Modifying Contract Law Principles to Accommodate Automated Transactions in South Africa

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ABSTRACT

Modern electronic commerce is chiefly characterised by the use of unattended computers in the negotiation and conclusion of agreements. Commonly referred to as "electronic agents," these computers assist their users to negotiate better and profitable deals in virtual marketplaces. In South Africa, the legal force and effect of automated transactions, *i.e.* agreements concluded by electronic agents, is addressed in section 20 of the *Electronic Communications and Transactions Act* 25 of 2002 (hereinafter referred to as the ECT Act). According to section 20 (a) of the ECT Act, a valid and enforceable agreement will be formed where an electronic agent performs an action required by law for agreement formation. The same statute provides further in section 20 (b) that a valid and enforceable agreement will be formed where all the parties to a transaction or either one of them uses an electronic agent. The overall effect of these provisions is that an agreement cannot be denied legal validity and enforceability on the ground that an electronic agent was used, whether by one or both parties, to conclude it. Likewise, an agreement cannot be denied legal validity and enforceability on the ground that no human being took part in its formation. Although the ECT Act provides as a general matter that automated transactions are valid and enforceable in South Africa, that statute does not, however, create new rules for the formation of such agreements. This is made clear in section 3, which provides, amongst others, that the ECT Act should not be interpreted to exclude the application of the common law of contract to electronic transactions. Therefore, as with traditional or non-automated agreements, automated transactions too must satisfy the individual requirements of a valid contract at common law.

As a matter of fact, the common law theory of contract formation is predominantly based on the assumption that human volition will always play a pivotal role in the making, acceptance or rejection of offers. For that reason, this research proceeds on a strong hypothesis that common law rules and principles pertaining to the formation of agreements are either insufficient or inadequate to accommodate the validity of agreements concluded by computers without the immediate intervention of their users. Consequently, the aim of this research is to discuss how the rules and

principles of the common law of contract can be modified or developed in order to accommodate, within the common law theory of contract formation, the statutory validity of automated transactions in South Africa.

The discussion of this research is limited to five legal issues, namely the basis of contractual liability in automated transactions, the analysis of offer and acceptance in automated transactions, the time and place of contract formation in automated transactions, the incorporation of standard terms and conditions in automated transactions, and the treatment of mistakes and errors in automated transactions. These issues are discussed first with reference to South African law, primarily with the purpose of determining the extent to which relevant common law rules and principles provide adequate solutions to specific challenges posed by automated transactions. To the extent that relevant common law rules and principles do not provide adequate solutions to the challenges of automated transactions, recommendations are made in this research for their development or modification. As shall be demonstrated in the course of this work, in relation to some of the abovementioned legal issues, the development or modification of common law rules has been done by the ECT Act. These "statutory developments or modifications of the common law" are also discussed in this work, primarily with the aim of determining the extent to which they provide adequate solutions to specific challenges posed by automated transactions. To the extent that these statutory modifications of the common law do not provide adequate solutions to the challenges of automated transactions, recommendations are made in this work on how the relevant provisions of the ECT Act may be interpreted by courts of law or amended by Parliament in order to strengthen the response of that statute.

The abovementioned legal issues are also discussed in this work with reference to US and UK law, primarily with the purpose of determining how the law addresses the challenges of automated transactions in these jurisdictions, and to draw valuable lessons for the development or modification of South African contract law.

Keywords: Automated transactions, autonomous electronic agents, contract formation, passive electronic agents.

OPSOMMING

Moderne elektroniese handel word hoofsaaklik gekenmerk deur die gebruik van onbewaakte rekenaars tydens die onderhandel en sluit van kontrakte. Daar word gewoonlik na sulke rekenaars of rekenaar programme verwys as "elektroniese agente", en hierdie rekenaars help hul gebruikers om beter en meer winsgewende handel te dryf in virtuele markte. In Suid-Afrika word die regsgeldigheid en effek van geoutomatiseerde transaksies, (d.w.s ooreenkomste wat deur elektroniese agente aangegaan is), aangespreek in artikel 20 van die Electronic Communications and Transactions Act 25 of 2002 (hierna genoem die ECT-wet). Volgens artikel 20 (a) van die ECT-wet sal 'n geldige en afdwingbare ooreenkoms gevorm word waar 'n elektroniese agent 'n aksie verrig wat deur die wet vereis word vir ooreenkomsvorming. Dieselfde wet bepaal verder in artikel 20 (b) dat 'n geldige en afdwingbare kontrak tot stand sal kom waar een, of al die partye tot 'n transaksie gebruik maak van ‘n elektroniese agent. Die uiteindelike uitwerking van hierdie bepalings is dat die geldigheid en afdwingbaarheid van so ‘n kontrak nie genegeer kan word slegs omrede 'n elektroniese agent gebruik is nie, hetsy deur een of albei partye. Dieselfde geld wanneer daar geen persoon aan die kontraksluiting deelgeneem het nie. Alhoewel die ECT-wet bepaal dat outomatiese transaksies geldig en afdwingbaar is in Suid-Afrika, skep hierdie wet egter nie nuwe reëls vir die sluit van sulke ooreenkomste nie. Dit word duidelik gemaak in artikel 3 wat bepaal dat die ECT-wet nie vertolk moet word om die toepassing van die gemenereg van kontraksluiting op elektroniese transaksies uit te sluit nie. Daarom, net soos met tradisionele of nie-outomatiese ooreenkomste, moet outomatiese transaksies ook voldoen aan die gemeenregtelike vereistes van 'n geldige kontrak.

Trouens, die gemeenregtelike teorie van kontraksluiting berus hoofsaaklik op die veronderstelling dat menslike bedoeling wilsingesteldheid altyd 'n sleutelrol sal speel in die maak, aanvaarding of verwerping van ‘n aanbod. Om hierdie steun hierdie navorsing op die hipotese dat gemeenregtelike reëls en beginsels rakende die totstandkoming van kontrakte onvolledig of onvoldoende is om die geldigheid van kontrakte wat deur rekenaars gesluit is, te akkommodeer sonder dat die onmiddellik ingryping van menslike. Gevolglik is die doel van hierdie navorsing om te bespreek

hoe die reëls en beginsels van die gemene reg van kontrakte aangepas of ontwikkel kan word om die statutêre geldigheid van geautomatiseerde transaksies in Suid-Afrika te akkommodeer binne die gemeenregtelike teorie van kontrakvorming.

Die bespreking in hierdie navorsing word beperk tot vyf regskwessies, naamlik die basis van kontraktuele aanspreeklikheid in outomatiese transaksies, die ontleding van aanbod en aanvaarding in outomatiese transaksies, die tyd en plek van kontraksluiting in geautomatiseerde transaksies, die inlywing van standaard bepalings en voorwaardes in outomatiese transaksies, en die hantering van foute in outomatiese transaksies. Hierdie kwessies word bespreek met verwysing na die Suid-Afrikaanse reg, hoofsaaklik met die doel om te bepaal tot watter mate die toepaslike gemeenregtelike reëls en beginsels voldoende oplossings bied vir spesifieke uitdagings wat deur outomatiese transaksies gestel word. Tot die mate dat toepaslike gemeenregtelike reëls en beginsels nie voldoende oplossings bied vir die uitdagings van geoutomatiseerde transaksies nie, word aanbevelings in hierdie navorsing gemaak vir hul ontwikkeling of wysiging. Soos in die loop van hierdie werk gedemonstreer word, is die ontwikkeling of wysiging van gemeenregtelike reëls ten opsigte van sommige van bogenoemde regskwessies deur die ECT-wet gedoen. Hierdie "statutêre ontwikkelings of wysigings van die gemenereg" word ook bespreek, veral om te bepaal tot watter mate hulle voldoende oplossings bied vir spesifieke uitdagings wat deur outomatiese transaksies gestel word.

Verder word die bogenoemde regsaspekte bespreek met verwysing na Amerikaanse en Britse reg. Dit word hoofsaaklik gedoen om te bepaal hoe die reg die uitdagings van geautomatiseerde transaksies in hierdie jurisdiksies aanspreek, en die lesse wat hieruit geleer word te kan toepas vir die ontwikkeling of wysiging van die Suid-Afrikaanse reg.

SLEUTELWOORDE: Outomatiese transaksies, outonome elektroniese agente, kontraksluiting, passiewe elektroniese agente.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....i

ABSTRACT.....ii

OPSOMMING. iv

TABLE OF CONTENTS vi

LIST OF ABBREVIATIONS.....xix

CHAPTER 1..... 1

1 Introduction..... 1

1.1 General introduction..... 1

1.2 Problem statement 3

1.3 Research question 16

1.4 Research methodology 17

1.4.1 Literature review 17

1.4.2 Comparative legal study 18

1.5 Outline of the thesis 19

CHAPTER 2..... 25

2 Automated transactions and electronic agents 25

2.1 Introduction..... 25

2.2 Automated transactions 25

2.3 Electronic agents 30

2.3.1 Types of electronic agents 31

2.3.1.1 Automatic vending machines..... 32

2.3.1.1.1 Description 34

2.3.1.1.2 The role of vending machines in the formation of agreements 35

2.3.1.2 EDI systems..... 36

2.3.1.2.1 Description 38

2.3.1.2.2 The role of EDI systems in the formation of agreements.....42

2.3.1.3 Autonomous electronic agents 43

2.3.1.3.1 Definition.....44

2.3.1.3.2 The role of autonomous electronic agents in the formation of agreements 49

2.4 Conclusions.....53

CHAPTER 3.. 55

3 The rationale of agency 55

3.1 Introduction.....55

3.2 The historical development of the South African common law of agency.....57

3.3 The legal definition of an agent.....60

3.4 The relationship of agency 64

3.5 The creation of the relationship of agency.....65

3.5.1 Agency arising from contract..... 66

3.5.1.1 The capacity of the parties to the relationship of agency 68

3.5.1.2 Agency by estoppel and ratification 70

3.5.1.3 Consideration in English law 71

3.5.2 Agency arising from authority 72

3.5.2.1 Actual authority 75

3.5.2.1.1 Express authority 76

3.5.2.1.2 Implied authority 77

3.5.2.2 Apparent or ostensible authority 81

3.6 The rights and duties of the parties to the relationship of agency 84

3.6.1 The duties of the agent 84

3.6.2 The duties of the principal 85

3.7 The personal liability of an agent to third parties 86

3.8 Termination of the relationship of agency 87

3.9 The rationale of agency 87

3.9.1 Agency as a risk based commercial process 95

3.10 Conclusions 112

CHAPTER 4. 115

4 Extending the South African common law of contract to automated transactions 115

4.1 Introduction 115

4.2 The validity and enforceability of automated transactions in South Africa 121

4.2.1 The relationship between the statutory validity of automated transactions and the common law of contract 126

4.3 Outline of the South African common law theory of contract formation.....130

4.3.1 Offer 131

4.3.1.1 Invitations to treat 132

4.3.2 Acceptance 135

4.3.3 The intention to be bound (animus contrahendi)..... 137

4.4. The basis of contractual liability in South Africa.....138

4.4.1 The will theory 138

4.4.2 The declaration theory..... 144

4.4.3 The reliance theory (the doctrine of quasi-mutual assent)..... 146

4.4.4 Ancillary considerations 149

4.5 Extending the common law theory of contract formation to automated transactions 151

4.5.1 The basis of contractual liability in automated transactions 152

4.5.1.1 The mere-tool theory..... 152

4.5.1.1.1 The limitations of the mere-tool theory.....157

4.5.1.2 A solution via the declaration and reliance theory..... 161

4.5.1.3 The risk theory..... 166

4.5.1.4 A recommendation for the development of South African law: the agency approach 167

4.5.2 The analysis of offer and acceptance in automated transactions..... 169

4.5.2.1 Offers and invitations to treat 169

4.5.2.1.1 Advertisements of goods for sale via automatic vending machines 169

4.5.2.1.2 Advertisements of goods for sale on commercial websites 171

4.5.2.1.2.1 The international legal framework: *The United Nations Convention on the Use of Electronic Communications in International Contracts* (2007).....172

4.5.2.1.2.2 The South African legal framework for the classification of advertisements for sale of goods on commercial websites..... 176

4.5.2.1.2.3 A critical analysis of the South African legal framework for the classification of website advertisements..... 179

4.5.2.1.2.4 Recommendations for the development of South African law..... 183

4.5.2.2 Automated replies and acceptances..... 186

4.5.2.3 The time and place of contract formation in automated transactions ... 188

4.5.2.3.1 The time and place of contract formation in contracts by telephone.....191

4.5.2.3.2 The time and place of formation of contracts concluded by post.....194

4.5.2.3.3 Challenges of automated transactions to the common law theories on time and place of contract formation..... 196

4.5.2.3.4 The time and place of conclusion of electronic contracts under the ECT Act.....199

4.5.2.3.4.1 The time of formation of electronic contracts 199

4.5.2.3.4.1.1 The case of *Jafta v Ezemvelo KZN Wildlife* 201

4.5.2.3.4.2 The place of formation of electronic contracts 204

4.5.2.3.4.3 A critical analysis of the time and place of formation of automated transactions under section 23 of the ECT Act 205

4.6 The incorporation of standard terms and conditions in automated transactions 210

4.6.1 The statutory legal framework for the incorporation of standard terms and conditions in automated transactions 211

4.6.2 The enforceability of standard terms and conditions in automated transactions 218

4.6.2.1 Click-wrap agreements 218

4.6.2.1.1 The enforceability of click-wrap agreements..... 221

4.6.2.2 Web-wrap agreements 229

4.6.2.2.1 The enforceability of web-wrap agreements..... 229

4.6.2.3 The enforceability of standard terms and conditions incorporated in automated transactions concluded between electronic agents 233

4.6.2.3.1 The enforceability of standard terms and conditions incorporated by one electronic agent..... 234

4.6.2.3.2 The enforceability of standard terms and conditions introduced by both electronic agents (the battle of forms in automated transactions)..... 237

4.6.2.3.3 Recommendations for the development of the South African common law - a case for the knock-out rule..... 240

4.7 The treatment of electronic mistakes and errors in automated transactions 242

4.7.1 Input errors 244

4.7.1.1 The legal framework for the treatment of input errors 246

4.7.1.2 A critical analysis of section 20 (e) of the ECT Act 250

4.7.2 Online pricing errors 254

4.7.2.1 Online pricing errors and the common law of unilateral mistake 256

4.7.2.2 Recommendations for the development of the common law..... 262

4.7.2.2.1 Advertisements of goods on automated websites as firm offers made subject to the availability of stock.....262

4.7.2.2.2 *Laesio enormis*— lamenting over spilled milk 265

4.7.3 Machine errors 267

4.7.3.1 The legislative framework for the treatment of machine errors in automated transactions 270

4.7.3.2 A critical analysis of section 25(c) of the ECT Act 271

4.8 Conclusions.....277

CHAPTER 5. 284

5 Extending the South African common law of agency to autonomous electronic agents 284

5.1 Introduction.....284

5.2 Electronic agents as representatives of their users in the creation of contractual rights and obligations—a case for the extension of the South African common law of agency to autonomous electronic agents.....286

5.3 Objections to the extension of the common law of agency to autonomous electronic agents.....292

5.4 The authority of an autonomous electronic agent to bind its user 301

5.4.1 The actual authority of an autonomous electronic agent to bind its user 301

5.4.1.1 The express authority of an autonomous electronic agent to bind its user 302

5.4.1.2 The implied authority of an autonomous electronic agent to bind its user 304

5.4.2 The apparent authority of an autonomous electronic agent to bind its user 305

5.4.3 The creation of electronic agency by estoppel 307

5.4.4 The liability of the user of an autonomous electronic agent based on ratification 308

5.5 The termination of electronic agency 310

5.6 Electronic agents and legal personality 310

5.7 Conclusions 316

CHAPTER 6. 318

6 The validity and enforceability of automated transactions in the US and UK 318

6.1 Introduction 318

6.2 US law 320

6.2.1 Outline of the legal landscape for electronic commerce in the US 320

6.2.2 The validity of automated transactions in US law..... 323

6.3 Outline of the legal framework for the formation of contracts in the US 328

6.4 The formation of agreements by electronic agents in US law 331

6.4.1 The basis of contractual liability in automated transactions 331

6.4.1.1 A solution under the UETA..... 331

6.4.1.2 A solution under the UCITA..... 334

6.4.2 The analysis of offer and acceptance in automated transactions..... 337

6.4.2.1 Offers and invitations to treat 337

6.4.2.2 Automated replies and acceptances..... 341

6.4.3 The time and place of contract formation in automated transactions 342

6.4.3.1 The time and place of contracts concluded by post..... 342

6.4.3.2 The time and place of contracts concluded by instantaneous modes of communication..... 344

6.4.3.3 The time and place of conclusion of electronic contracts..... 344

6.5 The inclusion of standard terms and conditions in automated transactions 351

6.5.2 Web-wrap contracts 358

6.5.3 The assent of an electronic agent to contractual terms..... 359

6.5.4 The battle of forms..... 361

6.6 The treatment of mistake in automated transactions 366

6.6.1 Input errors 366

6.6.2 Machine errors 367

6.6.3 Online pricing errors 370

6.7 Analysis and conclusion 372

6.8 UK law 377

6.8.1 Outline of the legislative framework for electronic contracts in the UK 377

6.8.2 Outline of the legal framework for contract formation in UK law 381

6.9 The validity and enforceability of automated transactions in UK law 387

6.10 The formation of automated transactions in UK law 393

6.10.1 Pre-contractual information requirements 393

6.10.1.1 A critical analysis of the pre-contractual information requirements 398

6.10.2 The placing of purchase orders: offer and acceptance in automated transactions 401

6.10.3 Offers and invitations to treat in automated transactions 401

6.10.3.1 A critical analysis of Regulation 12 of the *Electronic Commerce Regulations* 405

6.10.4 Acceptance and acknowledgment of receipt in automated transactions 410

6.10.4.1 Analysis of Regulation 11 in relation to acceptance and acknowledgement of receipt 412

6.10.5 The time and place of contract formation 414

6.10.5.1 The time and place of contracts concluded by post..... 415

6.10.5.2 The time and place of contracts concluded by instantaneous modes of communication..... 419

6.10.5.3 The time and place of conclusion of automated transactions..... 425

6.10.5.3.1 The time and place of formation of an automated transaction concluded between a human being and an electronic agent..... 426

6.10.5.3.2 The time and place of formation of automated transactions concluded between electronic agents on both sides.....430

6.11 The incorporation of terms in internet contracts.....432

6.11.1 The incorporation of standard terms and conditions in click-wrap contracts 432

6.11.2 The incorporation of terms and conditions in web-wrap contracts..... 435

6.11.3 The battle of forms..... 440

6.11.3.1 The mirror-image rule and the traditional offer and acceptance analysis 441

6.11.3.2 The first and last shot rule..... 444

6.11.3.3 Terms implied by law 446

6.11.3.4 The knock-out rule..... 447

6.11.3.5 A critical analysis of the approaches for the resolution of the battle of forms in the context of automated transactions..... 448

6.12 The treatment of electronic mistake 450

6.12.1 Input errors 450

6.12.1.1 Criticism of Regulation 11 (1) (b) 453

6.12.2 Machine errors 453

6.12.3 Online pricing errors 455

6.13 Analysis and conclusions 459

CHAPTER 7. 467

7 Conclusion and recommendations 467

7.1 Introduction.....467

7.2 Final analysis and recommendations 472

7.2.1 The basis of contractual liability in automated transactions 472

7.2.2 Offer and acceptance in automated transactions 481

7.2.2.1 Offer and invitation to treat 481

7.2.2.2 Automated replies— acceptance and acknowledgement of receipt..... 486

7.2.2.3 The time and place of contract formation in automated transactions ... 489

7.2.3 The enforceability of standard terms and conditions in automated transactions 494

7.2.3.1 The enforceability of click-wrap agreements..... 494

7.2.3.2 The enforceability of web-wrap agreements..... 497

7.2.3.3 The assent of an electronic agent to standard terms and conditions 499

7.2.3.4 The battle of forms in automated transactions 500

7.2.4 The treatment of mistakes and errors in automated transaction 505

7.2.4.1 Input errors 505

7.2.4.2 Machine errors 508

7.2.4.3 Online pricing errors 510

BIBLIOGRAPHY 514

LIST OF ABBREVIATIONS

ACM	Association for Computing Machinery
AI	Artificial Intelligence
ALI	American Law Institute
ANSI	American National Standards Institute
ASC	Accredited Standards Committee X12
BGB	Burgerliches Gesetzbuch
CA	Copyright Act
CIF	Cost Fright and Insurance
CILSA	Comparative and International Law Journal of Southern Africa
CISG	United Nations Convention for International Sale of Goods
CD	Compact Disc
DVD	Digital Versatile Disc
ECT Act	Electronic Communications and Transactions Act
ECA	Electronic Commerce Act
EC	Electronic Commerce
EDI	Electronic Data Interchange
EDIFACT	EDI for Administration, Commerce, and Transport
E-mail	Electronic Mail
ENECE	United Nations Economic Commission for Europe
EU	European Union
E-SIGN Act	Electronic Signatures in Global and National Commerce
FOB	Free on Board
IBM	International Business Machines
INCOTERMS	International Commercial Terms

IP	Internet Protocol
IT	Information Technology
JILT	Journal of Information, Law and Technology
JICLT	Journal of International Commercial Law and Technology
MAS	Multi-Agent System
MIT	Massachusetts Institute of Technology
NCCUSL	National Conference of Commissioners on Uniform State Laws
PECL	Principles of European Contract Law
PDF	Portable Document Format
SABS	South Africa Bureau of Standards
SADC	Southern African Development Community
SGA	Sales of Goods of Act
SALC	South African Law Commission
SALJ	South African Law Journal
SAMLJ	South African Mercantile Law Journal
SMS	Short Message Service
THRHR	Tydskrif vir Hedendaagse Romein-Hollandse Reg
PER	Potchefstroom Electronic Law Journal
UCC	Uniform Commercial Code
UCITA	Uniform Computer Information Transactions Act
UK	United Kingdom
UN	United Nations
URL	Uniform Resource Locator
US	United States of America
UETA	Uniform Electronic Transactions Act
UNCITRAL	United Nations Commission on International Trade Law

UNECIC	United Nations Convention of the Use of Electronic Communications in International Contracts
VANS	Value Added Networks

CHAPTER 1

1 Introduction

1.1 General introduction

One of the defining features of electronic commerce is automated contracting, which entails the negotiation and conclusion of agreements by unattended computer systems. Drawing from their role as "representatives" of their users in the creation of contractual rights and obligations, these computers have come to be known in law as "electronic agents."[1] In the main, electronic agents are distinguished from conventional computers by their ability to operate without direct human intervention,[2] meaning for purposes of present considerations that "…humans are not needed to review, approve or document…" any transaction concluded thereby.[3] The substitution of humans by automated processes in the negotiation and conclusion of agreements is considered desirable on the basis that human choices "…are a potentially inaccurate, always slower element of a transaction."[4] This observation is particularly true in the context of internet based commerce. Commonly referred to as the "information economy,"[5] or the "information superhighway,"[6] the internet is admittedly full of information that commercial entities and consumers can use to negotiate and conclude profitable deals.[7] It is unfortunate, however, that the diversity and volume of that information is such that no human can personally search, collect, analyse correctly and exploit without wasting time and transactional costs. This phenomenon has come to be known as "big data," which means data so large that "…traditional data processing is not capable to process them."[8] In order to conquer the obstacles of big data, online

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1 Nimmer 2007 *Journal of Contract Law* 17.
2 Bayamlioğlu 2008 *Ankara Bar Review* 49.
3 Nimmer and Krauthouse 1994-1995 *Idaho Law Review* 941.
4 Nimmer 1996 *John Marshall Journal of Information Technology and Private Law* 212.
5 See Kephart, Hanson and Greenwald 2002 *Computer Networks* 731.
6 See Eiselen 1995 *SAMLJ* 1.
7 Kephart, Hanson and Greenwald 2002 *Computer Networks* 731, mentioning that "[i]n the information economy, the plenitude and low cost of up-to-date information will enable consumers (both human and agent) to be better informed about products and prices. Likewise, producers will be better informed about and more responsive to their customers' needs."
8 Pavithra 2016 *International Journal of Advanced Research in Computer and Communication Engineering* 126.

businesses and shoppers are increasingly turning to electronic agents. With electronic agents, complex transactions, being transactions that require extensive analysis or comparisons of big data, can be finalised faster and at much lower costs than by humans.[9]

Another benefit of automated contracting is the elimination of paper documents,[10] which admittedly minimises the risk of clerical errors and mistakes in commercial transactions.[11] It is common cause that a majority of commercial entities, particularly those involved in international trade or repetitive sale transactions, usually deal with huge volumes of documents on almost a daily basis. Typical examples of commercial documents that such businesses deal with include quotations, commercial invoices, purchase orders, certificates of origin, and a wide range of transport documents including bills of lading, freight bills and waybills. When exchanged through paper-based information systems, *e.g.* by electronic mail, commercial documents usually have to be completed and processed manually by human employees. This is usually done by keying or typing data on the face of softcopy documents,[12] or by printing the documents into hardcopies in order to complete them by pen. This process increases the risk of clerical errors and mistakes in commercial transactions.[13] Automated contracting admittedly reduces the risk of clerical errors and mistakes because there is no manual keying of information by either the buyer or the seller; commercial documents are automatically generated and processed by electronic agents without any human input.

Automated contracting also reduces labour costs. As one author correctly notes,[14] electronic agent technology permits companies "…to replace low level clerical employees with automated processes…." This is so because the automatic processing of data by computers effectively eliminates the need for manual

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9 Sorge "Conclusion of contracts" 210.

10 See Hodgson 1995 *Industrial Management and Data Systems* 23, noting with specific reference to Electronic Data Interchange that, "[t]he concept of the 'paperless office' may still be a contradiction in terms, but EDI does at least offer an alternative method to the post, facsimile and telephone services, all of which still generate copious amounts of paper."

11 Trauth and Thomas 1993 *Journal of Global Information Management* 7.

12 Trauth and Thomas 1993 *Journal of Global Information Management* 7, noting that "[e]ach of these paper-based documents requires numerous keying and re-keying operations…."

13 Trauth and Thomas 1993 *Journal of Global Information Management* 7.

14 Winn 2002-2003 *Uniform Law Review* 701.

processing, meaning that humans are not required for data keying, "…document storage and retrieval, document matching, envelope stuffing, etc."[15] Electronic agents are admittedly more competent, efficient and reliable than their human counterparts. In terms of speed, an electronic agent might be able to do in one day what a human employee would need more than an entire week to accomplish. Moreover, it is common cause that electronic agents know not time or rest, meaning that transactions can be completed at any time of the day.

1.2 Problem statement

Prior to the passing of the *Electronic Communications and Transactions Act* 25 of 2002 (hereinafter referred to as the ECT Act) by the Parliament of the Republic of South Africa, there was no clear authority, apart from a few loose statements in academic commentaries,[16] that contracts concluded by machines without direct human involvement are valid and enforceable. This is so despite clear indicators that first generational electronic agents, including automatic vending machines and automatic banking machines, were already in widespread use across South Africa as early as the 1980s.[17] The adoption of the South African Model Interchange Agreement by the South African Bureau of Standards in 1995 is also sufficient evidence of the fact that more advanced electronic agents, referring here specifically to Electronic Data Interchange (EDI) systems, were already common in South Africa in the 1990s. Wherefore one is compelled to agree with Pistorius that the formation of agreements by electronic agents "…was recognised long before electronic commerce became a reality…."[18]

The absence of judicial authority concerning the validity and enforceability of automated transactions in South African is perfectly understandable though.

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15 Hill and Ferguson 1989 *The Journal of Electronic Data Interchange* 10.

16 See Christie *The Law of Contract of Contract* 88; Kahn 1995 *SALJ* 252.

17 See Olmesdahl 1984 *SALJ* 553, noting as early as then, that "[w]ith the increasing use of micro-computers, television sets linked through telephone modums, and electronic communication links between the parties, it will quite often occur that offers or acceptances, instructions, or transfers of funds will be transmitted in electronic form: for example, transfers of funds from an automatic banking machine where the person attending to the transfer, who may in fact be the offeree, would have no reason to doubt the effectiveness or efficiency of the particular machine, as to where funds had to be paid by a certain date."

18 Pistorius 2008 *JILT* 9.

Concerning automatic vending machines, Christie correctly mentions that it is by no means unnatural that,[19] despite their popularity, sale transactions concluded thereby have not attracted the attention of the courts of law in South Africa. This is understandably so because transactions concluded by automatic vending machines are of such negligible monetary value that no one would reasonably go through the notoriously costly and time consuming process of litigation for them. While Electronic Data Interchange transactions admittedly involve huge sums of money, it is understandable that, with the adoption of the South African Model Interchange Agreement by trading partners, courts of law lost an opportunity to pronounce themselves over the validity and enforceability of such transactions because their legal aspects are exclusively regulated by the Model Interchange Agreement. From the foregoing narration, one may easily conclude that at common law, it is debatable whether or not agreements concluded by unattended computer systems are valid and enforceable in South Africa.

Recognising the prevailing uncertainty concerning the validity and enforceability of automated transactions, the Parliament of South Africa seized an opportunity with the passing of the ECT Act to address the matter. In terms of section 20 (a) of that statute, a valid contract may be formed where an electronic agent performs an action required by law for contract formation. The same statute provides furthermore that a valid contract may be formed where one party, or all the parties to a transaction, use an electronic agent.[20] These provisions will be interpreted in full later on in this work. For purposes of present considerations, one need only note that their primary aim is to grant legal validity and enforceability to transactions concluded by electronic agents. That being said, it is worth noting that the ECT Act does not create separate rules for the formation of automated transactions,[21] meaning that common law rules continue to govern or regulate the formation of contracts by electronic agents.

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19 Christie *The Law of Contract of Contract* 88.

20 s 20 (b).

21 See s 3, which provides as a general matter that "[t]his Act must not be interpreted so as to exclude any statutory law or the common law from being applied to, recognising or accommodating electronic transactions, data messages or any other matter provided for in this Act."

The use of electronic agents for purposes of agreement formation creates a riddle for the common law of contract,[22] and it is not difficult to see why. As Dodd and Hernandez correctly note,[23] traditional contract law proceeds on the assumption that human volition "…will factor into decisions to make an offer and to accept or reject that offer." Therefore, the absence of a human actor on one or both sides of a transaction is *prima facie* bound to raise a number of doctrinal and practical challenges for the common law of contract.

The first challenge relates to the basis of contractual liability in automated transactions. At common law, the true basis of contractual liability is *consensus ad idem*,[24] meaning a meeting of the minds or a coincidence of the wills of the contracting parties. The constituent elements of *consensus ad idem* are first that contracting parties must have a mutual or common understanding of the legal rights and obligations that they wish to create, second that each party must have the intention to be bound by the contract, and third that each party must be aware or conscious of the contract.[25] In automated contracting, it is common cause that a party who uses an electronic agent to form an agreement will often be unaware of the exact terms of that agreement.[26] It is truly difficult in such a setting to appreciate how contracting parties can ever have a mutual understanding of their respective legal rights and obligations. Concerning the element of *animus contrahendi*, South African law is clear that a person who purportedly concludes a contract while unaware or ignorant of the promise of the other party acts without the requisite intention to be bound,[27] meaning that the purported agreement is *void ab initio*. Because a person who uses an electronic agent to form a contract will often be unaware of the promise or offer of the other party, it is difficult to appreciate how he or she can be said to have acted with the requisite *animus*

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22 Bellia Jr 2001 *Emory Law Journal* 1047.

23 Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5; Nimmer 2007 *Journal of Contract Law* 17, stating that "[t]raditional contract law … is based on the assumption that the conduct, words or writings involved were those of a human being with authority to act."

24 Louw *The Plain Language Movement* 25.

25 For an outline of the requirements of *consensus ad idem*, see Otto *Germany and South Africa* 80.

26 Koops, Hildebrandt and Jaquet-Chiffelle 2010 *Minnesota Journal of Law, Science and Technology* 534.

27 See Christie *The Law of Contract* 67.

contrahendi in concluding a contract.[28] Concerning the requirement that parties must be aware of their contract, it is common cause that a person who uses an electronic agent to conclude an agreement will "…often not…be aware of the contract being concluded,"[29] and may remain unaware of such a contract until the other party has already rendered performance. From all the aforesaid, it is clear that agreements concluded by electronic agents do not satisfy the individual requirements of *consensus ad idem*, which makes the basis of contractual liability in automated transactions a bone of contention amongst legal commentators.

To overcome the difficulty illustrated above, it has been suggested that at common law, the actions and communications of a machine are attributed to a person who programmed or instructed it to perform an action.[30] By this is meant that the actions and communications of an electronic agent are considered to originate from the will or intention of the person using it,[31] therefore, that he or she must ultimately bear responsibility for messages generated thereby. In this manner, an electronic agent is considered to be a channel or conduit-pipe for the transmission of the will of its user.[32] One finds no difficulty with that rule, especially when it is applied to passive electronic agents such as automatic vending machines. However, matters get complicated when an electronic agent operates not just automatically, but autonomously. Unlike passive electronic agents, autonomous electronic agents do not simply perform pre-programmed tasks, but:

> …can learn through experience, modify the instructions in their own programs, and even devise new instructions. They then can make decisions based on these self-modified or self-created instructions.[33]

These electronic agents cannot reasonably be said to be mere conduits for the transmission of the will of their users. This is so because autonomous electronic

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28 See Chopra 2010 *Communications of the ACM* 39, who makes the point that "…in relation to the requirement [that] there should be an intention to form legal relations between the parties, if the agent's principal is not aware of the particular contract being concluded, how can the required intention be attributed?"

29 Koops, Hildebrandt and Jaquet-Chiffelle 2010 *Minnesota Journal of Law, Science and Technology* 534.

30 Pistorius 2002 *SAMLJ* 740.

31 UN *United Nations Convention on the Use of Electronic Communications on the Use of Electronic Communications* para 69.

32 Weitzenboeck 2001 *International Journal of Information, Law and Technology* 214.

33 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 27.

agents do not just transmit messages, "…they [actually] influence the terms of the contract…."[34] Even without delving deeper into the issue, it is fairly obvious to see that it would be inexcusably unrealistic in any system of law to group autonomous electronic agents under the category of "simple tools of communication." Therefore, it remains a matter of debate the basis on which, and the extent to which, users of autonomous electronic agents should be made liable on agreements concluded thereby with third parties or their electronic agents.

Automated contracting also challenges common law rules applicable to the formation of a contract, *i.e.* common law rules on offer and acceptance. One contentious issue in that regard is whether a display of goods for sale through an electronic agent, particularly an automated or interactive commercial website, constitutes an offer or an invitation to treat? At common law, authorities are in agreement that an advertisement of goods for sale to the general public *prima facie* constitutes an invitation to treat,[35] rather than a firm offer. The extent to which the abovementioned rule is suitable for, or applicable to, advertisements of goods for sale on automated commercial websites is not immediately clear. This is so because, as correctly noted by one author,[36] "[w]eb-merchants generally reap the benefits of both positions: offeree and offeror." To illustrate, it is common cause that automated websites have been likened by others to self-service stores,[37] and to shop displays,[38] which leads one to the conclusion that advertisements of goods thereon are not offers, but rather invitations to treat. On the other hand, automated websites have been likened to automatic vending machines,[39] which analogy has led others to argue that advertisements of goods for sale thereon are firm offers.[40]

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34 Koops, Hildebrandt and Jaquet-Chiffelle 2010 *Minnesota Journal of Law, Science and Technology* 538.

35 Christie *The Law of Contract* 43; Roberts *Wessels' the Law of Contract* para 88.

36 Mik 2007 http://works.bepress.com/elizamik/7/.

37 Sasso 2016 *Pravo.Zhurnal Vysshey shkoly ekonomiki* 208, mentioning that "[s]ometimes the process is very similar to what would happen in an actual self-service shop, except that the cashier would be the electronic agent."

38 Pistorious 1999 *SAMLJ* 286.

39 Sasso 2016 *Pravo. Zhurnal Vysshey shkoly ekonomiki* 208, mentioning that "[a]t other times, however, the website operates like a digital vending machine, including all the terms of the contract and information about the products and thus providing clients with the complete offer."

40 See Squires 2000 *Deakin Law Review* 103.

Assuming for argument's sake that website advertisements are invitations to treat, which makes a purchase order placed by a customer on such a website an offer, another pressing issue is whether or not automated replies or responses are valid acceptances for purposes of contract formation? Normally, a customer who manages to place a purchase order on an automated commercial website will almost always invariably receive an e-mail of acceptance generated by the website without its user's awareness or input. The validity of such acceptances remain a matter of debate because, at common law, a person who purportedly makes an acceptance while oblivious to the existence of an offer cannot conclude a valid and enforceable contract.[41] This is so because such a person is taken to have acted without the requisite *animus contrahendi* in making that acceptance. Put otherwise, at common law, one cannot reasonably be understood to have intend to accept an offer if he or she did not know of the existence and specific terms thereof at the time of agreement formation.

Another troubling issue with the use of electronic agents for agreement formation relates to the time and place of contract formation in automated transactions. At common law,[42] the time and place of contract formation primarily depends on the mode or medium of communication used by the offeree to transmit his or her acceptance. Where the offeree employs an instantaneous mode of communication, *e.g.* telephone, telex or telefacsimile, he or she and the offeror are taken for all intents and purposes to be *inter praesentes*, *i.e.* in each other's presence. Consequently, a contract in that instance is concluded at the time when, and the place where, the offeror learns or becomes subjectively aware of the acceptance. In the context of automated transactions, a particular difficulty with the abovementioned rule is that transactions may admittedly be formed and performed by electronic agents without their users' awareness,[43] meaning that the offeror may never learn of the offeree's acceptance. Where the offeree uses a non-instantaneous mode of communication, *e.g.* post or telegram, the general rule at common law is that a contract is concluded at the time when, and the place where, the message of

41 Christie *The Law of Contract* 67.

42 See Department of Communications Republic of South Africa 2000 http://www.gov.za/sites/www.gov.za/files/electronic_commerce_1.pdf.

43 Eiselen 2002 *Vindobona Journal of International Commercial Law and Arbitration* 310.

acceptance is dispatched to the offeror.[44] Therefore, a contract by post or telegram is concluded when and where the offeree posts the letter of acceptance, or hands over the telegram of acceptance to the post office. In the context of automated transactions, unless an electronic agent is programmed to keep a register or log file of the time of dispatch and receipt of data messages, it may be very difficult for anyone to determine with certainty the exact moment that a message of acceptance was actually dispatched thereby to the offeror. Moreover, it is common cause that electronic agents may operate with a measure of mobility,[45] meaning that they can migrate from one computer to another within a network, or from one network to another. It will understandably be very difficult for anyone to know for sure the exact place or location from which such an electronic agent dispatched a message of acceptance. In light of the difficulties highlighted above, it is clear that common law rules on the time and place of contract formation do not provide a satisfactory solution to the challenges of automated transactions, consequently that they must be modified or developed.

It is also common cause that the use of electronic agents for contract formation makes it impossible for contracting parties to "personally" negotiate the terms and conditions of agreements. This has understandably led to a widespread use of standard-form contracts, also known as contracts of adhesion, in automated transactions. Typical examples of standard form contracts in automated transactions are internet sale agreements, also known as click-wrap and web-wrap agreements.[46] In order to conclude these contracts, online traders usually program their electronic agents, being automated commercial websites, to offer goods or services for sale subject to their standard terms and conditions.[47] The ECT Act provides that a person who interacts with an electronic agent to form a contract is not bound by the terms of that contract unless they were "…capable of being reviewed by a natural person … prior to agreement formation."[48] In the absence of judicial guidance on the matter, it remains uncertain as to what manner of displaying terms and conditions

44 Joubert *General Principles of the Law* 45.
45 See Brazier *at el* 2004 *Artificial Intelligence and Law* 14.
46 Chessick and Kelman *Electronic Commerce* 99.
47 Wang 2015 *Journal of Business Law* 4.
48 s 20 (d).

on a website will suffice to establish informed consent.[49] This is a very important issue in light of the inherent differences between websites and paper documents. For instance, online traders can use hyperlinks, moving texts, or very small scroll boxes to display their terms and conditions. Do these new techniques satisfy the requirement that the customer must be given an opportunity to review the terms of an agreement before contract formation?

Another contentious issue in relation to internet sale contracts is the validity of the manner in which customers are usually required to manifest their assent to the standard terms and conditions of online traders. The main issue in that regard is whether or not the techniques used by online traders are sufficient or adequate to establish consent or assent on the part of customers? In click-wrap agreements, customers are usually required to accept the standard terms and conditions of online traders by clicking on assent buttons, *e.g.* a button with an "I Agree" or "I Accept" caption. The legal significance of assent buttons remains somewhat contentious amongst legal commentators.[50] For instance, Koornhof maintains that the clicking of an assent button is equivalent to a signature,[51] consequently "…that the *caveat subscriptor* rule should in fact apply." Pistorius on the other hand does not consider the clicking of an assent button to amount to a signature, and argues on the contrary that a customer in click-wrap agreements is bound because she obtains knowledge of "…the contractual terms before she commits herself to buying goods or services."[52] In light of the prevailing conflict of opinion, the enforceability of click-wrap agreements in South African law obviously remains a matter of debate. In web-wrap agreements, customers are usually not required to perform any positive act to manifest or indicate their assent to the standard terms and conditions of an online trader. As one author explains,[53] a web-wrap agreement is presented as a set

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49 Wang 2015 *Journal of Business Law* 4.

50 Snail 2008 *JILT* 4, mentioning that "[d]espite the recognition of different forms of expressing one's intent to be contractually bound by electronic means, uncertainty still exists as to whether a click on an icon on the website of a vendor would constitute a legally recognizable act signifying one's intent to be contractually bound as such where terms were unilaterally imposed (Pistorius, 1999, p 293)."

51 Koornhof 2012 *Speculum Juris* 65. See also Snail 2008 *JILT* 4, mentioning that "[i]t may be argued that clicking 'I agree' or 'Buy' etc amounts to 'signing'…."

52 Pistorius 1999 *Juta's Business Law* 82.

53 See Pistorius 2004 *SAMLJ* 570.

of terms and conditions "…that the user browses while she visits a web site." It remains highly contentious whether the assent or consent of a customer can validly be obtained through this technique.[54] It is clear, therefore, that the enforceability of web-wrap agreements in South Africa needs to be rationalised, not with reference to abstract legal theories, but settled common law principles.

In other instances, an electronic agent may be programmed to conclude agreements with other electronic agents subject to the standard terms and conditions of its user.[55] This scenario raises a number of challenges for the common law of contract. As shall be recalled, the ECT Act provides that terms and conditions in automated transactions must be capable of being reviewed by a "natural person" prior to contract formation.[56] The expression "natural person" in that provision clearly excludes electronic agents. This raises an interesting issue as to whether or not, in the scenario under consideration, terms and conditions must also be incorporated or introduced into an automated transaction in a manner capable of being reviewed by another "electronic agent"? A majority of commentators on the issue answer that question in the affirmative.[57] If that is so, the next issue concerns the manner in which standard terms and conditions must be displayed in order for them to be capable of being reviewed by an electronic agent? When dealing with a natural person, the general rule at common law is that the proferens must take reasonable steps to bring his or her terms and conditions to the attention of a customer.[58] To do this, the proferens may print his or her standard terms and conditions in a different theme font, a different font size, or a different colour from the rest of the document.[59] While these techniques are guaranteed to catch the attention of a reasonable man, it is doubtful whether they are sufficient to catch the attention of an electronic agent. To illustrate, Lodder and Voulon point out that:[60]

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54 Wang 2015 *Journal of Business Law* 4.

55 Bain and Subirana 2003 *Computer Law and Security Report* 381; Jurewicz 2005 http://law.bepress.com/cgi/viewcontent.cgi?article=3598&context=expresso.

56 s 20 (d).

57 Lodder and Voulon 2002 *International Review of Law Computersand Technology* 283; Subirana and Bain *Legal Programming* 83.

58 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 20.

59 Pistorius 2004 *SAMLJ* 575.

60 Lodder and Voulon 2002*International Review of Law Computersand Technology* 282.

> Agents are software products that do not observe the world in the same way humans do. A human being surfing on the Internet perceives most information visually: the lay-out of the webpage, banners, text, pictures, links, etc. To put it trivially, an agent has no eyes.

Because an electronic agent has no eyes, it is fairly obvious that the use of a different theme font, font size or colour will not fulfil the requirement of a reasonable step on the part of the proferens to bring his or her terms and conditions to its attention. However, it is possible to argue that terms and conditions have been brought to the attention of an electronic agent if they are structured in a format that the electronic agent in issue is programmed or configured to process.[61] The main difficulty in that regard, however, is that there is currently no universal format that every electronic agent on the face of the earth is able to process,[62] meaning that terms and condition must be structured in a format that the specific electronic agent in issue is programmed or configured to process. Where there is no prior agreement between contracting parties concerning the format in which data messages will be exchanged between electronic agents, it will understandably be difficult for a party to know precisely what format to use in incorporating his or her standard terms and conditions into an automated transaction.[63] A difficult issue in that regard is to identify a party who must bear the risk of an incompatible format, namely whether it is the proferens or the user of an electronic agent to which standard terms and conditions are presented for acceptance.

In other instances, all the electronic agents involved in a transaction may be programmed to conclude it subject to their users' standard terms and conditions.[64] At common law, a problem arising from such a scenario is commonly referred to as a "battle of forms." A battle of forms arises when a party purportedly accepts an offer accompanied by the offeror's standard terms and conditions subject to his or her own standard terms and conditions.[65] At common law, an acceptance that is made subject to the offeree's standard terms and conditions is commonly construed as a

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61 Lodder and Voulon 2002*International Review of Law Computersand Technology* 282.

62 Davis 1998 *Berkeley Technology Law Journal* 1148, mentioning that "[t]he abilities of a typical software agent to understand and react [to a data message] will be limited more by the effort expended by its creator than the state of the art."

63 See Wong 1999-2000 *Suffolk University Law Review* 101.

64 Kafeza, Chan and Kafeza "Legal Issues" 9.

65 Kerr *The Principles* 77.

counter-offer, and does not conclude a contract until it is accepted by the original offeror.[66] For purposes of present considerations, it is difficult to appreciate how the aforementioned common law rule will be applied to automated transactions. Unless one of the electronic agents involved in a transaction is programmed to keep a register or log file of the sequence in which data messages leading to a contract were exchanged, it will understandably be difficult to ascertain which electronic agent made an offer, a counter-offer, or an acceptance. Assuming that it was possible to ascertain the sequence in which data messages leading to a contract were exchanged between electronic agents, another troubling issue would be whether in making a purported acceptance, an electronic agent was able to construe or understand a data message as a counter-offer. Wong points out in that regard that:[67]

> While message format standards may exist in business-to-business Electronic Data Interchange (EDI) applications to enable electronic agents to identify counter-offers, the absence of such standards in the consumer context may lead to uncertainty in contracting with consumers.

These observations raise concerns over whether the common law of contract, as it currently stands, is really able to offer a meaningful solution to the problem of a battle of forms in the context of automated transactions.

Another aspect in which automated transactions challenge common law rules on contract formation relates to the legal effect of electronic mistakes and errors. The most common form of mistake known in automated transactions is an input error, which arises when a party interacting with an electronic agent to form a contract makes a mistake or error while inputting or inserting data into that electronic agent.[68] At common law, a unilateral mistake will vitiate a contract only if it is an *iustus error*,[69] meaning a material and reasonable error. A mistake is material if it relates to a material or fundamental term of a contract, *e.g.* a purchase price or description of the *merx*.[70] A mistake is reasonable if it was caused by the

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66 Van der Merwe *et alContract* 51-52; Kerr *The Principes of the Law* 76-77.
67 Wong 1999-2000 *Suffolk University Law Review* 101.
68 See UN *United Nations Convention on the Use of Electronic Communications* para 234.
69 See Steyn *A Critical Appraisal of the Decision in Sonap v Pappadogianis* 7.
70 Van der Merwe *et al Contract* 22.

misrepresentation of the other party, or if that other party knew or reasonably ought to have known of it before deciding to conclude a contract. In the context of automated transactions, while it may be fairly easy to demonstrate that a mistake was material, it will definitely be difficult to demonstrate that the user of an electronic agent knew or reasonably ought to have known of an input error.[71] This is so because a party using an electronic agent to conclude a contract does not act in his or her natural person, meaning that he or she will often be ignorant of the mistakes or errors of the other party. In light of that difficulty, and it imperative to determine how the common law of mistake may be developed or modified in order to address input errors.

Another form of mistake common to automated transactions is an online pricing error, which arises when an online trader mistakenly uploads a wrong price for an item advertised on his or her automated commercial website.[72] The main difficulty in that regard concerns the prevailing conflict of opinion regarding the issue whether or not the common law of unilateral mistake is applicable to mass offers, *i.e.* offers made to the general public as is the case with advertisements of goods for sale on trading websites. As shall be illustrated later on in this work, the common law of unilateral mistake was applied by the South African Consumer Goods and Services Ombudsman to free an online trader from contractual liability where a pricing error on a trading website was alleged to have been committed. In that case, the Ombudsman did not consider the issue whether or not the fact that the offer in issue was made to the general public affected the application of the common law of unilateral mistake. On the other hand, Mbah J in the matter of *Donald and Richard Currie (Pty) Ltd v Growthpoint Properties (Pty) Ltd, Currie v Growthpoint Properties Limited* expressly rejected the view that the common law of unilateral mistake is applicable to mass offers,[73] meaning that a party who makes a mistake in a mass offer cannot avoid liability by demonstrating that the other party knew or reasonably ought to have known of that mistake. Assuming for argument's sake that Mbah J is wrong, and that the common law of unilateral mistake is applicable to mass offers;

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71 UN *United Nations Convention on the Use of Electronic Communications* para 227.

72 See Polanski 2007 *Journal of International Commercial Law and Technology* 117.

73 *Donald and Richard Currie (Pty) Ltd v Growthpoint Properties (Pty) Ltd, Currie v Growthpoint Properties Limited* [2011] ZAGPJHC 33 para 61.

the next difficulty concerns the manner of proving actual or constructive knowledge of an online pricing error on the part of the customer. It has been argued that while it might be fairly easy for a customer to have actual or constructive knowledge of a pricing error in a brick-and-mortar store, it will be very difficult for an online trader to prove knowledge of an online pricing error on the part of a customer because unbelievably low prices are a norm in internet sales.[74] Another difficulty relates to the validity of automated acceptances when an online trader has made a pricing error. It has been argued that automated replies constitute valid and enforceable acceptances even when made in response to purchase orders placed by customers pursuant to pricing errors on commercial websites.[75] However, this view is not free from controversy seeing that it has been held in one German case that automated acceptances made subject to online pricing errors are not valid and enforceable.[76]

The last type of mistake common to automated transactions is a machine error, which arises when, because of a mechanical malfunction, an electronic agent generates an offer or acceptance that it was not programmed to. The pressing issue in that regard is whether the user of an electronic agent is bound by the contract, or exempted from contractual liability, where his or her electronic agent malfunctioned? Opinions admittedly remain in conflict in that regard. At common law, it has been suggested that a person who uses an electronic agent to form a contract "…must take the risk of any defects or delays in transmission…."[77] The same attitude has been adopted by some authors to the effect that a person who selects or uses a tool of communication to conclude a contract is ultimately bound by the errors or mistakes in messages transmitted by or through that tool.[78] On the other hand, some authors have argued that if a tool of communications malfunctions, the resultant agreement should not be enforced.[79] On the contrary, these authors have suggested that a party who reasonably relied on that malfunction to conclude a

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74 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 15.
75 Pistorius 2008 *JILT* 12.
76 See Nicolai Law Group P.C 2013 http://www.niclawgrp.com/ResourceMaterials/MonthlyMemo/Online-Advertising-Error-Liability.shtml.
77 Olmesdahl 1984 *SALJ* 553.
78 Kahn 1955 *SALJ* 265-266; Francis 1967 *SALJ* 287.
79 Kerr *The Principles of the Law* 38-39.

contract must be awarded damages to the extent of the reasonableness of his or her reliance.[80] The prevailing conflict of opinion raises a concern over the true legal effect of machine errors on the formation of automated transactions.

1.3 Research question

A point has been made in this Chapter that although the ECT Act provides for the validity and enforceability of automated transactions in South Africa, it does not, however, establish new rules for the formation or creation of such contracts, which means for purposes of present considerations that common law rules on contract formation continue to prevail in automated transactions. What has been demonstrated so far is that common law rules on contract formation are either inadequate or insufficient, whichever syntax is proper, to accommodate the validity and enforceability of automated transactions. In the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[81] Rajah CJ in the High Court of Singapore explained that:

> There is no real conundrum as to whether contractual principles apply to Internet contracts. Basic principles of contract law continue to prevail in contracts made on the Internet. However, not all principles will or can apply in the same manner that they apply to traditional paper-based and oral contracts. It is important not to force into a Procrustean bed principles that have to be modified or discarded when considering novel aspects of the Internet.

Dealing specifically with automated transactions, Allen and Widdison, with who the current researcher is in full agreement, have argued in light of the various challenges posed to traditional contract law by the use of electronic agents that:[82]

> …the real issue is to determine how the law should be changed, rather than whether it should be changed.

Wherefore the present study poses the question:

> How can the principles of contract law be modified or developed in order to accommodate, within the common law theory of contract formation, the statutory validity of automated transactions in South Africa?

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80 Kerr *The Principles of the Law* 38-39.

81 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 91.

82 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 52.

Therefore, the primary aim of this research is to determine the extent to which, in light of the challenges of automated transactions, common law rules and principles applicable to the formation of contracts can be applied to automated transactions in the same manner or fashion that they are usually applied by courts of law to traditional or non-automated transactions. To the extent that those common law rules and principles cannot satisfactorily be applied in the usual manner to automated transactions, this study undertakes to determine how those rules and principles can be developed or modified in order to suit the practicalities of automated transactions. In relation to some of the challenges posed by automated transactions to the common law of contract, it will be noted in the course of this work that, to some extent, the ECT Act has either developed, modified or abolished the common law position in order to accommodate automated transactions. In relation to these "statutory developments of the common law," the primary aim of this study will be to determine whether or not, in light of the common law rules to which they relate, those statutory developments provide satisfactory solutions. To the extent that these "statutory developments of the common law" do not provide satisfactory solutions, recommendations will be made on how the relevant provisions of the ECT Act should be interpreted, applied or amended in order to produce legally acceptable results.

1.4 Research methodology

This research will utilise the following methodologies:

1.4.1 Literature review

This study is primarily based on a detailed literature review of relevant primary and secondary legal sources dealing with the formation of contracts, electronic agents and automated transactions. The study will cover a review of relevant statutory provisions, common law rules and principles, judicial decisions, legal textbooks, law journal articles, international conventions and model laws on electronic commerce, as well as electronic material sourced from reliable and authentic websites on the internet. The abovementioned legal sources will be subjected to a critical analysis with a view to determining the extent to which established common law rules and

principles pertaining to the formation of contracts in South Africa may satisfactorily be applied to automated transactions in the same manner or fashion that they are usually applied by courts of law to non-automated transactions. To the extent that common law rules and principles pertaining to the formation of contracts in South Africa cannot be applied to automated transactions in the same manner or fashion that they are commonly applied by courts to non-automated transactions, the aforementioned legal sources will be subjected to a critical analysis with a view to making recommendations for the development or modification of the South African law of contract.

1.4.2 Comparative legal study

The problem of this study, namely the quest to determine how existing contract law rules can best be developed or modified in order to accommodate transactions concluded by electronic agents, is by no means unique to South Africa. As correctly noted by the United Nations Commission on International Trade Law (hereinafter referred to as UNCITRAL), the use of electronic agents for contract formation has caused academics in many jurisdictions to revisit legal theories of contract formation with the aim of assessing "…their adequacy to contracts that come into being without human intervention."[83] In the matter of *K v Minister of Safety and Security*,[84] O' Regan J in the Constitutional Court of South Africa advised that when grappling with novel legal issues, guidance, whether positive or negative, should be sought from other legal systems "…grappling with issues similar to those with which we are confronted." As explained by the same judge,[85] the benefit of undertaking a comparative research of legal issues is that it may "…enlighten us in analysing our own law, and assist us in developing it further." The relevance of this advice to the current study is self-evident.

Some of the major legal systems that have grappled with the legal aspects of contract formation in automated transactions, and which will form the basis of a

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83 UN *United Nations Convention on the Use of Electronic Communications* para 208.

84 *K v Minister of Safety & Security* 2005 6 SA 419 (CC) para 35 (hereinafter referred to as *K v Minister of Safety & Security*).

85 *K v Minister of Safety & Security* para 35.

comparative study in this research, are the United States of America (the US) and the United Kingdom (the UK). The primary objective of the comparative study will be to determine, through a detailed review of relevant primary and secondary legal sources, how the theories of contract formation in the US and the UK have responded to the challenges of automated transactions; and to draw valuable lessons on how the law of contract in South Africa may best be developed or modified to strengthen its response to the same challenges. The US and the UK have been selected for comparative study in this research because of their respective influence on South African law. It is common cause in relation to US law that section 20 of the ECT Act, which deals with the formation of contracts by electronic agents, is "…based closely on section 10 of UETA…,"[86] which is a leading statute on electronic commerce law in the US. Likewise, UK law has admittedly also played a very big role in shaping the law of contract in South Africa.[87] Apart from their influence on South African law, it is common cause as pointed out by Almajid that the US and the UK are the best markets to test the legal aspects of electronic commerce because they constitute "…the largest proportion of electronic commerce transactions in the world."[88] Therefore, it is important when dealing with the validity and enforceability of automated transactions to consider the positive proposals which have been made by policymakers, legislators, courts of law and academic commentators in those jurisdictions.[89]

1.5 Outline of the thesis

The second chapter entails an introduction to the concept of automated contracting. The discussion of that chapter will primarily focus on the legal definition of an "automated transaction" and an "electronic agent." Drawing from the definition of an automated transaction under the ECT Act, the first part of that chapter will identify and discuss in detail the distinguishing features of an automated transaction. The second part of that chapter will discuss the definition and characteristics of an electronic agent from the perspective of the ECT Act. It will also offer real life

86 Pistorius 2008 *JILT* 8.
87 See generally Pretorius 2004 *CILSA* 96-128.
88 Almajid *The Legal Enforceability of Contracts made by Electronic Agents under Islamic Law* 10.
89 Almajid *The Legal Enforceability of Contracts made by Electronic Agents under Islamic Law* 10.

examples of electronic agents commonly used by modern traders to form agreements, namely automatic vending machines, EDI systems and autonomous electronic agents. With reference to the three types of electronic agents listed above, the discussion will go further to narrate their historical development, describe their manner of operation, and their role in the process of agreement formation. The primary purpose of that discussion will be to determine whether those electronic agents passively facilitate the formation of agreements, or whether they actually influence the final terms of the agreements that they conclude.

The third chapter will involve an enquiry into the rationale or theoretical basis of the concept of agency. The primary purpose of that chapter will be to explore the legal and philosophical basis on which principals are made to bear contractual liability for agreements concluded between their agents and third parties. The discussion of that chapter will commence with a brief, but informative, narration of the historical development of the South African law of agency. The discussion will proceed to define an agent, and to describe his role in comparison to other well known categories of commercial intermediaries. The definition of an agent will be followed by a detailed discussion of the concept of agency, which is a relationship between the principal and the agent. The purpose of that discussion will be to describe the various ways in which that relationship is created. The discussion will particularly emphasise the fact that in South African law, the creation of agency does not necessarily depend on the consent of the agent to represent the principal, or the contract of mandate between the principal and the agent. On the contrary, a point will be made that the relationship of agency depends on "authority," which is a unilateral juristic act through which the principal gives the agent power to represent him or her in the creation of contractual rights and obligations. The concept of authority will then be discussed at length, together with the various ways in which authority is usually granted by the principal to the agent. Thereafter will follow a discussion of the rights and obligations of the parties to the relationship of agency, the personal liability of an agent to third parties, and the various ways in which the relationship of agency may terminate. A turn will be made at that juncture to discuss the rational or theoretical basis of agency, which as mentioned above is at the core

of the chapter in issue. As a starting point, it will be demonstrated that agreement formation is by its nature a personal, individualistic or private venture, meaning that contractual rights and obligations accrue exclusively to those who took part in their creation. Proceeding from that analysis, it will be illustrated that, in the face of pure and untainted principles of contractual liability, agency is an elaborate anomaly to the extent that it permits or allows for contracts concluded by the expression of the will of the agent to bind the principal. A thorough enquiry will then be conducted to ascertain, and assess the reasons on which courts of law and academic commentators have attempted to rationalise agency.

The fourth chapter will discuss the extension of the South African law of contract, particularly common law rules and principles pertaining to the formation of contracts, to automated transactions. The purpose of that discussion will be to determine the extent to which those rules and principles can satisfactorily be applied to automated transactions in the same manner or fashion that they are usually applied by courts of law to traditional or non-automated transactions. To the extent that those rules and principles cannot be applied to automated transactions in the same manner that they are usually applied by courts of law to non-automated transactions, recommendations will be made on how they can be developed or modified in order to accommodate the formation of agreements by electronic agents. With specific reference to the developments or modifications that have already been made by the ECT Act, the objective of that chapter will be to critically analyse the reasons behind, and the utility, of those developments. That chapter will commence with a discussion of the validity and enforceability of automated transactions in South Africa, which will entail a detailed construal of the relevant provisions of the ECT Act. The discussion will proceed further to analyse the relationship between the statutory validity of automated transactions and the common law of contract. It will be demonstrated that although the ECT Act grants legal validity and enforceability to automated transactions, it does not in any manner create new rules for the formation of those transactions, meaning that the common law of contract continues to regulate the formation of automated transactions. That having been established, the common law framework for the creation or formation

of valid agreements will be mapped out and discussed in full. That discussion will entail the definition of a contract at common law, and a detailed analysis of the individual elements of a contract, namely offer, acceptance and *animus contrahendi*. The discussion will also cover the theories of contractual liability in South Africa, being the will theory, the declaration theory and the reliance theory. It will be demonstrated in that regard that the will theory, as tempered by the reliance theory where relevant, represents the true basis of contractual liability in South Africa. Proceeding from that analysis, a turn will be made to discuss the basis of contractual liability in automated transactions, primarily with the aim of determining whether or not automated transactions satisfy the general rule of South African law that *consensus ad idem* is the true basis of contractual liability. The discussion will also cover a critical analysis of offer, acceptance, and the time and place of contract formation in automated transactions. Thereafter, the enforceability of standard terms and conditions in automated transactions will be discussed. The discussion in that regard will involve an outline of the statutory legal framework for the incorporation of standard terms and conditions in automated transactions, a critical analysis of the enforceability of click-wrap and web-wrap agreements, and the resolution of a battle of forms in automated transactions. The remaining part of that chapter will discuss the legal effect of mistakes and errors on automated transactions, with specific focus on input errors, online pricing errors and machine errors/programming malfunctions.

The fifth chapter will discuss the extension of the common law of agency to automated transactions, particularly those formed by autonomous, as opposed to passive, electronic agents. The discussion of that chapter will commence with a justification of a recommendation made in the previous chapter that the rules and principles of the common law of agency, with relevant modifications, must be used to rationalise the basis of contractual liability in transactions concluded by autonomous electronic agents. In going about that task, it will be demonstrated that passive electronic agents resemble human messengers to the extent that they merely facilitate the formation of agreements without any influence on the final terms of those agreements. It will be demonstrated further in that regard that, to

the extent that they actually influence the terms of automated transactions, autonomous electronic agents find close analogy with human agents at common law; consequently that the common law of agency should apply. The advantages and benefits of extending the common law of agency to automated transactions will also be highlighted in that discussion. Thereafter, a turn will be made to outline, analyse and counter the various objections which have been advanced by the opponents of the proposition that the common law of agency must be extended to automated transactions. Having countered those objections, the discussion will proceed to illustrate, with reference to the concept of authority, estoppel and ratification, how the rules and principles of the common law of agency may apply to automated transactions. Another important issue discussed in that chapter is the possibility of granting legal personality to autonomous electronic agents. The discussion of that issue will primarily focus on the benefits and advantages of granting legal personality to automated transactions, and on potential difficulties or complexities.

Chapter six will entail a comparative study of US and UK law on the matter of this research. The first part of that chapter will focus exclusively on US law. The discussion will commence with a detailed outline of the legal landscape for electronic contracts in the US. The discussion in that regard will cover a historical background to the development of electronic commerce law in the US, with specific focus on the *Uniform Electronic Transactions Act* 1999 (UETA), and the *Uniform Computer Information Transactions Act* 1999 (the UCITA). The validity and enforceability of automated transactions under these statutes will also be discussed. That discussion will be followed by a detailed analysis of the legal framework for the formation of agreements in US law, which will focus primarily on the definition of a contract, the individual elements of a contract, and the true basis of contractual liability in that jurisdiction. Proceeding from that analysis, a turn will be made to discuss the formation of agreements by electronic agents in US law. The objective of that discussion will be to determine how the rules and principles pertaining to the formation of agreements in US law address the challenges of automated transactions. The response of US law to the challenges of automated transactions

will be assessed through a careful analysis of the developments introduced by the aforementioned statutes, and by a careful analysis of the strengths and weaknesses of relevant contract law principles where no statutory modifications are made by statute. As in the fourth chapter, the discussion will cover an analysis of offer, acceptance, the time and place of contract formation, the enforceability of standard terms and conditions, and the legal effect of mistakes and errors on automated transactions. The analysis of findings, accompanied by conclusions, will follow.

The second part of that chapter will focus on UK law. The discussion will commence with a detailed outline of the legislative framework for electronic contracts in the UK, followed by an outline of the legal framework for the formation of agreements at common law. In discussing the common law, specific focus will be paid to the definition and individual elements of a valid contract in UK law. The discussion in issue will also cover the basis of contractual liability in UK law. Thereafter will be discussed the validity and enforceability of automated transactions in UK law, which unlike in South Africa and the US, is not based on any legislation. With a view to analysing how UK law addresses or responds to the challenges of automated transactions, a turn will be made to discuss the formation of agreements by electronic agents in that jurisdiction. As with US law, the response of UK law to the challenges of automated transactions will be assessed through a careful analysis of any developments or modifications made by legislation, particularly the European Union's legal instruments, and by a careful analysis of relevant common law rules where no legislative developments have been introduced. As in the fourth chapter, the discussion will cover an analysis of offer, acceptance, the time and place of contract formation, the enforceability of standard terms and conditions, and the legal effect of mistakes and errors on automated transactions. The findings will be analysed and conclusions made.

The seventh chapter, being the last chapter of this study, will cover a brief summary of the findings, accompanied by final recommendations on how relevant rules principles of the South African law of contract can be developed or modified in order to accommodate the statutory validity of automated transaction.

CHAPTER 2

2 Automated transactions and electronic agents

2.1 Introduction

The aim of this chapter is to introduce the idea of automated transactions, being contracts formed between human beings and electronic agents, or by electronic agents *inter se*. The first part of the chapter shall proceed at length to discuss the key features of automated transactions, primarily with the purpose of highlighting essential differences between these sort of contracts and traditional contracts concluded between human beings on all sides. The chapter shall also introduce and discuss the notion of contracting electronic agents, and the various types of electronic agents known in both physical retailing and electronic commerce. The discussion shall be limited to three types of electronic agents, being automatic vending machines, Electronic Data Interchange (EDI) systems, and autonomous electronic agents. On the discussion of the types of electronic agents, the study shall concentrate mainly on the historical development of these electronic agents; their description, which shall cover the manner in which they operate; and their role in commerce, which shall focus mainly on the question whether these electronic agents merely convey terms determined by their human users, or whether they independently negotiate and form contracts on their own terms? Conclusions shall follow thereafter.

2.2 Automated transactions

The expression "automated transaction" is defined in the ECT Act to mean:[1]

> [A]n electronic transaction conducted or performed, in whole or in part, by means of data messages in which the conduct or data messages of one or both parties are not reviewed by a natural person in the ordinary course of such natural person's business or employment.

A critical element in this definition is that the "…data messages of one or both parties are not reviewed by a natural person…," wherefore it is said that a defining

[1] s 1.

feature of an automated transaction is the lack or absence of a human actor on one or both sides of a transaction.[2] A person who does not participate in his or her natural person to conclude an automated transaction will use an electronic agent as a substitute. An automated transaction may, therefore, be defined as an electronic contract in which at least one party is represented by an electronic device as his or her "agent."

There are three main points which need be underscored with the statutory definition articulated above, and which need further elaboration. The first point being that a contract will be labelled an automated transaction regardless of whether the electronic agent performed the whole or only part of the transaction. This part of the definition intentionally expands the description of automated transactions to include even those instances in which the role of the electronic agent in a particular contract may seem to have been either small or insignificant. Therefore, every electronic contract in which an electronic agent took part, no matter how limited that part may have been, is still an automated transaction.[3] A specific difficulty with this portion of the definition, especially in instances where the electronic agent was involved in only a part of the transaction, is whether the law of automated transactions will apply to the entire transaction or only to that specific part which was conducted or performed by the electronic agent? As has been demonstrated, the lack of human participation in the formation of a contract is the sole factor which distinguishes automated transactions from traditional contracts, and it is the sole factor which calls for special treatment of automated transactions in contract law. In the opinion of the current researcher, where an electronic agent plays a limited role such as to effect payment of the purchase price, or to perform part of the contract, there is no justification for labelling the entire contract an automated transaction, because the entire process of contract negotiation and formation would have been conducted by human beings. Alternatively, it is submitted that the labelling of the entire contract as an automated transaction under these circumstances should be for convenience only, and should not be permitted to interfere with the application of the common law of contract to

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2 UN *United Nations Convention on the Use of Electronic Communications* para 104.
3 UN *United Nations Convention on the Use of Electronic Communications* para 104.

the significant portion of the contract which was conducted or performed by human beings.

The second point to note with the definition is that in automated transactions, the messages of at least one party should not be reviewed by a human. Therefore, human beings can still participate in automated transactions, but that participation should not, however, involve a review of contractual communications, otherwise such review will render the transaction non automated. Once again, one encounters a tremendous difficulty here. There are other types of automated transactions in which messages are admittedly reviewed by humans, one such transaction being an EDI transaction. As shall be demonstrated later on in this chapter, EDI messages are often reviewed by humans, being either the users of EDI systems or third-party service providers known as Value Added Networks,[4] before they are dispatched by computers. To exclude EDI transactions from the category of automated transactions, as the ECT Act *prima facie* seems to suggest, would be a terrible mistake because human review of EDI messages notwithstanding, EDI transactions raise exactly the same questions as all other types of automated transactions. However, perhaps EDI is intentionally excluded from the category of automated transactions because as shall be illustrated, unlike other automated transactions, EDI is usually regulated by private agreement between contracting parties, and so many legal issues which may arise in EDI do not require application of the substantive law of contract but simple interpretation and enforcement of the written terms of the EDI agreement.

The third noteworthy point is that messages in automated transactions must not be reviewed by a natural person "…in the ordinary course of such natural person's business or employment." The purpose of this part of the definition is to narrow down the above discussed rule that data messages in automated transactions should not be reviewed by human beings by circumscribing the instances under which such messages should not be reviewed. Therefore, not only can human beings participate in automated transactions, but they can also review messages sent by their electronic agents, so long as that review is not done in the course of business or

4 Hereinafter referred to as VANS.

employment of the reviewer. The phrases "ordinary course of business" and "ordinary course of employment" are very popular in law. In the case of *Gore v Shell SA (Pty) Ltd*,[5] the court noted that the expression "ordinary course of business" was not susceptible to a comprehensive definition. The court stated, however, that the test of whether or not something was done in the ordinary course of business is objective, and that a court must consider all relevant facts in its determination of that fact.[6] In another case,[7] the expression "ordinary course of employment" was interpreted to mean that a conduct should "…be so closely connected with acts the … employee was authorized to do...." The use of these expressions in the definition of an automated transaction is very problematic. It is common cause that in whatever statute or context these phrases are used, their practical application to the individual facts of a case poses serious challenges. These phrases are also problematic for being extremely broad. It is submitted that a preferable approach would have been to follow the US perspective in this regard. In the US, the UETA defines an electronic transaction to mean:[8]

> …a transaction conducted or performed, in whole or in part, by electronic means or electronic records, in which the acts or records of one or both parties are not reviewed by an individual in the ordinary course in forming a contract, performing under an existing contract, or fulfilling an obligation required by the transaction.

As can be immediately noted, the UETA uses a more restrictive phrase, namely "in the ordinary course in forming a contract." This phrase may simply be interpreted to mean that offers or acceptances must not be reviewed by human beings before they are transmitted by an electronic agent. Unlike the phrase "ordinary course of business or employment," the phrase "ordinary course of contracting" may therefore be susceptible to a single definitive meaning. However, both the South African and US definitions of an automated transaction leave many questions unanswered. The first question is whether there is any way at all to tell if a message sent by an electronic agent was reviewed by a human being, whether in or outside the

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5 *Gore v Shell SA (Pty) Ltd* 2004 2 SA 521 (C) (hereinafter referred to as *Gore v Shell SA (Pty) Ltd*).

6 *Gore v Shell SA (Pty) Ltd* para 9.

7 *Dubai Aluminium Co Ltd v Salaam* [2000] UKHL 48 as quoted in *Grobler v Naspers Bpk* 2004 4 SA 220 (C) 290.

8 s 2(2).

"ordinary course of business or employment" or "ordinary course of forming a contract"? The second question is on whom the burden of proof will rest in that regard. The third question relates to the significance, in terms of the principles of law to be applied, of the fact of a message being reviewed in the ordinary course of business, employment or contracting? As regards this last question, it may be argued that where there is proof that messages were actually reviewed by a human beforehand, the agreement will not be classified as an automated transaction, but rather as an ordinary contract between humans on both sides.[9] Consequently, traditional contract law will be applied to resolve any dispute which may arise in relation to that contract.

In conclusion, it needs be mentioned that automated transactions can occur in two different environments, being in closed and open networks.[10] By closed networks is meant instances in which electronic agents are used to negotiate and conclude contracts between two or more identifiable parties. A key feature of closed networks is that the use of electronic agents, and many other issues which may arise from such use, are subject to terms of agreement reached beforehand by the parties. In other words, electronic agents in closed networks are not used unilaterally. Parties must bilaterally agree to use them. Furthermore, the parties to automated transactions in closed networks are generally known to each other, and are often involved in an ongoing or continuous business relationship. A typical example of automated transactions in closed networks is EDI, in which electronic agents are used subject to the EDI agreement.[11] Open networks refer to environments in which

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9 See Pistorius 2008 *JILT* 10, stating that "[in] a fully automated system human decisions are only involved in designing the system, in creating rules for human assent to the system, but human decisions are not involved in the specific transaction." However, where a human being actively takes part in an automated transaction, for instance by reviewing the communications of his electronic agent, it can be argued in that regard that the mere participation under those circumstances overshadows the fact of automation. After all, there is, in essence, no difference between a reviewed automated communication and a fax dispatched communication. The only difference between the two is in nature of the tool of communication used, and this does not, of itself, affect the fact that the contract is between human beings on both sides of the transaction.

10 See generally Apistola *et al* "Legal Aspects of Agent Technology."

11 As shall be demonstrate later on in this chapter, EDI is usually an arrangement between a few traders, who are both known to each other and have a continuing or continuous business relationship, see Smith *Internet Law* 774. However, EDI may take a form of a multilateral setting which happens in circumstances "…where many different parties are involved, or where the number of parties is expected to increase substantially…," See Eiselen 1995 *SALMJ* 5. The use of electronic agents in EDI is governed by an agreement commonly referred to as an EDI

electronic agents are used haphazardly. Unlike in closed networks, the parties to automated transactions in open networks remain unknown to each other, and the use of electronic agents in that environment is not regulated by prior agreement. A common example of automated transactions in open networks is internet or online sale transactions in which electronic agents can be used to sell or buy goods on commercial websites.[12] It is common cause that buyers and sellers in internet contracts are unknown to each other, and neither party knows as a matter of fact whether or not the other party is using an electronic agent to contract.

2.3 Electronic agents

The expression "electronic agent" is defined in the ECT Act to mean:[13]

> [A] computer program or an electronic or other automated means used independently to initiate an action or respond to data messages or performances in whole or in part, in an automated transaction.

By the word "independently" in this definition is meant that an electronic agent can:

> …respond to data messages or performances…without review or intervention by a natural person each time an action is initiated or a response is generated by the system.[14]

There is not much to be said in relation to this definition, save to note that the expression "electronic agent" is used in law for purposes of convenience only.[15] The term "agent" in that phrase is not meant to equate the relationship between an electronic agent and its user to common law agency.[16] On the contrary, it is meant to connote "…the more general idea that the software does what one tells it to

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agreement, which covers a wide range of legal and related issues which are relevant to such arrangements. For a discussion of the EDI agreement, see Boss 1992 *Northwestern Journal of International Law and Business* 44-65.

12 For an extensive discussion of the characteristics of open networks and how they substantially differ from closed networks, see generally Chau and Tam 1997 *MIS Quarterly* 1-24; Kajan 2004 *AMC SIGcom Exchanges* 34-44.

13 s 1.

14 See the definition of an "automated message system" in art 4 (g) of the *United Nations Convention on the Use of Electronic Communications in International Contracts* (2005).

15 UN *United Nations Convention on the Use of Electronic Communications* para 112.

16 Middlebrook and Muller 2000 *The Business Lawyer* 342.

do…."[17] Therefore, it logically follows that the ordinary principles of the common law of agency are not applicable to automated transactions.[18]

2.3.1 Types of electronic agents

It would seem that retailing, referring in this context to the practice of selling goods in exchange for money, has over the years shifted from restrictive to more liberal and flexible practices. One common trait of liberal and flexible practices in retail sales is the minimisation, and where possible total elimination, of the physical interaction between the retailer and his or her customers. The earliest shift into flexible retailing came with the introduction of self-service stores. Self-service in this context refers to "…any method of displaying goods in a manner that enables customers to help themselves."[19] The idea of customers serving themselves was first introduced by Clarence Saunders in Memphis, Tennessee, in the year 1961 when Piggly Wiggly opened its first chain store in the US.[20] This practice of retailing was later adopted by grocery retailers in England, which adoption came to be known as the "Americanisation of food retailing in Britain."[21] Soon thereafter, many more other businesses adopted the idea of self-service, and with colonialism, self-servicing was later introduced in various parts of the world including Africa, Asia and South America.[22] The practice of self-service became so attractive that it could no longer be confined within the walls of supermarkets, which factor led to the invention of automatic, and later on, autonomous trading machines that can serve customers

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17 Middlebrook and Muller 2000 *The Business Lawyer* 342.

18 See UN *United Nations Convention on the Use of Electronic Communications* para [212], stating that "…UNCITRAL had taken the view that, while the expression 'electronic agent' had been used for purposes of convenience, the analogy between an automated message system and a sales agent was not appropriate. General principles of agency law (for example, principles involving limitation of liability as a result of the faulty behaviour of the agent) could not be used in connection with the operation of such systems." See also Lerouge 1999-2000 *John Marshal Journal of Computer and Information Law* 421-422, making the point that the law of agency cannot apply to electronic agents because agency is a contractual human relationship, and that machines cannot be agents because they have not the capacity to agree to such a relationship.

19 Gay 2004 *Consumption, Markets and Culture* 152.

20 Morton 1994 *History and Technology: An International Journal* 102-103.

21 On how the practice of self-service was introduced and operated in Britain's food retailing, see Shaw, Curth and Alexander 2004 *Business History* 570.

22 See generally, Reardon, Timmer and Barrett 2003 *American Journal of Agricultural Economics* 1140-1146.

without any interference by vendors (referring to users or owners of these machines).[23]

The aim in this part of the chapter is to discuss the various types of electronic agents used by retailers to conclude contracts. The following discussion shall focus on the definitions, historical developments and the practical operations of the various types of electronic agents. The discussion shall be limited to three types of electronic agents, being automatic vending machines, EDI systems and autonomous electronic agents respectively.

2.3.1.1 Automatic vending machines

A vending machine is a "coin actuated machine through which various goods may be retailed."[24] It has also been described in detail as:

> …a machine that provides items such as four different products [mainly light refreshments such as soft drinks, potato chips and all other munchies] even diamonds and platinum jewellery to customers, after the vendee inserts currency or credit into the machine using extremely simple steps. These steps would not be time consuming at all. The vendee would get all the details on the screen which he/she should follow.[25]

The invention of the very first vending machine can be traced as far back as 215 BC by a Greek mathematician and engineer by the name of Hero of Alexandria.[26] This historically first vending machine was used to sell holy water (being ritual or

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23 Vending machines are generally viewed as an extension of the idea of self-service retailing outside the physical store, see generally Lin, Yu and Weng 2011 *Expert Systems with Applications* 91-29; Lee 2003 *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour* 178-197; Walley and Amin 1994 *International Journal of Operations and Production Management* 86-100; Reider and Vob 2010 *Journal Psychologie des Alltagshandelns / Psychology of Everyday Activity* 2-10.

24 Encyclopaedia Britannica 2014 http://www.britannica.com/topic/vending-machine.

25 Pradeepa, Sudhalavanya and Suganthi 2013 *International Journal of Advanced Engineering Technology* 5; Palnitkar *Verilog HDL* 10; Qurishi, Aziz and Rasool "Design and Implementation of Vending Machine" 306.

26 Shlozawa 2015 http://www.coca-colacompany.com/stories/16-things-you-didnt-know-about-vending-machines-in-japan-and-around-the-world/. On the historical account of the Hero of Alexandria and his other inventions, see Encyclopaedia Britannica 2014 http://www.britannica.com/biography/Heron-of-Alexandria.

sacrificial water) to believers in a temple in Alexandria, Egypt, and later on throughout all the temples of Egypt.[27] The Hero's vending machines:

> …allowed each member to receive an equal allotment of holy water without requiring the presence of the priest. Hero's vending machines operated on an open valve system. When a coin was placed in the slot of the vending machine, it would rest on a platform. The weight of the coin would push the platform down, opening a valve and dispensing a consistent trickle of holy water.[28]

Antiquities aside, the modern vending machine was invented and first used in America in 1888 by the Thomas Gum Company to expand the sale of its famous "Tutti-Frutti gum" in "…the platforms of the New York City elevated railway."[29] Around the same period, a vending machine was invented in London for the sale of post cards. Another vending machine was also invented during that period by Richard Carlisle, an English publisher and bookseller, to sell books.[30] Carlisle's vending machines could only contain six books at a time.[31] A cigarette vending machine was next invented in America in 1926 and a soft-drink vending machine in 1937.[32] During and after World War II, America saw a rapid increase in the use of vending machines for retail purposes. It is said that:

> As the United States began its defence buildup prior to its entry into World War II, plant managements estimated that people could not work efficiently for 10, 12, or more hours without a refreshment break, and vending machines proved the most practical way of providing refreshments. During the 1940s and 50s the vending machine business was concentrated in plants and factories, and by the end of that period, machines were being used to sell a wide variety of freshly prepared as well as prepackaged foods to replace or supplement traditional in-plant food service facilities. Refrigeration was added to vending machines to sell bottled soft drinks.[33]

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27 See McEwen *Who Knew?* 7; Project Gutenburg 2002 http://www.gutenberg.us/article/whebn0000266.339/vending%20machine.

28 LeVine date unknown http://www.vencoavendingmachines.com/vending_machine_recent_history.html.

29 Encyclopaedia Britannica 2014 http://www.britannica.com/topic/vending-machine.

30 On the history of book vending machines, see Geoghegan 2013 http://www.huffingtonpost.com/john-geoghegan/book-vending-machines_b_2945364.html.

31 EngineersGarage 2012 http://www.engineersgarage.com/invention-stories/vending-machine-history; LeVine date unknown http://www.vencoavendingmachines.Com/vending_machine_recent_history.html.

32 Encyclopaedia Britannica 2014 http://www.britannica.com/topic/vending-machine. For a brief narration of the history of cigarette vending machines specifically, see Parkinson 2011 http://www.dailymail.co.uk/health/article-2042747/Cigarette-vending-machines-pubs-outlawed-weekend.html.

33 Encyclopaedia Britannica 2014 http://www.britannica.com/topic/vending-machine.

After this period, the use of vending machines became so wide spread that it is impossible to capture and deliver a meaningful historical record thereof. Drawing from the above quotation, it is clear that the use of vending machines in the US, and perhaps around the globe too, was influenced by several factors including, new products, wars and factory line manufacturing. Therefore, one can conclude this aspect of the discussion by showing that vending machines have:

> …a polycentric history involving many unknown tinkerers, and it is a history that can be told only as a transnational venture among various industrialized societies.[34]

2.3.1.1.1 Description

A vending machine is essentially a metal cabinet measuring about 203 cm in height and 106 cm in Width.[35] This box is fitted inside with a stocking shelf on which goods are displayed. This stocking shelf is covered with lexan, which is a very tough polycarbonate plastic, to protect the goods in the machine.[36] Below or on the side of this protective plastic, depending on the design of the machine, is the key board. The keyboard is an input device through which customers select the desired items by entering codes which represents the goods inside the machine.[37]Somewhere near the keyboard is a money slot through which customers deposit the purchase price, in the form of coins or banknotes (and now even allow for the swiping of credit cards). Below this slot is another slot intended for purposes of returning the deposited money in case of an unsuccessful transaction, and for dispensing change.[38]

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34 Epple *Automatic Trade* 103.

35 Understandably, vending machines will differ in their sizes depending, for instance, on the type of items which they have been designed to trade. For different types of vending machines and their measurements, see DimensionsInfo 2010 http://www.dimensionsinfo.com/vending-machine-dimensions/.

36 See Encyclopedia.Com 2002 http://www.encyclopedia.com/topic/vending_machine.aspx.

37 As with a computer keyboard, a vending machine's keyboard is an input device that instructs the machine's central processor. As described by one author "…where you enter the code for the specific product that you want to buy. The keypad is not only the main input device for the machine, but is also home to the vending machines' central computer. When you press 'D7' on the keypad, it will tell the central computer which product to dispense," see Techreleased 2012 http://www.techreleased.com/blog/inside-a-vending-machine-how-do-these-devices-work/.

38 Vending machines are usually fitted with currency detectors. These currency detectors are able to read certain characteristics of either a bank note or a coin, and to verify whether or not the deposited money is counterfeit. For machines that accept bank notes, the technology used is commonly referred to as "bill detectors." For a discussion of how bill detectors work, see Ryan 1999 http://www.nytimes.com/1999/04/08/technology/in-vending-machine-brains-that-tell-good-money-from-bad.html. For machines that accept payment of coins, the technology used involves various tests which enable the machine to differentiate between the various metals out

Understandably, the machine is also fitted inside with a safe for storing all the deposited currency. There is also a medium dispenser through which products are delivered, via a mechanical motion, out of the machine into a slot where they are taken by customers.[39]

Vending machines are normally installed in busy places such as subway rail stations, learning institutions' cafeterias, hospital corridors *etc*. In most instances, the owners of these machines pay a levy to owners of the places in which they install their machines, that is, of course, if the owner of the premises is not concurrently the owner of the machine. Owners of vending machines have to frequently restock goods into the machines, and to empty the money safe whenever it is full.

2.3.1.1.2 The role of vending machines in the formation of agreements

The role of vending machines is clearly to sell goods to customers without their owners' involvement. Understandably, whenever a successful transaction is made between a vending machine and a customer, a valid sale contract has been concluded from the perspective of a lawyer. The role of vending machines is a simple one of providing a convenient way to advertise goods for sale, and to deliver those goods to customers anytime of the day.[40] The vending machine has no role whatsoever in the negotiation of the terms of sale.[41] The contract of sale through a vending machine is basically a contract of adhesion in which all the terms are imposed on customers by the owner of the vending machine. These terms can be found written on or near the vending machine in the form of a notice. Moreover, the vending machine has no role in determining the selling prices of the items, as these

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of which the coins are made, see Coinmate 2008 http://www.coinmate.us/news/item_930.html. If the coin in issue is counterfeit, the machine releases it into a coin slot for collection by the customer. In case of a counterfeit note, the machine normally pushes back the bank note from the very slot through which it was sought to be inserted. All in all, the technology of currency detection in vending machines is very much similar to that used in change machines, which serve no other purpose but to give change.

39 For an informative discussion of this feature of a vending machine, how it works and how it has been developed from traditional to more recent electronic vending machines; see Techreleased 2012 http://www.techreleased.com/blog/inside-a-vending-machine-how-do-these-devices-work/.

40 Molinari 1964 *Journal of Marketing* 8.

41 See Dahiyat 2006 *Computer Law and Security Review* 472-473; Mik 2013 *JICLT* 172; Dahiyat 2007 *Artificial Intelligence and Law* 376.

are programmed into the machine's central processor by the user.[42] The vending machine is expected to sell those items at the set prices until the user readjusts the prices.[43] The machine is unable to increase or reduce the prices of its own volition to match the dictates of demand and supply in the local market.

For these reasons, vending machines may be described as passive transactional electronic agents. They are passive in the sense that they do not have an active role in the negotiation of the terms of contracts. In this way, they are no more than telephones and fax machines through which contracts are formed, save to note that in the case of vending machines, the resultant contracts are instantly performed through the machine itself. Wherefore Kerr refers to them as:[44]

> …*conduits* through which two independent parties transact…The essence of *conduit automation* is that, while it can be used to extend the reach of interaction between parties, it is unable to alter the terms and conditions of the transaction and is therefore incapable of interfering with the rights and obligations owed by one party to the other.

2.3.1.2 EDI systems

EDI is defined as:

> …the direct transfer or interchange of structured data according to agreed message standards between computer systems by electronic means.[45]

It has also been defined as:

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42 The selling prices are programmed unto the central processor of the vending machine. When a customer deposits money into the machine, and selects the item which he or she wishes to purchase, the central processor of the vending machine is able to determine whether the deposited amount matches the value of the selected prices as programmed by the owner, see Encyclopedia.Com 2002 http://www.encyclopedia.com/topic/vending_machine.aspx.

43 As far as it concerns the selling prices, it is common cause that, if a vending machine is programmed to sell a product, say for instance a can of soft drink, at price X, the machine will always sell the product for that amount until it is reprogrammed to sell it at a different price. In 1999, Coca-Cola attempted to introduce a vending machine which could automatically increase the selling price of its products in hot weather. This machine was fitted with a temperature sensor, which could measure the temperature outside, and a computer chip which would automatically increase the selling price if the temperature reached a certain level. Had this ingenious invention succeeded, it would have been a breakthrough for vending machine technology. However, it is common cause that still, there are yet no vending machines capable of such abilities in the market today. For a discussion of the Coca-Cola vending machine, see Hays 2009 http://www.econ.wisc.edu/~scholz/Teaching_441/coke-vend.pdf.

44 Kerr 2003-2004 *University of Ottawa Law and Technology Journal* 29; Kerr 2001 *Electronic Commerce Research* 188-189; Kerr 1999 *Dalhousie Law Journal* 209-210.

45 Coetzee 2003 *SAMLJ* 2.

> …the interorganizational exchange of business documentation in structured machine-processable form.[46]

EDI was developed in the early 1960's to help big corporations to communicate more proficiently by automating communications.[47] Typically, big corporations, particularly those involved in international trade, and those involved in repetitive sale arrangements, deal in huge volumes of documents.[48] One transaction can carry with it more than 10 documents at a time, including purchase orders, receipts, invoices and bills of lading to mention but a few. In earlier times, these documents were delivered physically by couriers, and later by post. The main problem with these modes of delivery is that they are notoriously slow for business purposes. When the earliest electronic mediums of communications such as telegram, fax and facsimile were introduced, this was obviously a relief to businessmen, which explains why businesses quickly adopted these technologies. However, as quick as they are, these new tools of communication proved very unreliable, particularly in long distance communications. Telegrams and faxes easily got garbled.[49] An otherwise perfect message or document would be received in a distorted form on the other side. Moreover, these technologies did not really simplify matters because messages still had to be authored by humans, which was not only time consuming and taxing on transactional costs, but made no difference whatsoever in terms of paper load and office space needed to accommodate that load.

EDI quickly replaced faxes and the older tools of electronic communications in big corporations. Firstly, with the assistance of the internet, computer systems can transmit documents with little risk of distortion across the globe. Secondly, EDI uses

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46 Emmelhainz *Electronic Data Interchange: A Total Management Guide* 10.

47 O'Malley and Matheson 2002 *Journal of Information Technology Management* 33. For a discussion of some of the advantages of EDI see Trauth and Thomas 1993 *Journal of Global Information Management* 7; Naiker *Adoption of Electronic Data Interchange* 43-46.

48 See Turban, McLean and Wetherbe *Information Technology for Management* 256-257. For businesses involved in international trade, the international trade of goods has been referred to as the sale of documents as opposed to goods, correctly so because the seller of goods in international sales performs much of his or her obligations to the buyer through the delivery of documents. In CIF, FOB and other contracts governed by the INCOTERMS, the seller has several documentary obligations, see generally Winsor 2010 *Vindobona Journal of International Commercial Law and Arbitration* 91; Singh and Leisinger 2008 *Pace International Law Review* 180-183; Honnold *Uniform Law for International Sale* 249-250.

49 Telegrams and faxes could be garbled as a result of bad weather which affected the transmission wires, particularly in communications over long distances. However, sometimes the distortion of telegraphic communications could be caused by the negligence of telegraph companies.

electronic formats for documents, which reduces the need for paper work.[50] Thirdly, EDI automates communications, which in turn reduces the cost of labour by eliminating human reviewers. Although EDI was developed in the 1960s, it was not until the 1980s that a majority of companies turned to it.[51] This change was motivated amongst others by proof that EDI could increase profits,[52] and partly as a result of peer pressure from trading partners who were no longer content with the burden of paper documents.

2.3.1.2.1 Description

As mentioned earlier, EDI is a closed communication network. This was explained to mean that EDI communications occur between computer systems of a few identifiable parties, being trading partners with a continuing or a continuous business relationship. One key feature of closed networks is that the relationship between the parties is governed by an agreement which regulates the use of automated communications and all other issues related thereto. The conclusion of these agreements is usually the very first step in the use of electronic agents in closed networks. In EDI transactions, these agreements are known as the EDI agreements.[53] EDI agreements can be private or industry specific. Industry specific EDI agreements are standard contracts which can be adopted by partners trading within a specific industry.[54] Private EDI agreements are those which are negotiated and concluded between trading partners.[55] The EDI agreement governs the rights and obligations of the parties "…in relation to the way data are interchanged using

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50 See generally Hodgson 1995 *Industrial Management and Data Systems* 23-26, explaining how EDI has done away with paper-based modes of communication, and how EDI as a form of paperless trading has benefited businesses.

51 See Winn 2002-2003 *Uniform Law Review* 700; Bellia Jr 2001 *Emory Law Journal* 1050.

52 The example of how EDI maximises profits is given by one author about a company known as Digital Equipment Corporation, which after implementing EDI in one of its manufacturing plants, lowered processing costs for purchase orders from $125 to $32, and also cut the delivery from five weeks to three days, see Trauth and Thomas 1993 *Journal of Global Information Management* 5.

53 For a general discussion of the EDI agreement, see Eiselen 1995 *SAMLJ* 1-10; Katus "Three Types" 31.

54 See Computer Technology Research Corp *Electronic Data Interchange* 4, making the point that in earlier years, much of the work on EDI standards was directed towards specific industries.

55 Most of the time, individual traders will adopt industry-based EDI agreements, or the national Model EDI agreement of their country, or of one the parties if they conduct their trade in different countries.

electronic means."[56] However, as shall be shown later, the exchange of data through EDI systems can result in contracts, and the EDI agreements should in no ways be confused with these contracts. EDI agreements address various issues such as the validity and enforceability of the contracts which may result due to the automated exchange of documents, the standards to be used in effecting communications, the effect of failure to comply with these standards, security and privacy of data and the liability of third-party service providers.[57]

A part of EDI agreements which needs further discussion is the use of standards. To enable the automated exchange of communications between computers, there is an unavoidable need for standard formats. The need for standards arises because each computer system is designed separately, which means that "…they are likely to be different and not directly compatible."[58] As a simple example, to open and read a PDF file attached to an e-mail, one needs first to have installed a PDF program on his or her computer, if not, it is common cause that the recipient under these circumstances will be unable to read or use such a document. Therefore, messages in EDI also need to be transmitted in standard formats which the receiving computers can be able to accept and process. The idea of EDI standards is very broad. In the first place, it is an idea aimed at facilitating the interchange of standard commercial documents in an electronic form. Standard commercial documents are, as that phrase suggests, "standardised," meaning that their appearance and content is relatively similar everywhere in the world. A standard electronic document for purposes of EDI must therefore "…replicate a standard business document."[59] This replication must include headers, headings and

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56 Katus "Three Types" 31.

57 As EDI was one of the earliest methods of automated contracting, the parties using EDI to form contracts were obviously concerned about various legal issues concerning the validity and enforceability of contracts formed in this way. It must be recalled that,at that time, *i.e.* from the early 1880s until fairly recently, there was no electronic commerce legislation as many nations have today, and no one was sure how courts would approach legal questions relating to the use of EDI systems. Wherefore, under the broad principle of freedom of contract, trading partners using EDI communications chose to regulate some of these issues under EDI contracts. For a discussion of some of these legal issues, see generally Boss 1992-1993 *Northwestern Journal of International Law and Business* 31-70; Eiselen 1995 *SAMLJ* 1-10; Gliniecki and Ogada 1992-1993 *Northwestern Journal of International Law and Business* 117- 158.

58 Pfeiffer as referenced by O'Malley and Matheson 2002 *Journal of Information Technology Management* 35.

59 Computer Technology Research Corp *Electronic Data Interchange* 15.

transaction details.[60] Secondly, and most importantly, the replication of documents for purposes of EDI must be done in a machine readable manner, *i.e.* in a manner in which a computer can read and understand. For this purpose, several EDI standards have been developed around the world. In the US, the American National Standards Institute (ANSI) was established in 1918 to coordinate the development of EDI standards. In 1979, ANSI chartered the Accredited Standards Committee X12 to develop uniform EDI standards, which resulted in the famous ASC X12 standards.[61] The ASC X 12 standards cover a very wide range of transaction sets.[62] In the mid 1980s, the United Nations Economic Commission for Europe (ENECE) too began working on EDI standards. These were published later in 1987 under the title "EDI for Administration, Commerce, and Transport" (EDIFACT, or UN/EDIFACT).[63] These standards also cover some transaction sets similar to the ASC X12.[64] In Europe, multinational corporations have adopted either the ASC X12 or EDIFACT; others have tailored their systems to accommodate both standards.[65] In South Africa, a Model Interchange Agreement drafted by Professor Sieg Eiselen was accepted by the Technical Subcommittee of the South African Bureau of Standards (SABS) as a recommended practice for EDI in 1995.[66] The SABS Model Agreements adopts the EDIFACT standards.[67]

In order to enable the transfer of data between the computer systems of the trading partners, there obviously needs to be a connection mechanism between these systems. In the earliest years, traders used direct connection EDI. Direct connection EDI means that the trading partners would connect their systems through "…modems and dial-up telephone lines or dedicated leased lines."[68] A transition was made later on to an indirect and more efficient method of connection, being the use

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60 Computer Technology Research Corp *Electronic Data Interchange* 15.
61 See Schneider *E-Business* 262-263.
62 For a list of some of these transaction sets, see Schneider *E-Business* 263. The list includes air shipping information, purchase order, price change and others.
63 See Schneider *E-Business* 263.
64 For a list of some of these transaction sets, see Schneider *E-Business* 264.
65 Computer Technology Research Corp *Electronic Data Interchange* 6.
66 See Eiselen 1996 *EDI Law Review* 38.
67 Eiselen 1996 *EDI Law Review* 37.
68 Schneider *E-Business* 269; Computer Technology Research Corp *Electronic Data Interchange* 87.

of intermediaries, known as Value-added Networks (VANS).[69] VANS occupy a similar position to that of post-offices in postal communications, *i.e.* they transmit messages between the parties. However, over and above basic connection services, VANS may provide additional services such as format and standard translation, message tracing, mailbox services,[70] and record retention and storage.[71] With the advent of the internet, EDI has once again shifted from VANS towards open communications. Internet EDI still uses message standards to enable automatic processing by computers. However, the computer systems of partners are not connected by telephone lines or VANS, but by the internet directly.[72]

Having discussed the features of EDI communications, it is necessary to show in conclusion how it works in practice. EDI involves five main steps, namely (1) extracting data from a computer system. This is the data related to the trading arrangement of the parties such as the quantity of the goods ordered by the ordering party, and the documents which must be forwarded to the other party in relation to each transaction; (2) translating that data into a readable and processable format. This involves the use of the various standards discussed above, which-ever the parties may have agreed upon; (3) transmitting the relevant data in a standard format, and; (4) translating/interpreting the message at the receiving end. This is done automatically by the receiving computer, which will understandably be installed with software capable of such functions. Where the parties use VANS, the translation or interpretation of the message will be done by that company, which will thereafter transmit the translated message to the other end; and (5) downloading the data in the receiving computer application.[73]

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69 A VAN "…is a company that provides communication equipment, software, and skills needed to receive, store, and forward electronic messages that contain EDI transaction sets," see Schneider *E-Business* 296.

70 Mailbox services include receipt, storage, transmission and retrieval of messages on behalf of a trading partner.

71 See Boss 1992 *Northwestern Journal of International Law and Business* 49.

72 Turban, McLean and Wetherbe *Information Technology for Management* 259-260.

73 See generally, Van Tonder 2011 *De Rebus* 20-25.

2.3.1.2.2 The role of EDI systems in the formation of agreements

As mentioned, EDI is the means through which trading partners exchange trading information, particularly standard commercial documents.[74] However, it is common cause that EDI systems are not entirely limited to the exchange of documents. The information exchanged through EDI systems may at times lead to formation of contracts.[75] Dodd and Hernandez offer as example that:[76]

> …when a retailer and a wholesaler network for EDI transactions, the retailer's inventory system automatically evaluates when particular items should be ordered and, perhaps after some review or intervention by an employee, the system transmits an electronic order to the wholesaler.

Coetzee ingeniously completes the scenario by demonstrating that:[77]

> The receiving computer is able to process the message through a program using the same format. If the communicated offer matches the terms, the receiving computer is programmed to accept, and sends an acceptance message in an acceptance transaction set. A contract is concluded.

However, the role of EDI systems is not very different from that of vending machines. Like vending machines, EDI systems are passive transactional electronic agents. The only genuine difference is that EDI systems can perform their functions in a more fluid manner. EDI systems are passive in the sense that apart from communicating the terms upon which their users intend to contract, these systems have no active role in the content of those terms. The role of these systems is clearly defined in the EDI agreements,[78] and a departure from that agreement is a mistake, which mistake can result in the user of the relevant system being in breach of the EDI agreement.

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74 Computer Technology Research Corp *Electronic Data Interchange* 15-16; Schneider *E-Business* 262-264; Laudon and Laudon *Information Systems and the Internet* 273-274; Turban, McLean and Wetherbe *Information Technology for Management* 256-257.

75 See Eiselen 1995 *SAMLJ* 10, stating that "EDI messages are used not only to exchange information but will in many cases also be instrumental in creating binding and enforceable legal obligations. Where the main commercial contract makes provision for orders at a specific price, no obligation to pay arises before an order is placed. The EDI message may therefore be seen as the acceptance of the offer contained in the main commercial contract."

76 Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5.

77 Coetzee 2003 *SAMLJ* 3; Perritt *Law and the Information Superhighway* 376.

78 See Dahiyat 2006 *Computer Law and Security Report* 473, noting that an "…EDI system is designed exclusively and precisely to operate according to the terms and conditions of the trading partner agreement without having the ability to deviate from that agreement or to generate self-created or self-modified instructions."

2.3.1.3 Autonomous electronic agents

The 1990s saw much talk about the so-called "information superhighway" which is defined as a state of affairs in which:

> …Information and communication networks give access to almost any kind of information at any time virtually anywhere in the world.[79]

The realisation of the information superhighway transformed the internet from a simple medium of communication into an active marketplace, a virtual marketplace. This virtual marketplace, also known as the "information economy," is filled to the brim with information about buyers, sellers, goods, services and their prices. It is the abundance of this information which makes the internet the best profitable alternative to physical marketplaces. This information can assist online buyers and their electronic agents to make better decisions about the products that they wish to purchase.[80] Similarly, online vendors can use this information to respond efficiently to the needs of their customers.[81] However, it is a sad reality that no one can personally search, collect, analyse and use all this information without losing out on time and transactional costs. As a result, it is said that in online trade, human participation is not only undesirable, but must be actively discouraged.[82] Thankfully, the transition of the internet into a forum for trade has been equally matched by the transition of computers from simple calculating machines which they were in the 1950s, to information processors in the 1980s and to autonomous agents in the 2000s.[83]

The aforementioned transition in the role of computers was no doubt influenced by the overwhelming volume of information on the internet. The move to invent smart computers began in the USA. Famous research institutions such as the Massachusetts Institute of Technology (MIT), Carnegie Mellon University, Stanford

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79 Eiselen 1995 *SAMLJ* 1.

80 Kephart, Hanson and Greenwald 2000 *Computer Networks* 731.

81 Kephart, Hanson and Greenwald 2000 *Computer Networks* 731.

82 See Nimmer 1996 *Journal of Computer and Information Law* 212 making the point that "[h]uman choices are potentially inaccurate and always slower element of a transaction. Rather than encouraged, human choices may be actively discouraged in seeking the optimal business communication environment."

83 Faltings 2001 *Infomatik.Informatique* 2; Wooldridge *An Introduction to MultiAgent* 304.

University and IBM began the development of smart computers as early as the 1950s.[84] In 1956, at the Dartmouth College conference, John McCarthy proposed the use of the term "artificial intelligence" (AI) to describe "…computers with the ability to mimic or duplicate the functions of the human brain."[85] An equivalent term which has gained momentum in recent years is "electronic agent."[86] The first electronic agents were mainly used to search and collect information on behalf of their users on the internet, precisely because the increase of information on the internet made it "…impossible to gather and process information by manual browsing."[87] Famous examples of these types of electronic agents include Netscape, Google Chrome, Mozilla Firefox, Opera, Bing, Yahoo and Internet Explorer. The second generation of electronic agents, commonly referred to as "autonomous electronic agents" can do more than this, they can actually mimic a wide range of human qualities.[88]

2.3.1.3.1 Definition

An autonomous electronic agent has been described as:

> …an encapsulated computer system that is situated in some environment and that is capable of flexible [and] autonomous action in that environment in order to meet its design objectives.[89]

It has also been defined as computer software that knows how to do things that one could probably do in person if he or she had the time.[90] In the opinion of the current researcher, however, it will serve no good purpose in this study to attempt to

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84 See Weitzenboek 2001 *International Journal of Law and Information Technology* 206; Jurewicz 2005 http://law.bepress.com/cgi/viewcontent.cgi?article=3598&context=expresso; Buchanan *AI Magazine* 57.

85 Stair, Reynolds and Chesney *Principles of Business Information Systems* 312; Chorotas *Applying Expert Systems in Business* 42, equally defines artificial intelligence to mean "…a scientific field concerned with creating computer systems which can achieve human levels of reasoning. More precisely, AI is the branch of information science that focuses on developing computer programmes able to perform tasks normally associated with intelligent human behaviour." See also Gowda 2008 *International Journal of Computational Engineering Research* 248.

86 The idea of an "electronic agent" first originated with John McCarthy himself in the 1950s, but was developed further by Oliver G. Selffidge a few year years later when he and McCarthy were at the Massachusetts Institute of Technology.

87 Jurewicz 2005 http://law.bepress.com/cgi/viewcontent.cgi?article=3598&context=expresso; Wetting and Zehendner 2004 *Artificial Intelligence and Law* 112-113.

88 Gowda 2008 *International Journal of Computational Engineering Research* 248; Allen and Widdison 1996 *Harvard Journal of Law and Technology* 27.

89 Jennings 2000 *Artificial Intelligence* 280.

90 See Selker as quoted by Cross 2003 *International Review of Law, Computers and Technology* 177.

provide a conclusive definition of an autonomous electronic agent. The issue of the definition of an electronic agent remains one of the most bitterly debated in computer science.[91] To add even more confusion into that issue, other disciplines too, such as law and sociology, have also infiltrated that debate, adding more confusion as a result. Consequently, with every paper published on this topic, in whatever disciple or field of study that might be, one is likely to find a new and different definition of an autonomous electronic agent. It is proposed, therefore, that instead of seeking a comprehensive definition, one is better advised to define an autonomous electronic agent from the perspective of its characteristics and purposes.

It must be recalled that the ECT Act defines an electronic agent as "…a computer program or an electronic or other automated means…." This statute does not, however, define the term "program." Nevertheless, the *Copyright Act* 98 of 1979 (hereinafter referred to as the CA) defines a "computer program" as:

> …a set of instructions fixed or stored in any manner which, when used directly or indirectly in a computer, directs its operations to bring about a result.[92]

A computer program is essentially a piece of software. The statutory definition of an electronic agent as a computer program somehow downplays the size, and most importantly, the effort which it usually takes to implement an electronic agent, particularly in large corporations.[93] To start with, it must be recalled that a computer program does not operate in a vacuum, but needs the support of the

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91 Wetting and Zehendner 2004 *Artificial Intelligence and Law* 112, stating that "[t]here is no generally accepted definition of an 'electronic agent'. This term is to be interpreted with respect to an interdisciplinary area in which different scientific fields of research (e.g., artificial intelligence, information and communication systems, social science, and computer science) with different emphases are represented (Brenner et al. 1998)."

92 s 1(1).

93 It must be recalled that, although individuals and small traders may use simple pre-packaged software bought over the counter, or create their own electronic agents from relevant websites on the internet, big corporations usually use complicated software designed specifically to suit their business needs. This software is commonly referred to as bespoke software, and is developed by software houses for their clients; see Mogan and Stedman *Computer Contracts* 117. The development of the software is itself part of the implementation of the communication system, and requires constant interaction between the company and the software house. This software must then be installed and tested, separately and in combination with other programs on the company's system; see Martin, DeHayes and Hoffer *Managing Information Technology* 303; Stair Reynolds and Chesney *Principles of Business* 445-450.

hardware.[94]The hardware may be a simple laptop or desktop computer. However, in large corporations, *e.g.* Amazon.com and other companies that offer goods for sale on the internet, the electronic agent is a very big communication system composed of several computers, software and all other electronic devices necessary to support the automatic sale of goods to people around the world. Not only that, this complex communication system also requires skilled IT personnel, and the company may even need to send some of its employees for training with every major modification or improvement on the system.[95] No one can reasonably assume that the automated message system of Amazon.com is a simple laptop computer. Therefore, an electronic agent is better defined as a totality of all the constituent components that make up a communication or information system capable of initiating or responding to communications without human review.[96]

Autonomous electronic agents are distinguished from passive electronic agents, and all other computer software, by their autonomy. By "autonomy" in this context is meant that these electronic agents can:

> …perform the majority of their problem-solving tasks without the direct intervention of humans or other agents, and [that] they [must] have control over their own actions and internal state.[97]

The electronic agent must, therefore, perform its programmed functions autonomously or independently. For instance, an electronic agent programmed to buy and sell shares online must be able to match the skill which a Stock Exchange broker would demonstrate in the performance of his or her obligations. This includes, amongst others, the ability to do background checks or screening of the company offering shares; and the ability to sell shares at a profit on behalf of its

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94 See Alheit *Issues of Civil Liability arising from the use of Expert systems* 57.

95 Stair Reynolds and Chesney *Principles of Business* 449, stating that "…the eventual success of any system depends on how it is used by the IS personnel within the organization. Training programs should be conducted for the IS personnel to who will be looking after the new computer system. These programs are similar to those for the users, although they can be more detailed in the technical aspects of the system."

96 See Godaw 2008 *International Journal of Computational Engineering Research* 246, making the point that "…software agents are a piece of software which works for the user. However software agent is not just a program. A software agent is 'a system'…." An information system is defined in s 1 of the ECT Act to mean "…a system for generating, sending, receiving, storing, displaying or otherwise processing data messages and includes the Internet."

97 Jennings, Faratin and O'brien 2000 *Applied Artificial Intelligence* 150.

user. This ability of electronic agents to imitate human agents is achieved through several architectures employed during the programming stage. The "architecture" is the background basis that defines the functionality and abilities of an electronic agent.[98] The architectures employed in the design of electronic agents include blackboard architectures, reactive, subsumption and cognitive architectures.[99] Proceeding with the above example of an electronic agent programmed to trade shares on the Stock Exchange, such an electronic agent will only be able to match a human broker in the same position if it is build with cognitive architectural qualities which enable it to "think" like a person. Cognitive architectures would instil an electronic agent with certain negotiation, or bargaining tactics. This includes time and dynamic deadline dependent tactics, which allow the electronic agent to appreciate the value of time in negotiating offers and making acceptances.[100] An electronic agent may therefore be programmed with different architectures and negotiation tactics depending on the purpose for which it is intended to be used. It is a combination of these features that enables it to perform its functions autonomously.

Apart from autonomy, an electronic agent must also be reactive. By reactivity is meant that autonomous electronic agents must be able:

> …to perceive their environment (which may be the physical world, a user) via a graphical user interface, a collection of other agents, the internet or perhaps all of these combined, and to respond in a timely fashion to changes that occur in it.[101]

In short, an autonomous electronic agent must be able to perceptive its environment, and must be able to respond appropriately and timely to any changes which occur in that environment. To enable this quality, the programming of an electronic agent must be based on "reactive dynamic architectures."[102] This, in essence, involves the equipping of the electronic agent with three main tools of

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98 See generally, Eeles 2006 http://www.ibm.com/developerworks/rational/library/feb06/eeles/.

99 For a discussion of these and other architectures, see Wobbrock *The Law and Policy* 29-37.

100 For an informative discussion of all the negotiation tactics used by autonomous electronic agents, see generally Faratin, Siera and Jennings 1998 *Robotics and Autonomous Systems* 159-182.

101 Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 278; Cross 2003 *International Review of Law, Computers and Technology* 3.

102 See generally Anderson "Reactive Dynamic".

adaptive behaviour, namely sensors, triggers and effectors.[103] Through these tools, an electronic agent is able to sense and gather information about the state of the environment in which it operates, and to trigger and effect (implement) suitable adaptations whenever a change has been detected in that environment. The reactive behaviour of an electronic agent enables it to be autonomous in that the agent can deal with changes itself, without the assistance of its user, while at the same time pursuing its programmed mandate.

The third characteristic of autonomous electronic agents is "pro-activity," which means that these agents "…are able to demonstrate goal-directed activity by taking the initiative."[104] Electronic agents are used with a view to achieving a specific purpose on behalf of their users.[105] An electronic agent must demonstrate the ability to pursue its intended purpose, and must do so by taking initiatives without the user's direct intervention. For instance, an electronic agent programmed to sell or buy goods online must actually go into the virtual market to find sellers and buyers on behalf its user.

Other qualities of autonomous electronic agents which are not yet common cause, but are currently under development, and find much support in academic commentary include (1) the ability to learn. The ability to learn very much concerns the intelligence of the electronic agent. As a piece of software, an electronic agent has approximately as much intelligence or skill as has been programmed into it by the programmer. However, an autonomous electronic agent must be able to add more to the programmed intelligence by being able to learn from past

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103 Sensors are meant to enable an electronic agent to sense its environment, and to note any changes that may occur in that environment. These are essentially the senses of adaptive computer software. Triggers on the other hand trigger adaptations in software each time a change is been detected by the sensors. The effectors are used to effect the necessary change or adaptation which a software agent must assume in order to adapt to the changes. For an elaborate discussion of these functions, see generally Anderson "Reactive Dynamic"; Salehie and Tahvildari "Self-Adoptive Software" 14-42.

104 Cross 2008 *International Review of Law, Computers and Technology* 177.

105 Jennings 2000 *Artificial Intelligence* 281.

experiences;[106] (2) mobility;[107] (3) reasoning;[108] (4) benevolence;[109] (5) veracity[110] and the ability to plan.[111]

2.3.1.3.2 The role of autonomous electronic agents in the formation of agreements

For vending machines, it has been illustrated that their role is simply limited to selling goods, and for EDI systems that their role is primarily to exchange information between trading partners, and that this exchange of information may at times result in the formation of contracts. Both vending machines and EDI systems are mere conduits through which human users conclude, and where relevant, perform contracts. Autonomous electronic agents by far surpass their predecessors in that regard. Autonomous electronic agents are not simple conduits of communication, they are properly understood to be somewhere between being mediators and initiators of commercial transactions.[112] The main role of these

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106 Kis *Contracts and Electronic Agents* 9, describes the requirement that an electronic agent must be able to learn to mean that "[t]he agent may accumulate knowledge based on past experience and subsequently modify its behavior. The ability to learn is very much part of the requirement that an electronic agent must be reactive. From the lessons learned, the electronic agent must be able to adapt its behaviour so that it can easily adjust to similar instances in the future." As early as 1996, Allen and Widdison 1999 *Harvard Journal of Law and Technology* 27 had already demonstrated that "[a]utonomous machines can learn through experience, modify the instructions in their own programs, and even devise new instructions. They then can make decisions based on these self-modified or self-created instructions." The adaptive behaviour of electronic agents is dependent of their ability to learn from past experiences. Understandably, an electronic agent capable of learning must also have a memory in which all past experiences are stored.

107 Kis *Contracts and Electronic Agents* 9, describes mobility to mean that "[t]he agent can transport itself from one machine to another while preserving its internal state." The idea of mobile agents seems to serve no other purpose than to enable electronic agents to demonstrate the quality of 'proactivity.' For instance, an electronic agent programmed to sell goods on the internet must not be stagnant on the user's computer, it must actually go online and visit virtual markets with the purpose of finding buyers. See also Wobbrock *The Law and Policy* 46.

108 See Kis *Contracts and Electronic Agents* 9.

109 See Kis *Contracts and Electronic Agents* 9; Lodder and Voulon 2002 *International Review of Law, Computers and Computers* 279, defining "benevolence" to mean the assumption that electronic agents do not have conflicting goals, *i.e.* a conflict of interest, and that they only do as they are programmed to do.

110 "Veracity" has been defined as the assumption that electronic agents will not intentionally deceive, and provide false information, to other electronic agents or human beings; see Kis *Contracts and Electronic Agents* 9; Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 279.

111 The electronic agent must be able to choose a preferable course of action on behalf of its user, see Kis *Contracts and Electronic Agents* 9.

112 See Andrade, Novais and Neves "Will and Declaration" 53, making the point that in the past, computers were assistants, that today they are mediators in electronic commerce, and are quickly heading towards being initiators of commercial agreements. See generally also Guttman,

artefacts is to conduct trade on behalf of their users on the internet. The phrase "conduct trade" is used in a general manner encompassing the different usual processes involved in the buying and selling of goods, and these include (1) need identification; (2) product brokering; (3) merchant brokering; (4) negotiation and contract conclusion; and (5) product, service evaluation and recommendations. These are, in essence, the functions that if one is not able to perform them himself, would secure the services of another (being an agent) to perform them on his or her behalf. Therefore, the role of autonomous electronic agents closely resembles that of human agents in the real world.[113]

As the first stage in trading, need identification refers to the situation where the user of the software agent has an unmet need, and the agent is able to automatically identify that need.[114] Consider, for example, that Tekmetrix Ltd trades in a wide range of electronic devices. The buying of stock for this company is done by an electronic agent. This electronic agent is connected straight to the inventory system, which enables it to determine when the stock of a specific product, *e.g.* a HP laptop, has been depleted. In this way, the electronic agent can instantly tell when there is a need for HP laptops, and can surely tell that the need can be met by stocking laptops of that brand. Electronic agents of this sort are known as "monitors," and are generally used by entities or individuals involved in repetitive or habitual purchases such as suppliers and fanatics. For the latter group, *i.e.* fanatics who love specific products such as books by a certain author, or electronic devices by specific companies such as Apple, their electronic agents can instantly determine that their

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Moukas and Maes 1998 *The Knowledge Engineering Review* 147-159; Maes, Guttman and Moukas 1999 *Communications of the AMC* 81-91.

113 For a discussion of the similarities between human and electronic agents, see generally Wetting and Zehedner 2004 *Artificial Intelligence and Law* 111-135; Fischer 1996-1997 *Indiana Law Journal* 545-570; Chopra and White 2009 *Journal of Law, Technology and Policy* 363-403; Wong 1999-2000 *Suffolk University Law Review* 87, stating that "[t]he concept of an electronic agent shares certain important similarities to that of a human agent."

114 For a detailed discussion of the process of need identification, see Maes, Guttman and Moukas 1999 *Communications of the AMC* 83; Guttman, Moukas and Maes 1998 *The Knowledge Engineering Review* 148; Maes, Guttman and Moukas "Agents that Buy and Sell" 83.

users will be in need of the latest book by that author or a device by that company, and can instantly notify them whenever that product hits the market.[115]

Product brokering is essentially a process of searching for the various products which can meet the users' needs. Sometimes, there may be an unspecified number of products on the market that can meet a need. For instance, if one is in need of a legal textbook on the law of contract, it is common cause that there are numerous books on that topic in the market. The process of product brokering is essentially a refined search for information on similar products sold by different traders. It involves the electronic agent searching the internet for information on the required product, filtering unwanted information, and then delivering only the relevant information.[116] Continuing with the example of a legal textbook on the law of contract, the electronic agent will search the internet for traders who sell legal textbooks; it will filter out information on textbooks that do not address the law of contract and only deliver results for textbooks on the law of contract. Most importantly, being able to tell the location of the user, the electronic agent may only search the websites of local traders, and will therefore refine the search by delivering information on law of contract textbooks relevant to the user's jurisdiction.

Merchant brokering involves a process of comparison of the relevant information such as prices, with the view to recommending a merchant who offers a better deal. At this stage, the electronic agent does not filter any information as in the product brokering stage, but arranges the information chronologically from the perspective

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115 For instance, Amazon.com offers to its customers the services of a notification agent called "Eyes." These electronic agents monitor the catalogue of books available with Amazon.com, and notifies subscribers whenever a new book which may be of interest to them is stocked, see generally Maes, Guttman and Moukas "Agents that Buy and Sell" 84.

116 It is common cause that a general search of information through traditional search engines such as Googe and Internet Explorer can be tiring. In the first place, these search engines offer every piece of information available on the internet, as long as it contains one or a few words which have been typed in the search area. One may have to do several manual searches before he or she finds what they are looking for. Secondly, some companies that provide search engine services arrange the results of every search chronologically starting with websites who pay them or advertise through them. This manner of delivering results is beneficial to those companies, not the customers who use their search engines. Electronic agents provide a more refined list of search results in that they filter out unwanted and irrelevant results, and only deliver the most relevant. See Turban, McLean and Wetherbe *Information Technology for Management* 277, stating that "[t]he agent looks for specific product information, critically evaluates it, and reports the results to the customer." See also Guttman, Moukas and Maes 1998 *The Knowledge Engineering Review* 149-150; Maes, Guttman and Moukas 1999 *Communications of the AMC* 83.

of preference.[117] The negotiation stage on the other hand entails the electronic agent negotiating a sale agreement with the preferable merchant. In typical internet sales, the role of negotiating agents is very limited by reason of fixed selling prices. However, there are environments where the negotiation of prices and other terms of sale is a norm on the internet. These include auctions, stock markets, fine art auction houses, flower auctions and various *ad hoc* haggling.[118] As the last process, the stage of product or service evaluation entails the electronic agent evaluating a particular merchant's services, and making recommendations to the user for future purchases.

So far, the role of autonomous electronic agents in electronic commerce has been discussed from the perspective of a buyer who intends to purchase goods online. This does not mean, however, that online retailers do not use electronic agents. As with buyers, autonomous electronic agents are equally useful to online retailers. Online retailers who sell goods on interactive websites use electronic agents for a number of purposes. Although many may be oblivious to this fact, every time we visit these websites to buy goods, we interact not with a natural person but with the electronic agent of the relevant company.[119] Every process and procedure which online buyers follow when placing their orders on these websites is conducted by electronic agents. After their orders are placed, online buyers usually receive e-mails stating that their orders are being processed, and furthermore stating the period within which the ordered product will be delivered. These e-mails are automated, meaning that they are not authored by the employees of the company, but by the companies' automated message systems. This demonstrates that electronic agents are equally important to buyers and sellers online.

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117 See Guttman, Moukas and Maes 1998 *The Knowledge Engineering Review* 150-151; Maes, Guttman and Moukas 1999 *Communications of the AMC* 83.

118 Negotiating agents, as mentioned, are used mainly in sale settings where selling prices are not fixed, but have to be negotiated. Some of the famous negotiating agents include AuctionBot, developed by the University of Michigan. The website allows users to create negotiating agents by creating limits such as the type of auction, the highest amount to bid and the product. Other negotiating agents include Kasbah agents and Tete-@-tete. For a discussion of these electronic agents and how they function in practice, refer to Turban, McLean and Wetherbe *Information Technology for Management* 253.

119 See Chopra and White 2009 *Journal of Law, Technology and Policy* 363; Pistorious 2008 *JILT* 2, noting that "[m]ost on-line transactional interfaces involve an electronic agent."

Autonomous electronic agents are also frequently used to advertise goods online. Unlike traditional advertisements such as billboards, these electronic agents are mobile, and so do not necessarily wait for potential customers to see them, but actually go out to find customers themselves. Some of these electronic agents are intrusive, and often come in a form of "pop-ups" that invade websites. For instance, internet users often encounter advertisements that advertise products or events which have nothing whatsoever to do with the content of the websites which they are browsing.[120] The example of advertising electronic agents that are not intrusive includes Kasbah agents. With Kasbah:

> When a user creates a new selling agent, they give it a description of the item they want it to sell. Unlike traditional classified ads, though, which sits passively in its medium and waits for someone to notice it, Kasbah's selling agents take a pro-active role. Basically, they try to sell themselves, by going into the marketplace, finding interested parties (namely, buying agents) and negotiating with them to reach a deal.[121]

Autonomous electronic agents are also used by sellers for purposes of data mining. Data mining is a technique used by online sellers to collect information on buyers with the purpose of building "...models that predict consumer behaviour."[122] In this manner, sellers are able to identify their market, the specific products and type of customer service which they must offer in order to attract more and to keep existing customers.[123]

2.4 Conclusions

The main purpose of this chapter was to introduce and discuss the notions of automated transactions and electronic agents. It was demonstrated that automated transactions are electronic contracts concluded between electronic agents *inter se*

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120 For a discussion of online advertisements in the form of pop-ups, see generally McCoy *et al* "A Study of the Effects of Online Advertising."

121 Chavez and Maes "Kasbah" 8.

122 Berson, Smith and Thearling *Building Data Mining* 6. On the need and importance of predicting consumer behaviour in online retailing, see Turban, McLean and Wetherbe *Information Technology for Management* 249-252.

123 Data mining is also used for numerous other purposes, such as in the financial sector where it is used by banks, amongst others, to automate loan application processes, and to predict probable defaulters; detecting fraudulent credit cards, and for identifying what customers prefer, and offering them products and service that they are most likely to purchase, see Turban, Sharda and Delen *Decision Support Systems* 204; Stair, Reynolds and Chesney *Principles of Business* 169-170; Turban, Rainer and Potter *Introductionto Information* 343-346.

and between electronic agents and natural persons. It was also demonstrated that automated transactions can occur in both closed and open networks, and some explanation was offered regarding the differences between the two concepts. Under the topic of electronic agents, this chapter discussed the various forms of electronic agents, being automatic vending machines, EDI computer systems and autonomous electronic agents. In discussing these types of electronic agents, specific attention was paid to the historical development, description, and the role of these electronic agents in commerce. It was illustrated as regards automatic vending machines and EDI computer systems that these electronic agents are mainly passive in the sense that they do not actively participate in the negotiation and conclusion of agreements, but simply contract on terms predetermined by their programmers or users. As regards the role of autonomous electronic agents, it was demonstrated that this type of electronic agents by far surpass automatic vending machines and EDI computer systems in that they have an active role in the negotiation and conclusion of contracts. It was shown that the role of autonomous electronic agents includes (1) need identification; (2) product brokering; (3) merchant brokering; (3) negotiation and conclusion of contracts; and (4) product, service delivery and evaluation. It was furthermore illustrated that autonomous electronic agents can equally be employed by both online buyers and internet retailers. Internet retailers use autonomous electronic agents for several purposes, including, retail sales on interactive commercial websites, online marketing and advertising, and for purposes mining electronic data on consumer behaviour.

CHAPTER 3

3 The rationale of agency

3.1 Introduction

Modern commercial law recognises that for one reason or another, a person may need to negotiate and conclude contracts through another.[1] It may be that because of other pressing commitments, he or she has no time to personally conclude his or her own contracts, or that he or she lacks the necessary skill, knowledge or expertise to negotiate and conclude contracts within a specific trade or line of business.[2] Sometimes, as in the case of governments, companies and partnerships, it may be that the principal is unable to personally negotiate and conclude its contracts because of the lack of a corporeal body.[3] Therefore, the only way to conclude contracts is through another who has a corporeal body. It is in recognition of these and other relevant factors that the law permits one person to negotiate and conclude commercial transactions through another person as his or her agent. Agency serves a number of vital roles to which modern commercial life owes its success. Through the use of agents, principals capitalise on time and costs in that they can negotiate and conclude transactions with distant merchants without any need to be personally present.[4] In this way, principals increase their sphere of trade, with the result of increase in profits. Secondly, it is through agency that companies and partnerships, which are as a matter of fact the biggest contributors to economic and commercial growth, are able to participate in trade.[5] Therefore, without agency, commerce and trade would come to a standstill.[6]

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1 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 455; Silke *De Villiers and Macintosh's The Law of agency* 1.

2 Markesinis and Munday *An Outline of the Law* 3.

3 Silke *De Villiers and Macintosh's The Law of agency* 1.

4 Muller-Freienfels 1957 *The American Journal of Comparative Law* 165; Muller-Freienfels date unknown http://global.britannica.com/contributor/Wolfram-Muller-Freienfels/2074.

5 In company law, directors are regarded as agents of companies, see *Lennard's Carrying Co Ltd v Asiatic Petroleum Co Ltd* (1915) AC 705 713, in which it was stated that "[a] corporation is an abstraction. It has no mind of its own any more than it has a body of its own; its active and directing mind and will must consequently be sought in the person of somebody who for some purposes may be called an agent, but who is really the directing mind and will of the corporation, the very ego and centre of the corporation." See also *Director of Public Prosecutions v Kent and Sussex Contractors Ltd* [1944] KB 146 156, in which the court similarly mentioned

The aim in this chapter is to discuss in detail the rationale of agency. The discussion shall commence with a brief but informative historical background of the development of the South African law of agency. The first part of the work shall plunge in depth to define what an agent is, with specific focus on the legal as opposed to the commercial meaning of the word "agent." It shall be shown in that part that an agent is a representative who stands for another, known as the principal, in the negotiation and conclusion of contracts. The second part hereof shall define agency, which is a relationship which exists between the agent and his or her principal. It shall also be considered in that part of the chapter the various ways in which this relationship comes into existence. Contrary to popular belief, it shall be demonstrated that the relationship of agency does not arise from agreement between the principal and the agent, but mainly through the authority conferred by the principal on the agent, which authority is properly considered to be a unilateral act of the principal. The third part shall explore in full the idea of "authority," and shall define in minute detail the two categories of authority which a principal can confer on the agent, namely actual authority and ostensible or apparent authority. The fourth part hereof shall consider the various rights and obligations that accrue to the principal and the agent respectively. The firth part shall demonstrate the various ways in which the relationship of agency comes to an end. The sixth part of this chapter, which is the core, shall consider in detail the rationale of agency. It shall be demonstrated that in law, a principal is still liable for the acts of his or her agent even where the agent has exceeded or acted without authority. To explain this, an elaborate theory shall be developed to illustrate that the rationale of the law of agency is to distribute or allocate risk between the parties. To encapsulate, this theory commences with the recognition that agency is an inherently risky process. For the principal, the risk of agency is that the agent can exceed or act without authority, thus binding his or her principal in transactions to which he or she did not consent to be bound. To third parties, the risk of agency is that, if the agent exceeds

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that "a corporation can only have knowledge and form an intention through its human agents." In relation to partnerships, it is said that partners are agents of each other, meaning that transactions concluded by one partner binds all the other partners, see *Divine Gates & Co v African Clothing Factory* 1930 CPD 238 240; *Potchefstroom Dairies and Industries Co Ltd v Standard Milk Supply Co* 1913 TPD 506 511; Morse *Partnership* 104-123.

6 Markesinis and Munday *An Outline of the Law* 3.

or acts without the principal's authority, the principal may reject the contracts, consequently leaving these third parties with losses. The thrust of the theory proposed in this work is that, as its rationale or goal, the law of agency is mainly concerned with allocating or distributing the risk of agency in a just, fair and equitable manner between the principal and third parties. Conclusions shall follow thereafter.

3.2 The historical development of the South African common law of agency

Older Roman-Dutch law authorities were not familiar with the modern understanding of the concept of agency,[7] *i.e.* with the idea of direct representation of one man by another in the creation of contractual rights and obligations.[8] This was a legacy inherited from Roman law, which system of law did not recognise the principle of direct representation,[9] particularly representation between free men.[10] There were two main reasons for the refusal of direct representation in Roman law. Firstly, the creation of contractual obligations in Roman law was accompanied by strict ritualistic formalities which required the personal participation of the contracting parties.[11] As a result, a transaction could only have effect against those who took part in these

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7 See Kerr *The Law* 5. One refers here specifically to those Roman-Dutch law jurists whose works are frequently cited in South African courts. These include Voet, Van der Linden, and Hugo Grotius *etc*. A proper review of their works reveal that they were familiar with the contract of mandate, as opposed to agency, see Gane *Voet's The Selective Voet* 191-213; Maasdorp *Introduction to Dutch Jurisprudence* 236-238; Kotzè *Simon van Leeuwen's Commentaries* 8-31.

8 Direct representation means that, although the contract is concluded by the expression of the representative's will, the resultant rights and obligations nonetheless accrue to the person on whose behalf the representative stands. Contrast this with the definition of "indirect representation" by Procaccia 1976 *Tel Aviv University Studies in Law* 57. The modern understanding of agency is very much an instance of direct representation because, as shall be illustrated, although an agent concludes a contract by the expression of his or her own will, that contract does not bind him or her. The contract binds the principal directly, as if it was concluded by him or her personally.

9 See Silke *De Villiers and Macintosh's The Law of Agency* 5.

10 Procaccia 1976 *Tel Aviv University Studies in Law* 57. Although Roman law did not recognise the principle of representation, it allowed, however, that the *pater familias*, being the head of the family, could still acquire contractual rights, *albeit* not obligations, through his sons and slaves. See Thomas *The Institutes of Justinian* 302-304. At a later stage, the Praetor allowed third parties who dealt with these slaves a right, through *actio adjecticiae qualitatis*, to proceed directly against the *pater familias* on these contracts. For further discussion, see generally Van Den Bergh 2015 *Fundamina* 359-371; Johnston 1995 *Chicago-Kent Law Review* 1515-1538; Powell 1956 *Butterworths South African Law Review* 41-56.

11 See Van Den Bergh 2015 *Fundamina* 360.

formalities.[12] Secondly, direct representation was viewed as an unjustifiable intrusion into the privacy of an individual seeing that "…it would confer power on one person to affect the rights and duties of another."[13]

The foregoing notwithstanding, Roman law did recognise the principle of representation, *albeit* indirect representation in the form of a contract of mandate. The contract of mandate was an agreement in terms of which one person gratuitously undertook to perform a mandate, being any service which is lawful and possible, on behalf on another.[14] The mandate was to be performed exclusively in the interest of the *mandator*, *i.e.* the person giving the mandate.[15] The rights and obligations of the parties were that the mandate had to be properly performed by the *mandatarius*.[16] The *mandatarius* also had to deliver up any valuables acquired during the performance of the mandate.[17] On the other hand, the *mandator* had to reimburse the *mandatarius* for any expenses incurred in the course of performance of the mandate.[18] The contract of mandate was an instance of indirect representation in the sense that the rights and duties arising from the performance of the mandate accrued to the *mandatarius* and not the *mandator*.[19] The *mandator* only acquired these rights upon their formal transfer to him by the *mandatarius*.[20]

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12 See Muller-Freienfels 1957 *The American Journal of Comparative Law* 166.

13 Muller-Freienfels 1964 *The American Journal of Comparative Law* 194.

14 See Thomas *The Institutes of Justinian* 244. The contract of mandate was gratuitous mainly because it was an agreement between friends. As one author notes, "[a] Roman felt it his duty to help a friend; and, by accepting the mandate, he would carry out his duties towards a friend," see Van Warmelo *An Introduction to the Principles* 191. For a discussion of the relevance and impact of friendship to the contract of mandate, see generally Deere *The Contract of Mandatum*. If payment was offered, the contract ceased to be that of mandate, and became that of letting and hiring of services, see Hutchison *et alWille's Principles of South* 593.

15 See Thomas *The Institutes of Justinian* 244.

16 Deere *The Contract of Mandatum* 13. The *mandatarius* was expected to exercise a degree of care in performing the mandate, and was liable to the *mandator* for any negligence in the performance of the mandate, see Procaccia 1976 *Tel Aviv University Studies in Law* 60.

17 Deree *The Contract of Mandatum* 13.

18 Deree *The Contract of Mandatum* 17.

19 Deree *The Contract of Mandatum* 13, mentioning that "…unlike its modern counterpart, the *mandatarius* always acquired in his own name."

20 For a smooth operation of the arrangement of mandate, the *mandator* was allowed an action, known as *actio mandati*, through which he could compel the *mandatarius* to deliver or hand over the article acquired, see Deree *The Contract of Mandatum* 21-22.

The above narration encapsulates the precise position of Roman law as received in Holland and West Friesland.[21] As one author correctly notes, Roman-Dutch writers "…reflect the inadequacy of agency met with in the Roman law…."[22] As the need for agency gradually emerged, Roman-Dutch law writers and courts applied the principles of the contract of mandate to cases which today may be regarded as the sole sphere of the law of agency.[23] This was, however, an untenable approach and it was clear that the law of mandate was not sufficient to solve problems unique to the relationship of agency. In the first place, the power of honest friendship which made the contract of mandate possible in Rome had since faded, meaning that the *mandatarii* had to be paid for his or her services.[24] Secondly, agency challenged the principles of mandate in that it establishes a direct contractual relationship between the principal and third parties, which is not the case with the contract of mandate. With these challenges, Roman-Dutch law finally abolished its initial approach around the 18th century when it finally recognised the difference between agency and mandate.[25] Wherefore it is said that Roman-Dutch law did recognise the modern idea of agency long before its reception in South Africa.[26]

South Africa received the developed edition of the Roman-Dutch law of agency.[27] However, as developed as it might have been, it is agreed that the Roman-Dutch

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21 For finer details on the reception of Roman law in Holland and West Friesland, which was the birth of Roman-Dutch law, see Hahlo and Kahn *The South African Legal System* 484-481.

22 Lee *An Introduction* 261.

23 See *Transvaal Cold StorageCo Ltd v Palmer* 1904 TS 4 19 (hereinafter reffered to as *Transvaal Cold StorageCo Ltd v Palmer*), stating that "[t]he Roman-Dutch writers … applied the same principles to agents properly so called (as the modern doctrine of agency gradually developed) that had been applied to mandatories and procurators by the civil law." See also Kerr *The Law* 5; *Mason v Vacuum Oil Co of South Africa Ltd* 1936 CPD 219 223 (hereinafter referred to as *Mason v Vacuum Oil Co of South Africa Ltd*).

24 Met with this difficulty, Roman-Dutch law had to be developed in that regard. This development is seen first in the works of Van der Linden, who states that the *mandatarius* could charge the *mandator* for the performance of the mandate, see Van der Linden as discussed by Visser *et alGibson's South African Mercantile* 199.

25 Hosten *et alIntroduction to South African Law* 409; Maasdorp and Hall *The Institutes* 247-248.

26 See Millner "Mercantile Law: Agency" 695, stating that "[t]he Roman-Dutch law, on the other hand, although it shows little development of the law of agency, records a fundamental leap to the position that a contracting party could be directly represented at the formation of the contract."

27 Millner "Mercantile Law: Agency" 695 mentions that "…South African law did, therefore inherit what was, basically, the modern standpoint on agency."

law of agency was still very rudimentary at the time of its reception in South Africa.[28] Rudimentary in the sense that it did not provide satisfactory answers to cases that came before courts. This makes perfect sense because, although the law differentiated between agency and mandate, Roman-Dutch law courts in general continued to apply the principles of the contract of mandate to cases of agency.[29] With the insufficiency of Roman-Dutch law confronting them, South African courts turned to English law for guidance.[30] It is said in that regard that:[31]

> English law on the other hand was confronted with the new developments regarding trade etc at an earlier stage and therefore developed a sophisticated doctrine of agency which was, for obvious reasons, eagerly seized upon by our courts when originally faced with similar problems. This explains many of the peculiarities of our law of agency.

Therefore, the South African law of agency is said to be a combination of the principles of mandate, the English law of agency and the civil law institution of representation.[32]

3.3 The legal definition of an agent

An agent is a representative who represents his or her principal in the conclusion of contracts with third parties.[33] A representative is one who concludes juristic acts on behalf of another.[34] A juristic act is any act through which legal relations are established, altered or extinguished,[35] *e.g.* marriage,[36] transfer of property,

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28 See *Blower v Van Noorden* 1909 TS 890 899 (hereinafter reffered to as *Blower v Van Noorden*), noting that although the Roman-Dutch law of agency had already been developed along modern lines, it was, however, not fully explored.

29 According to De Wet "Agency and Representation" para 101, agency is classified under contracts known as mandate in Roman-Dutch law. This is so despite the fact that, while the task given to the agent is conclusion of a contract on behalf of the principal, the law of mandate still applies.

30 Lee *An Introduction* 261.

31 Hosten *et alIntroduction to South African Law* 409. See also *Transvaal Cold StorageCo Ltd v Palmer* 20 stating that "…the courts of England and America have developed the doctrine of the civil law, and examined the duties which an agent owes to his principal far more thoroughly than was possible at an earlier time, when business operations were neither so numerous nor so complicated." For a historical account of the development of the law of agency in English law, see Fridman *Law* 3-8; Procaccia 1976 *Tel Aviv University Studies in Law* 78-81; Muller-Freienfels 1964 *The American Journal of Comparative Law* 193-197.

32 Visser *et alSouth African Mercantile* 200.

33 See Hutchison *et alWille's Principles of South* 593; Silke *De Villiers and Macintosh's The Law of Agency* 1; Sharrock *Business Transactions* 136.

34 See De Wet "Agency and Representation" para 102.

35 Hutchison *et alWille's Principles of South* 593; De Wet "Agency and Representation" para 102.

litigation, conclusion of contract *etc*. Although the representative concludes juristic acts by the expression of his or her own will,[37] the resultant rights and obligations nonetheless do not bind him or her, but rather the person whom he or she represents.[38] Seeing that the idea of representation is so central to agency, it is of the utmost importance that it is discussed in more detail in this work. Representation is a legal phenomenon that allows one person to stand on behalf of another in the conclusion of juristic acts.[39] Theoretically, the original or primary purpose behind the institution of representation is to protect those who cannot personally conclude juristic acts due to their lack of legal capacity,[40] *e.g.* minors, and adults who suffer from mental infirmity. As Holmes and Symeonides informatively explain:[41]

> To understand the need for this institution [referring to representation] and to appreciate its utility, one must begin with two basic concepts: capacity to have rights and duties (so called "personality") and the capacity to enter into juridical acts ….
>
> The institution of legal representation becomes necessary for those persons who possess the former but lack the latter capacity. Today, this includes unemancipated minors as well as majors who, because of mental or physical infirmity, are incapable of taking care of themselves. Recognising this inability, civil law systems

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36 Although a juristic act, marriage is one of the few which cannot be performed through third parties today. This was, however, a late development. In the past, the conclusion of a marriage was not regarded a strictly personal act, and could be performed by proxy through another, see Roberts 1943 *SALJ* 280-288.

37 By the "will" is meant the intention or *animus.* In the case of juristic acts in the form of contracts, it is meant that, it is the representative who determines the terms of an offer or acceptance, most importantly that it is him, not the one he represents, who consents to the contract. As stated by the court in *MEC for Economic Affairs, Environment & Tourism v Kruisenga* 2008 6 SA 264 (Ck) (hereinafter referred to as *MEC for Economic Affairs, Environment & Tourism v Kruisenga*), in footnote 105 "[a]s it is the representatives and not the principal who concludes the juristic act, the question whether the parties were in agreement has to be determined with reference to the intention of the representative. The principal's intention is not relevant to the question whether consensus necessary to produce a contract existed or did not exist. Knowledge required by the representative is imputed to the principal and a contract concluded by the representative on terms not intended by the principal does not affect the issue of consensus." For an informative comment on this statement of the law, see Pretorius 2011 http://www.saflii.org/za/journals/DEJURE/2011/13.html.

38 Sharrock *Business Transactions* 136-132.

39 Hutchison *Wille's Principles of South* 592; SALC *Assisted Decision-Making* 141.

40 Legal capacity is the power of an individual to perform juristic acts. As a general rule, only those who possess the necessary intelligence and judgement are permitted to perform juristic acts. These are regarded as having a sufficient understanding of the consequences of their actions, and so the law grants legal recognition to their actions. See Hutchison *et alWille's Principles of South* 72. For a discussion of the concept of "sufficient understanding," see *Theron v AA Life Assurance Association Ltd* 1993 1 SA 736 (C) 740I-741C.

41 Holmes and Symionides 1998-1999 *Tulane Law Review* 1092-1093; Havenga 2002 *Australia Law Reform Commission Journal* 47-50.

> place these persons under a protected status, one of the consequences of which is a total or limited incapacity to enter into certain juridical acts. Precisely because the reason for imposing this incapacity is to protect rather than to punish the incapable, these systems seek other mechanisms for replacing, to the extent possible, the withdrawn capacity. Providing such mechanism is necessary not only for the sake of these persons … but also for the sake of society at large…. The mechanism that civil law systems have developed to this end is the institution of legal representation, whereby a person designated in advance or chosen by a court is empowered by law to act on behalf of the incapable person under procedures and limitations defined by law.

Representation is not only relevant to those who lack legal capacity, even legal persons, *e.g.* companies and governments, heavily depend on representatives in order to conclude juristic acts.[42] This type of representation is known as "juristic representation."[43] A defining feature of juristic representation is the fact that juristic representatives are empowered by law, especially statutory law, to represent their principals.[44] No agreement to that effect is required between the principal and the representative.

The original purpose of the institution of representation notwithstanding, the law is not so stereotyped and naïve as to deny those who possess full legal capacity the luxury of representation.[45] Mature systems of law recognise that for various reasons, a person of full legal capacity may find it a better option to perform juristic acts through a representative. This type of representation is known as "conventional representation,"[46] "conventional" because unlike juristic representation, it is consensual.[47] Conventional representatives are generally referred to as "agents,"[48] and these include brokers, servants, independent contractors, selling and buying

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42 Silke *De Villiers and Macintosh's The Law of Agency* 3.

43 Silke *De Villiers and Macintosh'sThe Law of Agency* 3.

44 Silke *De Villiers and Macintosh'sThe Law of Agency* 3.

45 In the opinion of the current researcher, the recognition of representation for those who possess full legal capacity can be explained mainly by the principle of "self-autonomy." The principle of autonomy means that every individual has a protected right to regulate their own affairs without interference, even at their own prejudice at that. Another powerful aspect of autonomy is the rule of "freedom of contract," which provides that contracting parties have a right to regulate their own contractual relationship. It is submitted that the principle of "freedom of contract" is broad enough to cover the right to enter into contracts either personally or through a representative.

46 Silke *De Villiers and Macintosh's The Law of Agency* 2.

47 Silke *De Villiers and Macintosh's The Law of Agency* 2.

48 Hutchison *et alWille's Principles of South* 592 notes in that regard that "[t]hough juristic representatives (such as public officials, company directors, guardians and curators) are often loosely referred to as agents, the tendency today is to reserve the term agent to denote a conventional representative."

agents, attorneys at law *etc*. One takes a pause here to note that the word "agent" in relation to some of these representatives is used loosely, *i.e.* in the layman's sense, and is therefore inappropriate for purposes of the law.[49] In law, the word "agent" has a more refined meaning of a person whose concern is with "…the formation, variation, or termination of contractual obligations."[50] Therefore, an agent is elaborately defined as:

> …a person who for and on behalf of a principal performs one or more of the following acts: he acquires, enforces, or extinguishes rights against third persons, or incurs, performs, or discharges obligations in favour of third persons.[51]

As agency is an instance of direct representation, it logically follows that although the agent concludes contracts by the expression of his or her own will, those contracts do not bind him or her, but rather the principal.[52]

It is customary in treaties on the law of agency to find at this stage further discussion of the differences between agents proper and other conventional representatives, especially servants and independent contractors. That is, however, not necessary for purposes of present considerations.[53] In the opinion of the current researcher, it is a sufficient distinguishing factor that an agent is specifically engaged for the sole purpose of concluding contracts on behalf of the principal, whereas other conventional representatives are not. If any representative, regardless of the name used to describe him or her, whether it be servant or independent contractor,

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49 In layman's terms, an agent is any commercial middleman or intermediary. As shall be illustrated, however, this definition is inappropriate for legal purposes, and courts of law have always been quick to point out this fact. For instance, in the matter of *Kennedy v De Trafford* [1897] AC 180 188, the court noted that "[n]o word is more commonly and constantly abused than the word 'agent'. A person may be spoken of as an 'agent', and no doubt in the popular sense of the word may properly be said to be an 'agent', although when it is attempted to suggest that he is an 'agent' under such circumstances as create the legal obligations attaching to agency that use of the word is only misleading." Equally relevant is the *dictum* of the court in *Potter v Customs and Excise Commissioners* [1985] STC 45 51 that "[t]he use of the word 'agent' in any mercantile transaction is, of itself, wholly uninformative…." These cases are discussed by Ryder, Griffiths and Singh *Commercial Law* 5.

50 Kerr *The Law* 3.

51 Hutchison *et alWille's Principles of South* 592.

52 See Hutchison *et alWille's Principles of South* 599; Sharrock *Business Transactions* 136.

53 For a detailed discussion of the differences between agents and other commercial intermediaries in law, refer to Silke *De Villiers and Macintosh's The Law of Agency* 15-36; Kerr *The Law* 33-49; Fridman *Law* 19-31.

concludes a contract on behalf of his or her employer, he or she is an agent.[54] Of course, in deciding that question, *i.e.* the question whether or not one is an agent, there will be other relevant considerations such as whether he or she was authorised or empowered by the principal to contract on his behalf.[55]

3.4 The relationship of agency

"Agency" has been defined to mean:[56]

> …a contract in terms of which one person (the agent) is authorized and usually required by another (the principal) to contract or to negotiate a contract on the latter's behalf with a third person.[57]

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54 For instance, it has been pointed out by some that "[t]he waiter is as much a salesman as a factor or a broker, whether he sells the soup or only a privilege to eat it," see Seavey 1920 *The Yale Law Journal* 865.This statement makes is clear that the waiter is also an agent for the fact that he sells the soup, and thus concludes contracts on behalf of his principal.

55 Kerr *The Law* 10-17 makes it clear that servants and independent contracts will be regarded as agents if ever they are empowered or authorised to act as such on behalf of the principal. Whether or not a servant or on independent contractor has been empowered is a question of fact, and there are several tests to determine that fact. The intention of the parties is one of those tests. It is also said that a servant will be regarded an agent if he is not under the strict or complete control of the employer. Unlike a servant, an agent has a larger degree of freedom from control by the principal. For a detailed discussion of this issue, and the tests employed by the courts in that regard, see Silke *De Villiers and Macintosh's The Law of agency* 15-30.

56 It must be noted that the term "agency" is open to several meanings. As De Wet "Agency and Representation" para 101 correctly notes, "[t]he expression 'agency' is used in such a wide variety of meanings that it cannot be regarded as a term of art denoting a specific branch of the law." See also Hutchison *et alWille's Principles of South* 593. The term "agency" can be used to refer to either of the following two things, namely a body of rules applicable to instances of representation, or a relationship which exists between two parties when one represents another in the performance of juristic acts, see Reynolds "Agency" 1; Holmes 1890-1891 *Harvard Law Review* 346 uses the term "agency" in the widest sense, which includes not only the relationship between the principal and agent, but also master and servant. As the title of the current discussion readily suggests, it is with the "relationship of agency," with which this work is concerned. It is important to mention, as a side note, that the issue of definitions is considered particularly difficult in the law of agency, especially the definition of the term "Agency." As one author points out, "[i]t is virtually impossible to provide a clear all-embracing definition of agency," see Ryder, Margaret and Singh *Commercial Law* 3. Markesinis and Munday *An Outline of the Law* 1 equally point out that in the law of agency, "…academics have been quick to criticise each other's definitions and find in them errors and omissions…." For these reasons, no attempt will be made in this work to formulate a unique definition of "agency." The definitions which will be used in this work are not necessarily presumed to be correct, but are specially selected, amongst the multitude, for purposes of a meaningful discussion.

57 Visser *et alGibson's South African Mercantile* 200. For a similar definition, see Lee "Agency and Representation" 154 who define agency to mean "…a contract whereby one person (termed the agent) agrees to represent another (termed the principal) in his dealings with third parties. The power of representation created by the contract of agency is called an 'authority' or a 'power.' An instrument by which an agent is appointed to represent a principal generally is termed a power of attorney." As can be noted, in both quotes, the authors consider agency to be a contractual relationship. They also refer to the issue of authority.

It has also been defined to mean a:

> …fiduciary relationship which exist between two persons, one of whom expressly or impliedly manifests assent that the other should act on his behalf so as to affect his relations with third parties, and the other of whom similarly manifests assent so to act or so acts pursuant to the manifestation. The one on whose behalf the act or acts are to be done is called the principal. The one who is to act is called the agent. Any person other than the principal and the agent may be referred to as a third party.[58]

It is clear from these definitions that agency is a legal relationship. According to the first quote, this relationship is "contractual" in nature. The inevitable conclusion being that the parties must actually reach agreement that one will represent the other in the negotiation and conclusion of a contract. The second quote, however, does not define agency to be a contract, but a "consensual" relationship. Another point deducible from these quotes is that the parties to the relationship of agency assume special titles, being principal and agent. The agent is the one who does the act of representation, and the principal the one on whose behalf the act of representation is done. It is furthermore deducible from both quotes that the aim of this relationship is that the agent is engaged specifically for the purpose of contracting with third parties on behalf of the principal. Lastly, the first quote mentions that, in order to contract on behalf of the principal, the agent must be authorised by the principal to do so. While the second quote makes no mention of this fact, it is nevertheless clear that, before the agent represents the principal, the principal must have manifested some form of assent or consent to that fact.

3.5 The creation of the relationship of agency

There has been a protracted conflict of ideas on the nature of the relationship of agency, especially regarding the manner in which such a relationship arises. The debate is largely between those who argue that agency cannot arise in any other manner except by contract between the principal and his or her agent, and those who, on the other hand, argue that the power of the agent to bind his or her principal does not depend on a contract of agency, but on "authority," which is the

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[58] Reynolds *Bowstead and Reynolds* 1. The author of this quote cautions, however, that it should not be read in isolation from the paragraphs that follow it. For purposes of this work, however, it shall suffice.

unilateral act of the principal. A further group of contenders choose to combine the idea of agency by contract with the idea authority. As shall be demonstrated in chapter five, the issue of how the relationship of agency arises is very relevant to this research; hence it is inevitable that it be given special attention at this stage. The aim in this part of the chapter is to discuss the various ways in which the relationship of agency arises.

3.5.1 Agency arising from contract

A contract is simply an agreement between two or more people, which agreement gives rise to legally enforceable rights and obligations between the parties.[59] In Roman-Dutch law, a valid contract arises in the instance of an offer from one party, the acceptance of that offer by the other party, and a serious intention from both parties to create a binding and enforceable agreement.[60] Apart from the intention to be bound, it is also necessary for the parties to the contract to be *ad idem*, meaning that their minds must meet about the exact terms of their agreement.[61] Because a contract is a juristic act, it is also a requirement of contract law that both parties to the contract must have the necessary capacity to conclude that juristic act,[62] which capacity is known in law as contractual capacity. Contractual capacity is a subspecies of legal capacity in the sense that it only attaches to those who have the power to perform juristic acts, being those who have the management of their own affairs. Those who lack legal capacity, including minors, unrehabilitated insolvents, drunken persons, prodigals and insane persons, have only a limited capacity to contract.[63] Any purported contract beyond the limits allowed them by the law is void.[64]

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59 Hutchison *et alWille's Principles of South* 409; Visser *et alGibson's South African Mercantile* 9; Kerr *The Principles of the Law* 3; Sharrock *Business Transactions* 3; Coacker and Zefferttt *Wille and Milli's Mercantile Law* 1.

60 *Conradie v Rossouw* 1919 AD 279 287-288 (hereinafter referred to as *Conradie v Rossouw*); *Robinson v Randfontein Estates Gold Mining Co Ltd* 1921 AD 168(hereinafter referred to as *Robinson v Randfontein Estates Gold Mining Co Ltd*) 236-237.

61 Christie *The Law of Contract* 24-25.

62 It is often said that parties can only bind themselves in accord with, and within, the limits of their capacity, see Sharrock *Business Transactions* 39.

63 The general rule in this regard is that every person has a *prima facie* right to create legally enforceable obligations, see Visser *et alGibson's South African Mercantile* 17. As a result, a contractant who disputes the contractual capacity of the other party bears the burden of proving the lack thereof, see Christie *The Law of Contract* 259. The lack of contractual capacity, however, does not *ipso facto* render the purported agreement void *ab initio*. If concluded within

There are countless authorities that define agency to be a contract. It is said that agency arises like any other contract,[65] meaning that it requires agreement between the parties, "… (which is arrived at by means of offer and acceptance, express or implied)…."[66] As with typical contracts, it is said also that the parties to this contract of agency must have the capacity to contract,[67] implying that the agreement will be void if either the principal or agent lacks contractual capacity. There are several reasons for the view that agency is a contractual relationship. As one author correctly notes, a contract is the most usual or ordinary way in which an agent is either empowered or authorised to act on behalf of the principal.[68] It is, therefore, considered to be very much in line with commercial practice to dub agency a contract because, as a matter of fact, in most instances of an agency relationship, "…there is a contract of agency between principal and agent."[69] Another explanation is that agency by its very nature implies an intrusion into the privacy and autonomy of the principal,[70] consequently that this state of affairs is legally impermissible unless the principal consents to it. Likewise, it is mentioned by one author that the consent of the agent is equally necessary to the creation of the relationship of agency because an agent is a fiduciary, and the duties attaching to a fiduciary cannot be unilaterally cast upon an individual.[71] Therefore, the relationship of agency cannot "…be created, nor can it continue to exist without the consent of both parties."[72]

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the limited capacity of the relevant individual, such contracts are valid and enforceable. For illustration, the limited contractual capacity of minors is that they should be assisted by their guardians in concluding the contract, see *Dhanabakium v Subramanian* 1943 AD 160 167. For insolvents, their limited contractual capacity requires that their trustees must consent to their purported contracts.

64 See Visser *et alGibson's South African Mercantile* 17.

65 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 457, stating that "[t]he contract of agency arises, like every other contract, from the union of free wills of the parties to a common purpose." See also Visser *et alGibson's South African Mercantile Law* 200; Lee "Agency and Representation" 154.

66 Silke *De Villiers and Macintosh's The Law of Agency* 42-43.

67 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 458, stating that "[t]o enter into the contract of agency the parties must be competent to contract generally…."

68 Kerr *The Law* 5.

69 Fridman *The Law* 47; Bennett *Principles of the Law* 6.

70 Muller-Freienfels 1964 *The American Journal of Comparative Law* 194.

71 Seavey 1920 *The Yale Law Journal* 863.

72 Seavey 1920 *The Yale Law Journal* 863.

Coming to Roman-Dutch law specifically, the reason for regarding agency as a contract is to a large extent influenced by the principles of the contract of mandate.[73] As illustrated in the narration of the historical development of the South African law of agency, Roman-Dutch law has had a hard time distinguishing between agency and a contract of mandate, so much so that the law of mandate has been extended to instances of agency,[74] with the result that agency is considered to be a form of mandate.[75] The relationship of mandate has already been discussed, and there is no need for repetition here, save to note that because that relationship was contractual, Roman-Dutch law authorities feel that agency should similarly follow this route because it is a form of mandate.

There is another category of authors who oppose the view that agency is a contractual relationship. Before proceeding to discuss these authorities, and the reasons on which they base their conclusion, it is important for purposes of a meaningful discussion to articulate the various reasons for which it is said that, in defining agency, "[t]oo much emphasis on 'consent'…should be avoided."[76]

3.5.1.1 The capacity of the parties to the relationship of agency

The first reason relates to the capacity of the parties to the relationship of agency, the capacity of one who acts as an agent to be more exact. As a general rule, the

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73 As was noted by the court in *Totalisator Agency Board, OFS v Livanos* 1987 3 SA 283 (W) 291B-F (hereinafter referred to as *Totalisator Agency Board, OFS v Livanos*), "[a] contract of 'agency', as used in the above sense, is, I believe, a misnomer for the contract of mandate, in terms of which one party, the mandatary, undertakes to perform a mandate, in the form of a commission or task, for the other party, the mandator. In Roman law mandate (mandatum) was one of the four consensual contracts (contractus consensu), the other three being the contract of purchase and sale (emptio venditio), letting and hiring (locatio conductio) and partnership (societas). The essence of mandatum was an instruction by the mandator (mandator) to the mandatary (mandatarius) to do something gratuitously for him, which instruction was accepted by the mandatary. Later there developed a moral duty for the mandator to pay the mandatary a fee (honorarium or salarium) for his services. See Digest 17.1.6 pr; 17.1.7; 17.1.36.1. On the other hand, payment of a quid pro quo for services rendered had the effect of a letting and hiring of services (locatio conductio operarum) rather than mandate. That is why the jurist, Paul, felt that no money (pecunia) or price (merces) should pass hands, since mandate derived from a sense of duty (officium) and friendship (amicitia). See Digest 17.1.1.4 (Paul, in the 32nd book of his commentary on the praetorian edict)…."

74 See *Mason v Vacuum Oil Co of South Africa Ltd* 223, stating that Roman-Dutch law in the main follows the Roman law of mandate.

75 As De Wet "Agency and Representation" para 101 notes, agency is classified under a category of contracts known as mandate or *mandatum* in Roman-Dutch law.

76 Markesinis and Munday *An Outline of the Law* 4.

principal must have contractual capacity.[77] For it is said that only he who has the capacity to perform juristic acts himself, can perform them through another.[78] However, it is not for the validity of the relationship of agency that the principal is required to have contractual capacity. It is solely for the validity and enforceability of the contracts created by the agent between him or her and third parties that the principal's contractual capacity is relevant. As these contracts bind the principal, he or she must have contractual capacity because they are in essence concluded by him or her, *albeit* through another. In relation to the capacity of one who acts as an agent, a rule which is recognised in both the civil law and common law systems is that for the reason that the agent is not a party to these contracts, he or she does not require full contractual capacity.[79] It is said that the agent must merely have a sufficient understanding of the transaction that he or she is conducting on behalf of the principal.[80] Therefore, a minor can be an agent,[81] without the consent of his guardian. During the reign of marital power, a woman married in community of property could also act as an agent despite her limited contractual capacity.[82] These

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77 See Silke *De Villiers and Macintosh's The Law of Agency* 48. Therefore, those who lack contractual capacity, such as infants and minors, cannot be principals. The fact that the contract is not concluded by them personally, but by the agent, does not matter in that regard. See Fridman *Law* 49-50.

78 See Silke *De Villiers and Macintosh'sThe Law of Agency* 48; Sharrock *Business* 138; Reynolds "Agency" 24-25; Fridman *Law* 49-50; *Caley v Morgan* 1887. 114 Ind. 350, 16 N.E. 790, stating that "[a]ny person capable of transacting his own business may appoint an agent to act in his behalf in all the ordinary affairs of life." Equally relevant is the opinion of the court in *Davis v Lane* 1838. 10 N.H. 156 282 that "[a]n authority to do an act, for, and in the name of, another, presupposes a power in the individual to do the act himself, if present. The act to be done is not the act of the agent, but the act of the principal; and the agent can do no act in the name of the principal which the principal might not himself do, if he were personally present. The principal is present by his representative, and the making or execution of the contract, or acknowledgment of a deed, is his act, or acknowledgment."

79 See Muller-Freienfels1964 *The American Journal of Comparative Law* 203. As put by the court in the matter of *King v Bellord* 1863, 2 New Rep. 442 448 "…the infant, in executing the power, is a mere conduit-pipe, as it has been termed, of the will of the donor of the power; so that when the estate is created, the infant (as was said in the case of Bridgman) is merely the instrument by whose hands the testator or donor acts. The donor, it is said, may use any hand, however weak, to carry out his intentions."

80 See Silke *De Villiers and Macintosh's The Law of Agency* 65; Coaker and Zeffertt *Wille and Millin's Mercantile Law* 458; Fridman *Law* 50-51; Reynolds "Agency" 25. The issue whether or not a person has a sufficient understanding of the transaction will obviously be a matter of evidence. However, without any need for evidence there are those who are automatically disqualified, as noted by the court in *Lyon v Kent* 45 Ala. 656 (1871) 671 "[a]ny one, except a lunatic, an imbecile, or child of tender years, may be an agent for another."

81 See Sharrock *Business Transactions* 138.

82 See *Aird v Hockly's Estate* 1937 EDL 34 42.

facts instantly cast doubt on the veracity of the view that agency cannot arise by any other means except contract.

3.5.1.2 Agency by estoppel and ratification

One author correctly mentions in relation to agency by estoppel that:[83]

> In certain situations although there is no true consent between one person and another to stand in the relationship of principal and agent, vis-à-vis each other or the outside world, the law treats their relationship as one of principal and agent…In fact, of course, consent is quite irrelevant to the power of the person treated as an agent to affect the position of the person treated as a principal. By the application of the doctrine of estoppel, an agency relationship comes about in the absence of true consent between the principal and agent.

Indeed, it is generally accepted that if a principal represents to a third party, whether expressly or by conduct, that a specific person is his or her agent, he or she will be bound by contracts made by that person with the third party.[84] This is known as agency by estoppel.[85] The basis of this rule is to protect the reasonable reliance of third parties who suffer prejudice as a result of the intentional or negligent representations of the principal.[86] To succeed in his or her claim, the third party must allege and prove the individual elements of estoppel at common.[87] These requirements were listed as follows by the court in *Zelpy 1780 (Proprietary) Limited v Mudaly*;[88] (1) there must be a representation by words or conduct, (2) the representation must be made by the principal that a person has authority to act on his or her behalf, (3) the representation should be in such a form that the principal should have reasonably expected that third parties would act on it, (4) the party who seeks to estop the principal must have relied on that representation, and (5) in relying on that representation, such a party must have suffered a prejudice. If all these requirements are met, the principal shall be held liable on the contracts made

83 Fridman *Law* 98.
84 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 466.
85 See Visser *et al Gibson's South African Mercantile* 205.
86 See Pretorious 2011 http://www.saflii.org/za/journals/DEJURE/2011/13.html.
87 See *Monzali v Smith* 1929 AD 382 385 (hereinafter refered to as *Monzali v Smith*).
88 *Zelpy 1780 (Proprietary) Limited v Mudaly* [2014] ZAKZPHC 63 para 40.

by the agent despite the fact that he never consented or authorised the agent to bind him.[89]

To a similar effect is the rule that a principal can *ex post facto* ratify a contract concluded by an agent without his or her initial approval or consent to being bound. Ratification is basically an adoption of a contract made by an agent in the name of the principal in instances where the agent had no power or authority to do so.[90] The effect of such adoption is that, once adopted, the contracts bind the principal as if he or she had initially consented to their creation.[91] As in the case of estoppel, there are conditions to be met before ratification can have its intended purpose,[92] namely that (1) the principal must have been in existence at the time the contract was concluded, (2) the contract must have professedly been concluded in the name or on behalf of the principal, (3) the principal must have the capacity to ratify that contract, referring to contractual capacity, (4) the principal must ratify the contract in its entirety, not merely partially, and (5) the ratification must occur within a reasonable time from the time of conclusion of that contract. As can easily be noted, agency by ratification equally contradicts the view that agency is necessarily a contractual relationship.

3.5.1.3 Consideration in English law

The point that the relationship of agency is not dependent on the contract between the parties is easily demonstrable with specific reference to English law. In that system of the law, it is not enough for the creation of a valid contract that there is an offer and acceptance, there is a further requirement that there must be consideration.[93] Unlike Roman-Dutch law, English law enforces actual bargains, not

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89 See Coaker and Zefferttt *Wille and Millin's Mercantile Law* 467, mentioning that "[w]hat is crucial is that we have here to deal with a situation where there is no authority in fact (either express or tacit) but the principal is precluded from denying the existence of authority." See also Fridman *Law* 98.

90 See Sharrock *Business Transactions* 142; Hutchison *et alWille's Principles of South* 598.

91 See *Klug & Klug v Penkin* 1932 CPD 401 405.

92 For a detailed discussion of all the essentials of a valid ratification, see Coaker and Zefferttt *Wille and Millin's Mercantile Law* 472-479; Sharrock *Business Transactions* 142-143; Hutchison *et alWille's Principles of South* 598; Kerr *The Law* 80-94; Silke *De Villiers and Macintosh's The Law of Agency* 282-305.

93 See Treitel "Formation of Contract" 253.

mere contractual promises.[94] For a valid contract, "something of value" must be given in exchange for a promise.[95] For instance, in a contract of sale, consideration will be constituted by payment of the purchase price in exchange for a promise on the part of the seller to deliver the goods. English law authorities on the law of agency point to the fact that agency may be gratuitous.[96] When the agent agrees to represent the principal gratuitously, there is no contract, strictly speaking, between the two parties for the sole reason of the lack of consideration.[97] Therefore, in English law, the mere fact of consent on both sides that the agent must represent the principal does not *ipso facto* render the relationship contractual.[98] In the absence of valuable consideration, the relationship is merely consensual, but not necessarily contractual.[99]

3.5.2 Agency arising from authority

In *Joel Melamed and Hurwitz v Cleveland Estates (Pty) Ltd; Joel Melamed and Hurwitz v Vorner Investments (Pty) Ltd*,[100] Corbett JA stated that:

> An act of representation needs to be authorised by the principal. Such authorisation is usually contained in a contract.

From this *dictum*, it is clear that the learned judge draws a distinction between "authority" and a "contract of agency." According to the judge, the relationship of agency stems from the authority conferred by the principal on the agent,[101] not

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94 Christie *The Law of Contract* 10.

95 Treitel "Formation of Contract" 254.

96 See Fridman *Law* 48; Markesinis and Munday *An Outline of the Law* 13-14; Bennett *Principles of the Law* 6.

97 See Fridman *Law* 48.

98 Markesinis and Munday *An Outline of the Law* 13.

99 Fridman *Law* 48, stating that "…so far as the creation of the agency relationship is concerned, purely consensual agency differs from contractual agency only in so far as no contract is required. Simple agreement, without the formalities of offer and acceptance, consideration, etc, necessary for the emergence of a contract at common law, is all that is needed."

100 *Joel Melamed and Hurwitz v Cleveland Estates (Pty) Ltd; Joel Melamed and Hurwitz v Vorner Investments (Pty) Ltd* 1984 3 SA 155 (A) 166C-D.

101 See Visser *et alGibson's South African Mercantile* 200, stating that "[t]he authority given by the principal to the agent to represent him is the essence of commercial agency." It shall be recalled that the first definition of "agency" quoted earlier in this work was sourced from the same author. Although he defines agency to be a contract, he nevertheless makes mention of "authority" in the same definition. He is one in a line of South African authorities that compress the idea of agency by contract with the concept of authority, and who do not draw a distinction between the two. Another famous South African authority who adopts the same approach is

necessarily from the contract between the parties, which contract is but a mere record of that authority. The correctness of that observation was affirmed by van Zyl J in the matter of *Totalisator Agency Board, OFS v Livanos*,[102] wherein he mentioned that:

> …it would appear that 'agency' is referred to, for the most part, in the sense of representation pursuant to authorisation granted by the principal to the agent by virtue of which the agent performs a juristic act on behalf of or in the name of the principal. Should such juristic act be a contract entered into between the agent, on behalf of the principal, and a third person, the rights and obligations arising therefrom accrue to the principal and not to the agent, who acts merely and solely in a representative capacity. The authorisation as such is not dependent on a contract of 'agency' between the agent and the principal, although it may arise from such a contract. In this regard, a careful distinction should be drawn between a contract of 'agency' and representation.

The term "authority" is derived from *auctoritas*, meaning lawful power, or power exercised in compliance with the law.[103] In the law of agency, authority can be defined as power rightfully exercised by the agent.[104] This power is rightfully exercised only if it is exercised in conformity with the direct instructions of the principal.[105] As shall be demonstrated, the existence of authority presupposes the existences of a consensual, but not necessarily a contractual relationship between the parties. This is so because, although authority is regarded to be a unilateral act of the principal, the unavoidable conclusion is that for power to be rightfully

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Kerr. Although he recognises the significance of "authority", Kerr, nevertheless, maintains that for agency to arise, it is "…necessary for both parties to consent," see Kerr *The Law* 6. Commenting on this approach, De Wet "Agency and Representation" para 101 points out that "[t]his view attempts to compress into one juristic concept two things which belong to two juristic concepts distinct from each other, and tends to blur the distinction between the contract of agency and authorization." On the other hand, Hutchison *et alWille's Principles of South* 593 supports the combination of agency by contract with authority on the ground that it is "…almost inescapable for both mandate and representation are obviously fundamental elements of the field of the law generally referred to as the law of agency."

102 *Totalisator Agency Board, OFS v Livanos* 291B-F. The same sentiments have been supported by the court in the recent case of *Maye Serobe (Pty) Ltd v LEWUSA* Case no. J2377/12 para 19-20 in which the court noted that "[t]he authorisation of the representative is a distinct unilateral act. It is sometimes closely associated with an agreement between the parties, but may also arise by operation of law."

103 Seavey1920 *The Yale Law Journal* 861.

104 Seavey1920 *The Yale Law Journal* 861. The *Restatement (Second) of Agency* 1958 defines authority in s 7 to mean "…the power of the agent to affect the legal relations of the principal by acts done in accordance with the principal's manifestations of consent to him." See also Bester 1972 *SALJ 56*; Bennett *Principles of the Law* 4-6; Markesinis and Munday *An Outline of the Law* 5-7.

105 As shall be shown later on, these instructions can be given verbally, or in writing through a document known as a power of attorney, or any informal document such as a letter.

exercised, the principal and the agent must know each other, further that the agent must actually be briefed about the limits of his or her power. Therefore, amongst all well known categories of authority, *i.e.* actual authority and ostensible authority, the word "authority" is only correctly used in relation to actual authority, *i.e.* express authority and implied authority. In relation to ostensible authority, this term must be considered to be improperly used because, as shall be demonstrated, the principal under such circumstances has conferred no authority on the agent.[106] The correct term to use under such circumstances is "power,"[107] not "authority."

Coming back to the question of the relationship between "authority" and the contract of agency, it is said that the existence of authority is independent of any agreement, or lack thereof, between the parties.[108] De Wet,[109] who was one of the earliest South African authorities to point out this difference, gives several examples to show that agency depends on authority as opposed to contract. For instance, he refers to the fact that a husband can authorise his wife to be his agent, even though no binding contract can exist between them by reason of their marriage in community of property.[110] De Wet notes further that authority is a unilateral juristic act of the principal,[111] through which he or she confers power on the agent to bind him or her in contract with third parties. In his own words:[112]

> Authorization is an expression of will by one person that another shall have the power to conclude juristic acts on his behalf. It is not, as is sometimes suggested, a contract between the principal and the representative but a unilateral juristic act of whereby the principal creates the legal machinery by means of which legal relationships can be created, altered or extinguished between himself and a third person via the representative. By the authorization the principal not only empowers

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106 In relation to ostensible authority, see Bester 1972 *SALJ* 56.

107 The distinction between power and authority is that, authority is strictly conferred by the principal on the agent, while power is conferred by law on the agent, see Bester1972 *SALJ* 50-51; Markesinis and Munday *An Outline of the Law* 7-10; Bennett *Principles of the Law* 4-6; *Restatement (Second) of Agency*, s 6.

108 See Sharrock *Business Transactions* 138; De Wet "Agency and Representation" para 109; Muller-Freienfels 1964 *The American Journal of Comparative Law* 203. For those who oppose this view, see Midgley 1988 *SALJ* 21-22, criticising both De Wet and the decision of *Totalisator Agency Board, OFS v Livanos* for holding that authority is a unilateral juristic act of the principal, independent from any agreement between him and the agent.

109 See generally De Wet "Agency and Representation" para 101-158.

110 De Wet "Agency and Representation" para 101.

111 De Wet "Agency and Representation" para 101. See also Hutchison *et alWille's Principles* 596.

112 De Wet "Agency and Representation" para 109. See also Muller-Freienfels1964 *The American Journal of Comparative Law* 203.

> the representative to act on his behalf but also indicates to the third person his will to be bound by acts performed on his behalf by the representative acting within the scope of the authority. The authorization is by its purpose and function as much an act vis-à-vis the third person as it is vis-à-vis the representative. To regard it as a contract between the principal and the agent is to disregard its purpose.
>
> It is true that an act of authorization is often linked with a contract between the principal and the representative and that a person may even by concluding a contract with another tacitly authorize that other to act on his behalf, but even then the authorization is a juristic act distinct from the contract to which it is attached, and the authority which the representative may have is not derived from the contract but from authorization which goes with it. In any event a contract between the principal and the representative is not an essential concomitant of an act of authorization. A father can authorize his son to buy a blazer from a shopkeeper without entering into contract with the son, a husband can authorize his wife to conclude juristic acts on his behalf without entering into a contract with her….

It shall be noted that the usual way of conferring authority on the agent, especially actual authority, is through a document known as a power of attorney. Though actual authority is said to be consensual,[113] a power of attorney is not a contract between the parties to the relationship of agency. As put by Lindley J in the matter of *M Chatenay v Brazilian Submarine Telegram Co*,[114] a power of attorney is "…a one-sided instrument … [it] is not in any sense a contract." This goes a long way to demonstrate that the act of authorisation is a unilateral juristic act of the principal.

Having established that the relationship of agency arises not necessarily from contract, but primarily from the authority bestowed on the agent by the principal, a turn shall be made at this juncture to discuss the various types of authority, namely actual and ostensible or apparent authority.

3.5.2.1 Actual authority

Actual authority is the real or factual authority conferred on an agent by his or her principal.[115] This type of authority presupposes the existence of a consensual relationship between the principal and the agent.[116] The scope of this authority may

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113 In the matter of *Freeman and Lockyer v Buckhurst Park Properties(Mangal) Ltd* [1964] 1 ALL ER 630 644 (hereinafter reffered to as *Freeman and Lockyer v Buckhurst Park Properties(Mangal) Ltd*), Lord Diplock defined actual authority to mean "…a legal relationship between principal and agent created by a consensual agreement to which they alone are parties."

114 *M. Chatenay v Brazilian Submarine Telegram Co* (1891) 1 QB 79 CA as quoted by Muller-Freienfels1964 *The American Journal of Comparative Law* 203.

115 Bester 1972 *SALJ* 54; Fridman *Law* 53.

116 *Freeman and Lockyer v Buckhurst Park Properties(Mangal) Ltd* 644.

be communicated to the agent expressly, it may be implied by law from the overall circumstances of a case, or it can be *ex post facto* subsequently ratified by the principal.[117] The two main subdivisions of actual authority, however, are express and implied authority,[118] ratification is generally considered an independent aspect of agency.

3.5.2.1.1 Express authority

Express authority is the authority conferred expressly, being either in writing or verbally, by the principal on his or her agent.[119] With a simple illustration, express authority would arise where a father gives money to his son for him to purchase groceries for the family. The terms of this authority would be the exact instructions by the father in relation to the specific grocery items to purchase, and where to purchase them. When in writing, express authority is usually contained in a formal document known as a power of attorney,[120] it can, however, be recorded in any other informal document such as a letter.[121] A power of attorney is a document signed by the principal, in which the appointment of an agent is made.[122] A power of attorney may also set out the scope of the agent's authority.[123]

The most important aspect of express authority is the scope or limit of the agent's authority. A general rule is that the agent will have the power to bind the principal within the four corners of what is stated to be his or her authority by the principal. In relation to written express authority, the question of the scope of the agent's authority will depend upon the interpretation of the words used in the relevant

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117 Fridman *Law* 53.

118 See *Hely-Hutchinson v Brayhead Ltd* [1968] 1 QB 549 447 (hereinafter refered to as *Hely-Hutchinson v Brayhead Ltd*).

119 See *Maasdorp v The Mayor of Graaff-Reinet* 1915 CPD 636 639 in which Kotzèr J mentioned that "[a]n agent may be lawfully or duly appointed or accredited … by deed, power of attorney, by simple writing, by word of mouth, or even by signs."

120 Visser *et alGibson's South African Mercantile* 201.

121 Visser *et alGibson's South African Mercantile* 201, citing the case of *Mahomed v Padayachy* 1948 1 SA 772 (A); Kerr *The Law* 64.

122 Kerr *The Law* 64 mentions that, at times, a power of attorney may simply states the appointment of an agent without further stating the scope of that agent's authority.

123 Visser *et al Gibson's South African Mercantile* 202 mentions that in some instances, third parties may only be prepared to deal with an agent upon the clear details of that agent's scope of authority in the power of attorney.

document.[124] The ordinary rules of construction of documents apply.[125] A rule stated in *Colonial Banking and Trust Co Ltd v Estate Hughes* is that:[126]

> …authorisation should, if the language permits, be benevolently interpreted so as to validate the acts of the agent….

Therefore, words used in written express authority may be interpreted to include other acts which the principal may not have intended. Where express authority is given verbally, the question of the scope of the agent's authority will understandably be a matter of oral evidence.[127]

3.5.2.1.2 Implied authority

The phrase "implied authority" envisages two factual scenarios; the first scenario being where it is sought to illustrate from the overall circumstances of a case that one person is another's agent.[128] For those who hold agency to be a contractual relationship, this scenario entails instances of an implied agreement of agency. Kerr states in that regard that,[129] "[a]s in the case of other contracts the contract of agency itself…may be implied." It is important to bear in mind, however, that what is implied is the authority of the agent to bind the principal,[130] not necessarily a contract of agency. Such will be the case where the principal is aware that the agent is acting on his or her behalf with third parties, without the principal's authority at that, but fails to object. For illustration, in *Coetzer v Mosenthals Ltd*,[131] the principal operated a small general dealer store on his farm, very close to his homestead. He opened an account with Mosenthal for purchase of goods on small amounts. A few years from the opening of the said account, the business was taken over by a

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124 See Kerr *The Law* 65.
125 See *Mohamed v Padayachy* 778.
126 *Colonial Banking and Trust Co Ltd v Estate Hughes* 1932 AD 1 19.
127 See Markesinis and Munday *An Outline of the Law* 16-17.
128 In the matter of *Inter-Continental Finance & Leasing Corp (Pty) Ltd v Stands 56 & 57 Industria Ltd* 1979 3 SA 740 (W) 749H, the court noted that the issue of implied authority "…covers [amongst others] the type of cases where the question is whether B was A's agent, generally speaking, and whether A had by words or conduct expressly or tacitly appointed B as his agent at all."
129 Kerr *The Law* 68.
130 Hutchison *et alWille's Principles of South* 579, highlight this fact by stating that "[t]he authority of the agent to conclude a particular juristic act on behalf of the principal may be conferred tacitly, by conduct…."
131 *Coetzer v Mosenthals Ltd* 1963 4 SA 22 (A) (hereinafter referred to as *Coetzer v Mosenthals Ltd*).

partnership to which the principal's son was a partner. On several occasions, the principal knew that the said partnership purchased goods from Mosenthal in his name and account. Even invoices for these purchases were sent to his address.[132] In an action for payment of the purchase price by Mosenthal, it was held that the defendant had impliedly authorised the partnership to make the purchases on his account.[133]

A second scenario envisaged under "implied authority" is that of residual powers.[134] These are powers implied by law into the actual authority of agents.[135] The first rule of residual powers is that every agent has additional authority to do all acts reasonably incidental to his or her actual authority. This point was illustrated in the matter of *Goldblatt's Wholesale (Pty) Ltd v Damalis*,[136] in which a woman married out of community of property, excluding marital power, operated a business as a public trader. This business was under the management of her husband. Without the knowledge and authority of his wife, the manager instructed a firm of attorneys to declare the business insolvent. The effect of this instruction was that the wife's estate would be sequestrated. The issue before court was whether the husband had implied authority to declare the business insolvent? Per Brink J, the court held that:[137]

> … from the facts referred to an inference can be drawn that Christos Damalis was in the position of a manager of his wife's business and that he had implied authority to do all things which were reasonably incidental to carrying on that type of business. He could for instance buy stocks on ordinary business lines, and, if it is usual to do so in the type of business in question, to purchase stocks on credit and

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132 *Coetzer v Mosenthals Ltd* 23D.

133 *Coetzer v Mosenthal Ltd* 23H, stating that "[o]n all the facts of the case, the conclusion that the defendant impliedly authorised the purchases made on his account is, in my judgment, legally inevitable and unavoidable." For a similar decision, see *Faure v Louw* [1880] 1 SC 3. In this case, a father operated a small store. The store was managed by his son, who was in the habit of drawing cheques and promissory notes in the name of his father for purposes of the business. The father knew of this, but did not object. The court found that the son had implied authority, therefore, that the was bound.

134 The phrase "residual powers" is used by Kerr *The Law* 69-80. Kerr 1980 *SALJ* 550-555; Visser *et alGibson's South African Mercantile* 203 to describe these powers as "implied additional authority."

135 These differ from implied authority in that they are not implied from the conduct of the parties; on the contrary, they are implied by law into the already existing authority of the agent.

136 *Goldblatt's Wholesale (Pty) Ltd v Damalis* 1953 3 SA 730 (O) (hereinafter referred to as *Goldblatt's Wholesale (Pty) Ltd v Damalis*).

137 *Goldblatt's Wholesale (Pty) Ltd v Damalis* 733G-734A.

> to give bills of exchange in respect of such purchases. Cf. Kahn v Leslie, 1928 E.D.L. 416. It is not, however, within representations in regard to it with a view to its sale, for such powers are not incidental to the ordinary conduct of such business. Cf. Ravene Plantations v Estate Abrey and Others, 1928 AD 143; Bowstead on Agency, 7th ed., p. 80. In the case of Frasers Ltd v Nel, 1929 O.P.D. 182, this Court held that an agent who had authority to sell motor-cars had no implied authority to compromise his principal's claim for the price. In my opinion Christos Damalis had no implied authority to instruct Messrs. G. P. Botha & Co. to write the letter in question for it was not incidental to the ordinary conduct of the business that he should have authority to enter or to attempt to enter into compromises with the creditors of the business, and for that purpose to send out circular letters to creditors.

An agent instructed by the owner of a house to sell the property and to take commission from the purchase price has been held to have implied authority to make a binding sale agreement, and to sign an agreement of sale.[138] However, an agent instructed to find a purchaser, has been held to lack an implied authority to conclude a contract of sale.[139]

Residual powers of agents can also be implied from what is usual in the particular trade, business or profession in which an agent is employed.[140] A leading South African case in this regard is *Nel v South African Railways and Harbours*.[141] The case involved a sale of a motor vehicle from Port Elizabeth to Potchefstroom. Although it was usual in consignment by rail that goods were carried at owner's risk, the agent in issue consigned the vehicle at railway's risk, thereby rendering the buyer liable for higher freight charges. The issue before court was whether or not the agent had implied authority to do that?[142] The court held it to be the correct position of the law that an agent must be strictly held to the principal's instructions. Apart from that, be it express or implied, the agent's authority only extents to "…all the usual and

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138 See *Rosenbaum v Belson* [1900] 2 Ch 267 as discussed by Markesinis and Munday*An Outline of the Law* 19-20. It was stated in this decision that "[a] sale prima facie means a sale effectual in point of law, including the execution of a contract where the law requires a contract in writing."

139 See *Hamer v Sharp* (1874) LR 19 Eq 108, as discussed by Markesinis and Munday*An Outline of the Law* 20.It was stated in that case that "[t]here is a substantial difference between those expressions [*i.e.* between finding a purchaser and concluding a contract of sale]. Authorising a man to sell means an authority to conclude a sale; authorising him to find a purchase means less than that—it means to find a man willing to become a purchaser, not to find him and make him a purchaser."

140 Silke *De Villiers and Macintosh's The Law of Agency* 146.

141 *Nel v South African Railways and Harbours* 1924 AD 30 (hereinafter referred to as *Nel v South African Railways and Harbours*).

142 *Nel v South African Railways and Harbours* 41.

ordinary means of executing it. It does not go beyond that."[143] On the facts of the case, the court held that the agent did not have implied authority to consign the vehicle at railway's risk because it was not usual in consignments by rail to do so. Per Kotzè J:[144]

> Applying the … principles to the facts of the case before us, it appears to me that, in the absence of anything to show that it was usual and ordinary, or necessary, in the case of a common and daily consignment by rail, which is understood to be at the risk of the consignee and owner, the consignor cannot be said to have implied authority to insure the goods at railway risk, and so make the cognisee liable for the payment of the insurance or extra rate of freight by rail….

The agent's residual powers can also be implied from the customs or usages of the particular trade, business or profession in which he or she is employed.[145] Understandably, before the principal is held liable on this basis, it must be demonstrated that what the agent did was indeed a usage or custom in that line of business.[146] It is important to note further that the principal's knowledge or ignorance of the particular usage or custom which his agent followed is irrelevant in determining his liability.[147]

Lastly, it needs mention that implied authority, in whatever form it may be found to exist, is not an independent form of authority, it is part and parcel of actual authority.[148] This was made abundantly clear by Botha J in the matter of *Inter-Continental Finance & Leasing Corp (Pty) Ltd v Stands 56 & 57 Industria Ltd*,[149] in which he stated that:

> Leaving aside questions of terminology, I proceed to state what I conceive to be the legal principles that can be gathered from the cases and that I am called upon to apply to the facts of the present case. A is bound by an agreement purportedly entered into on his behalf by B with C if B had authority from A to enter into that agreement on A's behalf, or if A is precluded from denying such authority by virtue

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143 *Nel v South African Railways and Harbours* 42.

144 *Nel v South African Railways and Harbours* 42.

145 See Silke *De Villiers and Macintosh's The Law of Agency* 161, stating that "[e]very agent has implied authority to use all the various means which are justified or allowed by custom and usages of the trade, market, business or place in which the mandate is to be executed."

146 For a discussion of the requirements of a binding custom and usage in contract law, see Christie *The Law of Contract* 184-190.

147 Silke *De Villiers and Macintosh's The Law of Agency* 161.

148 See *Hely-Hutchinson v Brayhead Ltd* 583A-G.

149 *Inter-Continental Finance & Leasing Corp (Pty) Ltd v Stands 56 & 57 Industria Ltd* 1979 3 SA 740 (W) 748C-749H.

> of the principles of estoppel. 'Between actual authority and estoppel I can perceive no intermediate situation in which A is bound by B's agreement with C.' For the purposes of the present case and for reasons which will appear later I need not dwell on the principles relating to estoppel. I shall merely refer to the summary thereof contained in para 137 of the Law of South Africa at 106. However, the other possibility, namely 'actual authority', requires some further observations. Its existence may be evidenced by direct proof of an express authorisation by A to B to enter into the particular agreement in question with C. Failing that, it seems to me that the existence of 'actual authority' can be established by one means only, and that is by way of inference, on a balance of probabilities, on all the admissible facts given in evidence. This broad statement appears to me to be the overriding consideration governing the multitude of particular problematical situations dealt with in the case. It covers the type of cases where the question is whether B was A's agent, generally speaking, and whether A had by words or conduct expressly or tacitly appointed B as his agent at all. It covers the case where it appears that A had appointed B as his agent and the question is whether the entering into of the agreement in question fell within the scope of B's authority. It applies also to the situation where A had appointed B as a particular kind of agent and the question is whether B in his particular capacity, as being in a special category of agents, was vested with authority to enter into the agreement in question on A's behalf. In this situation, too, the decisive question is: does the evidence justify an inference on a balance of probabilities that B had A's authority to enter into that agreement? The manner and the circumstances of B's appointment by A, the particular kind of business or professional activities carried on by B, his position and functions, and the usual or customary powers of such a kind of agent as B may be proved in evidence, are all but part of the totality of facts from which the further fact of the existence of authority to enter into the agreement in question may or may not be properly inferred.

Therefore, an agent who possesses an implied authority is as good as one with express authority. They both have actual authority to bind their principals.

3.5.2.2 Apparent or ostensible authority

At this point, it is very difficult to state in precise terms what apparent authority means. At the time of writing this chapter, South African law on this issue has been reversed by the decision of the Constitutional Court in the matter of *Makate v Vodacom (Pty) Ltd*.[150] Before this decision, it had always been the law that apparent authority gives rise to agency by estoppel.[151] Therefore, in a claim based on the

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150 *Makate v Vodacom (Pty) Ltd* 2016 ZACC 13 (hereinafter referred to as *Makate v Vodacom (Pty) Ltd*).

151 In English law, it was stated in the matter of *Rama Corp v Proved Tin and General Investment Ltd* [1952] 2 QB 147 149-150 that "[o]stensible or apparent authority…is merely a form of estoppel, indeed, it has been termed agency by estoppel…." This position is, or more properly was, generally followed in South African law. For instance, Silke *De Villiers and Macintosh's The Law of agency* 440-441, mentions that "[b]y ostensible authority is meant authority which *in fact* never existed, but the existence of which the alleged principal is estopped from denying." See

apparent authority of the agent to bind his or her principal, the third party was required to prove all the elements of estoppel.[152] The concept of agency by estoppel has already been discussed, and shall not be repeated here. In *Makate v Vodacom (Pty) Ltd*, the court held that apparent authority and agency by estoppel were two distinct grounds on which the power of the agent to bind the principal could be founded. The facts of the case were as follows, the applicant was a former employee of the respondent, which is a telecommunications company. During the course of employment, the applicant independently developed a product known as "Please call me."[153] This product he sold to the respondent through one of its officials holding the office of the Director of Product Development.[154] The applicant was never paid for the product. Suing the respondent for the purchase price, the applicant claimed that the Director of Product Development was an agent with apparent authority to bind the respondent. The respondent on the other hand argued that the Director of Product Development was not its agent, and therefore had no authority to bind it.

In the court *a quo*, the decision was handed down against the applicant *inter alia* on the ground that in alleging apparent authority, he had to go further and prove the individual elements of estoppel,[155] which he did not do. On appeal, the Constitutional

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also Visser *et alGibson's South African Mercantile* 205-208; Coaker and Zefferttt *Wille and Millin's Mercantile Law* 446-468; Hutchison *et alWille's Principles of South* 598. For case law, refer to *African Life Assurance Co Ltd v NSB Bank Ltd* 2001 1 SA 432 (W); *NSB Bank vCape Produce Company (Pty) Ltd* 2002 1 SA 396 (SCA) (hereinafter referred to as *NSB Bank vCape Produce Company (Pty) Ltd* 2002 1 SA 396 (SCA)) ; *Glofinco v ABSA Bank Ltd(t/a United Bank)* 2001 2 SA 1048 (W); *Service Motor Supplies (1956) (Pty) Ltd v Hyper Investments (Pty) Ltd* 1961 4 SA 842 (A); *Southern Life Association Ltd v Beyleveld* 1989 1 SA 496 (A); *Poort Sugar Planters (Pty) Ltd v Minister of Lands* 1963 3 SA 352 (A); *Dicks v South African MutualFire and General Insurance Co Ltd* 1963 4 SA 501 (N); *Rosebank Television & ApplianceCo (Pty) Ltd v Orbit Sales Corporation (Pty) Ltd* 1969 1 SA 300 (T).

152 See *Tuckers Land and Development Corporation (Pty) Ltd v Perpellief* 1978 2 SA 11 (T) 15.

153 *Makate v Vodacom (Pty) Ltd* para 2-3.

154 *Makate v Vodacom (Pty) Ltd* para 5-6.

155 *Makate v Vodacom (Pty) Ltd* Case No: 08/20980 para 157, stating that "[t]he mere allegation in the particulars of claim, that Mr Geissler had *ostensible authority*,was not enough. The plaintiff had to plead an estoppel in the replication. If the plaintiff was aware at the outset of the true facts, namely, that there was no actual authority and that he was relying on ostensible authority, he should have pleaded the facts, as represented to him, to found such authority, in his particulars of claim. If he was not aware that Mr Geissler had no actual authority and had pleaded actual authority and the defendant had, in turn, pleaded the true facts (i.e. a denial of actual authority), the plaintiff may then have relied on estoppel in his replication17. But it was essential for the plaintiff to have pleaded the facts as represented to him, if he was aware of those facts. The estoppel, which is not a cause of action, should then have been pleaded in a replication, in response to the defendant's plea."

Court found that apparent authority was independent from agency by estoppel.[156] Referring to the decision of Lord Diplock in *Hely-Hutchinson v Brayhead Ltd*,[157] the court defined apparent authority as the authority of an agent as it appears to others.[158] If the principal, whether by words or conduct, creates an appearance that another has power to bind him, he shall be taken to have conferred on that other person apparent authority to bind him. The court stated that, once the principal is demonstrated to have created an appearance of authority, nothing more is required in order to hold him liable.[159] Therefore, the requirements of estoppel are not necessary to establish apparent authority.[160] On the facts of the case, the court found that by reason of the powers conferred on him in relation to the development of new products, the Director of Product Development had an appearance of authority to bind the principal. In the words of Jafta J:[161]

> When account is taken of Mr Geissler's position as a member of the Board, the enormous power he wielded in respect of new products, the organisational structure within which he exercised his power and the process which had to be followed before a new product could be introduced at Vodacom, there is only one appearance that emerges. It is that Mr Geissler had authority to negotiate all issues relating to the introduction of new products at Vodacom. Those issues included agreements under which the new products would be tested before approval by him and once approved, the agreement in terms of which the new product would be acquired by Vodacom and the amount to be paid for it. After all, owing to his technical skills, he was best placed to determine the worth of a new product….

It would seem, therefore, that in the opinion of the court, in contrast to agency by estoppel, apparent authority arises where the principal creates a "general" impression or appearance that another person has power to bind him or her,[162] and

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156 *Makate v Vodacom (Pty) Ltd* para 75, stating that "[i]t is apparent that estoppel and ostensible authority are different, even though there may be some overlap between them. Ostensible authority is the power to act as an agent indicated by the circumstances, even if the agent may not truly have been given the power. Whereas estoppel, as observed in *West*, is the rule that precludes the principal from denying that she gave authority to the agent."

157 *Hely-Hutchinson v Brayhead Ltd* [1967] 3 All ER 98 (CA) 583A-G.

158 *Makate v Vodacom (Pty) Ltd* para 49.

159 *Makate v Vodacom (Pty) Ltd* para 47, mentioning that "[a] closer examination of the original statement on apparent authority by Lord Denning, quoted below, reveals that the presence of authority is established if it is shown that a principal by words or conduct has created an appearance that the agent has the power to act on its behalf. Nothing more is required."

160 *Makate v Vodacom (Pty) Ltd* para 47.

161 *Makate v Vodacom (Pty) Ltd* para 66.

162 *Makate v Vodacom (Pty) Ltd* para 47, stating that "[t]he means by which that appearance is represented need not be directed at any person. In other words the principal need not make the representation to the person claiming that the agent had apparent authority."

the matter ends there. With agency by estoppel, the third party who alleges that the agent had power to bind the principal must show that the appearance of agency was made to him or her *per se*, not to the general public. He or she must go further to prove the individual elements of estoppel.

3.6 The rights and duties of the parties to the relationship of agency

Having discussed what or who an agent is, and the various ways in which the relationship of agency arises between the principal and the agent, time is ripe at this juncture to turn to a discussion of the rights and obligations of the parties to that relationship.

3.6.1 The duties of the agent

As illustrated in this work, the relationship of agency does not necessarily depend on a contract between the principal and his or her agent, but mainly on the unilateral authorisation of the agent by the principal. Therefore, unless there is a contract of agency, the relationship between the principal and the agent does not automatically give rise to contractual rights and obligations.[163] Where there is no contract, it is said that the rights and duties of the parties will be deduced from the express terms of the authority given, or the common law rules applicable to the relationship of agency.[164] For these reasons, we shall consider strictly the rights and duties of the parties at common law.

The agent has a duty to obey the mandate of the principal,[165] meaning that he or she must perform the authorised task in accordance with the instructions of the principal.[166] What is required is not strict or rigid performance, but substantial performance of the mandate.[167] Substantial performance means that while the agent does not strictly follow the terms of the given authority, the discrepancy is not so great as to result in a substantially different transaction.[168] For illustration, where the

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163 See Sharock *Business Transactions* 152.
164 Fridman *Law* 139.
165 Visser *et alGibson's South African Mercantile* 219.
166 See Kerr *The Law* 136.
167 Visser *et alGibson's South African Mercantile* 219.
168 *Sammel v Jacobs & Co* 1928 AD 353 355-366.

agent is instructed to find a purchaser for £4000, but finds instead a purchaser for that amount paid in instalments and with 7 per cent interest, it has been held that such is substantial performance.[169]

The agent has a duty to perform the mandate with reasonable care, skill and diligence. He is therefore required to exercise the degree of care of a diligent and prudent person.[170] This is so because one who accepts a mandate is taken in law as holding out himself or herself to possess the necessary skills requisite for the performance of that mandate, and will therefore be liable to the principal in damages for any negligence.[171] The agent has a further duty to act in good faith, *i.e.* to act solely in the interest and for the benefit of his or her principal.[172] This means further that the agent must avoid any conflict of interest, and must account for any secret profits made during the course of the execution of the mandate.[173] The agent also has a duty to render to the principal a full and accurate account concerning his or her performance of the mandate.[174] This account must reflect true facts about all moneys received and all expenses paid for and on behalf of the principal.[175]

3.6.2 The duties of the principal

If the agent properly performs his or her mandate as authorised, he or she is entitled to receive a commission or remuneration from the principal.[176] Where the amount of remuneration has not been fixed by agreement between the parties, it may be determined by the court with reference to a trade usage or custom relevant to the agent's occupation.[177] Where no trade usage is applicable, the commission will be fixed by the court in light of what is fair and reasonable. In deciding what is fair and reasonable, the court will consider *inter alia* the time and labour involved on the

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169 See *Burt v Ryan* 1926 TPD 68.
170 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 492.
171 Silke *De Villiers and Macintosh'sThe Law of Agency* 326; *Bloom's Woollens (Pty) Ltd v Taylor* 1961 3 SA 248 (N) 253-254 (hereinafter referred to as *Bloom's Woollens (Pty) Ltd v Taylor*).
172 Silke *De Villiers and Macintosh'sThe Law of Agency* 326.
173 See *Bloom's Woollens (Pty) Ltd v Taylor v Palmer* 33-34; *Robinson v Randfontein Estates Gold Mining* 117-197; *Union Government v Chappell* 1918 CPD 462 480-481.
174 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 492.
175 Visser *et alSouth African Mercantile* 225.
176 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 480.
177 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 483; Visser *et al Gibson's South African Mercantile* 129-129.

part of the agent, the nature of the occupation, and the value of the agent's service to the principal.[178] Apart from commission, the agent is entitled to receive from the principal reimbursement of all expenses incurred in the execution of the mandate,[179] and indemnity for all losses and liability incurred in the execution of the mandate.[180]

3.7 The personal liability of an agent to third parties

Where the agent acts without, or exceeds the authority of his or her principal, he or she is personally liable to the third party for breach of warranty of authority.[181] The liability of the agent in this instance is not contractual,[182] meaning that the third party cannot enforce the purported contract against the agent. The agent's liability for breach of warranty of authority is in damages. The rationale of this rule was laid down as follows by the court in the matter of *Blower v Van Noorden*:[183]

> If the agent is to be sued on the contract itself, anomalous and highly inequitable results would in certain cases follow … Liability on the contract implies liability for the full damages which a breach of that contract entails. So that the other contracting party, if the agent were a wealthy man, and the principal a poor one, might recover from the former which he would never have succeeded in extracting from the principal had the latter (with whom alone he intended to contract) had been bound by the agreement. The amount awarded against the agent could have no reference to the pecuniary position of the alleged principal, because the agent would be in exactly the same position as if he had entered into the contract personally. The damages would be the same … against the agent for an insolvent as against an agent for a millionaire … But it does not follow that relief against an agent cannot be afforded on somewhat different grounds…. An agent who has exceeded his authority in contracting for a named principal is liable in damages to the other contracting party on the ground that, from his representation of authority, a personal undertaking on his part is to be implied that his principal will be bound, and that, if not, the other party will be placed in as good a position as if he were.

The foregoing notwithstanding, the agent will be held contractually liable to a third party if he or she intended or gave the appearance that he or she intended to

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178 See *Barnabas Plein & Co v Sol Jacobson & Son* 1928 AD 25.

179 Visser *et alGibson's South African Mercantile* 228-229.

180 Visser *et alGibson's South African Mercantile* 230.

181 *Blower v Van Noorden* 900, mentioning that an agent who contracts on behalf of the principal warrants that he has authority to do so. See also *Claude Neon Lights (SA) Ltd v Daniel* 1976 4 SA 403 (A) 392E-F.

182 See Silke *De Villiers and Macintosh's The Law of Agency* 558, stating it to be a general rule that "…a person contracting with an agent can only sue the principal on the contract."

183 *Blower v Van Noorden* 1909 TS 890 900.

assume personal liability.[184] One of these instances is where although intending to bind the principal, the agent fails to disclose or mention that fact to the third party. Not knowing of the existence and presence of the principal, the third party is allowed a right to enforce the contract against the agent personally.[185] However, the agent's liability in this regard is alternative to that of the principal.[186] If the third party subsequently discovers that the contract was in fact made for a principal, he or she can proceed against the principal. The third party cannot, however, enforce the contract against both the principal and the agent; he or she must choose one. The agent will also be held personally liable on the contract if he purports to act for a non-existent principal,[187] or a principal without capacity.[188]

3.8 Termination of the relationship of agency

The relationship of agency can be terminated in various ways including by mutual consent of the parties.[189] It can also be terminated by unilateral revocation of authority by the principal, or the unilateral renunciation of authority by the agent.[190] Agency can also be terminated by the death of either the principal,[191] or the agent; or additionally, by the sequestration, liquidation or placing under judicial management of the principal's estate.[192] However, agency is normally terminated by due performance of the mandate by the agent.[193]

3.9 The rationale of agency

A greater portion of the field of the law of agency is an elaborate anomaly.[194] To better appreciate how this is so, it is of utmost importance to adopt a puritan stance

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184 Silke *De Villiers and Macintosh'sThe Law of Agency* 560.
185 See generally *Natal Trading and Miling Co Ltd v Inglis* 1925 TPD 724 (hereinafter referred to as *Natal Trading and Miling Co Ltd v Inglis*).
186 See *Natal Trading and Miling Co Ltd v Inglis* 743.
187 See generally Williams 1990 *SALJ* 203-206.
188 Visser *et alGibson's South African Mercantile* 235.
189 Visser *et alGibson's South African Mercantile* 236.
190 See Visser *et alGibson's South African Mercantile* 236-237; Coaker and Zefferttt *Wille and Millin's Mercantile Law* 519.
191 *See Trop & Playfair v Currie* 1966 2 SA 704 (RAD).
192 See *Goodricle & Son v Auto Protection Insurance Co Ltd (in liquidation)* 1968 1 SA 717 (A) 722-733.
193 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 519.
194 Handelsrecht as quoted by Holmes 1890-1891 *Harvard Law Review* 347.

and commence the discussion with a restatement of the untainted principles of contractual liability.[195] One can state with little fear of contradiction to be one of these principles that, as a matter of fact, the creation of contractual liability is by its very nature a personal undertaking.[196] Because contractual obligations burden and often diminish the debtor's estate, law and justice demand that such onerous consequences can be assumed in no other way except voluntarily and consensually.[197] Therefore, an uninterested meddler, or a third party to be modest, cannot lawfully bind another person's estate.[198] Putting aside instances of assisted contracts;[199] agreements bind only those who are privy to them.[200] By this is meant that contractual rights and obligations ensue only to those who intentionally participate in their creation.[201] Privity to contract does not necessarily mean that parties must directly or personally participate in the process of contract formation.[202] It means in the very least, however, that even if a party does not personally participate in the formation of a contract, he or she must at least have actual knowledge of the terms of that contract, for how else can it be maintained that there

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195 By this is meant the pure principles of contractual liability. The current researcher deems this very important because the liability of the principal to third parties is by its very nature contractual. Therefore, the starting principle is that the principal's liability must follow, or at least, appear to be in line with the usual or generally accepted principles of contract law.

196 As mentioned elsewhere in this chapter, this was essentially the reason why Roman law did not recognise the institution of direct representation. To refresh the memory, see Muller-Freienfels 1964 *The American Journal of Comparative Law* 194; Muller-Freienfels date unknownhttp://global.britannica.com/contributor/Wolfram-Muller-Freienfels/2074. That this view is still relevant today is obvious from several texts. For instance, Hutchison *et alWille's Principles of South* 410, describes the rights and obligations arising from a contract as being "personal," meaning that that they bind only he who consented to their creation.

197 See Mearns 1962 *Virginia Law Review* 53, stating that "[p]eople, it is believed, should not be deemed to have bargained away their money or property, or assumed legal obligations, unless they do so of their own free will." He similarly states in another paragraph that "…a man must have freely disposed of his property in order to be bound in contract," see Holmes 1891 *Harvard Law Review* 14.

198 See *Standard Bank Financial Services Ltd v Taylam (Pty) Ltd* 1979 2 SA 383 (C) 392D-E, stating that "[t]he law does not allow rights to be acquired by meddling indiscriminately in the affairs of another…."

199 Assisted contracts are those formed by juristic representatives, such as guardians of minors, on behalf of those who are put under their care for lack of legal capacity, *e.g.* minors, insane people *etc*.

200 See Christie *The Law of Contract* 298-199.

201 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 75.

202 Christie *The Law of Contract* 199, mentioning that principals and partners in a business of partnership are still considered to be privy to contracts made by their agents even though they did not personally participate in the negotiation and conclusion of those contracts. One can also add here the example of contracts made through messengers. These contracts are valid and binding on those who communicate their intention to be bound through messengers.

is true *consensus* or meeting of the minds when one or both parties are ignorant of the terms upon which they are bound one to the other?[203]

It is against this background that the law of agency strikes one as an enormous anomaly. As shall be recalled, the law of agency holds without excerptions that a contract is concluded by the will of the agent, consequently that:

> The principal's intention is not relevant to the question whether consensus necessary to produce a contract existed or did not exist.[204]

That notwithstanding, it is common cause that the resultant contractual rights and obligations do not attach to the agent, but the principal. This is surely anomalous. As one author correctly notes,[205] it is:

> …absurd to maintain that a contract which in its exact shape emanates exclusively from a particular person is not the contract of such person [*i.e.*, the agent], but is the contract of another [referring to the principal].

The reality of agency, therefore, distorts the original principles of contractual liability, and does for that reason require further explanation. Without such an explanation, the law would be left in an unacceptable and miserable state, being a state in which courts are forced to pay lip-service to reason "…in a jargon of wise laws descending from the high priests of the legal cult."[206] This would no doubt be embarrassing, for as one author correctly observes:[207]

> A judge would blush to say nakedly to a defendant that: 'I can state no rational ground on which you should be held liable, but there is a fiction of law which I must respect and by which I am bound to say that you did the act complained of, although we both know perfectly well that it was done by somebody else whom the plaintiff could have sued if he had chosen, who was selected with utmost care by you, who was in fact an eminently proper person for the employment in which he was engaged, and whom it was not only your right to employ, but much to the public advantage that you should employ.' That would be an unsatisfactory form in which to render a decision against the… [principal], and it is not pleasant even to

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203 For relevance of a party's knowledge of the terms in determining the issue of whether or not there is a contract, see Christie *The Law of Contract* 67; Visser *et alGibson's South African Mercantile* 30-31; Kahn *Contract and Mercantile Law* 8-9; Kerr *The Principles of the Law* 97.

204 *MEC for Economic Affairs, Environment & Tourism v Kruisenga* footnote 105.

205 Handelsrecht as quoted by Holmes 1890-1891 *Harvard Law Review* 347. Holmes similarly states that "…common-sense is opposed to the fundamental theory of agency…."

206 Seavey 1920 *The Yale Law Journal* 859.

207 Holmes 1891 *Harvard Law Review* 22.

> admit to one's self that such are the true grounds upon which one is deciding. Naturally, therefore, judges have striven to find more intelligible reasons….

At the outset, it is important to clearly delineate the boundaries of the problem under consideration. It would be an overstatement of the problem to say that the entire process of the allocation of liability to the principal for contracts made by his or her agent requires extensive rationalisation. There are straightforward cases in which common-sense suffices for explanation. Where the agent has been given actual authority to bind his or her principal, and the agent does contract for the principal within the scope of that authority, the principal shall be bound by those contracts. This conclusion is justifiable on several grounds. When a principal voluntarily confers authority on an agent to bind him or her with third parties, he or she *ipso facto* evidences his or her consent or intention to be bound by the contracts made by that agent. Starting with express authority, if the agent properly transacts on behalf of his or her principal within the scope of the expressly granted authority, it is clear that the principal is privy to such a transaction because its terms were expressly dictated and authorised by him. With implied authority, one still finds nothing objectionable in holding a principal liable on that ground. The task of implying terms into a contract is well known at common law. These terms can be implied from law, or from what is usual and customary in a particular trade. Whether the contract is concluded by the principal personally, or through an agent, relevant terms will always be implied into a contract by the law if need arises.

Apart from actual authority, several instances in which principals are held liable require further explanation. The first of these instances relates to the liability of undisclosed principals. As mentioned above, a principal is undisclosed if the agent purportedly transacts on his or her behalf without disclosing that fact to the third party. It was demonstrated that, although the agent under such circumstances is *prima facie* a party to the contract, the third party can proceed against the principal if he or she subsequently discovers that the contract in issue was in fact made on behalf of the principal. A troubling issue has been to explain the basis of the principal's liability under such circumstances. As one author correctly mentions, it is without doubt anomalous that a third party "…can sue someone of whom he had no

knowledge when he contracted."[208] The sole difficulty with the doctrine of the liability of undisclosed principals is that it remains inconsistent with the settled principles of contractual liability.[209] It is admittedly very difficult to illustrate any form of consent and intention to be bound as between the undisclosed principal and a third party.[210] Though purportedly made on his or her behalf, the undisclosed principal is a stranger to such a contract.[211] As a result, a contract made on behalf of an undisclosed principal is more correctly a contract of the agent and the third person with whom he or she contracts,[212] not the principal's. That the principal has remained undisclosed effectively renders the agent and the third party the only people privy to the contract.[213] How then does the undisclosed principal acquire rights and obligations under such circumstances? Current literature on this issue offers no explanation of that, and the substitution of the agent by the initially undisclosed principal for purposes of contractual liability under such circumstances finds no rational support in law. As one author ably demonstrates:[214]

> Briefly stated, such difficulties are attributable to the legal deficiency of the doctrine's unilateral substitution power. For one thing, it eludes explanation in terms of established legal concepts that deal with the transfer of contractual obligations (for example cession, delegation and assignment). More importantly, the doctrine is fundamentally inconsistent with the general principles of contract and agency law—here the legal concepts of 'privity of contract' and '(direct) representation' are especially pressing….

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208 Kerr *The Law* 210. The same author, however, supports the imposition of liability on undisclosed principals on the ground that "…the contract is, and was from the beginning, his. It was made for him by his agent although the agent did not disclose the capacity in which he acted nor the existence of the principal. There is no separate contract to which the principal is a stranger, one in which the agent is a principal which is then considered at a later stage to have been transferred to the undisclosed principal."

209 See Bennett *Principles of the Law* 145, mentioning that the doctrine of undisclosed principals mandates a modification of the orthodox contract law theory. See also Powell 1956 *Butterworths South African Law Review* 49-50; Barnett 1987 *California Law Review* 1974-1976.

210 See comment to § 186 of the US *Restatement (second) of Agency* as quoted by Barnett 1987 *California Law Review* 1975, stating that "[t]he rules with reference to undisclosed principals appear to violate one of the basic theories of contracts. The relation between the principal and a person with whom the agent has made an authorized contract is spoken of as contractual, although by definition there has been no manifestation of consent by the third person to the principal or by the principal to him. In fact, the contract, in the common law sense, is between the agent and the third person."

211 Bennett *Principles of the Law* 145.

212 See Powell 1956 *Butterworths South African Law Review* 50.

213 Markesinis and Munday *An Outline of the Law* 125-126.

214 Bhana 2010 *SALJ* 11.

Another set of anomalies in the law of agency are the notions of apparent authority and agency by estoppel. There are those who view apparent authority and agency by estoppel as falling squarely within the objective or reliance theory of contract.[215] It is said that when a principal conducts himself in a manner which leads third parties into believing that another person is his authorised agent, he objectively manifests his consent to being bound to third persons by that apparent agent.[216] It has been noted that apparent authority coincides with actual authority.[217] It is said that while actual authority is the subjective intention of the principal to be bound by his agent, apparent authority is his or her objective intention.[218] One, however, stands to doubt the validity of this conclusion. To start with, while it is true that contract law embraces the reliance theory, it is not on grounds of estoppel that such a theory is premised. In South African law, the reliance theory of contract is encapsulated in the principle of quasi-mutual assent.[219] Subjective intention notwithstanding, if a man conducts himself in such a manner which leads the other party to believe that he or she is consenting; he or she shall be held to have consented to the contract.[220] However, the reliance or belief of the third party must be reasonable.[221] The additional requirements of estoppel clearly distinguish the objective or reliance theory of contract from agency by estoppel. It has been argued therefore that instead of estoppel, the liability of a principal for creating an appearance of authority is better explained with reference to the reliance theory of contract.[222]

With reference to both apparent authority and agency by estoppel, it is generally agreed that the principal's liability under such cases is not based on any authority

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215 See Conant 1968 *Nebraska Law Review* 678.

216 Conant 1968 *Nebraska Law Review* 678; Holmes 1891 *Harvard Law Review* 1.

217 *Hely-Hutchinson v Brayhead Ltd* 583A-G.

218 Bennett *Principles of the Law* 52.

219 See *Ridon v Van Der Spuy and Partners (Wes-Kaap) Inc* 2002 2 SA 121 (C) stating that "I accept for the purposes of this judgment that there was no subjective consensus between the parties. However, even in the absence of subjective consensus, the so-called 'reliance theory' (the theory of quasi-mutual assent) may in appropriate circumstances form an alternative basis for contractual liability."

220 See *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis* 1992 3 SA 234 (A) 382I-241D (hereinafter referred to as *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis*).

221 *Steyn v LSA Motors Ltd* 1994 1 SA 49 (A) 61C-E (hereinafter referred to as *Steyn v LSA Motors Ltd*).

222 Pretorius 2011 http://www.saflii.org/za/journals/DEJURE/2011/13.html.

conferred by him on the agent.[223] Having emphasised the relevance of authority as the ultimate basis of the principal's liability to third parties, any liability based on something else other than authority becomes instantly questionable. Rendering agency by estoppel and apparent authority even more absurd than already illustrated in this work, is the observation of the court in *NBS Bank Ltd v Cape Produce Company Pty Ltd*,[224] that a principal will be held liable for creating an appearance of authority even if he or she did not intend to do so, "…and even though the impression is in fact wrong." This is very damning. Why must the principal be held liable even when it is clear that the third party was wrong in believing that a person has authority to bind the principal? Surely this part of the law of agency needs be rationalised.

The third category of the anomalies within the law of agency, referred to as the "inherent powers of general agents," was once well known in American law.[225] As opposed to a special agent authorised to bind his or her principal in relation to a single and specific transaction, a general agent is defined in the *Restatement (Second) of Agency* to mean one who undertakes the general business of his or her principal, and has power to bind him or her in general matters relating to that business.[226] By "inherent agency power" is meant the power of the general agent which does not arise from actual authority, apparent authority or estoppel, but from the agency relationship itself.[227] The position of the law in that regard is that:

> A general agent for a disclosed or partially disclosed principal subjects his principal to liability for acts done on his account which usually accompany or are incidental to transactions which the agent is authorized to conduct if, although they are

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223 See Bester 1972 *SALJ* 56, mentioning that "[s]trictly speaking, apparent authority is no authority at all, but only power." See also Fridman *Law* 108, stating equally that "[u]nlike the kinds of authority which have been discussed in the preceding chapter, the agent's authority in agency by estoppel is not an actual or real authority at all. That is to say it does not result from consent on the part of the principal, whether express, or implied…."

224 *NBS Bank Ltd v Cape Produce Company Pty Ltd* 2002 1 SA 396 (SCA) para 22.

225 Reference is only made to this aspect for purposes of illustration. The position in American law has since been altered with the passing of the *Restatement (Third) of Agency* 2006, which has done away with the notion of inherent powers of general agents. That the position has been reversed is no surprise because, as shall be demonstrated, the principal's liability under that doctrine was unexplainable.

226 § 3 (1).

227 § 8 A.

> forbidden by the principal, the other party reasonably believes that the agent is authorized to do them and has no notice that the agent is not so authorized.[228]

That the doctrine of inherent powers of general agents is out of step with both the settled principles of contract and agency law is readily clear. Firstly, it is clear from the definition of "inherent agency power" that such is not based on actual authority, or in the very least, apparent authority or estoppel. Even more disturbing with this doctrine is the rule that the principal is not only held liable in the absence of authority, but also for the expressly forbidden acts. These facts instantly render it very difficult for one to comprehend the basis of the principal's liability under such circumstances.

The last anomaly of the law of agency which shall be considered in this work relates to the liability of the principal for the unauthorised fraudulent misrepresentations of his or her agent. A fraudulent misrepresentation occurs when an agent fraudulently conceals or positively misleads the third party about a material term of the contract.[229] The general rule of the law of agency is that the principal is liable for all the fraudulent misrepresentations of his or her agent committed within the scope of actual authority or apparent authority.[230] That the scope of authority is made a relevant factor in considering whether or not to place liability on the principal in such circumstances is indeed commendable. However, the rationale for making the principal liable, the scope of authority notwithstanding, is questionable. The first difficulty arises from the fact that, as a general rule, the principal's knowledge or ignorance of the alleged fraud is irrelevant to the issue whether or not he or she is responsible.[231] As mentioned by the court in the case of *Randbank Bpk v Santam Versekeringsmaatskappy Bpk*,[232] the principal's liability is not based "…on any theory of [actual or] constructive knowledge [on his or her part]…." This rule is problematic

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228 § 161.

229 See Kerr *The Law* 221.

230 See *Ravene Plantations Ltd v Estate Abrey* 1928 AD 143 153-154 (hereinafter referred to as *Ravene Plantations Ltd v Estate Abrey*); *Atkinson-Oats Motors (Pty) Ltd v Whall* (1933) 2 PH A48 (C).

231 Kerr *The Law* 221-222, stating that "[t]he principal's liability results, not from the addition of an ingredient found in his conduct to an ingredient found in the conduct of the agent, but from the application of the rule that the principal is liable for his agent's fraud."

232 *Randbank Bpk v Santam Versekeringsmaatskappy Bpk* 1965 2 SA 456 (W) 457.

in light of the fact that fraud is a wilful act.[233] Therefore, in contract law, it is required that the fraud in issue must be of one of the parties to the contract, not of a third party.[234] If the principal be innocent of any role in the perpetration of fraud by his agent, on what possibly rational ground does the law place liability for such fraud on him?

The foregoing are just a few illustrative examples of the anomalies of the law of agency; there are many more others which do not need to be discussed in this work.[235] It is felt that the foregoing examples are nevertheless enough to show that, if one was to insist on authority and consent on the part of the principal as the only basis of contractual liability, the law of agency would operate within a narrow and thinly circumscribed framework.

3.9.1 Agency as a risk based commercial process

At this juncture, one enters troubled waters, which must nevertheless be sailed if this chapter is to contribute anything to the existing pool of legal knowledge. The case in point is; why is the principal held liable for contracts made by his or her agent? Most importantly, why is the principal made to bear contractual liability in instances where the agent has exceeded or acted without the requisite authority? The latter is one of the most important questions of the law of agency. Scholars, judges and legal practitioners are generally not impressed with bare principles, the origin and basis of which they do not know or fully understand. Especially if such principles openly contradict the settled general rules of the law, as is the case with the anomalies of the law of agency under which principals are held liable for the unauthorised acts of their agents. Therefore, it is little surprise that much strength and time in this field of the law has been devoted to the end of explaining, in a logical manner, the rationale or basis of agency.

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233 *Ravene Plantations Ltd v Estate Abrey* 153.

234 See *Karabus Motors (1959) Ltd v Van Eck* 1962 1 SA 451 (C) 453.

235 For a discussion of some of the anomalies not discussed in this work, see generally Holmes 1891 *Harvard Law Review* 1-23; Seavey 1948 *Oklahoma Law Review* 3-20; Seavey 1920 *The Yale Law Journal* 859-895; Conant 1968 *Nebraska Law Review* 678-704; Mearns 1962 *Virginia Law Review* 50-57; Dalley 2011 *University of Pittsburgh Law Review* 495-547.

If one was to get overly strict with matters, it would seem that the aforesaid anomalies of agency are the distinguishing feature of the law of agency. Without these anomalies, agency would not stand as a separate and independent field of the law, distinguishable from the law of contract. Where the principal has actually authorised the agent to bind him or her in contract with third parties, this is strictly speaking not a matter of the law of agency *per se*, but largely a matter of the law of contract.[236] From the law of contract, the law of agency is distinguished by the various instances in which the principal is held liable for the unauthorised acts of his or her agent, these being instances in relation to which the principal cannot be said to have consented. That this is so was first pointed out by Oliver Holmes,[237] who is credited with being the "father" of the modern law of agency.[238] While it may be an exaggeration to credit him with being the father of the modern law agency, Holmes nevertheless deserves due credit for first highlighting the autonomy and independence of the law of agency. In his two papers published in the *Harvard Law Review*, he divided the law of agency into two segments, namely the law of master and servant,[239] and the law of principal and agent.[240] He pointed out that the law of agency had a very small role in instances where the agent sticks to his or her granted authority, or where the servant performs a service for his or her master within the scope of his or her employment.[241] He went further and stated that:[242]

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236 It is a matter of the law of contract because the principal's liability is easily explainable with reference to rules of the law of contract, especially the rule that a party's consent or manifestation of intention to be bound must be demonstrated before he is saddled with contractual liability. See Holmes 1891 *Harvard Law Review* 1, stating that "[a] man is not bound by his servant's contracts unless they are made on his behalf and by his authority, and that he should be bound then is plain common-sense … this merely illustrates the general rule which governs a man's responsibility for his acts throughout the law."

237 See generally, Holmes 1891 *Harvard Law Review* 345-364; Holmes 1891 *Harvard Law Review* 1-23.

238 See Estes 1976-1977 *The John Marshall Journal of Practise and Procedure* 227, commenting that "[i]f there is a 'father' of modern agency, it is likely Justice Oliver Wendel Holmes. While still a professor at Harvard Law School, Justice Holmes delivered two lectures dealing with the field of agency. Eight years later in 1891, these lectures were reprinted in the *Harvard Law Review*. No review of the current status, of the field of agency can omit attention to these lectures, for they influenced the course that the field was to take in the following few decades."

239 Holmes 1891 *Harvard Law Review* 345-364.

240 Holmes 1891 *Harvard Law Review* 1-23.

241 See Holmes 1891 *Harvard Law Review* 347, stating that "…it is plain good sense to hold people answerable for wrongs which they have intentionally brought to pass, and to recognize that it is just as possible to bring wrongs to pass through free human agents as through slaves, animals, or natural forces. This is the true scope and meaning of '*Qui facitperalium facit per se,*'and the

> If agency is a proper title of our *corpus juris,* its peculiarities must be sought in doctrines that go further than any yet mentioned. Such doctrines are to be found in each of the great departments of the law. In tort, masters are held answerable for conduct on the part of their servants, which they not only have not authorized, but have forbidden. In contract, an undisclosed principal may bind or may be bound to another, who did not know of his very existence at the time he made the contract. By a few words of ratification a man may make a trespass or a contract his own in which he had no part in fact. The possession of a tangible object may be attributed to him although he never saw it, and may be denied to another who has it under his actual custody or control. The existence of these rules is what makes agency a proper title in the law.

Therefore, a proper understanding of the basis of the principal's liability under the anomalies of the law of agency promises an insightful understanding of liability under the general law of agency. Equally, a rational explanation of the anomalies of the law of agency will in itself constitute a rationale of the entire field of the law of agency.

Recognising some of the aforesaid anomalies, Holmes proposed an interesting theory to explain and rationalise them. He argued that unauthorised agents and servants are allowed to bind their principals because of the fiction of law that the agent and his or her principal are considered to be one and the same person.[243] According to this theory, a principal who appoints an agent is taken to have adopted the name of the agent in negotiating and concluding contracts with third parties,[244] therefore, whatever the agent does in the name of the principal, even if unauthorised, it is as if the principal has done it himself. He traces the origins of this theory to Roman law, where the *paterfamilias*, being the head of the family, was considered to be one person with his *pater potestas* and slaves for purposes of holding him liable for their torts and contracts.[245] For some time, this theory was

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> English law has recognized that maxim as far back as it is worthwhile to follow it. So it is only applying the general theory of tort to hold a man liable if he commands an act of which the natural consequence, under the circumstances known to him, is harm to his neighbor, although he has forbidden the harm. If a trespass results, it is as much the trespass of the principal as if it were the natural, though unwished for, effect of a train of physical causes. In such cases there is nothing peculiar to master and servant; similar principles have been applied where independent contractors were employed. No additional explanation is needed for the case of a contract specifically commanded."

242 Holmes 1891 *Harvard Law Review* 348.

243 Holmes 1891 *Harvard Law Review* 3; Holmes 1891 *Harvard Law Review* 350-351.

244 Holmes 1891 *Harvard Law Review* 5.

245 Holmes 1891 *Harvard Law Review* 2, mentioning that "Ulpian says that the act of the family cannot be called the act of the *paterfamilias* unless it is done by his wish. But as all the family

well accepted amongst legal scholars, and it is still maintained by some today that "… [the modern law of] agency originated within the [Roman] family circle."[246] Powell mentions that:[247]

> This system is virtually one of identification of the *paterfamilias* with the persons of his *potestas* for the purpose of external commercial relations with members of other families. There was no contractual agency, no direct or indirect representation; nor yet was the contracting *filiusfamilias* or slave necessarily only a *nuntius*. The system depended on the character of the primitive family, and particularly on the results of the Roman theory of *potestas*. But for a very long time it satisfied the commercial needs which many years later were to require the intervention of indirect or, in some places but perhaps not in Rome, direct representation.

It was not until long, however, that commentators on the issue began to criticise and openly reject this theory. It is said by some that this theory merely explains, but does not subjectively justify the imposition of liability on the principal for the unauthorised acts of his agent.[248] Another author points out also that there is very little evidence in case law to suggest that the liability of the principal for the contracts of his agent is based on the Roman law fiction of identity.[249] Holmes himself had conceded that this is so.[250] The same author also mentions that the legal and social institutions of ancient Rome are so different to their modern counterparts that, even if the fiction of identity was the true rationale of the modern law of agency, the theory has since lost its relevance in the modern world.[251]

Having rejected the fiction of identity in explanation of the rationale of agency, legal scholars have endeavoured for more logical theories that do not merely explain, but

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rights and obligations were simply attributes of the *persona* of the family head, the summary expression for the members of the family as means of loss or gain would be that they sustained that *persona, pro hac vice*. For that purpose they were one with the *paterfamilias*. Justinian's Institutes tell us that the right of a slave to receive a binding promise is derived *ex persona domini*. And with regard to free servants, the commentators said that in such instances two persons were feigned to be one."

246 See Van Den Bergh 2015 *Fundamina* 367.

247 Powell 1956 *Butterworths South African Law Review* 42.

248 Hardman 1930 *West Virginia Law Quarterly* 133.

249 Dalley 2011 *University of Pittsburgh Law Review* 518-519, explains that prior to the 18th Century, English commercial law was generally buried in records of merchant's courts, and the law of commercial agents would have been less accessible than other common law doctrines.

250 Holmes 1891 *Harvard Law Review* 22, conceding that "…the evidence here collected has been gathered from nooks and corners, and although in the mass it appears to me imposing, it does not lie conspicuous upon the face of the law."

251 Dalley 2011 *University of Pittsburgh Law Review* 520.

also justify the imposition of liability on principals for unauthorised contracts of their agents. One such theory was proposed by Conant under the heading "the objective theory of agency."[252] Conant proposed that agency should be viewed as an extension of the objective theory of contract.[253] In contract law, the consent to be bound is determined objectively, not subjectively. Therefore, in his view, in every circumstance where the principal is held liable, even for seemingly unauthorised acts of his agent, it is because he or she has objectively agreed to be bound. He illustrates this *inter alia* with reference to the liability of undisclosed principals. He mentions that although an undisclosed principal remains unknown to third parties, it is justified to hold him accountable once identified because by giving the agent property and funds to trade on his or her behalf, the principal has created an appearance to third parties that he or she will be bound by the contracts of the agent.[254] The principal is therefore estopped from denying that he or she did not objectively consent to be bound. This is an interesting theory, and one which the present researcher applauds for seeking to rationalise agency with reference to settled and well accepted principles of contract law. However, one cannot help but to note the inherent difficulties confronting the objective theory of agency. There are clear instances where principals are held liable for the unauthorised acts of their agents, and where courts impose liability conscious of the fact that the principal did not consent to being bound. For instance, in what are commonly referred to as instances of agency by operation of law, *e.g.* the power of one partner to bind another. It is obvious under such circumstances that the objective theory of contract cannot explain such liability. The same can also be said regarding agency by

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252 Conant 1968 *Nebraska Law Review* 678-704.

253 Conant 1968 *Nebraska Law Review* 679, explaining the theory to mean that "[t]he objective theory of agency, as an extension of the objective theory of contract, is based on expressions or actions which demonstrate the consent of the principal. Just as ordinary liability in contract is based on voluntary promises, a principal's liability in contract is based on his voluntary representations to third parties concerning the scope of his agent's authority. The representations may be made by the principal to third parties through the agent's permitted expressions or acts (actual authority), or directly to the third parties (apparent authority). These representations are analogous to the offeror's promise in contract. Just as the offeror's promise puts legal power in the offeree to enter contract, so does the principal's representations to third parties put a conditional power in them to enter contract with the principal upon successful negotiations with his agent…."

254 Conant 1968 *Nebraska Law Review* 687.

apparent authority.[255] Lastly, it is noteworthy to mention as a general concern that it is undesirable to overly link agency with consent or agreement on the part of the principal, correctly so because the emphasis on consent creates the false impression that agency cannot arise otherwise but for consent.

The examples of the two theories mentioned above serve to illustrate the point that the law is not agreed on the true rationale of agency. A prevailing view in relation to theories seeking to rationalise agency is that such theories have done more harm than good for creating confusion.[256]

This study proposes a new realistic theory in explanation of the rationale of the law of agency. This theory is premised on the observation that agency is a risk based commercial process, and that the materialisation of that risk will always cause financial losses to either the principal who deals through an agent, or to third parties who deal with the agent. The next observation is that in agency, the loss caused by that risk does not rest wherever it falls. It is systematically allocated between the parties. What have been referred to as the anomalies of the law of agency in this chapter are but techniques developed by courts of law to distribute or allocate risk between principals and third parties in a just, fair and equitable manner. This, it is submitted, is the only true rationale of agency.

Interrogated behind a thicker lens, the law of agency appears to be a very broad web of rules designed mainly for the purpose of the allocation of risk. Risk is defined as an impending threat that one will not get what he or she bargained for, or feels to be legally entitled to receive from another.[257] The risk of agency inheres in one key player, namely the agent. For the principal, the risk of dealing with third parties through an agent is that the agent may exceed or act without authority, consequently binding him or her to transactions for which he or she did not consent to be bound. For third parties, the risk of dealing with an agent is that he may

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255 Fridman *Law* 108, mentioning that the apparent authority of the principal does not emanate from the consent, objective or otherwise, but simply from the creation of the appearance and impression of authority in the minds of third parties.

256 See Conant 1968 *Nebraska Law Review* 687; Estes 1977 *The John Marshall Journal of Practise and Procedure* 225-226; Dally 2011 *University of Pittsburgh Law Review* 497.

257 Lane as quoted by Pichler *Trust and Reliance* 40.

exceed or act without authority, with the result that the principal may reject contracts. Unfortunately, despite the fact that it is the agent who renders agency a highly risky process, third parties are often discouraged to seek legal remedies against agents because unlike principals, agents often lack sufficient resources to satisfy judgments.[258] Therefore, the allocation of risk for the unauthorised acts of the agent is mostly done between the principal and third parties. In allocating this risk, courts are generally concerned with commercial convenience, the dispensation of justice, equity or fairness between the parties. Where relevant, policy considerations are also given deserving regard.[259]

The proposition that the law of agency is mainly concerned with the allocation of risk has been approached by some with a degree of scepticism.[260] However, as shall be demonstrated, there is a steady increase in opinion to the effect that in instances where the authority of an agent to bind his principal is not readily apparent on the facts of the case, the main concern for the courts must be to do justice between the parties. This has been recognised to be so in relation to each of the anomalies discussed in this work.

In relation to undisclosed principals, this theory was received in South African law from its English counterpart in the case of *Cullinan v Noord-Kaaplandse*

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258 See Rasmusen 2004 *American Law and Economics Review* 372, stating that "[o]rdinarily, the loss cannot be put on the agent, either because he is not rich enough or he is a difficult target for litigation, having fled or having otherwise protected his assets from legal judgements. Moreover, while questions involving the agent's liability for contracts are interesting, much of their analysis revolved around the contract between principal and agent rather than between agent and third party, so that agency issues are secondary. The interesting cases from the point of view of agency law are thus those in which the agent has created a conflict in which the principal and some third party must share the loss, either because the efficient contract puts the risk there or because the agent lacks the resources to assume liability."

259 For a detailed discussion of the various influential policies, and their relevant in the allocation of liability for the acts of unauthorised agents, refer to Hetherington 1966 *Stanford Law Review* 76-128.

260 Pretorius 2011 http://www.saflii.org/za/journals/DEJURE/2011/13.html argues that the rule of contractually liability based on the allocation of risk is poorly developed, meaning that it does not give clear and satisfactory solutions. Furthermore, that it cannot stand as an independent basis of contractual liability. He concedes, however, that the risk theory "…can potentially function as a possible determinant of liability within the context of an objective theory of contract, such as for instance the reliance theory … In other words the representative's misrepresentations as to his authority binds the principal simply because the latter should bear the potential risk, occasioned by appointing the agent … It seems that courts have been prepared to embrace the notion of risk in agency situations…."

Aartappelkernmoerkwekers Koörporasie Bpk.[261] In that case, the court found it very difficult to justify the position that an undisclosed principal can be sued on contracts made by his or her agent. To counter the difficulty, the court mentioned that the doctrine was well entrenched in commerce, and that it was a very important part of daily commercial life.[262] Consequently, it would be untenable to overturn it after almost a hundred years of its existence.[263] Most importantly, the court mentioned commercial convenience as the main justification for the doctrine.[264] Furthermore, it was mentioned that though lacking in rational explanation, the doctrine must be retained because it did not operate unreasonably and inequitably against contracting parties.[265] That the doctrine was imported on these grounds in South African law illustrates the point that it is not based on settled grounds of contractual liability, but rather on considerations of the allocation of risk. That commercial convenience requires an undisclosed principal to be saddled with liability is convincing. As opposed to the agent, the undisclosed principal is the one who profits from contracts made with third parties; he or she is therefore the one who presumably has resources to satisfy any claims.[266]

In relation to apparent authority and agency by estoppel, both have been explained with reference to the desire to do justice and equity between the parties. As explained by Jafta J in the matter of *Makate v Vodacom (Pty) Ltd*:[267]

> This question must be considered with the view to doing justice to all concerned. The concept of apparent authority as it appears from the statement by Lord Denning, was introduced into law for purposes of achieving justice in circumstances where a principal had created an impression that its agent has authority to act on its behalf. If this appears to be the position to others and an agreement that accords with that appearance is concluded with the agent, then justice demands that the principal must be held liable in terms of the agreement. It cannot be gainsaid that on present facts, there is a yearning for justice and equity.

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261 *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk* 1972 1 SA 761 (AA) (hereinafter referred to as *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk*).

262 *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk* 768H.

263 *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk* 767H-768A.

264 *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk* 768H-769B.

265 *Cullinan v Noord-Kaaplandse Aartappelkernmoerkwekers Koörporasie Bpk* (AA) 768G.

266 Seavey 1948 *Oklahoma Law Review* 12.

267 *Makate v Vodacom (Pty) Ltd* 2016 ZACC 13 13 para 65.

Relating to the inherent powers of general agents to bind their principals even in relation to matters expressly forbidden by principals, a comment to §161 of the *Restatement (Second) of Agency*, mentions that:[268]

> The rules imposing liability upon the principal for some of the contracts and conveyances of a general agent, whether or not a servant, which he is neither authorized nor apparently authorized to make, are based upon a similar public policy [as those outlined for tort liability]. Commercial convenience requires that the principal should not escape liability where there have been deviations from the usually granted authority by persons who are such essential parts of the business enterprise…third persons should not be required to scrutinise too carefully the mandate of permanent or semi-permanent agents….

Coming to the liability of principals for the fraudulent misrepresentations of their agents, such was rationalised as follows by Trollip J in *Randbank Bpk v Santam Versekeringsmaatskappy Bpk*:[269]

> The reason or theory for holding the principal responsible in such a case has been differently stated. Equity—as between two innocent persons the consequence of the fraud or negligence of a third person should fall on him who employed that person (*Fitzherbert* v. *Mather* (1785) 1 T.R.12, 99 E.R. 944), or 'the principle of law applied … is the rule of right and wrong…that a man cannot, by delegating to an agent to do what he might do himself, obtain greater rights than if he did the thing himself' (per Lord Esher M.R. in *Blackburn, Low & Company v.Vigors* (1886) 17 Q.B.D. 553 (C.A.) at 559). Public Policy— if the agent could conceal material information without hazard to the principal, it would encourage the latter to instruct his agent to remain silent on the subject, which fraud … [the third party] might not be able to detect or prove (*Gladstone* v. *King* (1813) 1 M. & S. 35 at 38, 105 E.R. 13 at 15). Warranty—the principal impliedly warrants the absence of non-disclosure or fraud on the part of his agent authorized to contract for him … Condition precedent— 'the freedom from misrepresentation or concealment is a condition precedent to the right of the … [third party] to insist on the performance of the contract' … Duty—the agent himself owes a duty of disclosure to the … [third party] for a breach of which his principal is vicariously responsible….

The reference in these sources to commercial convenience, justice, fairness, equity or public policy strengthens the observation made in this work that the main concern of a greater portion of the law of agency is the allocation of risk. This risk is allocated in a manner which either fortifies commercial convenience, or does justice, fairness or equity between principals and third parties. It is felt that the examples given in this work are sufficient to illustrate that where the authority of an agent is not readily apparent *ex facie* the facts of a case, the main concern of the law of

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[268] Comment to § 161 as quoted by Barnett 1987 *California Law Review* 1975.

[269] *Randbank Bpk v Santam Versekeringsmaatskappy Bpk* 1965 2 SA 456 (W) 457.

agency appears to be the desire to do justice, fairness or equity to the parties. It is submitted, however, that this is not only the case where the agent exceeded or acted without authority. Even where the agent is duly authorised, the law is still concerned with allocating risk, except that, in all such cases, the answer is very straight forward. The principal must bear the risk for all the authorised acts of his agent.

To one who is familiar enough with the law of agency, it is clear that in a majority of cases where the agent's authority is in dispute, judicial attitude is lavishly skewed in favour of holding principals liable. This approach has been referred to as both disturbing and upsetting seeing that courts have been holding principals liable where "…agents have promised things clearly outside the scope of their authority."[270] However, once one adopts the view, proposed in this work, that the main concern of the rules of agency is with allocating risk between the parties in a just, fair and equitable manner, it is not difficult to appreciate why the principal is *prima facie* the most appropriate party to bear the risk of agency. This issue leads to the discussion of the rules relevant to allocation of risk in agency.

The first and foremost rule of the allocation of risk is that whenever two innocent persons must suffer from the conduct of a third party, he must bear the risk he who introduced that third party into the transaction.[271] The invention of this rule is often attributed to Lord Ashurst in the matter of *Lickbarrow v Mason*.[272] This case involved a sale of corn. The seller of corn had duly issued a bill of lading, and had drawn bills of exchange on the buyer. The buyer in turn transferred his bill of lading to the plaintiff. Unfortunately, the buyer became insolvent before he could meet the bills of exchange drawn on him by the seller. Upon obtaining knowledge of the buyer's insolvency, the seller sold the corn in transit to the defendant. The defendant received the goods and refused to hand them over to the plaintiff. On litigation by the plaintiff, the court was of the opinion that, once he received knowledge of the buyer's insolvency, the seller should have stopped the goods in *transitu*.

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270 Mearns 1962 *Virginia Law Review* 51.

271 See *Fitzherbert v Mather* (1785) 1 T.R. 12 1 R.R. 134; *Lickbarrow v Mason* (1787) 2 Term Rep 63 70.

272 See Brady 1924 *Washington University Law Review* 131; Pretorius 2011 *THRHR* 199.

Furthermore that once the buyer had transferred ownership of the corn to the plaintiff for value, the plaintiff became the true owner of that corn. Lord Ashurst mentioned that:[273]

> We lay it down as a broad general principle, that whenever one of two innocent parties must suffer by the acts of a third, he who has enabled such third person to occasion the loss must sustain it.

Therefore, the seller had to bear the loss because he enabled the buyer to occasion harm by not stopping the corn in transit upon hearing of his insolvency.

The principle stated in this rule has been repetitively criticised for being too broad. It is stated by one author that:[274]

> It is inconceivable that a person who has not been at fault or negligent in the slightest degree can be held liable because of the circumstances in which he may be situated. To invoke such a rule, the party to be charged must be negligent and have caused the loss through his legal wrong. The statement of the proposition is when one of two *innocent* parties must suffer by the act of a third, the party who has enabled such third person to occasion the loss must sustain it. If both parties are *innocent* and guilty of no legal wrong, the law should permit the loss to rest where it has fallen.

Over the fact that the party to bear the loss must have been negligent, it has also been stated by Solomon J in the matter of *Union Government v National Bank of South Africa Ltd*,[275] that such negligence must be demonstrated to be the proximate cause of the loss. These criticisms and observations are very compelling, yet it is in the opinion of the current researcher that they have no relevance in instances of agency.[276] As shall be shown below, where the principal is made to bear the loss for

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273 This quote and the entire narration of the facts and decision of the court are sourced from Brady 1924 *Washington University Law Review* 131-132.

274 Brady 1924 *Washington University Law Review* 135.

275 *Union Government v National Bank of South Africa Ltd* 1921 AD 121 131 (hereinafter referred to as *Union Government v National Bank of South Africa Ltd*). For other cases critical of the theory, see *Connock's (SA) Motors Co Ltd v Sentraal Westlike Ko-operatiewe Maatskappy Bpk* 1964 2 SA 47 (T) 48G-H; *Ok Bazaars (1929) Ltd v Universal Stores Ltd* 1973 2 SA 281 (C) 2871; *Stellenbosch Farmers' Winery Ltd v Vlachos t/a The Liquor Den* 2001 3 SA 597 (SCA) 17-18.

276 Most of the above mentioned cases relate to the fraud of an independent third party, not an agent *per se*. For illustration, in the matter of *Union Government v National Bank of South Africa Ltd* the facts were briefly as follows; A postal agent permitted a friend, one S, to use his office. S took the postal date stamp and stamped a number of stolen, blank postal orders, and thereafter deposited them with a number of people. Some of these people deposited the postal orders with the National bank. The National bank presented the orders with the post office, and was dully paid. Upon discovering the fraud, however, the government sought to recover the amount paid by the post office to the National Bank. The bank raised a defence of estoppel by negligence on

the conduct of his agent, it does not matter that he or she is innocent of any negligence, or that his or her negligence, if any, is or is not the proximate cause of the loss in issue.

The foregoing point in relation to agency was made abundantly clear in the matter of *Fitzherbert v Mather*. In this case, the plaintiff, through his agent, purchased oats from one Fisher. The agent in turn directed one Thomas to facilitate the transaction and to send the bill of lading and invoice to himself (the agent) and to Fisher. Thomas informed the plaintiff's agent that he had sent the said documents to Fisher, and that he had furthermore informed Fisher to insure the goods as the weather was stormy. As a matter of fact, Thomas had not done this, he only informed Fisher to insure the goods the following day after receiving information that the ship was lost at sea. In this way, the agent had misrepresented to Fisher that the goods had just been shipped, when in actual fact the ship had already been lost at sea. Therefore, Fisher's insurance of the goods was rendered ineffective. The issue before court was whether the plaintiff should bear the loss caused by the defective insurance? The court was of the opinion that Thomas was the plaintiff's agent, therefore that the insurance was made at the plaintiff's misrepresentation. On that basis, the plaintiff was held responsible for the loss caused by the ineffective insurance.[277] Lord Buller J stated that:[278]

> Though the plaintiff be innocent, yet if he builds his information on that of his agent, and his agent be guilty of a misrepresentation, the principal must suffer. It is the common question at Guilhall, when one of two innocent persons must suffer by the fraud or negligence of a third, which of the two gave credit? Here it appears that the plaintiff trusted Thomas; and he must therefore take the consequences.

Although Lord Ashurst is credited with being the "father" of this rule, it is interesting to note that the case of *Fitzherbert v Mather* was decided in 1785, being two years before *Lickbarrow v Mason*. In the opinion of the current researcher, Lord Buller in the case of *Fitzherbert v Mather* is the earliest authority to which this rule can be

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the ground that the agent had been negligent in not keeping the postal date stamp safe, and permitting S to access it. Clearly, this was not a case of agency. S was an independent meddler.

277 Online Library 2007 http://www.ebooksread.com/authors-eng/robert-campbell/english-ruling-cases-volume-13-pma/page-58-english-ruling-cases-volume-13-pma.shtml.

278 Online Library 2007 http://www.ebooksread.com/authors-eng/robert-campbell/english-ruling-cases-volume-13-pma/page-58-english-ruling-cases-volume-13-pma.shtml.

traced. Therefore, it is most proper to state that the rule was invented in a case of agency, therefore that it is most properly a rule of the law of agency than any other field of the law.

Having illustrated it to be a rule of agency that the principal must be settled with liability for the unauthorised acts of the agent because he or she is the one who creates space for the agent to occasion harm, one feels a need to go a mile further to fortify this conclusion. Why does the simple fact that the principal introduces the agent into the transaction make him the proper party to bear the risk of agency? It is important to detail in full the reasons on which the rule is based because one undeserving attack which has been made on it is that:[279]

> The proposition is neither based on sound theory nor public policy and results in confusion, uncertainty, and injustice in law. Considerations of fair dealing and freedom in business activities are directly opposed to it. It is almost unnecessary to say that although this proposition is often called a principle of law or maxim, it is of neither class since it fails to appear in any authoritative statement of the law or in any famous books of maxims. It is said of all laws, that when the reason for the law ceases to exist, the law must fail. There being no possible reason or principle for this doctrine regarding innocent parties, the doctrine itself should be expunged from the law.

This attack needs to be countered in this work because it specifically raises concern in relation to innocent parties, and as illustrated in both the case of *Fitzherbert v Mather* and *Randbank Bpk v Santam Versekeringsmaatskappy Bpk*, the principal will be settled with liability even where he or she is not guilty of the misrepresentation or fraud of his or her agent. The reasons detailed below for this rule are not only meant to substantiate it in relation to cases of misrepresentations or frauds of agents, but to show why as a general matter, the principal must bear the loss for the unauthorised acts of an agent that he or she has duly appointed.

One reason on which the principal is held liable for the unauthorised acts of his agent is because as between him and third parties, he is the least or cheapest cost avoider. The least cost avoider principle is more properly a rule of economics,[280] not of law *per se*. As shall be shown later on, however, this principle of economics finds

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279 Brady 1924 *Washington University Law Review* 135.

280 See generally Gilles 1992 *Virginia Law Review* 1291-1375; Rasmusen 2004 *American Law and Economics Review* 369-409.

much support amongst commentators on the law of agency. The least cost avoider rule means that where there is an impending threat, the loss caused by the materialisation of that threat must be rested with the party who would have incurred the lowest costs to avert the harm.[281] Reference to "cost" in this regard does not only concern financial or monetary costs, it includes also the amount of time and effort required to avert the harm.

In identifying who between two parties is the least cost avoider, especially in matters of agency, the main guiding factor is the relationship of the agent with each of the parties.[282] For several reasons, the principal is identifiable as the least cost avoider for the unauthorised acts of his or her agent. It would seem that the relationship which exists between a principal and the agent, *prima facie* renders the principal the least cost avoider.[283] As Rasmusen puts it:[284]

> The principal has a variety of means available to reduce the risk of agent mistakes. He hires the agent, and so can select an agent with the appropriate talents. He can

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281 Gilles 1992 *Virginia Law Review* 1306, defining the theory as follows "[i]n its general form, 'the cheapest cost avoider' (or in Shavell's terminology, the 'least-cost avoider') is understood to mean the person who could avoid an accident at least cost. Where one person is the cheapest cost-avoider of a particular accident ('alternative-care cases'), a rule that assigns liability to the cheapest cost-avoider supplies an efficient solution. If the injurer is the cheapest cost-avoider, the injurer is held … liable; if the victim is the cheapest cost-avoider, the victim is … liable (that is, bears the loss). Knowing that this is the rule, whichever party is the cheapest cost-avoider will take optimal care to avoid the accident…." See also Griffiths 2003 *European Business Organisations Law* 70; Rasmusen 2004 *American Law and Economics Review* 380, stating that "[t]he least-cost-avoider-principle, broadly stated, asks which party has the lower cost of avoiding harm, and assigns liability to that party."

282 Griffiths 2003 *European Business Organisations Law* 70-71, stating that "[o]ne key factor in this regard is the nature of each party's relationship with the agent. It has already been noted that, in the case of the company, this is likely to be a relatively long-term relationship. This reduces many of the company's avoidance costs, which are spread across many contracts. A third party's dealings with a particular corporate agent may vary from a one-off transaction to a long-term series of contracts. This can have two effects in terms of the assessment of avoidance costs. First, a greater number of contracts reduce the third party's overall avoidance costs. Second, however, a third party may acquire information about a particular corporate agent during the course of a deal, and any further information that contradicts or varies the acquired information could be relatively high."

283 Griffiths 2003 *European Business Organisations Law* 71, mentioning that "…the nature of each party's relationship with the agent suggests that, as a general rule, the company is most likely to be the least-cost-avoider."

284 Rasmusen 2004 *American Law and Economics Review* 382; Mearns 1962 *Virginia Law Review* 56, equally remarking that "[t]he reason an employer ought to be liable for the unauthorised promises of his agent is that he is *responsible* for having created the reasonable expectations in innocent parties dealing with this agent. The agency relationship is one he voluntarily creates, one he consents to, one designed and operated for his benefit, and one over which he has the right of control."

> negotiate a contract to give him incentive to use those talents properly. He can instruct the agent to a greater or lesser extent, choosing the level of detail in light of the cost. He can expressly instruct the agent not to take certain actions, and tell third parties about the restrictions. He can monitor the agent, asking for progress reports or randomly checking negotiations that are in progress. The principal's control over the agent, a basic feature of the agency relationship, gives him many levers with which to reduce the probability of mistakes.

A further addition to this quote would serve no good purpose but distort this ingenious observation. Over and above the fact that third parties enjoy no control over the agent, it is generally accepted that third parties do not have any duty to investigate or closely scrutinise the authority of an agent.[285] The first reason is the amount of costs which would have to be incurred in investigating whether or not an agent has authority. Secondly, the commercial world, it is said, could not operate smoothly if third parties were required to always confirm the authority of agents with their principals before concluding agreements with them.[286] This view was endorsed by the court in the matter of *Maye Serobe (Pty) Ltd v LEWUSA*.[287] Commenting on the facts of the case, Ralefatane J was of the view that:[288]

> It will be burdensome for the commissioner should he or she be expected to interrogate the contract between the principal and the agent where she or he will be enquiring if the agent has the mandate to say certain things or whether the agent is acting *ultra vires*. The inherent risk coupled with agency, is that the terms and conditions of the private contract (between the principal and agent), are not obvious to third parties….

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285 See *Kidd v Thomas A Edison Inc* 239 F 405 407 40 (SDNY 1917) 408, in which the court observed that "[t]he considerations which have made the rule survive are apparent. If a man selects another to act for him with some discretion, he has by that fact vouched to some extent for his reliability. While it may not be fair to impose upon him the results of a total departure from the general subject of his confidence, the detailed execution of his mandate stands on a different footing. The very purpose of delegated authority is to avoid constant recourse by third persons to the principal, which would be a corollary of denying the agent any latitude beyond his exact instructions. Once a third person has assured himself widely of the character of the agent's mandate, the very purpose of the relation demands the possibility of the principal's being bound through the agent's minor deviations. Thus, as so often happens, archaic ideas continue to serve good, though novel, purposes." For a discussion of this case, see Fishman 1987 *Rutgers Law Journal* 12-13.

286 Mearns 1962 *Virginia Law Review* 56.

287 *Maye Serobe (Pty) Ltd v LEWUSA* Case no. J2377/12.

288 *Maye Serobe (Pty) Ltd v LEWUSA* para 28.

Commenting on the same issue in relation to the apparent authority of a bank manager to bind its employer, Schultz JA equally mentioned in the case of *NBS Bank Ltd v Cape Produce Co (Pty) Ltd*,[289] that:

> Members of the public may have an awareness of the existence of a head office and of specialist departments in a bank, even of a 'wholesale' as opposed to a 'retail' borrowing department and of a 'money market', but for them the branch manager is the bank, the one who is authorised to speak and act for it, if something should be beyond the competence of a lesser official. And for those who may know that for some acts, for instance 'wholesale' borrowing, even he might need the confirmation of higher authority, they are entitled to assume that he knows his own limits and will respect them, so that when he speaks, he speaks with the full authority of the bank.

The fact that it is the principal, as opposed to third parties, who has effective control over the agent, coupled with the fact that third parties have no obligation to acquire the exact details of the agent's authority, *prima facie* makes the principal the least cost avoider, and therefore the most proper party to bear the risk and loss of unauthorised contracts.

Another reason on which the principal must be made to bear the risk of agency is because, in contrast to third parties, it is he or she who directly benefits from the services of the agent.[290] The principal's liability for the unauthorised acts of the agent is a price he pays for all the benefits he obtains through agency.[291] It is said that if principals are allowed all the benefits of agency without holding them liable for the risk that goes along with it, commerce would be redundant.[292] Understandably so, because third parties would obviously shy away from dealing with those who profess to be agents when the whole process of agency is skewed to

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289 *NBS Bank Ltd v Cape Produce Co (Pty) Ltd* 2002 1 SA 396 (SCA) 413B-D.

290 Mearns 1962 *Virginia Law Review* 56.

291 Dalley 2011 *University of Pittsburgh Law Review* 479. This author proposes a theory, termed the "Cost-Benefit Internalization theory." Briefly stated, the theory holds that "[t]he foundational principle of agency law is that the principal, who has chosen to conduct her business through an agent, must bear the foreseeable consequences created by that choice. Conversely, as the bearer of the risks, the principal is entitled to receive the benefits created by the agency relationship. This set of principles, which I call the cost-benefits internalization theory, explains current agency law doctrine in a way other explanations and theories cannot."

292 Mearns 1962 *Virginia Law Review* 56.

their prejudice. Wherefore it is said that the attitude of resting the risk of agency with principals benefits them in the long run.[293]

If the rules of the allocation of risk for the unauthorised acts of the agent are accepted as stated above, it is clear that there may be instances in which the third party would be the most proper person to saddle with liability for the unauthorised acts of the agent. As a general rule, a third party can only enforce unauthorised contracts if he or she dealt with the agent in good faith.[294] Where the third party colludes with the agent against the interests of the principal, he or she will acquire no rights against the principal.[295] For instance, where the third party bribes the agent into binding the principal, such a transaction has been held to be void.[296] The third party will also be made to bear liability for unauthorised acts if he or she knows or should reasonably have known that the agent has no authority to bind the principal. For instance, where the third party has been briefed by the principal concerning the agent's scope of authority, but nevertheless continues to transact with the agent outside that scope, he or she shall be taken to have assumed the risk.[297] It is also said that the third party shall acquire no rights against the principal if he or she:[298]

> …knows that the agent is exercising his authority wrongfully to enrich himself at the expense of the principal….

Some of these instances are clearly matters of the allocation of risk, for instance, where the third party knows of the lack of authority on the part of the agent, he or she is in that instance the least cost avoider. In other instances, the third party is made to bear liability on grounds of justice, fairness or equity. For instance, where

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293 See Comment to § 161 of the *Restatement (Second) of Agency*; Seavey 1948 *Oklahoma Law Review* 20, stating that "[a]lthough in a given case a principal who is subjected to liability or who loses his property through an improper act of an agent may feel that he has been unjustly treated, in the long run the rules rebound to the benefit of those who act through agents, since otherwise persons would avoid dealing with agents and business would be impeded … [the] law has gone far in permitting a person to achieve results through representatives. It is not unfair that within a limited field the principal should bear many of the losses which result."

294 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 507.

295 See Rasmusen 2004 *American Law and Economics Review* 395.

296 See generally *Extel Industrial (Pty) Ltd v Crown Mills (Pty) Ltd* 1999 2 SA 719 (SCA); *Plaaslike Boeredienste (Edms) Bpk v Chemfos Ltd* 1983 3 SA 616 (T).

297 Rasmusen 2004 *American Law and Economics Review* 392.

298 Coaker and Zefferttt *Wille and Millin's Mercantile Law* 507.

the third party bribes the agent, apart from the fact that the contract under such instances arises *ex turpi causa*, the third party must be made to bear responsibility for having voluntarily created the risk that the principal will reject the contract.

It is felt that enough evidence has been adduced to illustrate that agency goes along with the inherent risk that the agent may exceed or act without authority. Secondly, that it is a general rule of agency that the said risk must be rested *prima facie* with the principal, not with third parties. What remains to be said concerns the scope of the rules of the allocation of risk where the agent exceeds or acts without authority. Regarding the scope of the rules for the allocation of risk discussed in this work, nothing more needs be said. The scope of these rules of the allocation of risk is contained within the four corners of all the principles of agency used by courts to hold principals liable where it is clear that the agent exceeded or acted without authority. These include liability based on apparent authority, liability based on estoppel, liability based on the idea of inherent powers of general agents, principles relevant to the liability of undisclosed principals, and many more other rules of the law of agency that hold principals liable without a clear manifestation of intention or consent on their part to be bound. Under the influence of all these principles of the law of agency, it is clear that courts hold principals liable even though the agent's authority is not clear on the face of the facts. It is the argument of this chapter that principals are held liable in all such instances because they are the ones who have created the risk of agency, therefore that it is just, fair and equitable that they must bear the losses caused by the risk which they have voluntarily created.

3.10 Conclusions

The aim in this chapter was to discuss the rationale of agency. The chapter was commenced with a brief narration of the historical development of the South African law of agency. It was demonstrated that the South African law of agency developed from the principles of the Roman contract of mandate, however, that judges have lavishly resorted to the English law of agency for assistance. The second part hereof involved a legal definition of the term "agent." A case was made that a conventional agent is a representative concerned specifically with the negotiation and conclusion

of contracts on behalf of his principal. Furthermore, that, while contracts are concluded by the expression of the agent's will, such contracts do not bind the agent but his principal. The third part of the chapter was concerned with defining the relationship of agency, with special focus on the various ways in which such a relationship may be brought into existence. It was shown that while the relationship of agency usually arises by agreement between the principal and the agent, such a contract is not necessarily the basis of the agent's power to bind the principal. As opposed to the contract of agency, it was demonstrated that the agent's power to bind the principal stems solely from the authority conferred on the agent by the principal. Authority has been said to be a unilateral act of the principal. Different types of authority were also discussed, namely express authority, implied authority and apparent authority. In the fourth part of the chapter was discussed the various rights and duties of the agent and the principal. A point was made that the agent has a duty to perform the mandate in good faith, with reasonable care, skill and prudence, and to account to the principal. In relation to the duty to perform, it was demonstrated that the law does not insist on rigid or strict adherence to the principal's instructions, but merely on "substantial performance" of the principal's mandate. If the agent properly performs the principal's instructions, the principal has a duty to remunerate him, and to indemnify and compensate him for any losses, expenses and liability incurred in the performance of the mandate.

The fifth part of the chapter was concerned with the question of the agent's liability to third parties. It was demonstrated that, as a general rule, an agent who exceeds or acts without authority does not bear contractual liability, but is nevertheless liable in damages to the third party for breach of warranty of authority. However, where the agent gives an impression that he his intending to bind himself in contract, *e.g.* where he does not disclose the name of the principal, or acts for a non-existent principal, he shall be held to the contract. The sixth part discussed the various ways in which the relationship of agency comes to end, *inter alia* being by death of either the principal or the agent, by revocation of authority by the principal, by renunciation of the mandate by the agent, or by complete performance of the mandate by the agent.

The seventh part of the chapter, which was the core of the discussion, involved a search for the rationale of agency, being the basis of the principal's liability to third parties. Although authority was initially said to be the true basis of the principal's liability for the acts of his agent, it was demonstrated, however, that in a number of instances, the law still holds the principal liable for the unauthorised acts of his agent. It was argued that in these instances, the principal is held liable notwithstanding the lack or absence of clear consent or manifestation of assent on his part to being bound. These instances, termed the anomalies of agency, were argued in this work to be the main distinguishing factor between contract and agency law. Consequently, a detailed rationalisation of these anomalies would shed much light on the true rationale of agency. Examples were given of two theories which have been developed by academics to explain these anomalies. The chapter went further to propose a new theory of agency, premised upon the need for the allocation of risk. The theory commences with recognition of the fact that agency is a risky commercial process. This risk, it was agued, inheres in the agent, but that the agent is usually exempted from liability whenever the risk is to be allocated. To justify the imposition on liability on the principal for the unauthorised acts of his agent, reference was made to a general rule that if one of two innocent parties is to suffer by the conduct of a third party, he must be saddled with liability he who allowed the third party to occasion the harm, being the principal. Various reasons were given in this work in support of that rule, including the fact that it is the principal who is in the most proper position to monitor and control the acts of the agent, secondly because as a general rule, third parties are not obliged to closely scrutinise the authority of an agent, and lastly because it is the principal as opposed to third parties who benefits or profits from the relationship of agency. Therefore, the overall rationale of agency was held in this work to be the allocation of risk between the principal and third parties in a fair, just and equitable manner.

CHAPTER 4

4 Extending the South African common law of contract to automated transactions

4.1 Introduction

The objective of this chapter is to discuss the extension of the South African common law of contract to automated transactions. This task is undertaken primarily with the aim of testing the extent to which common law rules and principles pertaining to the formation of contracts can satisfactorily be applied to automated transactions in the same manner or fashion that they are usually applied by courts of law to traditional or non-automated transactions. To the extent that those rules and principles cannot be applied to automated transactions in the same manner that they are usually applied by courts of law to non-automated transactions, recommendations will be made on how they can be developed or modified in order to accommodate the validity of automated transactions in South Africa. As will be noted in the course hereof, there are legal issues relevant to the discussion of this chapter in relation to which the applicable common law rules and principles have already been developed or modified by the ECT Act. In relation to these "statutory developments or modifications of the common law," the primary goal will be to critically consider the desirability of such modifications in light of the common law rules or principles which they are intended by the legislator to alter. To the extent that those statutory modifications are found to be insufficient, inadequate or unjustified, recommendations will be made on how they can be improved or strengthened by interpretation or amending the ECT Act.

The first part of this chapter will discuss the validity and enforceability of automated transactions in South Africa. That discussion will primarily entail an outline and construal of the relevant provisions of the ECT Act. It will be demonstrated in that regard that according to section 20 (a) of the ECT Act, a valid and enforceable agreement may be formed where an electronic agent performs an action required by law for agreement formation. It will be demonstrated furthermore that according to section 20 (b) the same statute, a valid agreement may be formed where one or

both parties to a transaction use an electronic agent to form an agreement. These provisions, together with a couple other provisions relevant to the validity and enforceability of automated transactions under the ECT Act, will be interpreted and critically analysed with a view to determining their objectives.

In order to justify the question of this research, the second part of this chapter will discuss the relationship between the statutory validity of automated transactions and the South African common law of contract. It will be demonstrated in that regard that the provisions of the ECT Act are primarily intended to remove legal barriers and obstacles to the validity and enforceability of automated transactions in South Africa. It will be demonstrated furthermore that although the ECT Act grants legal validity and enforceability to automated transactions, it does not prescribe new rules for the formation of those transactions. Therefore, as with all other contracts in South Africa, the formation of automated transactions too is governed by established common law rules and principles pertaining to the formation of valid agreements. To support this conclusion, reference will made to section 3 of the ECT Act which provides that the provisions of that statute should not be interpreted to exclude the common law from being applied to, recognising or accommodating electronic transactions. On the basis of this provision, it will be demonstrated that as with all other contracts, automated transactions too must meet or satisfy the established requirements of a valid contract at common law.

The third part of this chapter will outline and discuss the South African common law theory of contract formation. It will be illustrated that at common law, a valid contract is formed at the instance of an offer and a corresponding acceptance, both of which must be made by the contracting parties with a serious and a deliberate intention to create a binding agreement. These three requirements, *i.e.* offer, acceptance and *animus contrahendi*, will each be discussed separately in full. This part of the chapter will also discuss the different theories of contractual liability in South African law, namely the will theory, the declaration theory and the reliance theory of contract. It will be demonstrated in that regard that South African courts first and foremost resort to the will theory to determine contractual liability, meaning that the true basis of contractual liability in South African law is actual *consensus*,

meaning a meeting of minds or a coincidence of the wills of the contracting parties (these phrases being used interchangeably). It will be demonstrated furthermore, however, that in the case of an apparent *dissensus*, meaning the absence of a meeting of minds, South African courts normally employ the reliance theory of contract to determine whether or not a valid agreement has been formed between the parties.

The fourth part of this chapter will discuss the extension of the South African common law theory of contract formation to automated transactions. The first part of the discussion will highlight the problem of *consensus ad idem* in automated transactions. It will be demonstrated in that regard that automated transactions do not fit well within the general rule that the primary basis of contractual liability in South Africa is a meeting of the minds of contracting parties. It will be illustrated that, theoretically, it is impossible to have a meeting of minds where one or both parties to a contract do not "personally" take part in its negotiation and conclusion. In light of that difficulty, the second part of the discussion will explore a number of legal theories that may be employed to explain or rationalise the basis of contractual liability in automated transactions. These theories are the mere-tool theory, the declaration theory, the reliance theory, and the risk theory. The strengths and weaknesses of each of these approaches will be discussed in full in the context of automated transactions. These theories notwithstanding, it will be recommended as a better solution to the problem of the basis of contractual liability in automated transactions that, with relevant modifications, the South African common law of agency must be extended to automated transactions. Because the extension of the common law of agency to automated transactions is a very contentious issue, the possible application of the common law of agency to automated transactions will be explored in full in the next chapter.

The third part of the discussion will critically analyse common law rules on offer and acceptance in the context of automated transactions. Concerning offers, the primary aim of the discussion will be to establish whether proposals or advertisements made to the general public via electronic agents are firm offers or invitations to treat? This issue will be discussed with reference to advertisements made via automatic vending

machines, passive websites and automated commercial websites. With reference to automatic vending machines, it will be demonstrated that a majority of commentators on South African law favour the view that a trader who displays goods for sale via a vending machine makes a firm offer which is accepted when a customer inserts a coin into the machine. A recommendation will be made that this rule must be amended or modified to the effect that a trader who displays goods for sale in a vending machine does not make an unconditional offer, but rather an offer to sell the displayed goods subject to the availability of stock. This recommendation will be made on the basis that a vending machine contains a very limited supply of goods, which is likely to result in commercially unreasonable consequences if the conduct of a trader is construed as an unconditional offer. Concerning advertisements of goods for sale on commercial websites, it will be demonstrated with reference to a recent case decided by the South African Consumer Goods and Services Ombudsman that such advertisements are *prima facie* classified as invitations to treat. While this classification might be correct in relation to passive websites, it will be demonstrated that the same cannot be said with reference to automated commercial websites. In relation to automated commercial websites specifically, it will be demonstrated that at common law, the most plausible conclusion is that advertisements of goods for sale on such websites are not invitations to treat, but rather firm offers. In light of the grave consequences which may befall online traders if advertisements of goods for sale on automated commercial websites are classified as unconditional offers, a recommendation will be made that South African law must be developed or modified to the effect that offers of goods for sale on automated commercial websites are made subject to the availability of stock. In relation to acceptances, the main purpose of the discussion will be to determine whether automated responses or replies are valid acceptances for purposes of contract formation? It will be demonstrated that if one adopts the recommendation made above that the advertisement of goods on an automated commercial website is an offer made subject to the availability of stock, it is the customer, and not the automated message system of an online trader, who makes an acceptance. It will be submitted in that event that automated responses should be classified as acknowledgements of receipt of purchase orders. It will be

demonstrated that it is only when one adopts the view that an advertisement of goods for sale on an automated website is an invitation to treat that the question whether an automated response is a valid acceptance becomes relevant. With reference to the ECT Act, and case law from comparable jurisdictions, it will be demonstrated that automated replies are valid acceptances for purposes of contract formation.

The fourth part of the discussion will cover the time and place of contract formation in automated transactions. It will be demonstrated that South African contract law traditionally employs two theories, being the expedition theory and the declaration theory, to determine the time and place of contract formation. Each of these theories will be discussed in full. It will be demonstrated, however, that none of these theories are applicable to automated transactions because South African law on the issue has been developed or modified by the ECT Act to the effect that the reception theory must be applied to determine the time and place of formation of electronic contracts. The reception theory will be discussed in full, and its advantages and weaknesses considered in the context of automated transactions.

The fifth part of this chapter will discuss the enforceability of standard terms and conditions in automated transactions. That discussion will commence with an outline and interpretation of the statutory legal framework for the inclusion or incorporation of standard terms and conditions in automated transactions. It will be demonstrated that in terms of section 20 (c) of the ECT Act, a party who uses an electronic agent to form an agreement is presumed to be bound by the terms of that agreement notwithstanding that he or she did not review those terms prior to the formation of an agreement. Furthermore, it will be demonstrated that in terms of section 20 (d), a person who interacts with an electronic agent to form an agreement is not bound by the terms of that agreement if those terms were not capable of being reviewed by a natural person prior to agreement formation. The second part of the discussion will consider the enforceability of standard terms and conditions in internet contracts, namely, click-wrap and web-wrap agreements. The main purpose of the discussion will be to consider the validity of the manner in which customers are normally required to indicate their assent to the standard terms and conditions of

online traders on automated commercial websites. An argument will be made that in relation to click-wrap agreements, *i.e.* where customers are required to click the "I Accept" or "I Agree" button as a form of manifesting assent to the standard terms and conditions of online traders, those terms and conditions are enforceable on the basis of the common law rules of signed contractual documents. In relation to web-wrap agreements, *i.e.* where online customers are not required to click on assent buttons to manifest their acceptance of the standard terms and conditions displayed on a commercial website, an argument will be made that those terms and conditions are enforceable on the basis of the rules of the ticket cases. The third part of the discussion will consider the battle of forms in automated transactions. It will be demonstrated that at common law, where both parties purport to incorporate their standard terms and conditions into an agreement, a contract is not formed until the original offeror accepts the standard terms and conditions of the offeree. Possible difficulties in extending this rule to automated transactions will be highlighted, and a recommendation subsequently made in light of those difficulties that South African law on the issue must be modified to adopt the knock-out rule to resolve a battle of forms in automated transactions.

The sixth part of this chapter will discuss the legal effect of errors and mistakes on the formation of automated transactions. The discussion of this issue will be limited to three types of errors or mistakes common to automated transactions, namely input errors, online pricing errors and machine errors. In relation to input errors, it will be demonstrated that the ECT Act has modified the common law of unilateral mistake to the effect that a person who makes a material error while inputting data into the electronic agent of another can avoid the resultant agreement on that basis. Argument will be made that this modification is problematic for the fact that it fails to protect the reasonable reliance of the users of electronic agents on input errors. To rectify this defect, a recommendation will be made that section 20 (e) of the ECT Act should be interpreted to mean that a party who makes an input error can avoid the resultant agreement "provided" the other party knew or ought reasonably to have known of that input error. Concerning online pricing errors, the main purpose of the discussion will be to determine whether a pricing mistake on an automated

commercial website vitiates a contract. It will be demonstrated in that regard that the common law of unilateral mistake can be applied to online pricing errors to hold that a pricing mistake on a commercial website does not vitiate an automated transaction unless it is proved that the customer knew or reasonably ought to have known of that pricing mistake. A point will be made in that regard, however, that the application of common law of unilateral mistake to online pricing errors is likely to produce harsh results in light of the inherent difficulty in proving actual or constructive knowledge of a pricing error on the part of an online customer. Recommendations will be made on how the common law can be developed or modified in order to produce better and commercially acceptable results. Concerning machine errors, it will be demonstrated that section 25 (c) of the ECT Act has modified the common law to the effect that a data message generated by an electronic agent as a result of a programming malfunction cannot produce a valid and enforceable agreement. Argument will be made that this modification of the common law is problematic for the reason that it does not protect the reasonable reliance of third parties on machine errors. It will be recommended on that basis that section 25 (c) must be interpreted to mean that a data message generated by an electronic agent pursuant to a programming malfunction does not vitiate a contract unless it is proved that the other party had actual or constructive knowledge of the error in that data message. It will be submitted in the alternative that if the reasonable reliance of a third party on a data message affected by a machine error is not protected by enforcing the resultant agreement, that reliance must at least be protected by awarding him or her the damages suffered in reliance on the concerned data message, *i.e.* reliance damages. Conclusions will follow.

4.2 The validity and enforceability of automated transactions in South Africa

The legal framework for automated transactions can be found amongst the provisions of the ECT Act. This legal framework is composed of both general and specific provisions. The general provisions are those that address the validity and enforceability of data messages and electronic contracts in general, *i.e.* without reference to a specific technology, medium or tool of communication. On the other

hand, the specific provisions are those that deal exclusively with the validity and enforceability of automated transactions, *i.e.* transactions concluded through or by electronic agents. Starting with general provisions, the ECT Act provides in section 11 (1) that:

> Information is not without legal force and effect merely on the grounds that it is wholly or partly in the form of a data message.

This provision is admittedly based on article 5 of the *UNCITRAL Model Law on Electronic Commerce* (1996) (hereinafter referred to as the UNCITRAL Model Law),[1] which is primarily intended to remove any discrimination or disparity of treatment between data messages and paper documents.[2] The purpose of that provision, *i.e.* section 11 (1), is to clarify the fact that the form in which information is communicated or stored cannot be evoked as the sole basis on which it is denied legal effectiveness, validity or enforceability.[3] Consequently, information presented or retained in the form of a data message must be given the same legal force and effect as information presented or retained in traditional forms such as paper documents.[4] What this means for purposes of present considerations is that valid offers and acceptances can be made electronically, furthermore that such offers and acceptances cannot be denied legal force and effect on the sole ground that they were made in the form of data messages.[5] In fact, that this is so is made perfectly clear in section 24 (a) of the ECT Act, which provides that:

> As between the originator and the addressee of a data message an expression of intent or other statement is not without legal force and effect merely on the grounds that—

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1 art 5 provides that "[i]nformation shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message."

2 UN *UNCITRAL Model Law on Electronic Commerce* para46.

3 UN *UNCITRAL Model Law on Electronic Commerce* para46.

4 Gereda "The Electronic Communications" 269, stating that "[s]ection 11(1) of the ECT Act provides that 'information is not without legal force and effect merely on the grounds that it is wholly or partly in the form of a data message'. Data messages are given the same legal status as information generated conventionally on paper."

5 The expression "data message" is defined in s 1 to mean "data generated, sent, received or stored by electronic means and includes-(a) voice, where the voice is used in an automated transaction; and (b) a stored record." Concentrating on automated transactions, Gereda "The Electronic Communications" 169 mentions that "[a]n example of automated transactions where voice is used can be a contract entered into telephonically by a consumer as defined in the ECT Act with an automated voice answering machine."

(a) it is in the form of a data message.

Concerning contracts formed through data messages, the ECT Act provides that:[6]

> An agreement is not without legal force and effect merely because it was concluded partly or in whole by means of data messages.

This provision is mainly intended to remove any discrimination or disparity of treatment between electronic contracts and traditional non-electronic contracts, *i.e.* verbal, written or tacit contracts. Therefore, a contract cannot be denied legal force and effect merely because it was concluded electronically. Such a contract is valid and enforceable regardless of whether "…it was concluded partly or in whole by means of data messages," meaning that section 22 (1) covers not only instances in which both offer and acceptance are made electronically, but also instances in which only the offer or the acceptance is made electronically.

It is fairly obvious that the provisions discussed above are technologically neutral. These provisions are technologically neutral in the sense that they guarantee or warrant the legal force and effect of data messages and electronic contracts irrespective of the technology, medium or tool of communication used. Consequently, a data message cannot be denied legal force and effect simply because a specific technology, medium or tool of communication was used to generate, sent, receive or store it. Likewise, a contract cannot be denied legal force and effect simply because a specific technology, medium or tool of communication was used to conclude it, whether partly or in whole. This analysis leads one to a conclusion that the provisions discussed above are broad enough to cover the validity and enforceability of automated transactions in South Africa.

Perhaps recognising the unique element of automated transactions, referring in this context to the lack of human participation in the conclusion of such transactions, the ECT Act contains a number of provisions specific to the validity and enforceability of automated transactions.[7] The statute provides in section 20 (a) that a valid contract may be formed where an electronic agent performs an action required by law for contract formation. The objective of this provision is to facilitate the conclusion of

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6 s 22 (1).
7 s 20.

contracts by electronic agents. This objective is achieved by providing expressly that electronic agents are capable of producing valid and enforceable contractual obligations. Consequently, section 20 (a) effectively removes any legal barriers or obstacles to the recognition of the validity and enforceability of automated transactions in South Africa. These legal obstacles include amongst others the question whether electronic agents have the capacity to create legally enforceable rights and obligations, *i.e.* contractual capacity.

In order to conclude a valid transaction, an electronic agent must perform "...an action required by law for agreement formation." As shall be illustrated later on in this chapter, South African law only requires an offer and a corresponding acceptance for a contract to be formed. At common law, offers and acceptances can be made in any manner including verbally, in writing or by conduct.[8] Therefore, section 20 (a) may be interpreted to mean that a valid and enforceable contract can be formed from an offer or acceptance generated by an electronic agent, or any other action of an electronic agent indicative of an offer or acceptance. Consequently, a contract cannot be denied legal force and effect solely on the ground that an electronic agent was used to conclude it. As UNCITRAL puts it:[9]

> …while a number of reasons may otherwise render a contract invalid…, the sole fact that automated message systems were used for purposes of contract formation will not deprive the contract of legal effectiveness, validity or enforceability.

The ECT Act provides furthermore that a valid and enforceable contract will be formed irrespective of whether "…all parties to a transaction or either one of them uses an electronic agent."[10] Unlike section 20 (a), which is intended to clarify the fact that electronic agents can be used to conclude valid and enforceable contracts, section 20 (b) is primarily intended to make it clear that the lack of human involvement "…in a particular transaction does not by itself preclude contract

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8 *Bremer Meulens (Edms) Bpk v Floros* 1966 1 PH A36 (A) 129-130, stating that "[i]n so far as the essentials are concerned there is no difference between express and tacit agreements. Indeed the only difference lies in the method of proof, the former being proved either by evidence of the verbal declarations of the parties or the production of the written instrument embodying their agreement, the latter by inference from the conduct of the parties."

9 UN *United Nations Convention on the Use of Electronic Communications* para 210.

10 s 20 (b).

formation."[11] Therefore, the legal effect of section 20 (b) is that a valid and enforceable contract may be concluded without any human intervention on one or all sides of a transaction, and that the absence of human participation in the conclusion of a transaction cannot be evoked as the sole ground on which that transaction is denied legal effectiveness, validity or enforceability. It is submitted that section 20 (b) was particularly necessary to include in the ECT Act in light of the argument frequently encountered in academic commentaries that "[t]he law generally assumes the existence of human actors as decision makers."[12]

Section 20 (b) is complemented by section 20 (c) of the ECT Act, which provides that:

> [A] party using an electronic agent to form an agreement is, subject to paragraph (d) presumed to be bound by the terms of that agreement irrespective of whether that person reviewed the actions of the electronic agent or the terms of the agreement.

In a setting where an offer or acceptance is made by an electronic agent without the immediate intervention of its user, common sense dictates that the user will be unaware of the terms of the particular transaction entered into by his or her electronic agent.[13] The user will also be unaware of the specific actions of his or her electronic agent that led to the conclusion of that transaction. The legal effect of section 20 (c) is that the user of an electronic agent is precluded from raising his or her unawareness of the aforesaid facts as a basis on which an automated transaction must be denied legal effectiveness, validity or enforceability. A party interacting with an electronic agent in his or her natural person can, however, avoid an automated transaction, or at least its terms, if the said terms were not capable of being reviewed by a natural person.[14]

Another relevant provision is section 25 (c), which provides that a data message sent by an electronic agent is attributed to the person who programmed it, or to the

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11 UN *United Nations Convention on the Use of Electronic Communications* para 210.

12 Fry 2000-2001 *Idaho Law Review* 262. See also Nimmer 2007 *Journal of Contract Law* 17; Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5.

13 Chopra 2010 *Communications of the ACM* 39.

14 See s 20 (d), providing that "[a] party interacting with an electronic agent to form an agreement is not bound by the terms of the agreement unless those terms were capable of being reviewed by a natural person representing that party prior to agreement formation."

one for whose cause the electronic agent was programmed to operate automatically. Putting software programmers aside, the legal effect of section 25 (c) is that the person on whose behalf an electronic agent was programmed (being the user) is considered to be the originator or author of the data messages generated by that electronic agent, consequently that he or she is ultimately responsible for the legal effects of those data messages.

4.2.1 The relationship between the statutory validity of automated transactions and the common law of contract

The question of this research is:

> How can the principles of contract and agency law be modified or developed in order to accommodate, within the common law theory of contract formation, the statutory validity of automated transactions in South Africa?

From the foregoing discussion of the legislative framework for automated transactions in South Africa, it is very clear that the ECT Act has paid unique attention to the question of the validity and enforceability of automated transactions. The attention is indeed unique because electronic agents are the only technology mentioned by name in the entire statute. Automated transactions too are the only species of electronic contracts mentioned by name in the statute. It is clear in light of the relevant provisions of the ECT Act that automated transactions are valid and enforceable in South Africa, meaning that the validity and enforceability of automated transactions cannot be questioned. As a result, it is conceivable that a concern may be raised on the part of the reader as to why this study drags the common law of contract and agency into the issue of the validity of automated transactions when it is clear that automated transactions are regulated or governed by the ECT Act? The reader may indeed feel that the statutory legal framework for automated transactions outlined above is so detailed and comprehensive that there is no need for common law principles to explain the validity of automated transactions. Instead of seeking to develop or modify common law rules as proposed in this study, it may be suggested by the reader that this study should rather focus on interpreting and adding more strength to the relevant provisions of the ECT Act.

It is, therefore, imperative at the very beginning of this chapter to justify the approach proposed in the research question.

It is worth mentioning that the present study does not in any manner attempt to challenge, dispute or question the validity and enforceability of automated transactions in South Africa. On the contrary, the research question is based on the hypothesis that while the ECT Act provides as a general matter that automated transactions are valid and enforceable in South Africa, the common law framework for valid contracts is, however, either inadequate or insufficient to accommodate the validity of automated transactions. It is in light of the aforesaid inadequacy that this study proposes to develop or amend the principles of contract and agency law in order to accommodate, within the common law theory of contract formation, the statutory validity of automated transactions in South Africa.

The important issue, it might be argued, is why the statutory validity of automated transactions must be tested against the common law framework for the formation of valid agreements. As mentioned above, the reader may feel that automated transactions are regulated exclusively by the ECT Act; consequently that there is no justification for dragging the common law of contract and agency into the issue of the legal aspects of automated transactions. To counter the above concern, it suffices to refer to section 3 of the ECT Act, which provides that:

> This Act must not be interpreted so as to exclude any statutory law or the common law from being applied to, recognising or accommodating electronic transactions, data messages or any other matter provided for in this Act.

For purposes of present considerations, this provision may be interpreted to mean that the ECT Act does not exclude or prohibit the common law of contract from being applied to automated transactions. Consequently, as with all other contracts, automated transactions too must meet or satisfy the requirements of a valid contract at common law. Proceeding from that analysis, it is fairly clear that automated transactions are not subject to a different or special regime from the common law of contract, meaning that questions of offer, acceptance, *animus contrahendi* and *consensus ad idem* are still relevant.

As a matter of fact, there are already some indications that courts of law will apply the common law of contract in analysing contract formation in automated transactions. This indication was made clear by both the High Court and the Court of Appeal of Singapore in the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*.[15] Commenting on the relationship between the electronic commerce legislation and the common law of contract in that jurisdiction, Rajah CJ made it abundantly clear in the High Court that:[16]

> There is no real conundrum as to whether contractual principles apply to Internet contracts. Basic principles of contract law continue to prevail in contracts made on the Internet….
>
> The Electronics Transaction Act (Cap 88, 1999 Rev Ed) ('ETA') places Internet contractual dealings on a firmer footing. The ETA is essentially permissive. It does not purport to regulate e-commerce but attempts to facilitate the usage of e-commerce by equating the position of electronic records with that of written records, thus elevating the status of electronic signatures to that of legal signatures. Section 11 of the ETA expressly provides that offers and acceptances may be made electronically. Section 13 of the ETA deems that a message by a party's automated computer system originates from the party itself. The law of agency and that pertaining to the formation of contracts are expressly recognised in s 13(8) of the ETA as continuing to apply to electronic transactions. This provision acknowledges that the essential framework of an electronic contract needs to be considered in the usual manner; in other words, principles of contract formation, consideration, terms and conditions, choice of law and jurisdictional issues need to be examined.

Likewise, the Court of Appeal conceded that:[17]

> It is common ground that the principles governing the formation of written or oral contracts apply also to contracts concluded through the Internet.

These observations attest to the fact that, as a general rule, electronic commerce legislation is not intended to supplant the relevance of the common law of contract to electronic contracts, but simply to facilitate the formation of contracts by electronic means.[18] By "facilitation" in this context is meant the removal of legal barriers and obstacles to the recognition of the validity and enforceability of

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15 For the decision of the High Court, see *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594. For that of the Court Appeal, see *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2005] SGCA 2.

16 *Chwee Kin Keong v Digilandmall.com Pte Ltd* para91-92.

17 *Chwee Kin Keong v Digilandmall.com Pte Ltd* para 229.

18 See Smith *Internet Law* 849-853; Nimmer 2007 *Journal of contract Law* 4; Edwards and Waelde *Law and the Internet* 19-21.

electronic contracts.[19] There are several reasons in support of this approach, *i.e.* leaving matters relating to the formation of electronic contracts to the common law. First of all, if electronic transactions are indeed "contracts," contract law is *prima facie* the correct body of law to govern them.[20] Secondly, apart from the form in which the intention to be bound is communicated, there is admittedly no substantive difference between electronic and traditional contracts.[21] The mere fact that a contractual message is communicated electronically does not in itself justify a departure from the common law of contract.[22] As one author puts it,[23] it is the content of a communication, not the tool used to communicate it, which is relevant to its legal effect. Thirdly, one notes grave danger in an approach that advocates for the creation of separate rules for electronic contracts. Technology is always in a state of evolution. If new contract rules were to be developed for every novel technology, the law would be cast in a perpetual state of uncertainty, precisely because tomorrow that technology may be outdated by more improved state of the art technology.

The foregoing notwithstanding, it must be noted, however, that where novel tools of communication introduce new problems, the law of contract may have to be developed, modified or adjusted in order to accommodate the validity of the resultant contracts.[24] As put by Rajah JC in *Chwee Kin Keong v Digilandmall.com Pte Ltd*:[25]

> …not all principles will or can apply in the same manner that they apply to traditional paper-based and oral contracts. It is important not to force into a Procrustean bed principles that have to be modified or discarded when considering novel aspects of the Internet.

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19 Smith *Internet Law* 849.

20 Nimmer 2007 *Journal of contract Law* 3.

21 See *Forrest v Verizon Communications Inc.*, 805 A.2d 1007 (D.C. App. 2002), in which it was stated that a contract is no less a contract just because it is concluded electronically, meaning that traditional contract law continues to apply to electronic contracts as it does to non-electronic contracts.

22 See Edwards and Waelde *Law and the Internet* 18, mentioning that the Internet is merely a tool of communication. Moreover, that there is no reason to think that the development of the Internet and e-mail will in any manner affect the application of the principles of the law of contract.

23 Mik 2013 *JICLT* 163.

24 See Nimmer 2007 *Journal of contract Law* 3.

25 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 91.

As shall be demonstrated later on in this chapter, the sentiments expressed in the preceding quotation are very relevant to automated transactions. It is for these reasons that, with the aim or purpose of accommodating the statutory validity of automated transactions within the common law theory of contract formation, the present study undertakes to develop or modify the rules and principles of the common law of contract in South Africa.

4.3 Outline of the South African common law theory of contract formation

A contract is a legally enforceable agreement between two or more parties who possess the capacity to contract.[26] The purpose of this agreement is admittedly to create legally enforceable rights and obligations between the contracting parties.[27] At Roman-Dutch law, a valid contract is formed in the instance of an offer and a corresponding acceptance thereof, coupled with a serious and a deliberate intention on both sides to form a binding pact.[28] There are of course several other requirements, most of which are largely irrelevant for purposes of the present considerations, which must be met in order to create a valid contract at common law. These include, amongst others, the requirement that an agreement must be legally possible in the sense that it is not expressly or impliedly prohibited by the law,[29] that a contract must not impose an obligation which is impossible to perform,[30] and that any formalities imposed by the parties must be observed.

The aim in this part of the chapter is to discuss the law of contract formation in South Africa. The discussion will be commenced with a detailed analysis of key elements of a contract in South African law, namely, offer, acceptance and *animus contrahendi*. The discussion will also cover an analysis of the various theories of

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26 See Visser *et alGibson's South African Mercantile* 9; Hutchison *et alWille's Principles of South* 409; Roberts *Wessels' the Law of Contract* para 40; Kope and Schoeman "The Law of Contract" 42.

27 Hutchison *et alWille's Principles of South* 409; Coaker and Zeffert *Wille and Millin's Mercantile Law* 1.

28 See *Conradie v Rossouw* 287-288; *Robinson v Randfontein Estates Gold Mining Co* 236-237.

29 Roberts *Wessels' the Law of Contract* para 47; *Reynolds v Kinsey* 1959 4 SA 50 (FC) 52A, stating that "[i]t is established law that the Courts will refuse to enforce a contract which is expressly or impliedly prohibited by statute, and a contract which, although not illegal in itself, can only be performed in an illegal manner."

30 Roberts *Wessels' the Law of Contract* para 47.

contractual liability in South African law, being the will theory, the declaration theory and the reliance theory (also known as the doctrine of quasi-mutual assent).

4.3.1 Offer

An offer is a proposal stating the terms upon which the offeror is willing to be bound in contract with the person to whom it is addressed.[31] The first requirement for a valid offer is that it must be communicated to the intended offeree,[32] which may be one person, a defined group of people, or the general public. The requirement that an offer must be communicated to the offeree is important because in order for the offeree to accept an offer with a serious intention, he or she must have full knowledge of the specific terms on which the offeror is prepared to form a contract. The second requirement for a valid offer at common law is that it must be made with a serious intention that its mere acceptance by the offeree shall result in a binding contract. Therefore, offers made without a serious intention are not valid.[33] An offer which is made with a serious intention has been variously described as being either "unconditional,"[34] or "firm."[35] The third requirement for a valid offer is that it must state, clearly and unequivocally, the terms upon which the offeror proposes to enter into a contract.[36] The terms stated in an offer must also be complete in the sense that the offer does not leave other terms to be negotiated by the parties later on.[37] It needs be mentioned that because the law places no formalities on contract formation, a valid offer can be communicated in any manner, including by post, fax, verbally, electronically, and even by conduct.

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31 See Kerr *The Principles of the Law* 64; Hutchison *et alWille's Principles of South* 413; Visser *et alGibson's South African Mercantile* 29; *Jurgens v Volkskas Bank Ltd* 1993 1 SA 214 (A) 218I-J, in which an offer was defined as "…a manifestation of the offeror's willingness to contract…."

32 Bradfield *Christie's law of Contract* 58-59.

33 Christie *The Law of Contract* 33-34, mentioning the various cases in which offers were held to be invalid for lack of serious intention.

34 *Hayter v Ford* (1895) 19 EDC 61 69.

35 *Wasmuth v Jacobs* 1987 3 SA 629 (SWA) 633D.

36 Christie *The Law of Contract* 36. The common law accepts that a valid offer can be made to a specific person, a defined group of people, or to the entire world, see Coaker and Zeffert *Wille and Millin's Mercantile Law* 6-8.

37 See generally *Humphreys v Humphreys* 1922 CPD 128.

4.3.1.1 Invitations to treat

At common law, advertisements, shop window displays and the display of goods for sale on shelves in self-service stores are generally regarded to be invitations to treat, as opposed to firm offers.[38] The essence of the doctrine of "invitation to treat" is that a trader who advertises the price at which he or she is prepared to sell an item does not make an offer, but rather a mere invitation to members of the public to make offers to him or her for the purchase of that item.[39] Therefore, when a member of the public reacts to an "invitation," say by placing an order or by entering the shop with a view to purchasing the advertised item; he or she does not make an acceptance, but rather an offer to the shopkeeper for the purchase of that item. Consequently, no contract arises from such conduct, *i.e.* the placing of an order or entering the store, until the shopkeeper has accepted the customer's offer. The shopkeeper can either reject or accept the customer's offer at will. A leading South African case in this regard is *Crawley v Rex*.[40] In that case, a shopkeeper placed a placard outside his store advertising a specific brand of tobacco at a low price. The accused purchased that tobacco and left the store, but he immediately returned within a couple of minutes to purchase more tobacco. The shopkeeper, however, refused to serve him the second round. In protest, the accused refused to leave the store until he was served, wherefore he was prosecuted for wrongfully and unlawfully refusing to leave the store when requested to. As part of his defence, the accused alleged that a contract had been concluded between him and the shopkeeper, and that he was entitled to remain in the store until the shopkeeper performed the contract by serving him with the tobacco. The court found that the mere advertisement of a price at which a trader is prepared to sell his goods is not an offer, and that no contract is constituted when a member of the public enters the store and tenders the amount.[41]

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38 Christie *The Law of Contract* 43; Roberts *Wessels' the Law of Contract* para 88; Coaker and Zeffert *Wille and Millin's Mercantile Law* 10-11; Kahn 1955 *SALJ* 250-253.

39 *Bird v Summerville* 1961 3 SA 194 (AD) 401C-D.

40 *Crawley v Rex* 1909 TS 1105 (hereinafter referred to as *Crawley v Rex*). This case is discussed in the following sources, Roberts *Wessel's the Law of Contract* para 189; Visser *et alGibson's South African Mercantile* 30; Kahn 1955 *SALJ* 250; Kahn *Contract and Mercantile Law* 19-20.

41 *Crawley v Rex* 1108.

A number of reasons have been advanced in support of the doctrine of invitation to treat. In *Crawley v Rex*,[42] the court rationalised the doctrine as follows:

> The mere fact that a tradesman advertises the price at which he sells goods does not appear to me to be an offer to any member of the public to enter the shop and purchase the goods, nor do I think a contract is constituted when any member of the public comes in and tenders the price mentioned in the advertisement. It would lead to most extraordinary results if that were the correct view of the case. Because then, supposing a shopkeeper were sold out of a particular class of goods, thousands of members of the public might crowd into the shop and demand to be served, and each one would have a right of action against the proprietor for not performing the contract. I do not think those consequences follow from the mere advertisement of the price at which a tradesman sells his goods. It seems to me to amount simply to an announcement of his intention to sell at the price he advertises. There is nothing, so far as I know, which obliges a tradesman to sell to any customer who chooses to present himself in his shop; and if he refuses to serve the customer, and demands that he shall leave the shop, in my opinion the customer wrongfully and unlawfully remains in the shop, if he still refuses to leave after so being told to go….

Apart from concerns over the availability of stock, and the fear that a trader might be inundated with purchase orders which he or she may not be able to meet, the doctrine of invitation to treat has also been supported on the ground that if advertisements were held to be offers, a trader would effectively be forced to deal with his trade rivals and competitors.[43] Joubert furthermore supports the doctrine of invitation to treat on the ground that:[44]

> One of the advantages of this construction is that it avoids certain problems in a natural way and brings about the following position: the customer cannot simply 'accept' the offer, though he may make an offer himself, so that the merchant is not bound to sell to the customer and may refuse to sell at the price he advertised or for any reason that may occur to him, such as that he has run out of supplies, that new supplies have an increased price, that he has put up the price or that the other party is not a person with whom he chooses to do business.

It must be noted, however, that it is not the mere fact that a proposal is communicated in the form of an advertisement which renders it an invitation to treat. Authorities are in agreement on this point that in some cases, an

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42 *Crawley v Rex* 1909 TS 1105 1108.

43 See Winfield as quoted by Kahn 1955 *SALJ* 251, stating that "…a shopkeeper might be forced to contract with his worst enemy, his greatest trade rival, a reeling drunkard or a ragged and verminous tramp."

44 Joubert *General Principles of the Law* 40.

advertisement may constitute a firm offer.[45] Secondly, it must be noted that the mere fact of a proposal being made to the general public does not necessarily render it an invitation to treat. For instance, in *Fraser v Frank Johnson & Co*,[46] the defendant company advertised that it would transport goods from Beira to Halisbury at specific rates upon the arrival of certain steamships, moreover that for further particulars, applications should be placed with its agents. The plaintiff delivered his merchandise to Beira for the defendant to transport it to Halisbury. However, the defendant refused to accept and forward the goods to Halisbury at the advertised rates. Although the court found that the advertisement in issue was not an offer, Lord De Villiers mentioned that:[47]

> A promise to the public may under certain circumstances entitle any one of the public who has given consideration upon which the promise was founded to a fulfilment of the promise.

Likewise, the same was held to be true in *Lee v American Swiss Watch Company*.[48] In that case, a company advertised a reward of £500 to anyone who would provide information to the police leading to the arrest of the thieves who had robbed its store. The same Lord De Villiers found that this advertisement was a firm offer.[49] However, he found that, despite his having provided the information, Lee was not entitled to the reward because the offer had already been accepted by the first person who provided information before him to the police.[50]

One can conclude the discussion by showing that, as a general rule, the intention of the trader will always be a decisive factor on whether or not an advertisement is an offer or an invitation to treat.[51] In approaching the matter, resort must be had

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45 See Visser *et alGibson's South African Mercantile* 30; Kerr *The Principles of the Law* 68; Van der Merwe *et al Contract* 49-50.

46 *Fraser v Frank Johnson & Co* 11 SC 63 (hereinafter referred to as *Fraser v Frank Johnson & Co*).

47 *Fraser v Frank Johnson & Co* 66 as quoted by Roberts *Wessel's the Law of Contract* para 192.

48 *Lee v American Swiss Watch Company* 1914 AD 121(hereinafter referred to as *Lee v American Swiss Watch Company*).

49 *Lee v American Swiss Watch Company* 123.

50 *Lee v American Swiss Watch Company* 123. See also *Sephton v American Swiss Watch Co* 1914 AD 673.

51 See Van der Merwe *et alContract* 49-50, stating that there can never be an inflexible rule that declarations contained in advertisements and other similar expressions can never constitute offers.

mainly to the specific words used in the advertisement.[52] If the words used in the advertisement demonstrate a clear intention to be bound upon mere acceptance, then such an advertisement is properly an offer. For instance, if a trader offers to sell at a specific percentage discount to the first ten people who purchase the advertised product, this is a firm offer which the trader will be bound to perform in relation to the first ten buyers who walk into the store and tender the amount. If the advertisement uses phrases such as "while stocks last," or "subject to the availability of stock," this is indicative more of an invitation to treat than a firm offer.

4.3.2 Acceptance

An offer will only result in a contract upon acceptance by the offeree. Acceptance is no more than a manifestation of consent on the part of the offeree that he or she agrees to be bound in contract with the offeror on terms proposed in his or her offer.[53] The first requirement for a valid acceptance is that it must be clear, unequivocal and unambiguous.[54] This has been explained in the case of *Boerne v Harris*,[55] to mean that:

> It must leave no room for doubt. The recipient is not required to apply any special knowledge or ingenuity in ascertaining the meaning of the letter. Thus if the appellant had chosen to write the letter in Chinese, or to convey his acceptance in the form of a cross-word puzzle, except possibly one that he who runs may read, I think that the respondent would have been entitled to refuse to attempt to translate, or solve the puzzle contained in the letter and to disregard it.

The second requirement for a valid acceptance is that it must correspond with the offer, meaning that it must not be conditional or propose new terms over those proposed in the offer.[56] If a purported acceptance introduces new terms, it is

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52 *Steyn v LSA Motors Ltd* 252H.

53 See Hutchison *et alWille's Principles of South* 413; Visser *et alGibson's South African Mercantile* 34.

54 Christie *The Law of Contract* 67; Coaker and Zeffert *Wille and Millin's Mercantile Law* 10-11; Kahn 1955 *SALJ* 11; Visser *et alGibson's South African Mercantile* 56.

55 *Boerne v Harris* 1949 1 SA 793 (A) 801. The test applicable to the issue whether an acceptance is unequivocal is that of a reasonable man. The question is whether a reasonable man would have had any doubts about the meaning of the acceptance? See Christie *The Law of Contract* 69. To the same vain is the observation that where acceptance takes the form of a conduct, not words, the conduct too must be such that an inference that the offeree accepted the offer must logically be inferred there from, see *Collen v Reitfontein Engineering Works* 1948 1 SA 413 (A) 429-430.

56 See *JRM Furniture Holdings v Cowlin* 1983 4 SA 541 (W) 546H-547C.

generally construed to be a counter-offer.[57] A counter-offer does not result in an agreement until the new terms have been accepted by the original offeror.[58] The third requirement is that acceptance must be communicated to the offeror.[59] If the offeror stipulates the mode in which his or her offer is to be accepted, *e.g.* by post or e-mail, the offeree must use that specific mode of communication.[60] Because it is for his benefit that acceptance is required to be communicated, the offeror can dispense with the need for communication of acceptance.[61] The fourth requirement is that an offer can only be accepted by the person(s) to whom it is made.[62]

The fifth requirement is that in order to make a valid acceptance, the offeree must have actual knowledge of the terms of the offer.[63] If the offeree purports to accept an offer the terms of which he or she does not know of at the time of acceptance, such an acceptance is invalid in law. A leading South African case on this issue is *Bloom v American Swiss Watch Company*.[64] The case involved a robbery of a jewellery store operated by the American Swiss Watch Company. The company advertised in the daily press that it would pay a reward of £500 to anyone who provided information to the police leading to the arrest of the robbers. Bloom provided the said information, which entitled him to receive the reward. However, it became apparent that at the time of giving information to the police, he was not aware of the offer for reward. The court found that Bloom's conduct was not a valid

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57 Van der Merwe *et al Contract* 51-52; Kerr *The Principles of the Law* 76-77.

58 See *Seeff Commercial & Industrial Properties (Pty) Ltd v Silberman* 2001 3 SA 952 (SCA) (hereinafter referred to as *Seeff Commercial & Industrial Properties (Pty) Ltd v Silberman*), in which it was ruled that the principles of offer and acceptance apply to counter-offers too, meaning that the counter-offer has to be accepted by the original offeror. See also *Ideal Fastener Corporation Cc v Book Vision (Pty) Ltd T/a Colour Graphic* 2001 3 SA 1028 (D).

59 See *Fern Gold Mining Company v Tobias* (1890) 3 SAR 134 137-138. In this case, Tobias offered by letter to purchase shares in a company. The company accepted the offer, but the letter of acceptance was never posted to Tobias, until he decided to revoke his offer. The question in issue was whether a contract had been concluded despite the lack of communication of acceptance? Per Kotzè CJ, the court found that there was no contract, mentioning that "…there can be no question of obligation until the acceptance is clearly brought to the attention of the knowledge of the offeror…."

60 Van der Merwe *et al Contract* 57-58.

61 See *R v Nel* 1921 AD 339 344.

62 See *Bird v Summerville* 961 3 SA 194 202-203. See also *Hersch v Nel* 1948 3 SA 686 (AD) 69, detailing a number of excerptions to the rule that an offer can only be accepted by the one to whom it is addressed.

63 See Christie *The Law of Contract* 67.

64 *Bloom v American Swiss Watch Company* 1915 AD 100 (hereinafter referred to as *Bloom v American Swiss Watch Company*).

acceptance because at the time of giving information to the police, he was not aware of the offer and its terms. Per Innes CJ,[65] the court was of the view that:

> In order to establish a legal tie between the parties, the information would have to be given, in consequence of the advertisement, by a person acting on the faith of the offer. Otherwise there could be no contractual privity; the *animus contrahendi* on the part of the person giving the information would be wanting; and he could not be the acceptor of the offer because he did not under the circumstances intend to accept anything….

Solomon JA equally expressed a view that:[66]

> …until the plaintiff knew of the offer it seems clear that he could not accept it, and until he accepted it there could be no contract, for a contract requires that there should be *consensus* of two minds, and if the one did not know what the other was proposing, the two minds never came together….

The rationale of the decision is very clear. Because South African law requires a meeting of minds between the parties, where the offeree does not know of the terms of the offer, his acceptance is invalid because, in such a setting, the minds of the parties would not have met about the exact terms on which they are bound one to the other. In such cases, there is no *consensus*, and therefore no contract. Apart from the meeting of minds, another ground on which the decision is based is that of *animus contrahendi*, meaning a serious intention to be bound. Indeed it is common cause that a person who accepts an offer while oblivious to its terms acts without the requisite intention to be bound.

4.3.3 The intention to be bound (animus contrahendi)

If an offer or acceptance is not made with a serious intention to be bound, it cannot result in a binding agreement between the parties. This is usually the case with proposals made in jest or from motives of gratitude,[67] at family or social

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65 *Bloom v American Swiss Watch Company* 102.

66 *Bloom v American Swiss Watch Company* 105. See also the decision of De Villiers AJA at 107.

67 See *Robinson v Randfontein Estates Gold Mining Co* 188. In this case, the defendant had on one occasion assisted with verifying the beacons on a farm. The owners of the farm were grateful for his assistance, and stated to the defendant that if they ever sold the farm, they would give him a right of pre-emption or first purchase benefit. The issue before the court was whether the defendant had the right of pre-emption to purchase the farm as promised by the owners? Per Innes CJ, the court was of the view that the promise to grant the defendant a right of pre-emption was motivated by gratitude, and was, therefore, not made with a serious intention to creatie a contract between the parties.

arrangements,[68] and for simulated contractual arrangements. For instance, in *Kilburn v Estate Kilburn* where in contemplation of a marriage,[69] a man passed a notarial bond over his property in favour of his intended spouse as security for the debt, the court refused to enforce the agreement because this was a simulation. The true intention behind the bond was to give the spouse a preferent claim on the husband's insolvency.

4.4. The basis of contractual liability in South Africa

As explained by one author:[70]

> The question of the basis of contractual liability principally deals with the justification for state coercion or rather the rationale for the imposition of contractual liability in positive law….

The aim in this part of the chapter is to discuss the basis of contractual liability in South African Law. The discussion shall focus on three main theories of contractual liability in South African law, namely the will theory, the declaration theory, and the reliance theory.

4.4.1 The will theory

As correctly observed by Jansen JA in the matter of *Société Commerciale de Moteurs v Ackermann*,[71] the true basis of contractual liability in South African law is "…the real *consensus* of the parties." By this is meant that the minds of the contracting parties must meet or coincide in order to form a contract,[72] wherefore the expression "*consensus ad idem*" is frequently used interchangeably with the phrases "meeting of the minds" and "coincidence of the wills."[73] This approach is known in South African law as the subjective approach, and the theory which underlies it is

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68 Coaker and Zeffert *Wille and Millin's Mercantile Law* 9-10.

69 See *Kilburn v Estate Kilburn* 1931 AD 501; *Bosman v Prokureursorde van Transvaal* 1984 2 SA 633 (T).

70 Pretorius 2004 *CILSA* 96.

71 *Société Commerciale de Moteurs v Ackermann* 1981 3 SA 422 (A) 428A. See also Kahn "General Principles of the Law of Contract" 441; Christie *The Law of Contract* 24; De Wet as discussed by Jethro *Reliance Protection* 1-2; Pretorius 2010 *Obiter* 518; Louw *The Plain Language Movement* 25, stating that "[a]s a starting point South African law has always had a high regard for consensus as the basis of a contract…."

72 McLennan 1994 *SALJ* 232.

73 See Bradfield *Christie's Law of Contract* 30.

commonly referred to as the will theory of contract.[74] *Consensus* is admittedly "…determined by considering the actual subjective intentions of the parties."[75] As one author eloquently explains:[76]

> The first meaning is that of concurrence of the true intentions of the parties, often described as a 'meeting of their minds', and generally referred to in our law as *consensus ad idem* or simply consensus. If the true, mentally held intentions of the parties do not coincide, then there can be no true agreement in this sense between them, even if there is the appearance of one. The theory that contractual liability is based on the fact of an agreement in this sense is called the 'consensual theory' (also known as the 'intention theory' or 'will theory').

As explained by Steyn JA in the matter of *Estate Breet v Peri-Urban Areas Health Board*,[77] "[*c*]*onsensus* is normally evidenced by offer and acceptance." To appreciate how that is so, one needs first of all understand the elements of *consensus*. The individual elements of *consensus* are first that the contracting parties must have a common or mutual understanding of the legal rights or obligations that they wish to create, second that they must each act with a serious intention to be bound by those consequences, and third that each party must be aware of the agreement.[78]

The first element of *consensus* is premised on the observation that a contract entails the creation of contractual rights and obligations,[79] consequently that a true agreement between contracting parties requires a common or a mutual understanding of what those rights and obligations are. A common understanding of contractual rights and obligations will admittedly depend on the effectiveness of the process of offer and acceptance; meaning that contracting parties cannot be said to have a common understanding of their respective rights and obligations until or unless all the terms of an offer are met with a corresponding acceptance.[80] Correspondence between offer and acceptance must exist with regard to the nature of the contract that the parties intent to create, the subject matter of the contract, and lastly with regard to the terms and conditions of that contract.[81] For an offer

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74 Jethro *Reliance Protection* 2.
75 Louw *The Plain Language Movement* 29.
76 Kritzinger 1983 *SALJ* 47.
77 *Estate Breet v Peri-Urban Areas Health Board* 1955 3 SA 523 (A) 532E.
78 See Pretorius 2011 *THRHR* 183; Christie *The Law of Contract* 67.
79 Otto *Germany and South Africa* 80.
80 Kerr *The Principles of the Law* 4-5.
81 Roberts *Wessels' The Law of Contract* para 165.

and acceptance to correspond in the sense discussed above, the requirements of a valid offer and acceptance must be fulfilled. Most important for purposes of present considerations, an offer must be clear and unequivocal; meaning that it must enable its intended meaning and "…the extent of the rights and duties of the parties to be readily determined."[82] An offer must also be communicated or brought to the attention of the offeree so that he or she is able to ascertain its meaning, consequently to decide whether he or she is willing to accept it. If these requirements of a valid offer are met, a corresponding acceptance thereof will evidence a mutual or common understanding of the contractual rights and obligations created.

It is worth noting that a mere appearance of a common understanding of the contemplated rights and obligations will not create a contract. What is required is actual *consensus* or a true meeting of the minds. Consequently, any subjective *dissensus* or misunderstanding in the mind of one of the parties will vitiate the contemplated agreement.[83] This is illustrated by the decision of *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd*.[84] The parties in that case had concluded a contract for the sale of clutch parts. The respondent thought that it was selling 723 clutch parts for R110 000,[85] whereas the appellant thought it was purchasing a total of 2 955 clutch parts for the sum of R110 000.[86] The issue for decision was whether a contract had been concluded between the parties in light of their disagreement? Per Boruchowitz J,[87] the court held that:

> …no agreement had been concluded on the terms contended for by the respondent. On a subjective level the parties were at cross-purposes. As far as Cochrane-Murray was concerned the respondent had offered to sell to the appellant only those parts reflected on the bills of entry whereas Steinberg understood that

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82 Joubert *General Principles of the Law* 38.

83 See *Spenmac v Tatrim CC* [2014] ZASCA 48 para 28, stating that "[a]cademic writers appear to be at one that a contract … may fail for lack of consensus between the parties." See also *Raft Crete CC v Netcom Construction CC* (CASE NO: 3740/2009) para 10, mentioning that "...not all agreements have a legally binding effect. There must be a meeting of the minds (consensus) as a basis of a contract. Without conscious consensus between the parties there can be no contract."

84 *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd* 2008 1 SA 279 (W) (hereinafter referred to as *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd*).

85 *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd* para 9.

86 *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd* para 10.

87 *Laco Parts (Pty) Ltd t/a ACA Clutch v Turners Shipping (Pty) Ltd* para 13.

> the appellant was to acquire the quantities reflected in the two invoices that had been forwarded to it. The appellant's acceptance did not coincide with the offer put and there was clearly a mutual error as to the subject-matter of the sale. If anything, Steinberg's qualified acceptance amounted to a counter-offer and by implication a rejection of the respondent's offer.

The second element of *consensus* requires that each of the contracting parties must have the intention to be bound by the contemplated rights and obligations. This requirement has already been discussed above, and shall not be rehearsed here. What is important to emphasise for purposes of present considerations is that the term "intention" refers to subjective intention, meaning that a party must truly intend to be bound by the contract. Therefore, the mere appearance of the intention to be bound is not enough to create a contract. One can refer here to the decision of *Bloom v American Swiss Watch Company*.[88] As shall be recalled, it was held in that case that a person acts without the requisite *animus contrahendi* if he or she accepts an offer while ignorant of its exact terms. Such an acceptance is invalid because it is not accompanied by a subjective intention to be bound in contract.

The third requirement of *consensus* is that the parties must be aware or conscious of their contract. As Bradfield puts it:[89]

> …there can be no contract until the offeror knows that he or she and the offeree are *ad idem* – the offeree already knowing this from the terms of the offer and fact of the offeree's own acceptance.

This requirement is particularly important for purposes of ensuring that the minds of the parties actually meet. It is difficult to appreciate how a meeting of minds can be said to exist when one of the parties is ignorant of the other's promise. This is precisely the authority of *Bloom v American Swiss Watch Company*.[90] The requirement that contracting parties must be aware of their agreement is also intended to ensure that the offeror is not burdened with contractual liability without his or her actual knowledge of that fact. It would indeed be unjust to hold the offeror contractually liable whilst he or she is still ignorant of whether or not his or her offer has been accepted.[91] It is for this reason that the law requires an

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88 *Bloom v American Swiss Watch Company* 1914 AD 405.
89 Bradfield *Christie's Law of Contract* 83.
90 *Bloom v American Swiss Watch Company* 1914 AD 405.
91 Roberts *Wessels' The Law of Contract* para 114.

acceptance to be communicated or brought to the attention of the offeror in order to conclude a contract.

A couple of reasons have been offered in support of the will theory. The three main reasons behind the theory are consensualism, freedom of contract and *pacta sunt servanda*.[92] Consensualism highlights the fact that a contract is an agreement, and that contractual obligations cannot be created otherwise than by the mutual consent of the parties.[93] Freedom of contract means that individuals have a right to regulate their contractual relations by voluntarily and freely choosing their contractual partners, and the terms upon which they wish to be bound with those partners in contract.[94] The consent of a party to contractual terms is in itself a manifestation of his or her freedom of contract or autonomy.[95] *Pacta sunt servanda* means that freely assumed contractual obligations must be respected and enforced.[96] What is required is that courts of law must enforce nothing but the inner will of the parties. Indeed it is often said that it is not the duty of courts to create a contract between parties where none was intended, nor to vitiate one where it was clearly intended to exist by the parties.[97] This means in effect that a contract is enforceable solely because it was willed by the parties.[98] Courts must enforce nothing but the will of the parties because "…the will is something inherently worthy of respect."[99]

The will theory of contract has been severely attacked. The main attack highlights the difficulty of ascertaining with precision the subjective intentions of the parties.[100] It is admittedly very difficult to acquire knowledge of the actual state of a person's

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92 Pretorius 2004 *CILSA* 400.
93 Pretorius 2010 *Obiter* 522.
94 Van der Merwe *et al Contract* 9.
95 Cockrell 1992 *SALJ* 42.
96 See *Barkhuizen v Napier* 2007 5 SA 323 (CC) para 57, in which Ngcobo J observed that "…public policy, as informed by the Constitution, requires in general that parties should comply with contractual obligations that have been freely and voluntarily undertaken. This consideration is expressed in the maxim pacta sunt servanda, which, as the Supreme Court of Appeal has repeatedly noted, gives effect to the central constitutional values of freedom and dignity. Self-autonomy, or the ability to regulate one's own affairs, even to one's own detriment, is the very essence of freedom and a vital part of dignity. The extent to which the contract was freely and voluntarily concluded is clearly a vital factor as it will determine the weight that should be afforded to the values of freedom and dignity."
97 See Barnard *A Critical Legal Argument for Contractual Justice* 70.
98 See Barnett 1986 *Columbia Law Review* 272.
99 Cohen as quoted by Barnett 1986 *Columbia Law Review* 272.
100 Pretorius 2004 *CILSA* 99; Pretorius 2010 *Obiter* 255.

mind at any one time. The insistence on subjective intention brews a recipe for dishonesty in that a party can easily demonstrate the lack of such intention by "…generating and preserving extrinsic evidence of … conflicting intention."[101] As noted by Davis J in *Irvin and Johnson v Kaplan*:[102]

> …it is difficult to see how commerce could proceed at all. All kinds of mental reservations, of careless unilateral mistakes, of unexpected conditions and the like, would become relevant and no party to any contract would be safe: the door would be opened wide to uncertainty and even to fraud.

It would be disappointing to the other party who in good faith reasonably relied on the words and conduct of the contract-denier as the expression of his or her true intention, only to find that he or she was misled. The second attack on the will theory is that it is merely philosophical,[103] and lacks in practical effect. It is said that as a matter of fact, the parties' intention is determined objectively by courts.[104] As put by Alkema J in *Lungile Elliot Siyepu v Premier of the Eastern Cape*:[105]

> …the search for the common intent that their contract will be legally enforceable is as a matter of logic and common sense dependent on not only what the parties' legal convictions are at the time of contracting, but what they agreed their legal convictions will be when the contract is enforced. Put differently, it is not what they now say they then intended (which evidence is in any event inadmissible), but what the Court now finds they then believed their legal convictions will be at the time of enforcement. (Also bearing in mind they had no idea at the time of contracting when and if, legal redress will be sought by either of them to enforce their agreement). The Court, therefore, ends up in objectively enquiring what the legal convictions of society are at the time of enforcement, and then ascribing such legal convictions to the subjective intention of the parties at the time.

This leads us to a discussion of another theory, which is known in South African law as the declaration theory.

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101 Barnett 1986 *Columbia Law Review* 273.

102 *Irvin and Johnson (SA) Ptyv Kaplan* 1940 CPD 647 651.

103 Pretorius 2010 *Obiter* 255.

104 Christie *The Law of Contract* 27, stating that "[a] lawyer needs proof before committing himself to a conclusion that a state of affairs exists, and when the state of affairs in question is something so subjective as the state of mind of two or more parties on a particular occasion or occasions, the lawyer will find that, in truth, he is not looking for agreement by consent but for evidence of such agreement."

105 *Lungile Elliot Siyepu v Premier of the Eastern Cape* Case No. 203/2000 para 31.

4.4.2 The declaration theory

The declaration theory was formulated as follows by Wessels JA in the matter of *South African Railways & Harbours v National Bank of South Africa Ltd*:[106]

> The law does not concern itself with the working of the minds of parties to a contract, but with the external manifestation of their minds. Even therefore if from a philosophical standpoint the minds of the parties do not meet, yet, if by their acts their minds seem to have met, the law will, where fraud is not alleged, look to their acts and assume that their minds did meet and that they contracted in accordance with what the parties purport to accept as a record of their agreement. This is the only practical way in which the Courts of law can determine the terms of a contract.

The essence of the declaration theory is that the intention of a party to be bound by a contract must not be investigated subjectively, but objectively from his or her outward expressions.[107] There is, however, much controversy whether the declaration theory is a subjective or an objective approach to contract formation. There are those who view it mainly to be an objective approach.[108] This view might be influenced by the fact that in his statement quoted above, Wessels JA mentions that according to the declaration theory, a contract will be found to exist "even if from the philosophical standpoint the minds of the parties do not meet." This statement gives a *prima facie* impression of a breakaway or departure from the will theory. However, it is clear on the other hand that Wessels JA might not have intended an alteration of the will theory, for he repeatedly mentions the issue of the "meeting of minds." Indeed he makes it clear that the only purpose for resorting to the outward expressions of the parties must be to determine whether or not their minds have met.[109] The declaration theory is easily reconcilable with the will theory as follows:

> The consensual theory does not postulate that contractual liability flows from mental agreement unaccompanied by a declared agreement. On the contrary, not only is a declared agreement in general regarded under the consensual theory as prima facie evidence of the concurrence of mental intentions on which contractual liability is based in terms of that theory, but also communication of mental

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106 *South African Railways & Harbours v National Bank of South Africa Ltd* 1924 AD 704 715.

107 See Jethro *Reliance Protection* 2.

108 See Pretorius 2010 *Obiter* 523; Kritzinger 1983 *SALJ* 55.

109 See Christie *The Law of Contract* 24-25, stating that Wessels makes it clear that "[a]lthough the minds of the parties must come together, courts of law can only judge from external facts whether this has or has not occurred. In practice, therefore, it is the manifestation of their wills and not the unexpected will which is of importance."

> intentions, so as to constitute a declared agreement, is generally regarded as an essential contractual requirement. In other words, under the consensual theory a contract is constituted by a declared agreement plus consensus.[110]

This, referring here to the practice of inferring subjective intention from the conduct or expressions of a person, is the ordinary course of South African law whenever liability is sought to be imposed on the basis of subjective intention. Even in criminal law, wherein criminal liability is based on subjective intention, it is accepted that such intention can be proven objectively from available evidence. Reference to criminal liability in this instance is approached with due care, noting very well that there might be substantive differences or considerations compelling a distinction to be drawn between the imposition of criminal liability as compared to contractual liability. The comparison in this work is, however, on point. In the matter of *Director of Public Prosecutions, Gauteng v Pistorius*,[111] the Supreme Court of Appeal reaffirmed the view that the subjective mind of an accused can be inferred from available evidence and the surrounding circumstances.[112] This goes a long way to show that as a matter of fact, subjective intention does not necessarily mean the inner workings of a person's mind; it envisages also any conduct which may shed light on the actual state of the mind at the time of an agreement or a crime.

The foregoing nevertheless, because the declaration theory is generally viewed as an objective approach different from the subjective theory, it has been criticised on that basis. It has been pointed out that the declaration theory is untenable because it detaches itself from the minds of the parties.[113] In this way, the declaration theory appears to go counter to the rule that contracts are enforced because they originate from the will of the parties. The detachment of the declaration theory from the subjective or mental will of the parties has been described as a great illusion in that is assumes that "words" have a meaning that is independent from the people using them.[114] This illusion, it is submitted, can simply be corrected by reconciling the will

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110 kritzinger 1983 *SALJ* 48.

111 *Director of Public Prosecutions, Gauteng v Pistorius* [2015] ZASCA 204 (hereinafter referred to as .*Director of Public Prosecutions, Gauteng v Pistorius*).

112 *Director of Public Prosecutions, Gauteng v Pistorius*para 34.

113 Kahn "General Principles of the Law of Contract" 442.

114 Corbin as quoted by Lewis 1991 *SALJ* 259. Quoted in full, Corbin argues that "[a]s usually understood, the 'objective theory' is based upon a great illusion -the illusion that words, either singly or in combination, have a 'meaning' that is independent of the persons who use them. It is

theory with the declaration theory. As demonstrated above, this reconciliation is captured in the view that the declarations of the parties must be taken to be a reliable indicator of their subjective will.

4.4.3 The reliance theory (the doctrine of quasi-mutual assent)

The reliance theory bases contractual liability not on actual *consensus* between the contracting parties, but on the conduct of one party, hereafter referred to as the contract-denier, which leads the other party, hereafter referred to as the contract-assertor, to reasonably believe that the contract-denier intended to be bound.[115] The gist of the reliance theory is to protect the reasonable reliance of the contract-assertor on the misleading conduct of the contract-denier that he or she is or was agreeing to be bound by the contract.[116] This theory was received in South Africa from the English law dictum of Lord Blackburn in the matter of *Smith v Hughes*,[117] in which the learned judge stated that:

> If, whatever a man's real intention may be, he so conducts himself that a reasonable man would believe that he was assenting to the terms proposed by the other party, and that other party upon the belief enters into the contract with him, the man thus conducting himself would be equally bound as if he had intended to agree to the other party's terms.

The reliance theory was imported in South Africa by Innes CJ in the matter of *Pieters & Co v Salomon*,[118] in which he stated that:

> When a man makes an offer in plain and unambiguous language, which is understood in its ordinary sense by the person to whom it is addressed, and accepted by him *bona fide* in that sense, then there is a concluded contract. Any unexpressed reservations hidden in the mind of the promisor are in such circumstances irrelevant. He cannot be heard to say that he meant his promise to be subject to a condition which he omitted to mention, and of which the other party was unaware.

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crudely supposed that words have a 'true' or 'legal' meaning (described as 'objective'), one that all persons of whatever race, origin or education are bound to know, and in accordance with which the law requires them to perform and to accept performance…."

115 See Jethro *Reliance Protection* 5-6.

116 Kopel and Schoemann "The Law of Contract" 42; Van der Merwe *et al Contract* 33; Cockrell 1993 *Stellenbosch Law Review* 47, mentioning that "…it is often the reasonable reliance of the promisee that seems to justify the imposition of liability where there has been no subjective intention to assume such liability on the part of the promisor."

117 *Smith v Hughes* (1871) LR 6 QB 597 607.

118 *Pieters & Co vSalomon* 1911 AD 121 137.

The reliance theory is known in South African law as the "doctrine of quasi-mutual assent,"[119] and was authoritatively pronounced part of South African law by Harms AJA in the matter of *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis*.[120] The theory is usually employed as an alternative basis of contractual liability where there is admittedly a *dissensus* between contracting parties, and the decisive question in that instance is whether:

> …the party whose actual intention did not conform to the common intention expressed, lead the other party, as a reasonable man, to believe that his declared intention represented his actual intention? [121]

If the answer is in the affirmative, a valid contract will be found to have been concluded between the parties despite an alleged *dissensus*, and *vice-versa*. Whether or not a reasonable man would have been misled by the conduct of the contract-denier will depend on all the circumstances of a case.[122]

A case in which it was found that the contract-assertor was actually misled, and that a reasonable person in his position would have been equally misled, by the conduct of the contract-denier, is *Pillay v Shaik*.[123] In that case, a group of developers marketed to the public a sale of their interest in a sectional property development. The developers drew up standard-form agreements to be signed by them and the prospective buyers, and further instructed a firm of estate agents and attorneys at law to facilitate the transactions. Pillay and the other appellant had signed the standard-form contracts; they had rendered deposits of the purchase price, secured guarantees for the remainder of the purchase price, and were asked to deliver copies of their identity documents to enable a transfer of the developer's interests in the property. However, just when it seemed like the transaction was to be finalised, the appellants were informed that the developers did not sign the standard-form contracts, therefore that there was no agreement between them and the appellants,

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119 See generally Christie 1976 *Acta Juridica* 149-156.

120 *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis* 1992 3 SA 234 (A) 239H-I (hereinafter referred to as *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis*).

121 *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis* 239I.

122 *Van Ryn Wine and Spirit Co v Chandos Bar* 1928 TPD 417 423.

123 *Pillay v Shaik* 2009 4 SA 74 (SCA) (hereinafter referred to as *Pillay v Shaik*).

hence the litigation.[124] The court resorted to the reliance theory to determine whether or not a binding agreement had come into place between the parties.[125] The court found that there was indeed a *dissensus* between the parties, *i.e.* that there was a party whose declared intention did not reflect or match its true intention. This party was identified to be the developers whose intention as declared in the standard-form agreements did not match their true intention.[126] Coming to the issue of whether or not there had been a reasonable reliance on the conduct of the developers, the court held that:[127]

> It is clear on the evidence that Mooney Ford [being the firm of attorneys instructed by the developers to facilitate the transactions] had authority to call for and receive deposits paid under contracts for the sale of member's interests in the close corporation to which units were to be allocated; to call for guarantees under the contracts; to allocate close corporations, from the list made available to them by Mr Blake's accountants, to particular units; to call for copies of identity documents and marriage certificates so as to be able to open the sectional title register and transfer member's interests; to write to the buyers regarding the finishes of the units and to ask for additional payments occasioned by changes thereto and to give notices under clause 13 of the standard form contracts threatening cancellation.
>
> All these acts, which they were authorised to perform on behalf of Mr Blake and his fellow developers, amounted, in my view, to a clear representation that the offers made by Mr Pillay and Dr Motlanthe had been duly accepted.

A case in which the court found that the contract assertor was not misled, and that a reasonable man in his position would not have been misled by the conduct of the contract-denier is *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator*.[128] The case involved prolonged negotiations for the sale of a vessel between the buyer and a manager of a vessel on behalf of the owners of that

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124 The issue for decision was essentially whether a binding contract had come into place between the parties despite the fact that the developers did not sign the contracts? The developers argued that no contracts had been concluded between them and the appellants because the formality that such contracts should be signed had not been fulfilled. In the court *a quo* it was found that the lack of signature on the part of the developers had indeed vitiated the purported agreement between them and the appellants. On appeal, however, the court found that the parties had never agreed that a binding agreement would only arise in the event of signature on both sides. Therefore, that the developer's failure to sign the standard-form agreements did not vitiate the agreement because at common law, no formalities such as signature are required for the conclusion of a valid agreement, see *Pillay v Shaik* para 2009 4 SA 74 (SCA) 43-52.

125 *Pillay v Shaik* para.53.

126 *Pillay v Shaik* para.56.

127 *Pillay v Shaik* para 57-58.

128 *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator* 2004 5 SA 10 (C) (hereinafter referred to as *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator*).

vessel. The parties had agreed on the purchase price for the vessel. Agreement on the purchase price notwithstanding, the purchaser was informed by e-mail that, while his offer had been accepted by the owners of the vessel, a contract was yet to be put together in writing. He was informed later by fax to the same effect that the owners of the vessel were willing to accept his offer, and that they would draw up a sale and purchase agreement which after being signed, the vessel would be relocated to him. The issue for decision was whether in light of the e-mail and fax, a valid agreement had been concluded between the parties? Per Louw J, the court assumed for purposes of the decision that *prima facie* the facts of the case, the parties had reached agreement, however that there was a *dissensus* because the owner's declaration as contained in the e-mail and fax did not match their true intention.[129] The court then resorted to the reliance theory to enquire whether despite the misrepresentation, the buyer was actually misled and whether a reasonable person in his position would have been actually misled by the e-mail and fax. In going about the task, the court mentioned that:[130]

> The first issue is whether the plaintiff was misled by the reply on 17 October to believe that the owners intended to be bound there and then without the conclusion of a formal written contract. Assuming for the moment that the plaintiff was indeed so misled, a reasonable man in the position of the plaintiff would not in my view, in the circumstances have believed that the owners intended that their acceptance would there and then give rise to a binding contract. Given the references in the various communications that went before, to the conclusion of a written contract, a reasonable man would in my view have understood that the acceptance expressed in the e-mail was subject to the conclusion of a formal written contract or would at least have had sufficient doubt in his mind as to what the position was so as to require the position to be cleared up. A reasonable man would consequently … at least have made enquiries in this regard. Had [the buyer] done so … [he] would have been told that while the owners agreed to the price proposed, they intended a binding contract to come into existence only once all the terms of the contract had been agreed to, been reduced to writing and been signed by the parties.

4.4.4 Ancillary considerations

In light of the multiplicity of the theories of contractual liability in South African law, there is admittedly a conflict of opinion amongst courts of law and academic

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129 *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator* 22J-24C.

130 *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator* 25D-G. As a matter of fact, the court found that the buyer had not been misled, see *Mv Navigator (No 1): Wellness International Network Ltd v Mv Navigator* 25G-26F.

commentators as to which of the three theories discussed above represents the true basis of contractual liability in South Africa. The conflict is between those who favour an objective approach to contractual liability, *i.e.* the reliance theory or the declaration theory, and those who favour a subjective approach, *i.e.* the will theory. In favour of the reliance theory, Bradfield mentions that this theory is so important that no dispute on the existence of a contract "…can properly be resolved without calling it in aid."[131] In support of the declaration theory, Van Heerden J in *Ridon v Van der Spuy & Partners (Wes-Kaap) Inc* expressed the view that:[132]

> South African law, as a general rule, concerns itself with the external manifestations, and not the workings of the minds of parties to a contract….

Roberts similarly argues in favour of the declaration theory that:[133]

> Although the minds of the parties must come together, courts of law can only judge from external facts whether this has or has not occurred. In practice, therefore, it is the manifestation of their wills and not the unexpressed will which is of importance.

On the other hand, Jansen JA as quoted above has maintained that:[134]

> …the true basis of contractual liability in our law…is not the objective approach of the English law, but is…the real *consensus* of the parties.

What appears to be the correct position of the law, however, is that the basis of contractual liability in South African law is the will theory as tempered by the reliance theory.[135] This was made clear as follows by Botha JA in the matter of *Steyn v LSA Motors Ltd*:[136]

> The argument is fundamentally fallacious in as much as it treats Smal's subjective intention as irrelevant and postulates the outward manifestation of his intention as the sole and conclusive touchstone of the respondent's contractual liability. That is contrary to legal principle. Where it is shown that the offeror's true intention differed from his expressed intention, the outward appearance of agreement flowing from the offeree's acceptance of the offer as it stands does not in itself or necessarily result in contractual liability. Nor is it in itself decisive that the offeree accepted the offer in reliance upon the offeror's implicit representation that the offer correctly reflected his intention. Remaining for consideration is the further and

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131 Bradfield *Christie's Law of Contract* 32.
132 *Ridon v Van der Spuy & Partners (Wes-Kaap) Inc* 2002 2 SA 121 (C) 135B-C.
133 Roberts *Wessels' The Law* para 62.
134 *Société Commerciale de Moteurs v Ackermann* 428A.
135 Kerr *The Principles of the Law* 23.
136 *Steyn v LSA Motors Ltd* 1994 1 SA 49 (A) 61C-E.

> crucial question whether a reasonable man in the position of the offeree would have accepted the offer in the belief that it represented the true intention of the offeror, in accordance with the objective criterion formulated long ago in the classic dictum of Blackburn J in Smith v Hughes (1871) LR 6 QB 597 at 607. Only if this test is satisfied can the offeror be held contractually liable.

This means, in practical effect, that every enquiry into contractual liability must commence with a search for a meeting of the minds of the contracting parties. The reliance theory is applied or applicable only as an alternative basis of contractual liability whenever it is found that there is a *dissensus* between the parties.[137] Therefore, the true basis of contractual liability in South Africa is the will theory, as tempered by the reliance theory where necessary.

4.5 Extending the common law theory of contract formation to automated transactions

A turn shall be made at this juncture to determine the extent to which it is possible to explain the validity of automated transactions with reference to the common law theory of contract formation as discussed above. In the first part hereof shall be discussed in detail the basis of contractual liability in automated transactions, primarily with the aim of determining whether or not it is possible to have a meeting of minds in automated transactions. Because *consensus ad idem* is usually determined with reference to the process of offer and acceptance, the second part hereof shall entail a critical analysis of the process of offer and acceptance in automated transactions. The third part of the discussion shall discuss the time and place of contract formation in automated transactions.

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[137] As Thejane 2012 *PER* 516 puts it "[t]he doctrine is meant to aid in resolving disputes on the existence of an agreement. It firstly acknowledges that the general principle for the formation of valid contracts is that there must be a meeting of the minds of the parties or subjective consensus. Thus, the primary basis of liability in contract law is the expressed will of the parties. It further concedes that there are instances where confusion could arise as to whether there has been a meeting of the minds or not, because one of the parties may have an intention different from that of the other party, but fail to communicate this intention. Its essence is, therefore, that since contractual liability is based on the parties' subjective intention, and since it can be difficult for the one party to read the other's mind, there should, in such instances, be an alternative basis for determining a party's liability. Consequently, where there is dissensus which is not readily apparent, the party that acted contrary to the subjective consensus should be held bound to the apparent agreement. The doctrine thus protects parties who would otherwise not be able to dispute the other contracting party's denial of their 'true' intention, and who would as a result be left destitute. This is because the doctrine refers to the surrounding circumstances to determine the disputing party's intention."

4.5.1 The basis of contractual liability in automated transactions

As mentioned above, the question of the basis of contractual liability is principally concerned with the rationale for the imposition of contractual liability in positive law. It has been established in that regard that the true basis of contractual liability in South African law is *consensus ad idem*, meaning that the minds of the contracting parties must meet in order to create a contract. The aim of the present discussion is to determine the extent to which it is possible to have a meeting of minds in automated transactions. To the extent that the will theory does not adequately explain the basis of contractual liability in automated transactions, the discussion shall proceed further to consider the extent to which the other two theories of contractual liability in South African law can be employed.

4.5.1.1 The mere-tool theory

It is a dominant view in electronic commerce law that an electronic agent is a simple tool of communication,[138] no different, amongst others, from a telephone or a fax machine.[139] The essence of a tool of communication is that it is a mere conduit-pipe or channel for the transmission of the will of its user,[140] meaning for purposes of present considerations that the user of an electronic agent is considered in law to have used it simply "…as a medium of exchange to transmit his will…."[141] This approach is properly known in electronic commerce law as the mere-tool theory.[142]

Since a tool has no independent volition, the inevitable legal consequence of the mere-tool theory is that all the actions or operations of an electronic agent are attributable or attributed to its user. The concept of "attribution" has been explained as follows by Pistorius:[143]

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138 Almajid *The Legal Enforceability of Contracts made by Electronic Agents under Islamic Law* 28; Chopra and White 2009 *Journal of Law, Technology and Policy* 370-371, state that "[m]ost current approaches to the problem of electronic contracting, including legislative solutions … treat artificial agents as 'mere tools of communication' of their principals."

139 Weitzenboeck 2001 *International Journal of Information, Law and Technology* 214.

140 Cross 2003 *International Review of Law, Computers and Technology* 180.

141 Blake and Eymann "The Conclusion of Contracts by Software Agents" 773.

142 Chopra and White 2009 *Journal of Law, Technology and Policy* 370.

143 Pistorius 2002 *SAMLJ* 739.

> Attribution concerns whether an electronic event may be related to a person. To be more specific, in e-commerce, attribution refers to the manner in which one determines whether a data message (electronic communication) originates from a specific person, or machine (for automated communication systems). Attribution deals with whether a data message was actually sent by the person who is indicated as its originator, and with the circumstances in which one may assume that it actually originated from that person.

In automated transactions specifically, attribution is primarily concerned with the issue of "…when … [are] the actions of the electronic agent attributable to the principal?"[144] The ECT Act offers a fairly straight forward answer to that question. In terms of section 25 (c), the ECT Act provides that, unless it is proved that an electronic agent did not properly perform or execute its programming, a data message generated thereby is attributed to the programmer or user thereof. This provision may be interpreted to mean that the person who programmed an electronic agent to operate automatically, or the one for whose cause it was programmed to operate automatically, is ultimately responsible for the data messages generated thereby. This provision is in line with the common law. As one author demonstrates,[145] at common law, the actions of a machine are usually attributed "… to the person who instructed or programmed it to perform a specific function…." The only exception to this rule under the ECT Act is if the electronic agent did not properly execute its programming, *i.e.* if the electronic agent malfunctioned.

If the operations of an electronic agent produce or result in a contract, that contract too is attributed to the user of that electronic agent.[146] This is so because as illustrated above, the electronic agent is a mere conduit-pipe for the expression of the intention or will of its user, wherefore it is said that:

> In such a case [*i.e.* when one adopts the mere-tool theory], one would no longer be able to say that the electronic agent has automatically concluded a contract on behalf of the person in whose interest it has acted. On the contrary, it is the human

144 Pistorius 2008 *JILT* 10.

145 Pistorius 2002 *SAMLJ* 740.

146 See Allen and Widdison 1996 *Harvard Journal of Law and Technology* 46, stating that "[b]y doing so, we would treat the computer as we do a telephone or fax machine. Accordingly, all intentions manifested by, or embodied within, the machine would be regarded as the intentions of the controller. It follows that all transactions entered into by the computer would be treated as transactions entered into by the human trader."

> controller who has concluded the contract through such a means of communication charged with transmitting his will.[147]

Although Allen and Widdison refer to the mere-tool theory as a "fiction,"[148] it is the opinion of the current researcher that this is not entirely true, and that the mere-tool theory has a measure if legal realism in it. That an electronic agent is a mere conduit-pipe for the transmission of the will of its user is based on a perfectly rational basis. As shall be demonstrated below, contracts concluded by electronic agents are properly attributed to users thereof because they already have foreknowledge of the terms of those contracts, and the intention to be bound by those contracts.

To better understand how the programmer or user of an electronic agent is considered to be the originator or author of data messages generated thereby, one needs first to understand the concept of "programming." Before proceeding to define that concept, however, it is important for purposes of a meaningful discussion to offer a brief explanation of the workings of a computer, or any other machine whose functionality is dependent on software for that matter. As illustrated in chapter two,[149] a computer is basically software installed on hardware. Hardware is the peripherals, or the physical components of a computer.[150] For a typical desktop computer, hardware consists of the system unit, together with all input and output devices connected to it.[151] For a vending machine, hardware is the metal cabinet together with all the components found on and inside of it as described in the second chapter of this work. Hardware is useless without software propelling it into action. As Alheit puts it:[152]

> [A] computer must be told how to perform any task and this is done by having the instructions carried by a computer program called the software to the hardware which is the computer itself, referring to the boxes and electronics it contains.

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147 Weitzenboeck 2001 *International Journal of Law, Information and Technology* 214.

148 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 46.

149 See para 2.3.1.3.1 above.

150 See Chaffey, Greasley and Hickie *Business Information Systems* 47; Stair, Reynolds and Chesney *Principles of Business* 70.

151 The system unit is the metal cabinet or box which goes together with the monitor. Examples of input devices include the keyboard and mouse, output devices include the monitor or display screen, printer and speakers, see Chaffey, Greasley and Hickie *Business Information Systems* 54-85; Stair, Reynolds and Chesney *Principles of Business* 70.

152 Alheit *Issues of civil liability* 57.

It shall be recalled that the ECT Act defines an electronic agent *inter alia* to be a computer program,[153] which is another term for software. Although the ECT Act does not define the phrase "computer program," it was illustrated in chapter two that the CA defines the same phrase to mean a series of instructions which when used directly or indirectly "…in a computer, directs its operations to bring about a result."[154]

In what sense does computer software constitute a series of instructions? Computer software is designed and built by IT specialists commonly referred to as programmers. The process of designing and building computer software is correspondingly referred to as programming. The term "programming" has been defined amongst others to mean the process of "…providing instructions to the computer that tell the microprocessor what to do."[155] Amongst the various activities involved in programming, the most relevant for purposes of present considerations entails the programmer making a decision about what the software or program will achieve, and encoding those decisions into a computer readable language.[156] The programmer's decision or intention of what the software will achieve is represented in a form of instructions that will ultimately tell a computer what to do on his or her behalf. The text containing these instructions is commonly referred to as the "source code."[157] The source code is simply a series of zeros and ones.[158] Because a computer cannot read or understand the source code, the programmer must translate it into an "object code."[159] As explained by Erasmus J in the matter of *Haupt t/a Soft Copy v Brewers Marketing Intelligence (Pty) Ltd*:[160]

> The source code of a computer program is a textual description of the program, written in a programming language. The source code is not directly executable by a computer, and must first be converted into an object code which is 'machine readable', either by passing it through a compiler or loading it into an interpreter that translates and executes it one statement at a time.

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153 s 1.
154 See para 2.3.1.3.1 above.
155 Pfaffenberger *Quo's Computer* 423.
156 For a discussion of the various stages of the process of programming, see Pfaffenberger *Quo's Computer* 95.
157 Brill 1998 *Chicago-Kent Law Review* 291-292.
158 See Brill 1998 *Chicago-Kent Law Review* 291-292.
159 Brill 1998 *Chicago-Kent Law Review* 292.
160 *Haupt t/a Soft Copy v Brewers Marketing Intelligence (Pty) Ltd* 2005 1 SA 398 (C) 410G-H.

Once the programmer's instructions have been translated into an object code, they become executable by a computer, and can direct its operations to bring about a result. When a program is run, it causes a computer or machine to perform an action, which action is directed by the programmer's instructions. From the perspective of the law, these instructions are an embodiment of the programmer's will. In the case of electronic agents, these instructions will understandably include *inter alia* the terms on which an electronic agent will conclude agreements with third parties; and the actions or operations that the electronic agent will perform in order to conclude those agreements. It is for this reason that the ECT Act provides in section 20 (c) that:

> [A] party using an electronic agent to form an agreement is … presumed to be bound by the terms of that agreement irrespective of whether that person reviewed the actions of the electronic agent or the terms of the agreement.

The user does not need to review the terms of agreements concluded by his or her electronic agent, or the actions of that electronic agent, because he or she already has foreknowledge thereof. Although the user of an electronic agent may not be its original programmer, he or she is nevertheless presumed to have foreknowledge of the terms of all the agreements that it will conclude because he or she consciously chose to adopt the programmer's instructions as his or her own. This is the basis on which, instances of malfunctions aside, all the contracts concluded by electronic agents are attributed to users thereof. If an electronic agent malfunctions, its operations are not attributed to the user or programmer because such operations are not part of the programmer's or user's instructions.

The programmer's or user's intention to be bound by a contract concluded by his or her electronic agent in such a setting is normally referred to as a "programmed intention."[161] The intention is programmed into the electronic agent in a form of instructions specifying what the electronic agent will do on behalf of the user, *e.g.* to sell or buy specific goods, and it is expressed to third parties when the user of the

[161] See Gringras *The Laws* 41-42; Kerr 2003-2004 *University of Ottawa Law and Technology Journal* 294; Allen and Widdison 1996 *Harvard Journal of Law and Technology* 46; Mik 2013 *JICLT* 174; Dahiyat 2006 *Computer Law and Security Report* 473.

electronic agent holds it out to the world as being ready to trade on his or her behalf.[162]

Therefore, it is possible to have a meeting of minds or a coincidence of wills in automated transactions when one adopts the mere-tool theory. Since an electronic agent is a simple tool for the transmission of the will of its user, there will understandably be a coincidence of wills if an electronic agent forms a contract with a natural person; provided that the electronic agent in issue properly executes its programming, and the natural person with who it is interacting expresses his or her subjective intention in forming the contract. In the case of an automated transaction concluded between electronic agents on both sides, a meeting of minds will arise if in concluding that transaction, both electronic agents properly executed their programming.

4.5.1.1.1 The limitations of the mere-tool theory

The proposition that users of electronic agents already know the terms which their machines will communicate to third parties, and that they already have the requisite intention to be bound with third parties on those terms, works perfectly well in the case of passive electronic agents, *e.g.* automatic vending machines and EDI systems. This is so because as illustrated in chapter two, vending machines and EDI systems are properly conduits for human trading. They are conduits for human trading in the sense that they are capable of operating only within the parameters of their original programming. To illustrate the fact that the mere-tool theory is most proper for passive electronic agents, Dahiyat mentions with reference to vending machines and EDI systems that:[163]

> Since automatic vending machines do not make independent decisions, but only perform pre-determined tasks according to previous programming, and since such machines have no control over the contractual terms and details such as prices, means of payment, and the quantity and the quality of the goods, then the most practical and legally logical option in this instance is to consider that the conclusion of contracts through such machines is the result of a pre-programmed will, and that the owner's intention to accept offers for certain goods at a certain price is embodied in the stored program of such machines.

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162 Mik 2013 *JICLT* 174.

163 Dahiyat 2006 *Computer Law and Security Report* 472-473.

> Another example that fits readily with the above analysis is electronic data interchange systems (EDI), which are used to communicate business transactions between conventional computer systems of different entities according to a standard format specified within trading partner (interchange) agreement signed by such entities prior to the commencement of trading. With EDI, a computer can be programmed to transmit data, send out a purchase order in the case of a depletion of inventory below a certain level, or to accept any order that complies with pre determined criteria. It can be said that such EDI system is designed exclusively and precisely to operate according to the terms and conditions of the trading partner without having the ability to deviate from that agreement or to generate self-created or self-modified instructions. That being the case, one may safely conclude that EDI systems are merely pure tools of communication to transmit messages and extend the reach of users' will. This implies that the requisite intention to be bound in this case is actually generated by human users but transmitted automatically by a computer.

Matters get complicated, however, when electronic agents do not simply execute pre-programmed instructions, but are able to modify those instructions, or create new instructions altogether, as is the case with autonomous electronic agents.[164] In the instance of autonomous electronic agents, there is *consensus* amongst commentators that there is little likelihood of the programmer or user of such an electronic agent ever knowing precisely what the electronic agent will communicate on his or her behalf.[165] As Karnow puts it:[166]

> No one system, and no one systems operator, programmer or user, will know the full context of a networked intelligent program….

If this was to come as a shock, which should not, Sartor is quick to remind us to:[167]

> Note that the difficulty of anticipating the operations of the agent is not a remediable fault, but it is a necessary consequence of the very reason for using an agent: the need to approach complex environments by decentralizing knowledge acquisition, processing and use. If the user could forecast and predetermine the optimal behaviour in every possible circumstance, there would be no need to use an agent (or, at least, an intelligent agent).

Because the user of an autonomous electronic agent is not in a position to predict or anticipate the outcomes of its operations, Sartor concludes that the user is likely to reject or not want contracts which the electronic agent may conclude on his or her

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164 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 27; Hildebrandt2001 http://works.bepress.com/mireille_hildebrandt/35.

165 See Karnow 1996 *Berkeley Technology Law Journal* 154-155; Sartor 2009 *Artificial Intelligence and Law* 278; Hildebrandt2001 http://works.bepress.com/mireille_hildebrandt/35.

166 Karnow 1996 *Berkeley Technology Law Journal* 154-155.

167 See Sartor as quoted by Hildebrandt2001 http://works.bepress.com/mireille_hildebrandt/35.

behalf.[168]Therefore, it is unrealistic to refer to autonomous electronic agents as mere conduit-pipes for the transmission of the will of their users. It is in this regard that the mere-tool theory may be referred to as a legal fiction. In contrast to conduit automation, Kerr refers to the process of contract formation through autonomous electronic agents as "intermediary automation."[169] As he explains it:[170]

> *Intermediary automation* … can be used to generate novel terms and conditions, some or all of which might not have been contemplated by the actual parties to the transaction. The entire point of intermediary automation is to remove the need for one or both parties to be involved in decision-making during the formation of the contract. Instead of involving people, the automation technology is used to transact with consumers or other businesses on their behalf. Consequently, technologies that operate as intermediaries are capable of altering the legal positions of the parties. Like legally authorized agents, the operations of electronic intermediaries can create obligations on the part of those for whom they are acting as intermediaries.

In the case of autonomous electronic agents, the logical conclusion is that agreements are actually generated by electronic agents, not merely through them.[171] It is truly difficult to appreciate how a meeting of minds can occur in such a setting. As mentioned above, the first element of *consensus ad idem* is that the contracting parties must reach a common or mutual understanding of the legal rights and obligations that they wish to create by contract. This was explained above to mean that contracting parties must have a common understanding of the nature of their contract, the subject matter of the contract, and the terms and conditions upon which the contract is concluded. This aspect of *consensus ad idem* creates a unique problem for automated transactions because as Chopra correctly mentions,[172] a party using an autonomous electronic agent to conclude a contract will often be "…unaware of the terms of the particular contract entered into by its artificial agent." Contracting parties can never have a common or mutual understanding of the legal consequences of their agreement in that instance. Bearing in mind the inherently subjective nature of the concept of *consensus ad idem*, it would indeed be an anomaly to talk of any form of "understanding" of contractual rights and obligations

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168 Sartor 2009 *Artificial Intelligence and Law* 278.
169 Kerr 2003-2004 *University of Ottawa Law and Technology Journal* 291.
170 Kerr 2003-2004 *University of Ottawa Law and Technology Journal* 291.
171 Kerr 2001 *Electronic Commerce Research* 188.
172 Chopra 2010 *Communications of the ACM* 39.

on the part of a person who was unaware of the exact terms of a contract at the time of its formation. The veracity of this observation becomes more obvious when an automated transaction is concluded by autonomous electronic agents *inter se*, wherefore Kerr poses the question,[173] "[i]n what sense could it be said that… two devices can reach a meeting of the minds?"

The second element of *consensus ad idem* discussed above is that the parties must act with a serious and a deliberate intention to be bound by the contract, *i.e. animus contrahendi*. As illustrated with reference to the decision of *Bloom v American Swiss Watch Company*,[174] a person who purportedly concludes a contract while ignorant of the exact terms of the promise of the other party acts without the requisite intention to be bound, which renders the purported agreement *void ab initio*. This aspect of *consensus* too creates a problem for automated transactions because as illustrated above, a party using an autonomous electronic agent will often be unaware of the terms of the contract concluded thereby. It is precisely for this reason that Chopra poses the question,[175] if the user of an autonomous electronic agent is unaware of the specific "…contract being concluded, how can the required intention be attributed?"

The last element of *consensus ad idem* is that the parties must be aware of their contract. This element similarly creates a problem for automated transactions because the party using an electronic agent will be unaware of the contract.[176] As Eiselen correctly notes in relation to internet sale transactions:[177]

> Very often an electronic order will automatically be acknowledged by the supplier's system and executed by its plant or shipping department without any person with executive powers actually taking notice of the communication.

It is common cause in other instances that contracts can even be performed by electronic agents without their users' awareness, *e.g.* where a website is

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173 Kerr 1999 *Dalhousie Law Journal* 211.

174 *Bloom v American Swiss Watch Company* 1915 AD 100.

175 Chopra 2010 *Communications of the ACM* 39.

176 Koops, Hildebrandt and Jaquet-Chiffelle 2010 *Minnesota Journal of Law, Science and Technology* 534, stating that "…the human parties that are bound by the contract may not know the exact terms of the contract and often not even be aware of the contract being concluded."

177 Eiselen 2002 *Vindobona Journal of International Commercial Law andArbitration* 310.

programmed to allow customers to download items such as information, music files, movies or digital books after submission of purchase orders. As demonstrated above, there can be no *consensus ad idem* between contracting parties if one or both of them are not aware of the contract.

The foregoing observations suffice to highlight the inadequacy of the will theory in relation to automated transactions concluded by autonomous electronic agents; wherefore one is forced to ask, if not *consensus ad idem*, what then is the basis of contractual liability in automated transactions concluded by autonomous electronic agents? Having exposed the limitations of the will theory, the following discussion will consider the extent to which the other two theories of contractual liability in South African law, namely the declaration theory and the reliance theory, can be employed to rationalise the imposition of contractual liability in instances of transactions concluded by autonomous electronic agents.

4.5.1.2 A solution via the declaration and reliance theory

It has been suggested that the validity of automated transactions concluded by autonomous electronic agents can be sustained on the basis of the objective theory of contract formation.[178]In South African law, the objective theory of contract entails both the declaration theory and the reliance theory. As shall be recalled, the declaration theory is premised on the view that, in determining the issue whether or not contracting parties have reached agreement, the law relies on the external manifestation of the minds of the contracting parties, as opposed to the inner working of their minds.[179] Therefore, notwithstanding that there is no meeting of minds from the perspective of the will theory; a court applying the declaring theory will nevertheless hold that a contract has been formed if there is an appearance of a meeting of minds from the expressed or declared intentions of the contracting parties. For instance, if Mr A offers to sell an item for R100 and Mr B declares his

[178] Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 417; Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5; Mik 2013 *JICLT* 174.

[179] *South African Railways & Harbours v National Bank of South Africa Ltd* 1924 AD 704 715.

acceptance of that offer, a contract of sale will arise on the agreed terms even if Mr A intended to sell for R1000, and Mr B intended to purchase, but at R50.[180]

Extending the declaration theory to automated transactions, the data messages and operations of an autonomous electronic agent will be regarded as a manifestation or declaration of the mind of its user to third parties. It does not matter for purposes of contractual liability that those data messages and operations do not match or reflect the inner will of the user. This is so because as illustrated above, it is the manifestation of the will, and not the unexpressed will, which is important for purposes of contractual liability. Consequently, the unpredictable, unanticipated and unforeseeable data messages and operations of an autonomous electronic agent will result in a valid contract as long as they produce an appearance of a meeting of minds or a coincidence of wills between the user and a third party. A court shall assume in that instance that the minds of the user of an autonomous electronic agent and a third party have met, consequently that they have contracted in accordance with the record of their agreement.

In legal commentary on the current issue, however, by objective theory is specifically referred to the reliance theory,[181] not to the declaration theory as such. As shall be recalled,[182] the decisive question under the reliance theory is whether:

> …the party whose actual intention did not conform to the common intention expressed, lead the other party, as a reasonable man, to believe that his declared intention represented his actual intention?[183]

As was illustrated above,[184] all the circumstances of a case must be taken into account in deciding the issue whether or not a reasonable man in the position of the contract-assertor would have been misled into believing that the declared intention of the contract-denier represents his or her actual intention. If a reasonable man would believe that the contract-denier was assenting to the terms proposed by the

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180 Van der Merwe *et al Contract* 32.

181 See Weitzenboeck 2001 *International Journal of Law and Information Technology* 222-223; Mik 2013 *JICLT* 174; Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 416-417; Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5.

182 See para 4.4.3 above.

183 *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis* 239I.

184 See para 4.4.3 above.

contract-assertor, a valid contract will be found to have been concluded between them, and *vice-versa*.

It has been argued that the law must protect the reasonable reliance of third parties who conclude agreements under the impression that the users of autonomous electronic agents have agreed to be bound by the terms stated or accepted by their electronic agents.[185] According the proponents of this solution, the use of an autonomous electronic agent for contract formation must be interpreted as a conduct of assent to the formation of automated transactions,[186] especially if third parties reasonably rely on such conduct to conclude agreements with the electronic agent. According to Dahiyat,[187] this solution is premised:

> …on the general principle according to which whoever operates a device that has the ability to create both trust and reliance in the minds of others, is committed himself to be legally bound by any generated consequences….

The proponents maintain furthermore that,[188] what is important, for purposes of imposing contractual liability, is the fact that a third party has reasonably relied on the declarations or activities of an electronic agent to conclude a contract. The subjective intention of the user of the electronic agent is wholly unimportant and irrelevant to the issue, meaning that he or she will be bound by the declarations and activities of the electronic agent "…even though he [or she] may subjectively intend otherwise."[189] Not only that, even the inner workings of the electronic agent, *i.e.* whether it operates passively or autonomously, are said to be irrelevant to the issue

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185 Mik 2013 *JICLT* 174; Dodd and Hernandez 1998 *Computer Law Review and Technology Journal* 5.

186 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 417; Nimmer 2007 *Journal of Contract law* 17, stating that "[o]ne could reach the result of giving legal efficacy to electronic agents by focusing on the fact that the party represented by the automated system made an initial decision to use the electronic agent on its behalf. This could create a form of indirect assent. A company that creates or uses an entirely automated system creates objective indicia of an intent to be bound by the system."

187 Dahiyat 2006 *Computer Law and Security Report* 473.

188 See Dahiyat 2006 *Computer Law and Security Report* 473; Weitzenboeck 2001 *International Journal of Law and Information Technology* 221; Kerr 1999 *Dalhousie Law Journal* 212.

189 Dahiyat 2006 *Computer Law and Security Report* 473.

whether or not its user is bound by its declarations and activities.[190]As Kerr puts it:[191]

> ...the actual internal workings of the electronic device and the question about whether such a device could ever form an actual intent to enter into an agreement (rather than merely communicating a representation that there exists mutual concordance) is unimportant or irrelevant.

There overall legal effect of a solution based on the reliance theory of contract is neatly summarised as follows by one author:[192]

> If one applies the objective test, then a court would not be interested in any psychological or inner state of mind but in the outward significance of the contractual statements that were made. It would apply the test of how a reasonable man in the shoes of the other contracting party would have interpreted the contractual statements made by the electronic agent, to see if they amounted either to a firm offer or an acceptance (depending on whether the offer was made by the agent or by the other party). It would thus seem that the actual internal workings of the intelligent agent and questions as to whether this could have formed an intent to enter into an agreement are irrelevant. What is relevant is whether a reasonable man would believe that assent to the terms proposed was being manifested by the other party.

One must applaud all such endeavours which attempt to explain the validity of automated transactions concluded by autonomous electronic agents with reference to well established theories of contractual liability. On proper interpretation, however, it is fairly obvious that a solution based on the objective theory of contract is still deeply rooted on the rule of attribution. The communications and operations of an autonomous electronic agent are still considered to originate from the user thereof, not from the electronic agent *per se*. This is problematic for lack of realism. The declaration and reliance theory proceed on the assumption that the declaration or conduct inducing a contract is that of a person who is sought to be held liable, not of an independent third party or entity.[193] As illustrated above, unless one

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190 Weitzenboeck 2001 *International Journal of Law and Information Technology* 221; Kerr 1999 *Dalhousie Law Journal* 212.

191 Kerr 1999 *Dalhousie Law Journal* 212.

192 Weitzenboeck 2001 *International Journal of Law and Information Technology* 221.

193 Chopra and White 2009 *Journal of Law, Technology and Policy* 379, stating that "[t]he objective theory refers to the relationship between actions and intentions of a single actor: if those actions are such as conventionally to express a particular intention, that intention will be attributed to an actor employing those actions even if on a particular occasion the actor does not have those intentions. In order to explain contracts entered into by artificial agents, the theory seeks to provide a doctrinal bridge between the actions of the agent in manifesting assent, and the

adopts a purely fictional stance, the operations of an autonomous electronic agent cannot be said to originate from the will of the user thereof. It remains a worrying factor that the advocates of the objective approach, consciously or otherwise, choose to ignore the accountability gap introduced by autonomous electronic agents. The application of the attribution rule here is unrealistic because the communications in issue arise from the independent volition of an electronic agent. One author argues, however, that the autonomy of electronic agents must be attributed to users because it too is part of the programming,[194] meaning that electronic agents do not self-acquire their autonomy. That this is true remains beyond dispute, yet it does not appeal to one as commercially reasonable and sensible to attribute all the unpredictable, unexpected and unforeseeable communications of an electronic agent to the user simply because the electronic agent was programmed to act in that manner. It would indeed be a sad day for the commercial world if a man's estate was all of a sudden allowed to be bound in such a random manner.

Another important issue is whether a reasonable man would ever believe that the user of an autonomous electronic agent intends to be bound by its data messages and operations indiscriminately? Chopra and White,[195] with who the current researcher is in full agreement, argue that at most, a reasonable man might believe that the user of an autonomous electronic agent, "…if she turned her mind to the contract in question, would agree to it." Kerr similarly makes the point that:[196]

> …where an offer can be said to be initiated by the electronic device autonomously, i.e., in a manner unknown or unpredicted by the party employing the electronic device. Here it cannot be said that the party employing the electronic device has conducted himself such that a reasonable person would believe that he was assenting to the terms proposed by the other party.

(presumed) intention of the principal referred to by those actions; it seeks to link the intentions of the principal with the actions of the agent. But unlike in the case of a single actor, in the artificial agent case the principal will never, or almost never, have a specific intention referable to a particular contract. The objective theory therefore is quite different in kind when deployed in this kind of instance."

194 Mik 2013 *JICLT* 173.

195 Chopra and White 2009 *Journal of Law, Technology and Policy* 379.

196 Kerr 1999 *Dalhousie Law Journal* 213.

It is clear from the foregoing discussion that neither the declaration theory nor the reliance theory provides a satisfactory solution to the problem of the current discussion.

4.5.1.3 The risk theory

Seeing that resort to theories of contract law fails us, it has been suggested that the matter is best approached from the perspective of the allocation of risk.[197] In South African law, the risk theory has been explained as follows by one author:[198]

> Where a party chooses a specific method of communication or a messenger, or an intermediary, for the communication of his offer to the other party and such offer becomes distorted or garbled in its transmission, so that the offer is communicated to the other party incorrectly, in spite of the absence of fault on the part of the first party, *he* must bear the loss on the basis that he bears the risk of using that method of communication or a messenger or intermediary. The same applies to communication of acceptance.

This explanation is clearly concerned with the allocation of risk for incorrect transmissions, and does not offer much assistance for purposes of present considerations. What is easily gatherable from that explanation, however, is that the risk associated or inherent in a tool of communication lies with the party who chose to communicate his or her intention through that tool. For purposes of present considerations, the risk theory may be interpreted to mean that the risk of unintended, unexpected, unpredictable or unforeseeable communications of an autonomous electronic agent must lie with the user of that electronic agent. He or she must bear the risks of unpredictable, unexpected and unforeseeable actions of his or her electronic agent because he or she has consciously chosen to use it.

Although apparently fair in principle, the risk theory has never been recognised as an alternative basis of contractual liability in South Africa.[199]Therefore, it is truly

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197 See Chopra and White 2009 *Journal of Law, Technology and Policy* 379, referring to the allocation of risk in the sense of the least-cost avoider rule as discussed in the previous chapter.

198 Steyn *A Critical Appraisal of the Decision in Sonap v Pappadogianis* 33.

199 See Steyn *A Critical Appraisal of the Decision in Sonap v Pappadogianis*33, explaining that "…in *Saambou Nasionale-Bouvereniging v Friedman*, Jansen JA, having raised the question whether fault was required for the application of the reliance theory, considered whether the risk principle applied in South African law. The learned judge of appeal was not conclusive on this aspect, and we may well ask ourselves whether…we are in a better position to determine whether the risk principle should apply in our law."

doubtful whether it can ever be accepted by courts of law as a basis of contractual liability in automated transactions. This doubt is justified by the observation of one author that,[200] in South Africa, the risk theory is so poorly developed that it "… simply cannot stand independently as contractual basis…."At most, in instances where the risk is allocated to a party for the miscommunications of his or her tool of communication; such does not *ipso facto* warrant enforcement of a contract against that party. As Kerr explains:[201]

> …what is the nature of the risk undertaken? Is it, on the one hand, the risk of making good useless expenditure by one party, and/or the loss of profit for the period during which the other party, relying on the erroneous communication, is inactive or unable to make other arrangements? Or is it, on the other hand, the risk of being held to have entered into a contract…? It is thought that the risk of being held to a contract is too great a burden to place on anyone…it is suggested that South African courts should hold that in such circumstances there is no contract, but that the party who chose or authorised or indicated the method of communication in question should make good any useless expenditure by the other party and/ or any loss of profit for the period during which the other party, relying on the erroneous communication, is inactive or unable to make other arrangements.

Therefore, it is clear that the application of the principles of the allocation of risk would in most instances result in an award of damages against users of autonomous electronic agents. In the opinion of the current researcher, such a state would amount to no more than an ingenious way of denouncing the validity and enforceability of automated transactions.

4.5.1.4 A recommendation for the development of South African law: the agency approach

As a matter of fact, electronic commerce law does not equate electronic agents with human agents.[202] To avoid any confusion in this regard, some electronic commerce law instruments avoid use of the phrase "electronic agent," which they substitute with the phrase "automated message system."[203] This does not, however, mean that the principles of the law of agency are wholly irrelevant to autonomous electronic

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200 Pretorious 2011 http://www.saflii.org/za/journals/DEJURE/2011/13.html.

201 Kerr *The Principles of the Law* 38-39.

202 See UN *United Nations Convention on the Use of Electronic Communications* para 212.

203 See for instance the UNECIC. It is clear, however, from the definition of an automated message system in art 4(g) that it is one and the same with an electronic agent.

agents. In both electronic commerce legislation and academic commentary, there is already a growing recognition that autonomous electronic agents very much mimic the crucial aspects of human agency,[204] therefore that in instances where application of the theories of contract law fails us, resort may be had to a modified version of the common law of agency. For instance, having expressed the view that the law considers electronic agents to be capable of acting strictly within the confines of their original programming, UNCITRAL continues that through the innovations of technology, electronic agents may possess autonomy,[205] and that legal issues relevant to agency that may "…arise in that context are to be settled under rules outside the Convention."[206]

It is submitted that, seeing the limitations of the common law theories to rationalise the basis of contractual liability in automated transactions, particularly those concluded by autonomous electronic agents, the best approach may be to modify and extend the common law of agency to those transactions. In this way, the risk for unpredicted, unexpected and unforeseeable offers and acceptances generated by autonomous electronic agents will be treated with reference to settled principles of the law of agency such as express authority, implied authority, agency by estoppel, ratification *etc*. At this stage, one shall not delve deep into this issue as it is more properly a subject of the next chapter. It suffices to mention in conclusion that the application of the law of agency would assist in the solution of the present issue by holding that automated transactions are concluded through the expression of the will or intention of the electronic agent, not its user. The user would nevertheless be liable for those contracts on the basis that he or she has authorised the electronic agent to conclude them.

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204 See generally Fischer 1996-1997 *Indiana Law Journal* 545-570; Cross 2003 *International Review of Law, Computers and Technology* 175-189; Chopra and White 2009 *Journal of Law, Technology and Policy* 363-403; Wettig and Zehendner 2004 *Artificial Intelligence and Law* 111-135, offering an impressive and comparative analysis of the similarities between human and electronic agents.

205 UN *United Nations Convention on the Use of Electronic Communications* para 211.

206 UN *United Nations Convention on the Use of Electronic Communications* para 213.

4.5.2 The analysis of offer and acceptance in automated transactions

Having dealt above with the issue of the basis of contractual liability in automated transactions, a turn shall be made at this point to analyse automated transactions in terms of offer and acceptance. Concerning the requirement of an offer, the discussion will concentrate mainly on the issue whether proposals made through electronic agents are offers or invitations to treat? This question shall be discussed in the context of passive electronic agents and autonomous electronic agents respectively. Concerning the requirement of acceptance, the discussion will concentrate mainly on the issue whether an automated reply is a valid acceptance for purposes of contract formation, or whether it is a mere acknowledgement of receipt?

4.5.2.1 Offers and invitations to treat

4.5.2.1.1 Advertisements of goods for sale via automatic vending machines

When the user of an electronic agent, in this case an automatic vending machine, holds it out to the public for purposes of concluding sale agreements, does he or she make a firm offer or an invitation to treat? As a starting point in the discussion of the issue, one cannot help but note that in light of the type of items usually traded through vending machines, being mainly munchies, and in light of the monetary value of sales involving such items, the discussion of contract formation in instances of vending machines *prima facie* appears to be exclusively for academic delight. Indeed the legal aspects of these transactions are doomed to remain outside the pages of law reports in perpetuity by reason of their *de minimis* nature.[207] However, the discussion of the issue is unavoidable in this work for purposes of highlighting the difficulties inherent in the analysis of offer and acceptance in automated transactions facilitated by passive and autonomous electronic agents.

[207] Pretorious 2010 *Obitor* 524, noting that despite the prevalence of transactions made through vending machines, these transactions are rarely a matter of judicial scrutiny, and therefore that their discussion is purely for conceptual viewpoint.

It has been suggested that the holding out of a vending machine as being ready to sell to the public constitutes a firm offer,[208] rather than an invitation to treat. As explained by Christie:[209]

> In contrast to the usual situation when goods are displayed for sale in a shop, the controller of the machine must be taken to be making the offer because he has put it out of his power to exercise any choice in the conclusion of the contract, and the customer accepts by his conduct in inserting his coin or doing whatever else the writing on the machine invites him to do.

Although in passing, Kahn similarly mentions that a person who inserts a coin into an automatic vending machine manifests an unequivocal intention to accept by conduct.[210] Reasoning by reverse analogy, if the person who inserts a coin into a vending machine to purchase an item makes an unequivocal acceptance by conduct, it logically follows that the one who installed that machine must be construed to have made a firm offer. This conclusion finds support in recognition of the fact that in comparison to invitations to treat, a person who installs a vending machine filled with stocks does not indicate an intention for further negotiations with prospective buyers. Neither can he or she be said to indicate an intention to turn down anyone who approaches the machine to purchase an item, even his or her worst rivals and trade competitors at that. These facts, it may be argued, are enough evidence of a conduct reflective of a firm offer than an invitation to treat.

Bearing in mind the rationale behind the doctrine of invitation to treat, which is to protect a trader from being inundated with purchase orders he would not be able to perform if he was legally enjoined to serve every customer who wished to purchase the advertised product despite his having ran out of stock, it is not immediately clear why the installation of a vending machine must not be construed to constitute an invitation to treat. A vending machine is admittedly very small, and contains a very limited supply of goods. This fact, it is submitted, is indicative of the fact that the sale of goods *via* such machines is more of an invitation to treat than a firm offer. In the very least, the conduct of the user of the vending machine can be construed as a firm offer made subject to the availability of stock. It is submitted that when a

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208 See Unger 1953 *Modern Law Review* 371; Pretorious 2010 *Obitor* 524.
209 See Christie as quoted by Pretorious 2010 *Obitor* 524 at footnote 49.
210 Kahn 1955 *SALJ* 252.

trader stocks his or her vending machine with a certain number of items, he or she is impliedly offering to serve anyone who wishes to purchase any of those items, *albeit* subject to the availability of stock. A term as to the availability of stock must be implied into the conduct of the trader firstly because of the size or limited stocking space of the vending machine. No one person, it is submitted, can ever have a reasonable and enforceable expectation of finding a product usually sold by a local vending machine every time he or she needs it. Secondly, it is common cause that when a vending machine has run out of stock for a specific product, it will automatically reject and return any payment tendered in purchase of that product. Therefore, it is not proper to classify the offering of goods through a vending machine as a firm and unconditional offer. In the opinion of the current researcher, the best approach is to treat proposals made through vending machines as firm offers made subject to the availability of stock.

From comparative jurisprudence, it is gratifying to note that in German law, a vendor who offers goods through a vending machine makes a firm offer subject to the availability of stock.[211] A term concerning the availability of stock is usually implied by law into the conduct of the vendor through the principle of offers *in incertam personam*.[212] Therefore, German law considers declarations made through vending machines as offers made subject to the availability of stock;[213] wherefore it is said in that jurisdiction that a trader who installs a vending machine implicitly "delivers an offer to anyone, provided … there is an availability of goods."[214] It is recommended that South African law on the issue must be modified to the same effect in order to avoid the harsh consequences of classifying the display of goods in vending machines as firm and unconditional offers.

4.5.2.1.2 Advertisements of goods for sale on commercial websites

More than automatic vending machines, most automated transactions today are being concluded online through websites. Known as electronic storefronts, these

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211 See Wetting and Zehendner 2004 *Artificial Intelligence and Law* 121.
212 For a detailed definition of this principle, see Otto *Germany and South Africa* 36–37.
213 Liegl *et al* "Germany" 395.
214 Wetting and Zehendner 2004 *Artificial Intelligence and Law* 121.

websites have greatly simplified commerce for both online vendors and their customers. For online vendors, commercial websites mitigate the costs of office space which would have to be incurred if the business operated a bricks-and-mortar store. There is also the benefit of internationality, which means that the electronic storefront can be accessed by anyone around the globe with access to the internet. To online buyers, electronic storefronts simplify the task of comparing prices in that a buyer can browse from one website to another. Moreover, electronic storefronts present online buyers with the benefit on going on shopping sprees in the comfort of their own homes.

Although some electronic storefronts are passive, meaning that the sale of goods on these websites is facilitated by the human employees of the concerned companies, many electronic storefronts today are automated. Automated electronic storefronts are usually installed with software capable of guiding buyers through the process of selecting and purchasing the goods advertised on the website.[215] The software is also capable of processing purchase orders once received, and of sending out replies or responses to the e-mail addresses of successful purchasers. Therefore, contracts concluded through automated electronic storefronts are properly classified under the genre of automated transactions.[216]

The aim in this part of the chapter is to discuss and critically analyse the classification of website advertisements into firm offers and invitations to treat. For purposes of a meaningful discussion, it is important to commence the analysis with a review of the international legal framework.

4.5.2.1.2.1 The international legal framework: *The United Nations Convention on the Use of Electronic Communications in International Contracts* (2007)

At the international level, electronic commerce is regulated by the *United Nations Convention on the Use of Electronic Communications in International*

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215 For discussion of the various software used to automate electronic storefronts, and the functions of each software, see Bothma *E-commerce* 184-190; Sasso 2016 *Pravo. Zhurnal Vysshey shkoly ekonomiki* 208, mentioning that at times trading websites operate in an automated manner like automated vending machines.

216 Pistorius 2008 *JILT* 2.

Contracts(2007) (hereinafter referred to as the UNECIC). Concerning the issue at hand, the applicable provision of the UNECIC is article 11, which states that:

> A proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties, but is generally accessible to parties making use of information systems, including proposals that make use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance.

As is readily clear, the purpose of this provision is to clarify the issue whether the advertisement of goods for sale through open and accessible communication systems, including electronic storefronts, are firm offers or invitations to treat.[217] In discussing article 11, it is important first of all to note the scope of application of that provision. Its scope of application is clearly defined by the following points; the first point being that it applies to all proposals to conclude a contract "made through one or more electronic communications." An "electronic communication" is defined in the UNECIC to mean any communication made by means of data messages.[218] A data message is defined wide enough to mean:

> …information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange, electronic mail, telegram, telex or telecopy.[219]

Therefore, article 11 applies to a proposal made through all electronic means.[220] The reference to EDI in the definition of a data message indicates also that automated transactions are covered by article 11. The second point defining the scope of application of article 11 is that the proposal must be addressed, not to one or more specific people, but to the general public. A determining factor in that regard, it is submitted, is certainty in the identification of the parties to whom a proposal is

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217 See UN *United Nations Convention on the Use of Electronic Communications* para 65.

218 art 4(b).

219 art 4(c). See also art 2(a) of the UNCITRAL Model Law.

220 See UN *United Nations Convention on the Use of Electronic Communications* para 95, stating that "[t]he definition of 'data message' focuses on the information itself, rather than on the form of its transmission. Thus, for the purposes of the Electronic Communications Convention it is irrelevant whether data messages are communicated electronically from computer to computer, or whether data messages are communicated by means that do not involve telecommunications systems, for example, magnetic disks containing data messages delivered to the addressee by courier."

addressed. Their number notwithstanding, they may be more than a million people, if ever they are "specific," meaning clearly identifiable, the vendor will *prima facie* be taken to have made a firm offer. The third point defining the scope of article 11 is that the proposal in issue must be generally accessible by parties using information systems. An "information system" is defined as a system for "…generating, sending, receiving, storing or … processing data messages."[221] This definition is admittedly broad enough to include any tool of communication which can perform any or all of the listed functions.[222] In electronic communications, "accessibility," has been defined to mean that "…information in the form of computer data should be readable and interpretable."[223] In the context of article 11, however, even before going into issues of readability and interpretability, it is submitted that the term "accessibility" must be interpreted to mean that the proposal, for lack of a better term, must be reachable or attainable by anyone who desires to read and interpret it. The effect of the third point, and so it would seem, is that a proposal which is made to the general public but which is nevertheless inaccessible by people using information systems, is not covered by article 11.

If a proposal satisfies all the three requirements discussed above, the rule of thumb is that such is not a firm offer but an invitation to treat. This is so even for proposals made through "interactive applications for the placement of orders," which clearly refers to automated commercial websites such as those frequently used by online traders.[224] Article 11 is motivated by two main considerations, being media neutrality

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221 art 4(f).

222 See UN *United Nations Convention on the Use of Electronic Communications* para 101 mentioneing that "[t]he definition of 'information system' is intended to cover the entire range of technical means used for transmitting, receiving and storing information. For example, depending on the factual situation, the notion of 'information system' could refer to a communications network, and in other instances could include an electronic mailbox or even a telecopier." See also UN *UNCITRAL Model Law* para 40.

223 UN *United Nations Convention on the Use of Electronic Communications* para 149.

224 As a matter of fact, the original draft provision to art 11 explicitly referred to websites. This draft provision stated that "[a] proposal for concluding a contract which is not addressed to one or more specific persons, but is generally accessible to persons making use of information systems, such as the offer of goods and services through an 'Internet web site,' is to be considered merely as an invitation to make offers, unless it indicates the intention of the offeror to be bound in case of acceptance." Although the final provision, *i.e.* art 11, makes no reference to internet websites, it is not in dispute that the expression "interactive applications," includes automated websites. This is so because, in actual fact, most online traders today use automated websites to conclude agreements.

and the desire to match the UNECIC with *the United Nations Convention for International Sale of Goods* (1980) (hereafter the CISG), being its counterpart in international sale contracts. Regarding media neutrality, UNICTRAL notes that in a paper-based environment, proposals to the general public, including newspaper advertisements, radio, television, price lists, catalogues and shop displays are considered in many jurisdictions to be invitations to treat.[225] UNCITRAL felt that, in pursuance of the principle of media neutrality, electronic advertisements made to the general public too must be treated in exactly the same way as their counter-parts in the paper-based environment.[226] In relation to the CISG, it must be noted that the CISG itself provides that a proposal made to the general public is not an offer but an invitation to treat.[227] It was very important for UNCITRAL to align the two conventions because the UNECIC is expressly stated to apply even to contracts concluded subject to the CISG.[228] It, therefore, would have been untenable if the two conventions crossed each other on the issue.

Article 11 has come under severe attack from academic commentators. It has been argued that it unjustifiably presumes that trading websites in themselves constitute advertisements, and that advertisements are generally invitations to treat.[229] It is said further that there is no presumption in law that advertisements are invitations to treat.[230] The distinction between offers and invitations to treat, it has been suggested, is usually a matter dependent on specific words used in the proposal.[231] In the opinion of the current researcher, however, these criticisms are undeserving. Article 11 has been drafted with utmost ingenuity. While it may be unjustifiable for the provision to proceed on a presumption that website advertisements are invitations to treat, one should not, however, lose sight of the qualification at the

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225 UN *United Nations Convention on the Use of Electronic Communications* para198.

226 UN *United Nations Convention on the Use of Electronic Communications* para 199.

227 art 14(2) of the CISG. Quoted in full, art 14 provides that "(1) A proposal for concluding a contract addressed to one or more specific persons constitutes an offer if it is sufficiently definite and indicates the intention of the offeror to be bound in case of acceptance. A proposal is sufficiently definite if it indicates the goods and expressly or implicitly fixes or makes provision for determining the quantity and the price. (2) A proposal other than one addressed to one or more specific persons is to be considered merely as an invitation to make offers, unless the contrary is clearly indicated by the person making the proposal."

228 See art 20(1) of the UNECIC.

229 Mik 2010 *Research Collection School of Law* 8; Mik 2013 *JICLT* 170.

230 Mik 2013 *JICLT* 170.

231 Mik 2013 *JICLT* 171; Mik 2010 *Research Collection School of Law* 10.

end of that provision. The qualification to the rule of thumb that a website advertisement is an invitation to treat is that such will nevertheless be held to constitute a firm offer if it clearly indicates the "…intention of the party making the proposal to be bound in case of acceptance." Read as a whole, it is apparently clear that article 11 does not discard the relevance of intention in determining whether a website advertisement is an offer or an invitation to treat. As one author mentions,[232] in practice, it will turn on the "…wording and construction of the website…" whether it is a firm offer or an invitation to treat.

4.5.2.1.2.2 The South African legal framework for the classification of advertisements for sale of goods on commercial websites

In contrast to the UNECIC, the ECT Act is silent on the question whether proposals made on commercial websites are firm offers or invitations to treat. To the extent of its silence on the matter, the ECT Act may be said to be out of step with the prevailing international legal framework. Not only that, it is already clear that if a provision similar to article 11 of the UNECIC is not included by amendment in the ECT Act, South Africa is also going to fall out of step with the regional legal framework. As contained in the *Southern African Development Community Model Law on Electronic Transactions and Electronic Commerce* (hereafter referred to as the SADC Model Law), the regional framework on the issue follows in the footsteps of the UNECIC.[233] In light of these disparities, some may feel that the ECT Act must be amended to include a similar provision. In the opinion of the current researcher, however, such an amendment is unnecessary. The South African law of contract is advanced and flexible enough to solve the issue with less difficulty. Instead of criticism, it is in the opinion of the current researcher that the silence of the ECT Act on the matter deserves credit for the sole reason that it leaves the issue purely in

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232 Eiselen 2007 *PER* para 7.

233 In art 10(2), the SADC Model Law provides, similar to art 11 of the UNECIC, that "[a] proposal to conclude a contract made through one or more electronic communications, which is not addressed to one or more specific parties but is generally accessible to parties making use of information systems (including proposals that make use of interactive applications for the placement of orders through such information systems) is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance."

the hands of a judge to determine in light of individual facts placed before him or her.

The issue of the present discussion has attracted very little attention amongst South African scholars in electronic commerce law. A few commentators who have taken the opportunity to cast thoughts on it seem to embrace a neutral view, thus avoiding a hard and fast rule. Having mentioned as a general matter that South African law regards advertisements as invitations to treat, one author mentions that:[234]

> It is trite law that a valid offer may be made to interminable persons by advertisement or other methods and that a valid contract will be formed with anybody who accepts the offer in the predetermined manner … A commercial web site usually serves both as 'shop displays' and 'selling shops' and they fuse advertising with selling … An advertisement or digital image of products for sale on a web site is generally directed 'to the world' and may, depending on its wording constitute an offer.

On the other hand, another author has expressed the view that:[235]

> It should also be noted that an advertisement does not generally constitute an offer; it merely amounts to an invitation to do business (*Crawley v. Rex* 1909 TS 1105). Note however that an advertisement may depending on its wording qualify as an offer (*Carlill v. Carbolic Smoke Ball Company* [1893] 1 QB 256 (CA); Pistorius, 1999, p 286). This might be a grey area especially when dealing with website based advertisements and advertisements by electronic mail.

With respect to the second author, it is not clear why website advertisements should be said to be a grey area. It is submitted with little doubt on it that South African courts are more likely to follow, or at least to proceed from the general rule laid down in *Crawley v Rex* that advertisements are invitations to treat.[236] This has already been suggested to be so by the South African Consumer Goods and Services Ombudsman in *Price on Webstore*.[237] In the matter for decision before that tribunal, the complainant came across a website offering a coffee machine at the price of R655.00. Having purchased the coffee machine, the complainant later on returned to the same website and purchased goods to the value of R10 530.00. Unfortunately, the website in issue was not meant to be accessible to the general public, as it was

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234 Pistorious 1999 *SAMLJ* 286.
235 Snail 2008 http://go.warwick.ac.uk/jilt/2008_2/snail.
236 *Crawley v Rex* 1909 TS 1105.
237 *Price on Webstore* (201502-0086) [2015] ZACGSO 1 (11 May 2015).

for illustrative purposes only, and the trader never intended to be bound by the specials posted thereon. Wherefore, the trader refused to perform the agreement. Although the matter was decided with reference to the principles of the law of mistake,[238] the Ombudsman nevertheless noted that:

> In the case of *Crawley v Rex* 1909 TS 1105, a shopkeeper advertised on a placard outside his shop a particular brand of tobacco at a cheap price to attract the public. The court held that the advertisement did not constitute a binding offer that a customer could accept but was merely an announcement of the shopkeeper's intention to sell at the advertised price (this is known as an invitation to treat (do business)). The court was swayed by a concern that if a shopkeeper had sold out of the goods, thousands of customers may nevertheless hold him to the offer.
>
> Some South African writers suggest that the same rules apply to ecommerce transactions, namely that the website owner is merely inviting offers from members of the public and it is the customer who makes the offer. According to Van der Merwe and Janse van Vuuren:
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> 'The contract will be concluded when such [internet] order is received and accepted. The acceptance of the order will often be manifested merely by the dispatch of the goods to the purchaser. No legal relationship exists between the parties before the acceptance, and an offer may be revoked at any time before then.'
>
> On this analysis, if a website owner made a mistake regarding price, it would not be binding- the website owner needs only to refuse the offer.

Indeed South African courts are most likely to follow the decision of *Crawley v Rex* because the same concerns which were mentioned as motivation for that decision are equally relevant to online sales. The online trader equally stands the risk of being inundated with purchase orders that he or she will not be able to fulfil if ever his or her website advertisements are held to constitute firm offers. This risk, it is submitted, is even higher in online sales than in traditional sales. The risk is made higher in online sales because of the internationality of the internet. While the store of a traditional trader who advertises a special will be flocked mostly by people within the trader's geographical location, an online store can be reached by anyone across the globe.

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238 The Ombudsman found that "…the discrepancy between the actual price or the price that a reasonable consumer might expect the price to be and the advertised price was so large that a reasonable consumer would have realised there was an error and not have been misled."

4.5.2.1.2.3 A critical analysis of the South African legal framework for the classification of website advertisements

The main difficulty with the UNECIC and the South African legal framework is that they do not draw and distinction between passive and automated commercial websites. As mentioned above, when goods are advertised on a passive website, contracts of sale for those items are concluded by the human employees of the concerned online vendor. Consequently, advertisements of goods on passive websites are admittedly on the same footing with advertisements of goods in newspapers, catalogues or billboards.[239] Following the general rule of South African law, advertisements of goods for sale on such websites are *prima facie* invitations to treat.

The question whether advertisements on interactive or automated websites constitute firm offers or invitations to treat is very problematic in law. As a matter of fact, interactive websites appear to satisfy the requirements of both a firm offer and an invitation to treat. Regarding their ability to conclude sale agreements with online buyers, interactive websites reflect compelling similarities with self-service stores.[240] Just as is the norm in self-service stores, these websites allow prospective buyers to browse the catalogue for goods available with the trader, to electronically select the desired products into the shopping basket, and to pay for the goods by entering credit card details. Although no South African case has been decided on the issue, it is highly probable that South African courts will follow the English law rule that the conduct of a self-service store is not an offer but an invitation to treat.[241] Seeing the similarities between automated electronic storefronts and traditional self-service stores, argument can be made that advertisements of goods for sale on automated commercial websites constitute invitations to treat.

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239 UN *United Nations Convention on the Use of Electronic Communications* para 202, stating that "[i]f a website only offers information about a company and its products and any contact with potential customers lies outside the electronic medium, there would be little difference from a conventional advertisement."

240 Kadir 2013 *International Journal of Law and Management* 47-48.

241 *Pharmaceutical Society of Great Britain v Watkinson* 1931 (3) K.B. 323.

Advertisements of goods for sale on automated websites can also be interpreted as tacit offers. Common examples of tacit offers include offers made via slot machines, and the offering of bus and railway passenger services.[242] A tacit offer is a conduct indicating, clearly and unequivocally, an intention to be bound.[243] Such a conduct must be open to no other interpretation than that the offoree acted with the intention to be bound in contract.[244] It is submitted that when a business conducts trade through an automated website, it creates by conduct an impression that it is willing to be bound in contract with anyone who places a purchase order for a product advertised thereon. As UNCITRAL puts it:[245]

> …it has been argued that parties acting upon offers of goods or services made through the use of interactive applications might be led to assume that offers made through such systems were firm offers and that by placing an order they might be validly concluding a binding contract at that point in time. Those parties, it has been said, should be able to rely on such a reasonable assumption in view of the potentially significant economic consequences of contract frustration, in particular in connection with purchase orders for commodities or other items with highly fluctuating prices. Attaching consequence to the use of interactive applications, it was further said, might help enhance transparency in trading practices by encouraging business entities to state clearly whether or not they accepted to be bound by acceptance of offers of goods or services or whether they were only extending invitations to make offers….

Drawing from the South African common law of contract, several reasons do justify the impression that a vendor or trader who advertises his or her goods on an automated website makes a firm offer. First of all, by automating contract formation in this manner, the trader creates an impression that he or she is not open for further negotiations or bargaining with prospective buyers. Secondly, such a vendor unequivocally demonstrates that he or she is less concerned with protecting himself or herself from dealing with adversaries and trade competitors. He or she is prepared to trade with anyone, regardless of their identity, who successfully places a purchase order on the website. To adopt the words of Christie,[246] these factors lead to the conclusion that:

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242 Christie *The Law of Contract* 91; Pretorius 2010 *Obiter* 524.
243 See *Nedcor Bank Ltd v Withinshaw Properties (PTY) Ltd* 2002 6 SA 236 (C) para 30.
244 *Standard Bank of South Africa Ltd v Ocean Commodities Inc* 1983 1 SA 276 (A) 292B.
245 UN *United Nations Convention on the Use of Electronic Communications* para 203.
246 Christie *The Law of Contract* 88.

> In contrast to the usual situation when goods are displayed for sale in a shop, the controller of the machine must be taken to be making the offer because he has put it out of his power to exercise any choice in the conclusion of the contract….

UNCITRAL has, however, rejected the argument that a trader or vendor who uses an automated website makes a firm offer on the basis that:[247]

> …attaching a presumption of binding intention to the use of interactive applications would be detrimental for sellers holding a limited stock of certain goods, if the seller were to be liable to fulfil all purchase orders received from a potentially unlimited number of buyers….

While that might be so, it is worth noting that the argument is inherently problematic for failing to distinguish between the sale of physical and virtual goods. That such a difference is necessary to draw in electronic commerce has been suggested by Rajah JC in *Chwee Kin Keong v Digilandmall.com Pte Ltd*. *obiter*,[248] in his statement that:

> In an Internet sale, a prospective purchaser is not able to view the physical stock available. The web merchant, unless he qualifies his offer appropriately, by making it subject to the availability of stock or some other condition precedent, could be seen as making an offer to sell an infinite supply of goods. A prospective purchaser is entitled to rely on the terms of the web advertisement. The law may not imply a condition precedent as to the availability of stock simply to bail out an Internet merchant from a bad bargain, *a fortiori* in the sale of information and probably services, as the same constraints as to availability and supply may not usually apply to such sales. Theoretically the supply of information is limitless. It would be illogical to have different approaches for different product sales over the Internet. It is therefore incumbent on the web merchant to protect himself, as he has both the means to do so and knowledge relating to the availability of any product that is being marketed….

At the very outset, one needs first to demonstrate the degree to which he endorses these sentiments. In the opinion of the current researcher, there is no justification for drawing a difference between tangible goods advertised on the internet and those advertised in a bricks-and-mortar store or traditional media. With deserving respect to the learned judge, it does not appear that the customer's ability to view the actual stock in possession of the trader has any relevance to the question. It is common cause when goods are advertised in newspapers and catalogues that prospective customers are not able to view or see the physical stock available with a

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247 UN *United Nations Convention on the Use of Electronic Communications* para 204.

248 *Chwee Kin Keong v Digilandmall.com Pte Ltd*[2004] 2 SLR 594 para 96.

trader, yet this has never been interpreted to mean that the trader has an unlimited supply. Adopting a realistic view, there does not seem to be any compelling reason why anyone would assume that an online trader has an unlimited supply of stock for a particular product, more so when the online trader in issue is not the manufacturer of that product. A reasonable online shopper, it is submitted, must be taken to understand it that an online trader acquires his or her stocks in exactly the same way as a trader who operates a traditional store. Therefore that, as with his or her traditional counterpart, an online trader can equally run out of stock.

The foregoing criticism aside, it is submitted that there is much sense in the suggestion that an online trader who advertises a sale of information must be presumed to have made a firm offer. Information sold online can be classified as a "virtual good."[249] The supplier of "virtual goods," *e.g.* music files, movies, virtual magazines *etc*, may *prima facie* be presumed to have unlimited stock of these products.[250] This conclusion finds support in the view that when he or she sells these products to the public, the online trader merely sells copies of the original files stored in his or her information system. He or she can never run out of stock or supply of electronic copies even if he or she had to supply the entire globe. If however, the trader sells virtual products transposed into tangible goods, *e.g.* music

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249 By "virtual goods" in this context is meant intangible goods. In the context of the CISG, the concept of "goods" has been defined by UNCITRAL as follows "[a]ccording to case law, 'goods' in the sense of the Convention are items that are, at the moment of delivery, 'moveable and tangible', regardless of their shape and whether they are solid, used or new, inanimate or alive. Intangibles, such as intellectual property rights, goodwill, an interest in a limited liability company, or an assigned debt, have been considered not to fall within the Convention's concept of 'goods'. The same is true for a market research study. According to one court, however, the concept of 'goods' is to be interpreted 'extensively,' perhaps suggesting that the Convention might apply to goods that are not tangible," see UN *UNCITRAL Digest of Case Law* para 28. Whether this distinction applies to the UNECIC is not immediately clear. However, in the opinion of the current author, such a distinction is not applicable. One indicator that this is the fact is that art 11 itself has been explained by UNCITRAL to apply to "goods and services," see UN *United Nations Convention on the Use of Electronic Communications* para 197. The reference to services, it is submitted, might be indicative of the fact that the tangibility, or intangibility of the "commodity" sold is of no relevance to the provision of the UNECIC, art 11 included.

250 The said presumption may, however, be displaced where it is demonstrated that the original file from which copies have always been sourced to supply the public has been deleted.

files, movies or software burned unto a CD or DVD, the aforesaid presumption shall not apply because such are not virtual but tangible goods.[251]

In conclusion, it is the opinion of the current researcher that according to the South African common law of contract, the most plausible conclusion is that the advertisement of goods on automated websites is not an invitation to treat, but a firm offer. This is so because the reasons advanced at common law in support of the doctrine of invitation to treat do not appear to have any relevance to advertisements of goods on automated websites. As illustrated above, a vendor who advertises goods on an automated website makes a clear indication that he or she is not prepared to bargain or engage in further negotiations with customers. Such a vendor similarly waives the right to select or exercise any choice over his or her customers. Lastly, when an online vendor programs the website to automatically perform contracts, he or she impliedly waives the need for legal protection from inundation by purchase orders. All these factors point to the fact that an advertisement of goods on an automated commercial website is a firm offer.

4.5.2.1.2.4 Recommendations for the development of South African law

There is apparent danger, however, if advertisements of goods for sale on automated websites are construed as firm offers. The danger is the usual one of the trader being inundated with purchase orders. This danger, it is submitted, is even higher in automated transactions. The fact that electronic storefronts can be accessed by everyone with an internet connection, coupled with the automatic processing of purchase orders by electronic agents, makes the risk of inundation by purchase orders a cause for concern. If the mere placing of a purchase order by a customer on an automated website concludes a contract, it is indeed not difficult to imagine that an online vendor can easily be inundated by purchase orders. The

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[251] This point was made by the US Court of Appeal for the third Circuit in the matter of *Advent Systems Limited v Unisys Corporation* (1991) 925 F.2nd 670, U.S. CA, Third Circuit, LEXIS 2396 675, in which the court stated that "[c]omputer programs are the product of an intellectual process, but once implanted in a medium are widely distributed to computer owners. An analogy can be drawn to a compact disc recording of an orchestral rendition. The music is produced by the artistry of musicians and in itself is not a 'good', but when transferred to a laser-readable disc becomes a readily merchantable commodity. Similarly, when a professor delivers a lecture, it is not a good, but, when transcribed as a book, it becomes a good." See case as referenced and quoted by Chissick and Kelman *Electronic Commerce* 70.

pressing issue is therefore whether seeing the apparent danger to online vendors; the law should intervene on their behalf?

It is submitted that the law should indeed intervene. Such intervention, however, must be done in a manner which pays due regard to the conflicting interests of both sides to the transaction. These interests can be summarised as follows, online buyers expect that purchase orders placed on automated websites will always produce valid contracts, and that those contracts will be performed. Although always ready and willing to perform their side of the bargain, online traders expect that they will not be legally enjoined to do so if they run out of stock, or if such performance would cause them hardship or unrecoverable financial loses. How then can the law strike a fair balance of these interests?

The first solution is that adopted in the UNECIC, which adopts a hard and fast rule that all advertisements on trading websites are invitations to treat, even those made on automated websites. However, one finds great difficulty with this rule for the fact that it is obviously skewed in favour of online traders rather than online buyers. If advertisements on automated websites are classified as invitations to treat, the inevitable result is that online traders can reject purchase orders for whatever reason. This is so despite the fact that the conduct of advertising goods on an automated website creates a *prima facie* impression that the trader operating such a website is willing to be bound by the mere placing of a purchase order by a customer.

It is the view of the current researcher that, instead of invitations to treat, the law should hold advertisements on automated websites to be firm offers made subject to the availability of stock, or as usually put by men of commerce, while stocks last. The effect of this rule would be to enjoin online traders to perform all purchase orders successfully placed by customers on their automated websites until they run out of stock. Once an online trader runs out of stock, he or she cannot be compelled to perform the remaining purchase orders because of the implied term as to the availability of stock. In this manner, the law will be able to protect the reasonable belief of online customers that a trader who offers goods for sale on an automated

website makes a firm offer. The law will also be able to protect online traders from inundation by purchase orders. This proposition, it is submitted, balances the interests of both parties in a fair and legally acceptable manner.

It is conceivable, however, that some may find fault with the above proposition. The *advocatus diaboli* may argue that, apart from the fact that the online trader consciously chose to conclude contracts through an automated website, he or she is also the one who has the leverage of imposing the terms of those contracts. Therefore that he or she should not be protected from his or her failure, carelessness or negligence of not making it clear in his or her standard trading terms and conditions that he or she is willing to be bound subject to the availability of stock. In *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[252] the High Court of Singapore was of the view that:

> The law may not imply a condition precedent as to the availability of stock simply to bail out an Internet merchant….

Joubert similarly argues that "…it falls outside the province of the courts to amend the law this way,"[253] consequently that a term concerning the availability of stock cannot be implied into advertisements except by means of statute.

It is not immediately clear to the current researcher why the law cannot imply a term concerning the availability of stock into advertisements of goods to the public if there is a demonstrable need to do so. It is worth noting that most of the grounds on which the doctrine of invitation to treat is based at common law are themselves terms implied by law into advertisements. The need to protect traders who advertise their goods to the general public from inundation by purchase orders, and the right of those who display goods on shelves in self-service stores to choose their customers, are clearly terms implied by the law into advertisements. These terms are usually implied by the law into public advertisements with very little regard to the actual intention of the trader. If the law can imply terms in this manner into advertisements, it is not clear to the current researcher why it cannot similarly imply a term concerning the availability of stock where appropriate.

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252 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 96.
253 Joubert *General Principles of the Law* 40 at footnote 34.

4.5.2.2 Automated replies and acceptances

In a typical online sale transaction, after a customer has filled and submitted his or her purchase order, he or she will usually receive an e-mail acknowledging receipt of the purchase order. The e-mail may furthermore state the period within which the customer's purchase order will be performed. These messages are automatically generated by electronic agents in response to every successful purchase order, *i.e.* a purchase order placed in a manner that the electronic agent is programmed to recognise and process. The pressing issue is whether such automated replies and responses are valid acceptances for purposes of contract formation?

If one adopts the view advanced in this study that advertisements of goods for sale on automated commercial websites are firm offers, or offers made subject to the availability of stock, the question whether the automated response of a trader's electronic agent is an acceptance becomes irrelevant. That is understandably so because it is the customer who makes an acceptance under such circumstances. Therefore, the reply generated by the trader's electronic agent will only serve as an acknowledgement of receipt of the customer's purchase order. Section 26 (2) (a) of the ECT Act provides that an acknowledgement of receipt may be given, amongst others, through an automated communication.

It is only when advertisements on automated websites are held to be invitations to treat that the current issue becomes relevant. The answer to that question is fairly straightforward. As shall be recalled,[254] the ECT Act provides as a general matter that an agreement may be formed where an electronic agent performs an action required by law for contract formation. This provision was interpreted to mean that offers and acceptances generated by electronic agents are valid and enforceable. Consequently, an acceptance generated by an electronic agent in response to a purchase order placed by a customer is a valid acceptance for purposes of contract formation. In *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[255] the High Court of Singapore was of the view that an automated response in that case was a valid

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254 See para 4.2.1 above.

255 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 136(hereinafter referred to as *Chwee Kin Keong v Digilandmall.com Pte Ltd*).

acceptance. The e-mail in that case had the caption stating "Successful Purchase Confirmation from HP online," and stated in the body that:

> [W]e will be calling you in the near future to deliver the products to the address shown below. You may find the status of your order by calling us at (phone number given) … Special instructions: Please call to advise delivery date and time.[256]

The court was of the view that:

> The fact that the acceptance was automatically generated by a computer software cannot in any manner exonerate the defendant from responsibility. It was the defendant's computer system. The defendant programmed the software.[257]

One finds nothing wrong with this decision. It must be noted, however, that an automated message of acceptance must also meet the requirements of a valid acceptance at common law. This is important to emphasise in light of the fact that in most instances, electronic agents in online sales are not programmed to generate acceptances but mere confirmations or acknowledgements of receipt of purchase orders.[258]Polanski explains in that regard that,[259] the practice of acknowledging or confirming the receipt of online purchase orders "…is a custom as to the formation of a contract." Although the ECT Act does not place an obligation on parties to acknowledge receipt of data messages,[260] this does not mean that a message which is clearly intended to be an acknowledgement of receipt, as opposed to an acceptance, must not be given its proper legal effect. Consequently, it is advisable when dealing with automated replies that courts of law must strictly scrutinise such to ensure that they are not mere acknowledgements of receipt. Apart from the words used by the electronic agent, it has also been suggested that the user's

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256 *Chwee Kin Keong v Digilandmall.com Pte Ltd* para 75.

257 *Chwee Kin Keong v Digilandmall.com Pte Ltd* para 136.

258 See Nimmer 1996 *John Marshall Journal of Information Technology and Privacy Law* 217, noting that "[m]odern communications systems make possible immediate and routine confirmation of the receipt of an offer and even of the terms of the offer. This confirmation can be an important safeguard against garbled messages and other system-based problems. Merely issuing a confirmation of receipt of the offer cannot create a contract, whether confirmation occurs automatically or by action of a human actor."

259 Polanski "Common practices in the electronic commerce" 8.

260 See s 26 (1), stating that "[a]n acknowledgement of receipt of a data message is not necessary to give legal effect to that message."

intention should be considered in determining whether an automated response is an offer or acknowledgement of receipt.[261] As Nimmer puts it:[262]

> …there must be some indication that the automated system was intended to signify acceptance, rather than merely to confirm receipt.

Therefore, a trader who programs his or her website to generate mere acknowledgements of receipts should not be held to have accepted a purchase order until he or she has communicated a clear and unequivocal acceptance to a customer, or has indicated acceptance by rendering performance of the agreement by delivering the ordered goods.

4.5.2.3 The time and place of contract formation in automated transactions

As mentioned above,[263] acceptance must be communicated to the offeror in order to conclude a contract. This requirement is premised on a general rule that there can be no contract until the offeror is aware of the offeree's acceptance.[264] There can consequently be no talk of contractual obligations until the act of acceptance is clearly brought to the attention or knowledge of the offeror. The time and place at which acceptance concludes a contract are very important aspects of the process of contract formation at common law.[265] It is common cause that an acceptance cannot conclude a contract if it is effected after a period fixed or prescribed for acceptance by the offeror,[266] or after a reasonable time if the offeror did not fix time for acceptance.[267] The same rule applies to option contracts,[268] and to acceptances made during public holidays or after business hours.[269] The place at which acceptance concludes a contract will be important, amongst other reasons, for

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261 See Nimmer 1996 *John Marshall Journal of Information Technology and Privacy Law* 217.
262 See Nimmer 1996 *John Marshall Journal of Information Technology and Privacy Law* 217.
263 See para 4.3.2 above.
264 Bradfield *Christie's Law of Contract* 83.
265 Cupido [year of publication unknown] *Scientific Cooperations International Journal of Law and Politics* 15.
266 See *Laws v Rutherfurd* 1924 AD 261 262, stating per Innes CJ that "…when the acceptance of an offer is conditioned to be made within a time or in a manner prescribed by the offeror, then the prescribed time limit and manner should be adhered to."
267 See *Dietrichsen v Dietrichsen* 1911 TPD 261 262; *Multilateral Motor Vehicle Accidents Fund v Thabede* 1994 2 SA 610 (N); *Meyer v Kirner* 1974 4 SA 90 (N) 93C.
268 See Coaker and Zeffertt *Wille and Millin's Mercantile Law* 8-9.
269 See generally *Dormell Properties 282 CC v Renasa Insurance Co Ltd* 2011 1 SA 70 (SCA).

deciding whether or not a particular court has jurisdiction to decide a dispute arising from that contract.[270]

A general rule of South African law concerning the time and place of contract formation is that a contract is concluded at the time and place where agreement is reached.[271] There is usually no difficulty in determining the time and place of contract formation where contracting parties are *inter praesentes*, *i.e.* in each other's presence in the sense of face-to-face communications. The time of contract formation in that instance is the moment that the offeree expresses and communicates his or her acceptance to the offeror.[272] The place of contract formation in that instance is the exact same place where the offeree expressed and communicated his or her acceptance to the offeror.[273]

The real difficulty in determining the time and place of contract formation arises where contracting parties are *inter absentes*, *i.e.* situated in different geographical locations.[274] This is usually the case in contracts negotiated and concluded by correspondence, *e.g.* by post, fax, telegraph or telephone. It is usually not clear in contracts by correspondence whether acceptance becomes effective at the time and place where it is expressed by the offeree in the sense of initiating its dispatch, or at the time and place where it is communicated to the offeree in the sense of him or her receiving the message of acceptance.[275] Another difficulty with contracts by correspondence is the high risk or possibility of contractual messages being lost, delayed or distorted on transmission. For instance, a letter of acceptance posted on time may get lost or delayed in the "hands" of the post office, a telegraphic message may be garbled on transmission, problems with transmission lines may render a

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270 See generally *Ex parte Jamieson: In re Jamieson v Sabingo* 2001 2 SA 775 (W); *McKenzie v Farmers' Co-operative Meat Industries* 1922 AD 16; Coaker and Zeffertt *Wille and Millin's Mercantile Law* 18.

271 See Bradfield *Christie's Law of Contract* 37; Joubert *General Principles of the Law* 45.

272 See Snail 2008 *JILT* 7-8.

273 See Joubert *General Principles of the Law* 45; Coaker and Zeffertt *Wille and Millin's Mercantile Law* 18; Roberts *Wessels' Law of Contract* para 112, discussing the different schools of thought on the issue. He notes that "[t]here has been a considerable controversy upon this question, one school of jurists holding that a clear and unequivocal manifestation of acceptance is enough to form the contract, whilst the other school requires that acceptance should not only be manifested but should be communicated to the offeror…."

274 See *Bal v Van Staden* 1902 AD 128 141; Joubert *General Principles of the Law* 45.

275 Joubert *General Principles of the Law* 45.

telephone conversation inaudible at the other end, and even e-mail messages sometimes never reach their destination. Some of these risks will inevitably bear on the question of the time and place of contract formation.

Joubert lists at least four theories that may be applied to determine the time and place of formation of contracts by correspondence,[276] namely:

> (a) The declaration theory [which] states that the contract comes into being at the time and place where the offeree gives expression to his acceptance, e g by signing the letter of acceptance.
>
> (b) The expedition theory [which] states that the contract comes into being at the time and place where the offeree sends the acceptance or commits it to some or other means of communication.
>
> (c) The reception theory [which] states that the contract comes into being at the time and place where the offeree receives the communication of acceptance.
>
> (d) The information theory [which] states that the contract comes into being at the time and place where the offeror learns of the acceptance.

It is common cause that South African courts apply only two of the aforementioned theories, namely the expedition theory and the information theory, to determine the time and place of conclusion of contracts by correspondence. The Department of Communications of the Republic of South Africa correctly notes in this regard that:[277]

> In terms of South African law, two general methods are applied by courts to establish the time and place of contracting. The distinguishing factor in each is the mode of delivery or communication used. The *expedition theory* generally applies to postal contracts and provides that a contract concluded via the post comes into existence at the place where and time [w]hen a letter of acceptance is posted or the telegram of acceptance is handled in a post office. The *information theory* generally applies [*sic*] to modes of direct, interactive communication (e.g. the telephone) and provides that a contract is concluded at the place where and time when the acceptance is brought to the mind of the offeror.

Each of these two theories will be discussed in full below. The discussion will concentrate mainly on the rationale or basis for the application of each of the two theories.

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[276] Joubert *General Principles of the Law* 45.See also Roberts *Wessels' Law of Contract* para 138.

[277] Department of Communications Republic of South Africa 2000 http://www.gov.za/sites/www.gov.za/files/electronic_commerce_1.pdf.

4.5.2.3.1 The time and place of contract formation in contracts by telephone

It is common cause as noted by the Department of Communications above that the information theory is applied in South African law to determine the time and place of conclusion of contracts by direct or instantaneous modes communication, *e.g.* telephone, telex and telefacsimile. Known amongst others as the recognition or ascertainment theory, the information theory holds that for a contract to be concluded, "...acceptance must [actually] come to the knowledge of the offeror…."[278] Therefore, a contract in that instance will be concluded at the time and place where acceptance comes to the knowledge of the offeror, *i.e.* "…when and where [the] offeror hears the acceptance."[279] This was held to be so amongst others in the matter of *Tel Peda Investigation Bureau (Pty) Ltd v Van Zyl*.[280] In that case, the defendant made an offer over the telephone from Johannesburg, to the plaintiff in East London. That offer was accepted by the appellant over the telephone. When a dispute arose between the parties in relation to that contract, the plaintiff instituted an action in the Magistrate's Court at East London. The issue on appeal was whether the magistrate had jurisdiction to entertain or decide the matter? It was argued for the plaintiff relying on the decision of *Wolmer v Rees* that the magistrate had jurisdiction to decide the matter because the contract was concluded in East London.[281] In *Wolmer v Rees*, Greenberg J held that a contract by telephone is concluded where the party making acceptance is located.[282] Because the plaintiff in the case under discussion accepted the offer in East London, the effect of the decision of *Wolmer v Rees* was therefore that the contract in issue was concluded in East London. Per Jennett JP, the court refused to follow the decision of *Wolmer v Rees*, but held on the contrary that the contract in issue was concluded in

278 Roberts *Wessels' Law of Contract* para 138; Joubert *General Principles of the Law* 45.
279 Kerr *The Principles of the Law* 117.
280 *Tel Peda Investigation Bureau (Pty) Ltd v Van Zyl* 1965 4 SA 475 (E) (hereinafter referred to as *Tel Peda Investigation Bureau (Pty) Ltd v Van Zyl*).See also *S v Henckert* 1981 3 SA 445 (A) 451A-B.
281 *Wolmer v Rees* 1935 TPD 319 (hereinafter referred to as *Wolmer v Rees*).
282 *Wolmer v Rees* 324, stating that "[i]n my opinion the offer is accepted at the spot where the person, who is said to accept the offer, happens to be at the moment when he accepts the offer."

Johannesburg,[283] this being the place where the defendant became aware of the plaintiff's acceptance.

The rationale behind the rule that a contract by telephone is concluded when and where the offeree hears the acceptance is that parties communicating by telephone are for all intents *inter praesentes*.[284] That the parties using a telephone to conclude a contract are in as good a position as parties *inter praesentes* was stated to be so by Farlam JA in the matter of *Jamieson v Sabingo*.[285] In his own words, the judge mentioned that:[286]

> Parties who communicate by telephone, telex or telefacsimile transmission are 'to all intents and purposes in each other's presence' ... and the ordinary rules applicable to the conclusion of contracts made by parties in each other's physical presence apply, viz the contract comes into existence when and where the offeree's acceptance is communicated to and received by the offeror. This has been held to be the legal position in the case of contracts concluded over the telephone and contracts concluded by telex ... By parity of reasoning the same principle must apply where the parties are in communication with each other by telefacsimile transmission….

The information theory is admittedly the most ideal or philosophically correct solution to the problem of the time and place of contract formation in South African law.[287] As shall be recalled from previous discussions,[288] the basis of contractual liability in South African law is actual *consensus* between contracting parties. What has been demonstrated is that actual *consensus* requires amongst others that the offerer must be aware of the offeree's acceptance before a binding contract is concluded.[289] The information theory clearly coincides with the will theory of contract to the extent that it requires an acceptance to come to the actual knowledge of the

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283 *Tel Peda Investigation Bureau (Pty) Ltd v Van Zyl* 479H.

284 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 15, stating that "[A]lthough the parties may be separated by great distances they can effect communications which resemble ordinary conversation between persons present to one another…."

285 *Jamieson v Sabingo* 2002 4 SA 49 (SCA) (hereinafter referred to as *Jamieson v Sabingo*).

286 *Jamieson v Sabingo* para 5.

287 Joubert *General Principles of the Law* 45.

288 See para 4.4.1 above.

289 See para 4.4.1 above; Bradfield *Christie's Law of Contract* 83.

offeror in order to conclude a contract,[290] which will establish a meeting of minds between him or her and the offeree.

Because a contract concluded over a telephone is formed where and where the offeror "hears" the acceptance, it logically follows that a contract cannot be concluded where the offeror did not hear the offeree's acceptance. Coaker and Zeffertt mention in that regard that "…if the line goes dead, the mere utterance … of acceptance will not avail…."[291] The same is true for inaudible telephonic acceptances.[292] Indeed there is no doubt that Greenberg J was wrong in his statement that:[293]

> …when a person makes an offer over the telephone he authorises the use of the instrument for an acceptance, and as soon as the acceptance is uttered into the telephone, whether he hears it or not, there is an acceptance. The analogy was invoked of two persons in each other's presence, where one makes an offer and the other accepts, but the first person does not hear the acceptance. It seems to me it would be importing a dangerous doctrine if one held that the offeror could say afterwards 'It may be that you accepted my offer and did so in an audible tone, but I happened to be thinking of something else and I did not hear you, and therefore I am not bound'. I think that when an offeree accepts the offer in the manner invited by the offeror, that is an acceptance whether it reaches the offeror or not.

Authorities on the issue are agreed that this statement is wrong,[294] and that there can be no contract if acceptance is uttered over a dead line, or if it is rendered inaudible by one cause or another.

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290 Snail 2008 *JILT* 8, stating that "… the information theory rests on the principle that the primary basis for contractual liability is actual and conscious agreement between the contractants … [t]he implication of this legal rule is that a legal bond will only be created when the offeror is informed of the acceptance in order for there to be *consensus ad idem*."

291 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 15.

292 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 15.

293 *Wolmer v Rees* 324.

294 See Bradfield *Christie's Law of Contract* 92-93; Olmesdahl 1984 *SALJ* 545-553; Kahn 1955 *SALJ* 267, stating that "[w]ith the greatest respect, it is suggested that our law should be otherwise. The popularity of the telephone as a mode of contracting will assuredly suffer if the rule is finally settled in the way proposed in *Wolner v. Rees.* In other countries contracts over the telephone are generally considered to be equivalent to contracts *inter praesentes,* and the agreement comes into existence when and where the offeror hears or ought to hear the words of acceptance. The difficulty alluded to by Mr. Justice Greenberg, of the offeror's saying, 'I was thinking of something else at the time', is avoided by holding that where it is the offeror's fault that he did not hear, he is deemed to have heard."

4.5.2.3.2 The time and place of formation of contracts concluded by post

For contracts concluded by post, South African courts apply the expedition theory as an exception to the information theory. The expedition theory holds that a contract concluded by post is formed when and where the offeree posts the letter of acceptance.[295] That acceptance communicated by post becomes effective when and where the letter of acceptance is posted was held to be so in the matter of *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)*.[296] The issue in that case was the place of formation of two separate contracts concluded between Cape Explosive Works Ltd (hereinafter referred to as the plaintiff) and the defendants, being respective SA Oil & Fat Industries Ltd (hereinafter referred to as the first defendant) and Lever Brothers (SA) Ltd (hereinafter referred to as the second defendant). The plaintiff was a company registered and operating in the Cape Province. The first contract was between the plaintiff and the first defendant, which was a company registered and operating in the Transvaal Province. The first defendant made an offer by post to sell a certain amount of saponification glycerine to the plaintiff. The said offer was duly accepted by the plaintiff by post from the Cape Province. The second contract was between the plaintiff and the second defendant, which was a company registered in London but operating in Natal. The two companies entered into a contract for the sale of saponification and soap lyes crude glycerine to the plaintiff. The contract was executed by the second defendant in Natal, and delivered to the plaintiff by post for signature. After affixing its signature, the plaintiff posted signed copies of the contract to the second defendant. When disputes arose between the plaintiff and the two defendants, the plaintiff instituted actions in the Cape Province. The main issue was whether or not the contracts in issue were concluded in the

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295 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 14. This rule will only apply where the offer was made by letter, or where the offeror has expressly authorised acceptance by post, see *Smeiman v Volkersz* 1954 4 SA 170 (C) 117A, stating per Ogilvie Thompson J that "[a]n offer made through the post affords the commonest illustration of implied authorization or indication by the offeror of a mode of acceptance. In such a case the offeror impliedly authorizes the use of the postal communications by the offeree, and the posting of the letter of acceptance concludes the contract…."

296 *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)* 1921 CPD 244 (hereinafter referred to as *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)*).

Cape Province? If the answer was in the affirmative, it would mean that the courts of the Cape Province had jurisdiction to decide the disputes, and *vice-versa*. The court found that the contracts in issue were indeed concluded in the Cape Province because:[297]

> …where in the ordinary course the post office is used as the channel of communication, and a written offer is made, the offer becomes a contract on the posting of the letter of acceptance.

The main problem with the expedition theory is that it contradicts the general view that contractual liability in South African law is based on actual *consensus*. As demonstrated above with reference to the information theory, actual *consensus* requires that the offeror must be aware of the offeree's acceptance. It is beyond dispute in contracts by post that the offeror does not become aware of the offeree's acceptance at the time that it is posted to him or her. On the contrary, the offeror becomes aware of such acceptance when he or she reads the letter of acceptance. Therefore, it is immediately clear that the expedition theory needs to be rationalised.

The expedition theory is primarily based on practical considerations, and was justified as follows by Kotzè JP in *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)*:[298]

> …while each of the four theories may be open to objection, we should inquire which of these theories is, in the long run, the most satisfactory and convenient. It will then depend not so much on the strict juridical and philosophical view, that there can be no contract, until two agreeing minds have become conscious of the mutuality of consent, and are aware of each other's intention, but rather on the practical question, what is best in the interest of commerce and the activities of men in their dealings and intercourse with one another … Looked at philosophically , the so-called strict *vernemings* theory [information theory] may have much to commend it, but it is open to practical difficulties in the modern world … We should bear in mind that law in its development is apt to proceed on practical in preference to philosophical lines. The practice of law, as a living system, is based rather on human necessities and experience of the actual affairs of men, than on notions of a purely philosophical kind … When, then, it comes to the question of election between various legal theories, which each in turn has the support of eminent jurists—and we are at present placed in this position—it certainly is a matter of importance carefully to consider which of these different theories have the balance

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297 *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)* 266.

298 *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)* 265-266.

> of practical convenience of its side…These considerations have brought me to the conclusion that upon the whole the second theory [referring to the expedition theory] is the one we should adopt.

In the matter of *Kergeulen Sealing & Whaling Co Ltd v Commissioner for Inland Revenue*,[299] Stratford explained further that:

> There is just one further reason for agreement with the decision [of *Cape Explosive Works Ltd v SA Oil & Fat Industries Ltd (1); Cape Explosive Works Ltd v Lever Brothers (SA) Ltd (2)*]. It was of great importance not only to the legal but more particularly to the commercial community, which presumably has acted on the assumption of its correctness. Business men's assurance that the decision was a final pronouncement of the law on the subject must have become confirmed by the passage of time, for it has remained unchanged for over twenty years. Therefore, if that judgment had less to recommend it than in law it has one would hesitate now to disturb it….

Therefore, the expedition theory sacrifices the logic of the information theory for commercial convenience and legal certainty, with the effect that the mere posting of the letter of acceptance concludes a contract. Because acceptance communicated by post becomes effective upon the mere posting of the letter of acceptance, the offeror will be bound by that acceptance even if it never reaches his mailbox,[300] for instance because it was lost in the "hands" of the post office.

4.5.2.3.3 Challenges of automated transactions to the common law theories on time and place of contract formation

The reality of automated transactions poses a number of challenges to the general rule at common law that a contract is concluded when and where the fact of acceptance comes to the knowledge of the offeror, *i.e.* the information theory. As shall be recalled from chapter two,[301] the ECT Act defines an automated transaction as an electronic transaction in which "…data messages of one or both parties are not reviewed by a natural person…." The absence of human review of data messages in automated transactions means precisely that a user of an electronic agent will often be unaware of communications received by his or her electronic agent.[302] Where the

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299 *Kergeulen Sealing & Whaling Co Ltd v Commissioner for Inland Revenue* 1939 AD 487 505.

300 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 13.

301 See para 2.2 above.

302 This will be so unless the electronic agent is programmed to notify its user of any communications it receives from third parties.

user of an electronic agent is in the position of an offeror, it logically follows that he or she will remain unaware of the fact of acceptance communicated by a third party or its electronic agent to his or her electronic agent. The offeror may be oblivious of such an acceptance until such time that performance has already been executed in relation to that acceptance.[303] The first disadvantage of the information theory in the context of automated transactions is that it provides the offeror with an opportunity to play ducks and drakes with the offeree "…by manipulating the time of taking subjective notice of an acceptance."[304] The second disadvantage of the information theory in the context of automated transactions is that it saddles the offeree with a heavy burden of proving the exact time that the offeror using an electronic agent became subjectively aware of the fact of acceptance, which is almost impossible for him or her to know.[305]

It is not only the information theory that is challenged by the reality of automated transactions. The expedition theory too does not appear to provide a satisfactory solution to the testing question of the time and place of contract formation in automated transactions. As shall be recalled, the expedition theory holds that a contract is concluded when and where the offeree expresses his or her acceptance by initiating its transmission or conveyance to the offeror. Unless an electronic agent is programmed to keep a register or log file of all the data messages that it dispatches to third parties, it is conceivably very difficult for anyone to know with a measure of precision the exact moment at which that electronic agent initiated a message of acceptance.

Concerning the place of dispatch of data messages, it is common cause that electronic agents can possess mobility, meaning that they can migrate from one

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303 See Eiselen 2002 *Vindobona Journal of International Commercial Law andArbitration* 310, stating that "[i]n respect of EDI or internet transactions for instance, it is quite easy to determine when a party had access to a message, or when it had received it. On the other hand it may be very difficult to determine when it actually became informed of the existence or content of the message in a subjective sense. Very often an electronic order will automatically be acknowledged by the supplier's system and executed by its plant or shipping department without any person with executive powers actually taking notice of the communication. In these circumstances it is unrealistic to apply the information theory."

304 Eiselen 2002 *Vindobona Journal of International Commercial Law andArbitration* 310.

305 Eiselen 1999 *EDI Law Review* 25.

information system to another within a network, or from one network to another.[306] This can make it very difficult to determine the place from which a message of acceptance was actually initiated by such an electronic agent, which place will inevitably be different from the location of the computer or information system on which that electronic agent is installed by its user.[307] In other instances, contracting parties may use information systems located at a different place from where they have their places of business to send and receive messages. UNCITRAL mentions in this regard that:[308]

> It is not uncommon for users of electronic commerce to communicate from one State to another without knowing the location of information systems through which communication is operated. In addition, the location of certain communication systems may change without either of the parties being aware of the change.

Therefore, it is easily conceivable that the courts of law will struggle, when applying the expedition theory, to determine with certainty the exact location or place from which a message of acceptance was initiated by an electronic agent.

It is clear in light of the aforementioned difficulties that common law theories do not provide adequate or satisfactory solutions to the question of the time and place of formation of automated transactions. Therefore, the common law on the issue must be developed or modified in order to accommodate automated transactions within the common law theory of contract formation. The development of the common law in this regard was done by the legislator in the ECT Act. This new legal framework is discussed in full below.

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306 See Gowda 2008 *International Journal of Computational Engineering Research* 247.

307 See Dahiyat 2006 *Computer Law and Security Report* 476, stating that "…many users do not know precisely in which platforms and operating systems their intelligent agents communicate. A good example here is a mobile agent, which operates remotely without interacting with its user or with the computer system of the latter."

308 UN *UNCTRAL Model Law* para 100.

4.5.2.3.4 The time and place of conclusion of electronic contracts under the ECT Act

Concerning the time and place of formation of electronic contracts, the ECT Act provides as a general matter that:[309]

> An agreement concluded between parties by means of data messages is concluded at the time when and place where the acceptance of the offer was received by the offeror.

Concerning the time and place of dispatch and receipt of data messages, the ECT Act provides that:[310]

> A data message—
>
> (a) used in the conclusion or performance of an agreement must be regarded as having been sent by the originator when it enters an information system outside the control of the originator or, if the originator and addressee are in the same information system, when it is capable of being retrieved by the addressee;
>
> (b) must be regarded as having been received by the addressee when the complete data message enters an information system designated or used for that purpose by the addressee and is capable of being retrieved and processed by the addressee: and
>
> (c) must be regarded as having been sent from the originator's usual place of business or residence and as having been received at the addressee's usual place of business or residence.

4.5.2.3.4.1 The time of formation of electronic contracts

As mentioned above, the ECT Act provides in section 22 (2) that an electronic contract, which includes an automated transaction, is concluded at the time when acceptance is received by the offeror. In terms of section 23 (b), a communication of acceptance will be taken to have been received by the addressee when a complete data message enters his or her designated information system, or an information system that he or she uses for purposes of receiving data messages. The data message in issue must be capable of being retrieved and processed by the addressee. It must be noted that the time of receipt of a data message under the ECT Act occurs simultaneously with the time of dispatch. As shall be recalled, section

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309 s 22 (2).
310 s 23.

23 (a) provides that a data message will be taken to have been sent or dispatched to the addressee when it enters his or her information system. If the addressee and originator of a data message are communicating within the same information system, *e.g.* if they are employees of a university and are using the university's network to exchange communications, it is sufficient for purposes of dispatch that a message is capable of being retrieved by the addressee.

A data message "enters" an information system of the addressee at the time "… when it becomes available for processing within that information system."[311] It is not immediately clear from relevant literature, especially the comments of UNCITRAL on a similar provision in the *UNCITRAL Model Law*,[312] what it means that a data message must become "available for processing" within an information system. The main difficulty here relates to the element of "processability" of a data message. It would seem, however, that a data message is considered to be "processable" when it is capable of being retrieved by the addressee from his or her information system.[313] UNCITRAL mentions in relation to the UNECIC that a data message is presumed to be capable of being retrieved when it "…reaches the addressee's electronic address."[314] For instance, an e-mail will be considered to have entered the information system of the addressee when it reaches his or her electronic mailbox, this being the time when an e-mail is capable of being retrieved by the addressee.

Because the time of dispatch occurs simultaneously with the time of receipt, it follows logically that a data message which merely reaches the information system of the addressee without actually entering it shall be taken to have never been

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311 UN *UNCTRAL Model Law* para 103.

312 art. 15 (2).

313 See UN *United Nations Convention on the Use of Electronic Communications* para 183, stating that entry "…in an information system is understood under article 15 of the Model Law as the time when an electronic communication 'becomes available for processing within that information system', which is arguably also the time when the communication becomes 'capable of being retrieved' by the addressee."

314 See UN *United Nations Convention on the Use of Electronic Communications* para 183, noting also that "[w]hether or not an electronic communication is indeed 'capable of being retrieved' is a factual matter outside the Convention. UNCITRAL took note of the increasing use of security filters (such as 'spam' filters) and other technologies restricting the receipt of unwanted or potentially harmful communications (such as communications suspected of containing computer viruses). The presumption that an electronic communication becomes capable of being retrieved by the addressee when it reaches the addressee's electronic address may be rebutted by evidence showing that the addressee had in fact no means of retrieving the communication…."

dispatched by the originator.[315] It is important to note furthermore that section 23 (b) of the ECT Act is not concerned with whether or not a data message is intelligible or usable by the addressee. UNCITRAL explains in this regard that electronic commerce law:[316]

> …should not create a more stringent requirement than currently exists in a paper-based environment, where a message can be considered to be received even if it is not intelligible for the addressee or not intended to be intelligible to the addressee (e.g., where encrypted data is transmitted to a depository for the sole purpose of retention in the context of intellectual property rights protection).

Although an unintelligible data message will be regarded as having been received by the addressee under the ECT Act, it is conceivable that such a data message will not conclude a contract because the minds of contracting parties cannot meet in that instance. This is so because South African law requires as a general matter that acceptance must be clear and unequivocal. This was interpreted in *Boerne v Harris* to mean that the addressee must not be required to apply special knowledge or ingenuity in order to understand a communication of acceptance.[317]

4.5.2.3.4.1.1 The case of *Jafta v Ezemvelo KZN Wildlife*

Section 23 (b) of the ECT Act has so far been applied by the Labour Court of South Africa in the matter of *Jafta v Ezemvelo KZN Wildlife*.[318] In that case, the respondent company had publicly advertised a job offer for the position of a General Manager of Human resources. The applicant was selected or appointed for the aforesaid position by the respondent after an interview. Because he was still in another employment at the time of his appointment, the applicant was not able to join the respondent company's employment immediately seeing that he was due to go on leave, and would only be able to serve his current employer with a two months' notice of resignation upon his return from leave.

A formal job offer was e-mailed to the applicant by the respondent on 13 December 2006, stating that he was expected to commence work on 1 February 2007. Because

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315 UN *UNCTRAL Model Law* para 104.
316 UN *UNCTRAL Model Law* para 103.
317 *Boerne v Harris* 1949 (1) SA 793 801.
318 *Jafta v Ezemvelo KZN Wildlife* 2008 ZALC 84 (hereinafter referred to as *Jafta v Ezemvelo KZN Wildlife*). See case as discussed by Stoop 2009 *SAMLJ* 110-125.

the applicant did not respond to the aforesaid e-mail, he received another e-mail from the respondent on 28 December 2006 urging him to respond to the job offer communicated to him in the first e-mail, and making it clear that the date of commencement of employment was non-negotiable. Seeing that he was already on leave at the time of receipt of the second e-mail, the applicant had to use his personal laptop to respond to the second e-mail, but that laptop unfortunately malfunctioned in the process. The applicant had to go to a nearby internet café to send his acceptance of the offer, which he did with the assistance of an employee of that establishment. The respondent maintained, however, that it never received that e-mail. On the same day, *i.e.* 28 December 2006, the applicant received an SMS from the respondent advising him that if he did not confirm his acceptance, the job offer would be passed to the next candidate, wherefore the applicant replied through the same channel to confirm his acceptance. For purposes of present considerations, the issue before the court was whether the applicant could be said to have accepted the job offer in light of the fact that his e-mail was never received by the respondent?

The court noted first of all that section 23 of the ECT Act adopts "…the 'reception theory' for receipt of electronic communication,"[319] consequently that section 23 supplants or replaces the common law position that an acceptance must come to the knowledge of the offeror in order to conclude a contract,[320] *i.e.* the information theory.

What is the reception theory? The reception theory originates from civil law systems, and is usually applied in relation to indirect modes of communication such as telegram and telex.[321] As explained by Eiselen,[322] the reception theory:

> …determines that a communication only becomes effective once the recipient has actually physically received the communication or it has at least been made available to it, even though it has not yet taken notice of the content. In terms of this socalled '*Zugangstheorie*', the deciding moment is dependent upon the

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319 *Jafta v Ezemvelo KZN Wildlife* 84 para 79.

320 *Jafta v Ezemvelo KZN Wildlife* para 80.

321 See Eiselen 2002 *Vindobona Journal of International Commercial Law andArbitration* 310; Eiselen 2008-2008 *International Law Review of Wuhan University* 147; Eiselen 1999 *EDI Law Review* 31.

322 Eiselen 1999 *EDI Law Review* 31; Eiselen 2002 *Vindobona Journal of International Commercial Law andArbitration* 310.

> communication being available to the recipient in the sense that it has been placed at its disposal in a place in which it would expect to receive communications in the normal course of business and in a manner which is comprehensible to it.

In short, the reception theory only requires that a message of acceptance must be placed at the disposal of the offeror. This was explained by the court in *Jafta v Ezemvelo KZN Wildlife* to mean that data messages will be considered to have been received by addressees under the reception theory:[323]

> …even if the addressees have no knowledge of it being in their inboxes. The data message has to be merely capable of being retrieved; the addressee does not have to actually retrieve it. Furthermore, the addressee does not have to acknowledge receipt of a data message for it to have legal effect.

Therefore, a data message of acceptance under the reception theory will conclude a contract by mere virtue of it being under the control of the offeror; for as noted by the court in *Jafta v Ezemvelo KZN Wildlife*,[324] the critical element of the reception theory is "…the sender losing and the recipient acquiring control [of a data message]."

Back to the decision of the court in *Jafta v Ezemvelo KZN Wildlife*, the court found on the facts of the case as discussed above that the applicant's e-mail neither entered the information system of the respondent, nor was it capable of being retrieve and processed by the respondent.[325] The judge noted in that regard that it was possible that either the applicant's or respondent's information system had malfunctioned and "…did not either bounce back the e-mail or forward it to Wildlife."[326] The court consequently found that the respondent could not be regarded as having received the applicant's e-mail of acceptance under section 23 (b) of the ECT Act.[327]

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323 *Jafta v Ezemvelo KZN Wildlife* para 91.

324 *Jafta v Ezemvelo KZN Wildlife* para 84.

325 *Jafta v Ezemvelo KZN Wildlife* para 105.

326 *Jafta v Ezemvelo KZN Wildlife* para 106. The court noted in relation to malfunctions that "…the ECT Act and statutes of the other implementing states considered in this judgment reveals that none of these instruments cater for situations in which communication systems malfunction."

327 That notwithstanding, a valid contract of employment was found to have been concluded between the parties on the basis of the plaintiff's acceptance by SMS. The court held in relation to the SMS that, "…Jafta did not communicate his e-mail accepting the offer to Wildlife. He did communicate his acceptance via SMS. An SMS is as effective a mode of communication as an e-

4.5.2.3.4.2 The place of formation of electronic contracts

As shall be recalled, the ECT Act provides that an electronic contract is concluded at the "…place where the acceptance of the offer was received by the offeror." Concerning the place of receipt of a data message, the ECT Act determines as a general matter in section 23 (c) that a data message must be regarded "…as having been received at the addressee's usual place of business or residence." The phrases "usual place of business" and "usual place of residence" are unfortunately not defined in the ECT Act. The interpretation of these phrases raises a unique problem because a person may have more than one place of business or residence. As correctly noted by Erasmus J in the case of *Parity Ins Co Ltd v Wiid*:[328]

> …it is perfectly normal to conceive of an individual having more than one independent business at different 'usual' places of business….

However, in the matter of *Dowson & Dobson Ltd v Evans & Kerns (Pty) Ltd*,[329] the phrase "place of business" as used in section 215 of the *Companies Act* 46 of 1926 was interpreted to mean:[330]

> …a place where the management is situated (although this may well be in more than one place) where the public is invited to communicate with the company for the performance of the company's business and where - unless the company ceases to do business altogether - it may be expected with reasonable confidence that responsible officials, competent to bind the company, will normally be found, irrespective of the fact that the companys' other employees may elsewhere be engaged on its activities. Not all these elements will necessarily be present in every case, but in my view they are the aggregate of the factors, all or most of which will exist at a place of business of the company.

In the matter of *Biro v Minister of the Interior*,[331] the court was of the view that:

> Ordinary residence is in the case of a person who has more than one residence, such residence with which he or she is connected more closely than with other places of residence; therefore, the test for being 'ordinarily resident' is stricter and narrower than for being merely 'resident'….

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mail or a written document. In view of these findings, the court concludes that a contract of employment came into existence," see *Jafta v Ezemvelo KZN Wildlife* 2008 ZALC 84 para 113.

328 *Parity Ins Co Ltd v Wiid* 1964 1 SA 216 (GW) 220A-B.

329 *Dowson & Dobson Ltd v Evans & Kerns (Pty) Ltd* 1973 4 SA 136 (hereinafter referred to as *Dowson & Dobson Ltd v Evans & Kerns (Pty) Ltd*).

330 *Dowson & Dobson Ltd v Evans & Kerns (Pty) Ltd* 141E-F.

331 *Biro v Minister of the Interior* 1957 1 SA 234 (T) 235.

Be the proper interpretation of those phrases whatever it may, what is important for purposes of present considerations is the fact that a message of acceptance will not necessarily conclude a contract at the place where it actually entered the offeree's information system. To illustrate, if a South African company uses the services of a VANS situated in the Netherlands to transmit and receive communications, a message of acceptance received by that VANS from a business partner of the client will not conclude a contract in the Netherlands but South Africa. Similarly, if a person resident within South Africa uses a mobile electronic agent to conclude a contract, that contract will be considered to have been concluded at that individual's usual place of residence within South African regardless of the actual place at which a message of acceptance entered the electronic agent.

4.5.2.3.4.3 A critical analysis of the time and place of formation of automated transactions under section 23 of the ECT Act

In the context of automated transactions, the first advantage of section 23 is that acceptances become effective and binding on offerors even without their awareness of the fact of receipt of the data messages of acceptance, and the contents of those data messages. It has been illustrated above that, on the part of the users of electronic agents, personal knowledge of the receipt of data message of acceptance would be impossible. That this is so was also acknowledged by the court in the matter of Jafta *v Ezemvelo KZN Wildlife*,[332] in which Pillay J mentioned that:

> It is not hard to see why the information theory is unworkable for contracts concluded electronically. A typical electronic or cyber contract is concluded when an offeree clicks on 'accept' or 'I agree' on a website that offers goods for sale. The acceptance of the offer may not even come to the attention of the seller if the thing sold is packaged and delivered automatically or through a despatch service.

Therefore, it would be untenable to hold that a contract has not been concluded under such circumstances simply because the user of an electronic agent was not personally aware of the customer's acceptance.

The second advantage of section 23 in relation to automated transactions is that it creates a presumption that a contract is concluded at the offeror's usual place of

[332] *Jafta v Ezemvelo KZN Wildlife* [2008] ZALC 84 para81.

business or residence. As illustrated above,[333] it can be very difficult in automated transactions to determine with precision the actual place or location from which a data message was dispatched or received by an electronic agent. This is especially true where the electronic agent in issue is mobile, *i.e.* capable of migrating from one network or computer to another. By creating a presumption that a data message is received at the addressee's usual place of business or residence, section 23 (c) relieves the court from a burdensome evidentiary enquiry of the factual place or location at which a message of acceptance actually entered an electronic agent.

The aforementioned advantages notwithstanding, there are notable difficulties with section 23 of the ECT Act. The first difficulty with section 23 is that it is drafted in a very wide and loose language, which in turn raises concerns over its relevance to automated transactions. For instance, section 23 consistently makes reference to an "information system," and does not in any of its subsections refer to an electronic agent or an automated message system. The ECT Act defines the expression "information system" to mean: [334]

> [A] system for generating, sending, receiving, storing, displaying or otherwise processing data messages and includes the Internet.

This definition is admittedly wide enough to include any tool of communication which can perform any of the listed functions. It is said as a result that depending on the factual situation, a communication network, electronic mailbox or telecopier may qualify as an information system.[335] As wide as it might be, it is common cause that the definition of an information system does not include an electronic agent. Indeed UNCITRAL is at pains to mention in its commentary on the UNECIC that:[336]

> The notion of 'automated message system' refers essentially to a system for automatic negotiation and conclusion of contracts without involvement of a person, at least on one of the ends of the negotiation chain. It differs from an 'information system' in that its primary use is to facilitate exchanges leading to contract formation. An automated message system may be part of an information system, but that need not necessarily be the case….

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333 See para 4.5.2.3.3 above.

334 s 1.

335 UN *United Nations Convention on the Use of Electronic Communications* para 40; UN *UNCITRAL Model Law* para 101.

336 UN *United Nations Convention on the Use of Electronic Communications* para 103.

Unless one adopts the view that the expression "information system" as used in section 23 of the ECT Act includes an electronic agent, which the current researcher considers to be so, a case can be made out that section 23 does not apply to automated transactions.

Another difficulty with section 23 is that it is drafted in a tone which seemingly excludes instances of receipt of data messages by electronic agents. Indeed section 23 (b) mentions that a data message will be regarded to have been received if it "…is capable of being retrieved and processed by the 'addressee.'" The term "addressee" is defined in the ECT Act to mean:[337]

> [A] 'person' who is intended by the originator to receive the data message, but not a person acting as an intermediary in respect of that data message.

It is common cause that the word "person" as used in the ECT Act does not include an electronic agent.[338] As one author puts it,[339] "…the ECT Act does not regard the computer as an individual…." Consequently, a case can similarly be made out that section 23 (b) is not intended to apply to automated transactions unless one adopts the view that the term "addressee" in that section includes an electronic agent of the addressee.

It is submitted that reference to an addressee in section 23 (b) must be interpreted to include an electronic agent of the addressee. This submission is based on the view that the ECT Act regards an electronic agent as a mere tool of its user, meaning that whatever the user does through the instrumentality of an electronic agent he does himself. An offer made by an electronic agent is regarded under the ECT Act as having been made by the user of that electronic agent himself.[340] Similarly, an acceptance communicated to a person's electronic agent must be regarded as having been communicated to the user of that electronic agent personally. Consequently, section 23 (b) must be interpreted in the context of automated transactions to mean that a message of acceptance will be regarded to have been received by the offeror when a complete data message enters his or her

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337 s 1.
338 s 1, stating that the word person "includes a public body."
339 Gereda "The Electronic Communications" 284.
340 s 25 (c).

electronic agent, and is capable of being retrieved and processed by that electronic agent.

For a data message to be capable of being retrieved and processed by an electronic agent, it is common cause that it must be generated and communicated to that electronic agent in an appropriate or compatible format. By an "appropriate format" is meant a format that the addressee's electronic agent is programmed or configured to recognise as a valid communication. That communications between electronic agents must be exchanged in structured formats has been illustrated in chapter two,[341] albeit with specific reference to EDI transactions. However, it is common cause as one author points out, that the need for structured formats in the use of electronic commerce technologies is not limited to EDI.[342] Structured formats will still have to be used to exchange messages between electronic agents in all other instances of automated contracting. In the absence of prior agreement between users concerning the format(s) in which messages will be exchanged by their electronic agents, it is easily conceivable that problems will arise in law concerning the issue of the legal effectiveness of messages exchanged in incompatible formats. As one author correctly notes:[343]

> While message format standards may exist in business-to-business Electronic Data Interchange (EDI) applications ... the absence of such standards in the consumer context may lead to uncertainty in contracting with consumers.

It is not immediately clear the course which the law will adopt in relation to messages exchanged between electronic agents in incompatible formats. One solution would be to hold that a message of acceptance received in a format that the offeror's electronic agent is unable to process does not conclude a contract because it is not "capable of being retrieved and processed" as required by section 23 (b). This solution can be justified on the ground that it matches the reality of automated transactions. To illustrate, if an electronic agent is programmed to automatically perform a contract upon receipt of a message of acceptance, it is beyond doubt that

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341 See para 2.3.1.2.1 above.

342 Boss 1991 *The Business Law* 1795, stating as a general matter that "[t]he effective and efficient use of electronic commerce technologies requires the exchange of business information in standardized format."

343 Wong 1999-2000 *Suffolk University Law Review* 101.

such performance cannot be triggered by an "unprocessable" message of acceptance. Similarly, if an electronic agent is programmed to automatically send out an acknowledgement of receipt of a message of acceptance, it is common cause that the electronic agent will not execute that function if the message of acceptance is received in a format that it is unable to process. From this perspective, a message of acceptance received in a format that the offeror's electronic agent is unable to process cannot conclude a contract. For purposes of the law, such a message of acceptance may be regarded as equivocal in the sense of being in a "language" which the offeror's electronic agent does not understand.

The foregoing view is, however, problematic. Argument can be made that in the absence of agreement between users concerning the format(s) to be used, it is unfair for the law to require or expect the originator to use a format that is unique to the addressee's electronic agent. First of all, the originator may not even be aware of the fact that he or she is communicating with an electronic agent, consequently that he or she must be mindful of the format in which his or her messages are generated. Secondly, even if the originator is aware of the fact that the addressee uses an electronic agent to receive communications, he or she cannot reasonably be expected to know precisely the format in which that electronic agent is programmed to receive communications. By neglecting to disclose to third parties that he or she is participating through an electronic agent, or the format in which his or her electronic agent is programmed to receive communications, the addressee may be taken to have assumed the risk of being bound by messages communicated in incompatible formats. Such a risk may be said to have been assumed especially where the originator's message was generated in a format that is reasonable under the facts and circumstances of a case. For instance, if a format is commonly used by businessmen to transmit and receive messages in the ordinary course of business within a given industry, it is submitted that the use of that format by the originator will be reasonable. Similarly, if the addressee reprograms his electronic agent to accept messages in a different format from that which was used previously, and fails to inform trading partners of that fact, the originator must be taken to have used a reasonable format if his or her message of acceptance was generated in the

previously used format. Consequently, a data message of acceptance that is generated by the offeree in a reasonable format will conclude a contract even if the offeror's electronic agent is unable to process that format. This approach is strongly supported by the current researcher on the basis that it provides users of electronic agents with an incentive to minimise the risk of incompatible formats in automated transactions by informing third parties of the proper format(s) to use.

4.6 The incorporation of standard terms and conditions in automated transactions

The advent of online trading, particularly the sale of goods over automated commercial websites, has brought with it novel means of incorporating terms and conditions into contracts. Terms may be incorporated by reference through a hyperlink made available on the actual trading website.[344] When a customer clicks on the hyperlink, the browser will automatically open or display a separate page containing the trader's standard terms and conditions.[345] In other instances, the trader may make his or her standard terms and conditions available on the actual trading website at a certain stage in the process of contract formation. The customer may then be required to indicate his or her assent to those terms and conditions by clicking on the "I Agree" or "I Accept" button. In other instances, an online trader may simply warn customers that they will be taken to have consented to his or her standard terms and conditions by downloading an item or performing any other action on the website. The enforceability of terms and conditions introduced in online contracts has been a bone of contention amongst legal commentators and courts of law. The manner in which terms and conditions are usually introduced on

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344 The ECT Act defines a "hyperlink" in s 1 to mean "…a reference or link from some point in one data message directing a browser or other technology or functionality to another data message or point therein or to another place in the same data message." A hyperlink normally takes the form of a website or webpage address, also known as the URL, for instance <http://lawschool_essensialmaterialsforstudents&lecturers.pdf>.

345 See Wu 1997-1998 *Juremetrics* 318; Koornhof 2012 *Speculum Juris* 44-45. Apart from agreements concluded on trading websites, hyperlinks can also be used in contracts concluded through email where the document containing the terms and conditions which are sought to be included in the agreement is not attached to the email. The other party, upon clicking on the hyperlink, is usually directed to the relevant webpage or document. The direction happens automatically, meaning that that the party does not have not retype or search the webpage address or URL on a search engine. The simple click of the hyperlink automatically opens the webpage on a browser.

commercial websites, and the manner in which customers are required to indicate or manifest their assent thereto, remain problematic in law.

The aim in this part of the study is to discuss the incorporation or inclusion of terms into automated transactions. This issue is particularly relevant to the validity and enforceability of automated transactions in as much as contracting parties can use electronic agents to incorporate or accept contractual terms. The discussion shall be commenced with a detailed outline and interpretation of the statutory legal framework for the incorporation or inclusion of terms in automated transactions. The second part of the discussion shall discuss the enforceability of terms introduced by online traders in click-wrap and web-wrap agreements. The third part of the discussion shall interrogate the legal force and effect of terms and conditions introduced in automated transactions by electronic agents *inter se*.

4.6.1 The statutory legal framework for the incorporation of standard terms and conditions in automated transactions

The ECT Act adopts two sets of provisions for the inclusion of terms in electronic contracts. The first set deals with the incorporation of terms by reference in electronic contracts. The second set deals specifically with the incorporation of terms in automated transactions. For purposes of a meaningful discussion, both sets of provisions shall be interpreted in this work.

The incorporation of terms by reference in electronic contracts is addressed in section 11 of the ECT Act. The statute proceeds with a general rule that information is not without legal force and effect solely on the ground that it is not contained in the data message purporting to give it such force and effect, but is merely referred to in that data message.[346] This provision extends legal recognition and validity to the practice of incorporation by reference in electronic contracts.[347] As explained by

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[346] s 11(2). This provision was sourced from art 5 *bis* of the UNCITRAL Model Law which was introduced in that document as an addition in 1998. Art 5 *bis* equally provides that "[i]nformation shall not be denied legal effect, validity or enforceability solely on the grounds that it is not contained in the data message purporting to give rise to such legal effect, but is merely referred to in that data message."

[347] See UN *UNCITRAL Model Law* para 46-1. In adopting this provision, UNCITRAL recognised that there was already a widespread practise emerging in which contracting parties in EDI, electronic

Scott JA in the matter of *Industrial Dev Corp of SA (Pty) Ltd v Silver*,[348] incorporation by reference occurs when "…one document supplements its terms by embodying the terms of another." The effect of incorporating terms contained in a separate document by reference is to make the contents of that document part of the contract.[349]

The ECT Act places a number of requirements for the incorporation of terms by reference in electronic contracts. The first requirement is that, if the information incorporated by reference is not in the public domain, reference thereto must be done in such a manner that a reasonable person would have recognised both the reference thereto and the incorporation thereof.[350] The second requirement is that the incorporated information must be accessible in a form in which it can be read, stored and retrieved by the other party, whether electronically or as a computer printout, so long as the incorporated information is capable of being reduced to an electronic format by the party incorporating it.[351] Each of these requirements shall be discussed in full below.

The first point worth noting with section 11 (3) is that it is applicable where the information which is sought to be incorporated by reference is not in the public

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mail, digital certificates and other forms of electronic commerce where incorporating terms in their agreements by reference. Through incorporation of information by reference, especially by using hyperlinks, parties to electronic contracts are able to exchange huge volumes of information with each message containing a brief and manageable volume of information, see UN *UNCITRAL Model Law* para 46-2. The main purpose of the provision is to afford legal recognition to the practise of incorporation by reference.

348 *Industrial Dev Corp of SA (Pty) Ltd v Silver* 2003 1 SA 365 (SCA) para 6; UN *UNCITRAL Model Law* para 46-1 which defines "incorporation by reference" to mean "…a concise means of describing situations where a document refers generically to provisions which are detailed elsewhere, rather than reproducing them in full." See also Wu 1997-1998 *Juremetrics* 317-318; Whitman 1961 *Maryland Law Review* 1-21; Barondes 2012 *Baylor Law Review* 652-720.

349 The effect of incorporation by reference is demonstrated in the case of *Burger v Central South African Railways* 1903 TS 571. In that case, the plaintiff's agent delivered a package of valuable law books to the railway company for transportation, and signed a consignment note on his principal's behalf. The consignment note in issue incorporated by reference the Goods Traffic Regulations which *inter alia* contained a provision outlining a formula for the calculation of the railway's liability. The plaintiff had read the consignment note, but did not bother to acquire a copy of the Regulations. The books were lost on transit, and the plaintiff sued. The railway company argued that its liability to the plaintiff had to be calculated in terms of the Regulations. The court found that the terms incorporated by reference were as binding as if they had been printed on the consignment note itself. See case as discussed by Christie *The Law of Contract* 199; Kerr *The Principles* 343.

350 s 11(3) (a).

351 s 11(3) (b).

domain. The ECT Act unfortunately does not define the expression "public domain." Therefore, guidance must be sought in other parts of the law where that phrase has earned a settled meaning. In the law of patents and trademarks, as formulated by Viljoen AJ in *Rizla International BV v L Suzman Distributors (Pty) Ltd*,[352] the test for determining whether or not something is in the public domain is whether its reproduction by someone who is not its original inventor can still be calculated as deceiving the public. If not, then the product is in the public domain, and anyone can reproduce it without incurring liability to the original inventor.[353] In relation to confidential information, *i.e.* protected information such as state secrets, such is regarded to be in the public domain if it has received wide media publication over a significant period of time.[354] It is clear, however, that these interpretations do not offer much assistance. In the opinion of the current researcher, for purposes of section 11(3), information must be held to be in the public domain if it is freely available to anyone who desires to access or obtain it, with very little restrictions or bureaucratic obstacles at that. For instance, information may be regarded to be in the public domain if members of the general public can freely view and download it from a website.

Regarding the first requirement, *i.e.* the requirement that information must be referred to in such a manner that a reasonable person would notice it, there are two points which require further elaboration. The first point relates to the "reasonableness" of the reference. What is reasonable enough will admittedly depended on the practicalities of a case. The incorporating party may use a different colour, or a different theme font and font size to highlight the significance of the information to which reference is made,[355] or can underline the hyperlink.[356] It is

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352 *Rizla International BV v L Suzman Distributors (Pty) Ltd* 1996 2 SA 527 (C) 533 C-F.

353 See *Schultz v Butt* 1986 3 SA 667 (A) 681B.

354 See generally *Independent Newspapers (Pty) Ltd v Minister for Intelligence Services: In re Masetlha v President of the RSA* 2008 5 SA 31 (CC).

355 See Pistorius 2004 *SAMLJ* 575, making the point that "[t]he terms should be displayed in a manner that catches the eye. Grey hyperlinked text on a grey background is not good enough. The font of the URL to the linked information should at least be as big as the font of the other text on the page. I believe that it should be displayed in a bright colour to make it more noticeable. If the URL is displayed in a manner that makes it clear and distinctive, it will catch the eye of a reasonable person. If the font size and colour are acceptable, the text will be deemed to be readable." Apart from colour and font size, the location of the hyperlink itself may be a significant factor. Reference to the information which is being incorporated must be made

worth noting that the standard of reasonableness does not only apply to the party incorporating terms by reference, but also to the other party, who as a reasonable person is expected to take notice of the incorporation by reference.[357] The second point to note is that not only should the incorporating party refer to the information which is sought to be incorporated by reference in a manner that a reasonable person would notice, it must also be clear to the other party that the information to which reference is made is being incorporated into the contract. Therefore, the mere provision of a hyperlink without clear indication that the hyperlink leads to standard terms and condition which are intended to form part of the contract will not be enough.[358]

The second requirement is that the information being incorporated by reference must be:

> [A]ccessible in a form in which it may be read, stored and retrieved by the other party, whether electronically or as a computer printout as long as such information is reasonably capable of being reduced to electronic form by the party incorporating it.[359]

What is important first of all is that the information being incorporated by reference must be accessible. In the main, "accessibility" means that the information being incorporated by reference must actually be available to the other party.[360] In the opinion of the current researcher, information incorporated by reference will be considered to be available first and foremost if the hyperlink is active in the sense

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at a place where a reasonable person would expect to find it, for instance reference made at the very end or an obscure part of the webpage may not be enough to draw the attention of the customer, see Organ and Corcoran 2008 *Privacy and Data Security Law Journal* 693.

356 See Organ and Corcoran 2008 *Privacy and Data Security Law Journal* 693-694. To summarise, all that is required is that the intention to incorporate information must be made in an inconspicuous manner. The incorporating party must not hide his or her terms and conditions from the customer. Indeed same has been held to be true even at common law.

357 Therefore, if despite the incorporating party having taken all reasonable steps to bring such to the attention of the other party, that party fails to read the terms, he will be held to be bound by the said terms nevertheless.

358 As part of this requirement, one may also add that, if only specific terms are being incorporated, such also must be made abundantly clear. This was held to be so in the matter of *Hartland Implemente (Edms) Bpk v Enal Eiendomme BK* 2002 3 SA 653 (NC) 667C-669H, in which it was held that for a proper incorporation by reference, there must be a clear nexus or connection between the incorporating and incorporated document. Such nexus does not merely mean that the incorporated document must be clearly identifiable, it must also be indicated the context in which it is being incorporated in relation to the contract.

359 See s 11 (3) (b).

360 See Pistorius 2004 *SAMLJ* 574.

that the mere clicking of it by the other party will automatically lead him or her to the website or document containing the information that is being incorporated. According to UNCITRAL,[361] other factors which may affect the accessibility of such information include the ease with which it can be accessed by the other party, the cost of accessing that information, the integrity of the information,[362] and the degree to which the information is subject to later modifications.

The information being incorporated by reference must be accessible in a manner which permits or allows the other party to read, store and retrieve it, either electronically or as a computer printout. Whether or not the information is readable will depend, amongst others, on the font size and colour used.[363] The font used to represent the information being incorporated must be legible.[364] Where the background of the website is coloured, the information being incorporated must be presented in a different colour so that it is visible to the other party. Apart from "readability," section 11 (3) (b) requires that the information being incorporated must also be capable of being stored and retrieved electronically or as a computer printout. The requirement that information must be capable of being stored and retrieved means that the other party must be able to save it in his or her information system, *e.g.* by downloading it. Information will also be capable of being stored and retrieved if it is capable of being printed into a hardcopy. It is the opinion of the current researcher that this requirement is intended to ensure that the other party is able to retain a copy of the incorporated terms for future reference. Consequently, information that is presented in such a manner that it cannot be saved or printed by the other party will not qualify. The same observation is true for information that can be read and printed without the option of saving it.[365]

Section 11 (3) (b) requires lastly that the information being incorporated by reference must be reasonably "…capable of being reduced to electronic form by the

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361 UN *UNCITRAL Model Law* para 46-5.

362 The integrity of the incorporated information include "verification of content, authentication of sender, and mechanism for communication error correction," see UN *UNCITRAL Model Law* para 46-5.

363 See Pistorius 2004 *SAMLJ* 575.

364 Kunz *et al* 2001 *Business Lawyer* 423.

365 See Pistorius 2004 *SAMLJ* 575.

party incorporating it." This means in short that the information being incorporated by reference must be in an electronic form, consequently that a party cannot incorporate information by reference into an electronic contract if that information is retained in hardcopy. If a party wants to incorporate information retained in hardcopy, he or she must reasonably reduce it into electronic form, *e.g.* by electronic scanning or taking a snapshot. If the information in issue is not capable of being reduced and represented in an electronic form, such will not fall within the scope of section 11(3). Therefore, even information that is in the public domain must be accessible by the other party in an electronic form, more so because the parties may be in different locations or jurisdictions, so that the only practical way in which the other party can get hold of that information is electronically.

Concerning automated transactions specifically, the ECT Act provides that:[366]

> [A] party using an electronic agent to form an agreement is, subject to paragraph *(d)*, presumed to be bound by the terms of that agreement irrespective of whether that person reviewed the actions of the electronic agent or the terms of the agreement.

This provision was interpreted above to mean that a party using an electronic agent to form a contract will be bound by the terms of that agreement even though he or she did not review them prior to agreement formation.[367] As illustrated elsewhere in this chapter,[368] a party using an electronic agent to form a contract is presumed to have foreknowledge of the terms of the contract that it will conclude with a third party. This is so because he or she has programmed those terms into the electronic agent. The user of an electronic agent cannot, therefore, avoid the terms of an agreement on the basis that he or she did not review them prior to the formation of an automated transaction. The presumption in section 20 (c) that the user of an electronic agent is bound by the terms of an automated transaction operates subject to section 20 (d), which provides that:

> A party interacting with an electronic agent to form an agreement is not bound by the terms of the agreement unless those terms were capable of being reviewed by a natural person representing that party prior to agreement formation.

366 See s 20 (c).
367 See para 4.2 above.
368 See para 4.5.1.1 above.

Section 20 (d) clarifies the fact that the presumption in section 20 (c) operates only in relation to the party using an electronic agent. Consequently, the other party, who is interacting with that electronic agent in his or her natural person to form an automated transaction, is not presumed to be bound by the terms of that transaction if he or she did not review them;[369] wherefore section 20 (d) provides that the terms of an automated transaction must be capable of being reviewed by the other party. If the terms in issue are not capable of being reviewed by the other party, he or she is not bound thereby.

There are a number of points that need further elaboration with section 20 (d). The first point is that section 20 (d) presumes that the terms of an automated transaction will always be dictated by the party using an electronic agent, consequently that the user of an electronic agent must ensure that the other party is able to review those terms before agreeing to be bound. The second point is that the terms in issue must merely be capable of being reviewed prior to contract formation, not that they must actually be reviewed. Consequently, if the other party fails or neglects to review the terms when they are capable of being reviewed, he or she cannot evoke section 20 (d) to avoid those terms. The third point is that the terms must be capable of being reviewed by a "natural person," meaning that section 20 (d) does not apply where both parties use electronic agents to form an agreement. The fourth point worth noting with section 20 (d) is that the mere fact that the terms of an automated transaction were not capable of being reviewed does not entitle the other party to avoid the entire agreement. On the contrary, section 20 (d) is clear that such a party "…is not bound by the terms…," meaning that he or she can only avoid the terms.[370] One must readily acknowledge, however, that where the terms in issue are material to the contract, *e.g.* if they relate to the purchase price or the description of the *merx*, the legal effect of section 20 (d) shall be to vitiate the entire agreement. The fifth point is that the terms in issue must be

369 As Pistorius 2008 *JILT* 9 puts it "…section 20(c) deals with the legal position of the person on whose behalf the automated system operates and not the person interacting with the electronic agent."

370 See Pistorius 2008 *JILT* 11, stating that "…in assessing the effect of this provision; one should focus on the enforceability of the terms and conditions, and not on the contract itself. The effect of section 20(d) is simply that the natural person will not be bound to the terms and conditions, but that the *naturalia* of the contract will apply."

capable of being reviewed prior to agreement formation, meaning that terms cannot be introduced into an automated transaction *post hoc facto*.

According to Pistorius:[371]

> The real complication which section 20(d) creates is the fact that it dilutes the incorporation by reference requirements of the ECT Act as provided for in section 11(3)).

This is so because unlike section 11 (3), section 20 (d) merely requires that terms introduced into an automated transaction must merely be capable of being reviewed. Therefore, all the requirements listed in section 11 (3) are inapplicable to the incorporation of terms in automated transactions.

4.6.2 The enforceability of standard terms and conditions in automated transactions

Having considered above the legislative legal framework for the incorporation of terms and conditions in automated transactions, a turn shall be made at this point to discuss the enforceability of such terms and conditions in South Africa. The main focus of the present discussion is to consider the enforceability of such terms and conditions in light of the various ways in which customers are commonly required to demonstrate or manifest their assent thereto in internet contracts. The discussion shall consider the enforceability of terms and conditions introduced by online traders in click-wrap and web-wrap agreements. It is common cause that in the context of online sale transactions, click-wrap and web-wrap agreements are likely to qualify as automated transactions because as one author correctly observes,[372] "… [m]ost on-line transactional interfaces involve an electronic agent."

4.6.2.1 Click-wrap agreements

Click-wrap agreements are the most popular of all internet contracts.[373] To better appreciate the concept of click-wrap, one needs first understand the evolution of these agreements. Click-wrap agreements are said to have evolved from shrink-wrap

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371 Pistorius 2008 *JILT* 11.
372 Pistorius 2008 *JILT* 2.
373 Gatt 2002 *Computer Law and Security Report* 405; Pistorius 1999 *SAMLJ* 292-293; Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 908.

agreements, uniquely for purposes of electronic commerce.[374] Shrink-wrap agreements are largely used in the sale of computer software off-the-shelf.[375] Software sold in this way is usually written on a CD. The CD is packaged together with user guide manuals in a box. Over the box is placed a licence agreement containing the terms and conditions on which the purchaser of the software will use the product.[376] The licence agreement and the software package are then wrapped in a plastic or cellophane wrapper.[377] There is usually a notice warning that by tearing the cellophane wrapper, the customer agrees to be bound by the terms of the licence agreement. Therefore, by tearing the wrapper, the customer practically manifests his or her assent to the terms and conditions of the licensing agreement.[378] If the customer does not wish to be bound by the terms and conditions of usage of the software, there is always an option to return the package before tearing the wrapper.[379] There are several advantages to the use of shrink-wrap agreements for the sale of computer software. With the increased need for

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374 See Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 908; Koornhof 2012 *Speculum Juris* 43; Femminella 2003 *St. John's Journal of Legal Commentary* 95; Pistorius 1999 *SAMLJ* 569; Pistorius 1999 *Juta Business Law* 81; Jones *et al* 2000 *Technology Commentaries* 1, stating that the term "click-wrap" derives from the term "shrink-wrap," and that click-wrap agreements came about as a result of a transition made by the computer industry, from selling software over the counter, to the Internet.

375 See Pistorius 1999 *Juta Business Law* 79; Goodman 1999-2000 *Cardozo Law Review* 319; Pistorius 1993 *SAMLJ* 1-2. The use of shrink-wrap agreements in the sale of computer software was introduced mainly with the aim of protecting the copyright interest of software producers. In the US particularly, the "first sale rule" was largely viewed by producers of software as prejudicial. The effect of the "first sale rule" is that, once the inventor of a work sells or legally transfers it to another, the copyright of the owner in that work is exhausted. Therefore, the new owner of the work or product can deal with it as he or she pleases. Through shrink-wrap agreements, software producers are able to label the transaction as a licence agreement, as opposed to a sale, and to impose the terms and conditions of the licence on the customer or user of the software, see Femminella 2003 *St. John's Journal of Legal Commentary* 91-92.

376 This standard form contract may be placed inside or on top of the package, see Koornhof 2012 *Speculum Juris* 43. The main aim of the licence is to cover issues of copyright and terms of use of the software by the buyer, see Pistorius 1999 *Juta Business Law* 79; Jones *et al* 2000 *Technology Commentaries* 1; Gatt 2002 *Computer Law and Security Report* 405.

377 See Jones 2000 *Technology Commentaries* 1; Goodman 1999-2000 *Cardozo Law Review* 320; Koornhof 2012 *Speculum Juris* 43; Pistorius 1999 *Juta Business Law* 79; Pistorius 2004 *SALMJ* 569.

378 See Condon Jr 2004 *Regent University Law Review* 435; Snail *A Comparative Analysis of Legislative Reform of Electronic Contract* 129, stating, however, that if the retailer fails to draw the customer's attention to this fact, such may be calculated to constitute a misrepresentation by silence.

379 Jones *et al* 2000 *Technology Commentaries* 1; Pistorius 1999 *Juta Business Law* 80 give example of a term stating that "[b]y breaking this seal you agree to be bound by all the terms and conditions of this licence agreement. If you do not accept or agree to these terms you may, within fifteen (15) days, return this entire package unused and unopened to the person from whom you acquired it for a full refund."

computers and software, it is no longer practical for software producers to negotiate agreements individually with each customer.[380] Being contracts of adhesion, shrink-wrap agreements effectively allow software producers to conclude agreements with anyone around the globe without direct negotiations between the parties.[381]

As mentioned above, the concept of click-wrap evolved from that of shrink-wrap. The main difference between the two is that, unlike in shrink-wrap agreements, where customers are required to perform an act of assent after the purchase of the product, customers in click-wrap agreements are required to show assent to the terms and conditions of the trader before the conclusion of a sale transaction.[382] In a typical click-wrap agreement, the customer is presented with the terms and conditions of the trader, and is required to assent to the said terms before he or she can access any service or product from the website.[383] The customer's assent can be acquired in a variety of ways, *e.g.* by requiring the customer to type "I Agree" or "I Accept" below or near the said terms.[384] The most common way of acquiring the customer's assent, however, being the one from which click-wrap contracts receive their name, is by requiring the customer to click a button or icon with the "I Agree" or "I Accept" caption below or near the terms.[385] Although click-wrap agreements are largely associated with online sales, this form of agreement is admittedly used in different industries operating online, including in online banking, securities trading,

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380 Gatt 2002 *Computer Law and Security Report* 405-406.

381 Goodman 1999-2000 *Cardozo Law Review* 320. For an informative discussion of the validity and enforceability of shrink-wrap agreements from the perspective of South African law, see Pistorius 1993 *SAMLJ* 1-19.

382 Jones *et al* 2000 *Technology Commentaries* 2; Pistorius 1999 *SAMLJ* 292.

383 See Gatt 2002 *Computer Law and Security Report* 405, mentioning that the customer may not have access to the trader's website unless he or she has demonstrated assent to the applicable terms and conditions. This is, however, not always true. Terms and conditions in click-wrap agreements do not always appear at the very beginning of the transaction. The terms can be introduced at any stage of the transaction before finalisation of the contract. What is important to note is that the transaction cannot be finalised or complete before the customer is presented with these terms and conditions for purposes of manifesting assent, see Anderson 2007 *Shidler Journal of Law, Commerce and Technology* para 3; Condon Jr 2004 *Regent University Law Review* 435. For instance, if the customer desires to download a product from the website, *e.g.* software, a movie or music; that will not be possible until the customer has clicked the requisite icon or button.

384 See Gatt 2002 *Computer Law and Security Report* 405.

385 See Anderson 2007 *Shidler Journal of Law, Commerce and Technology* para 3; Gatt 2002 *Computer Law and Security Report* 405; Jones *et al* 2000 *Technology Commentaries* 2; Kunz *et al* 2001 *The Business Lawyer* 402-405; Pistorius 1999 *Juta Business Law* 81-82; Snail *A Comparative Analysis of Legislative Reform of Electronic Contract* 129; Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 908.

auction and gambling, discussion blocks, newsgroups *etc*.[386] The presence of click-wrap agreements is also readily clear in electronic software, where amongst the various stages of installing software on a computer, the user is required to click on a "proceed" or "I Agree" icon below licensing terms before the software can complete installation.[387]

4.6.2.1.1 The enforceability of click-wrap agreements

A central theme in all the objections that have been raised against the enforceability of click-wrap agreements relates to the requirement of assent in the creation of contractual obligations. There are those who feel that the mere clicking of an "I Agree" icon is not enough to indicate the customer's assent or consent to the trader's terms and conditions.[388] The first argument against "the click" as a means of expressing assent to terms and conditions is that such a process is just too simple and easy that many online buyers do not even appreciate its legal consequences.[389] The second argument, closely affiliated to the first, is that from the social and psychological point of view, online customers do not usually associate themselves with texts encountered on websites, but simply browse them.[390] The third argument is that the internet is inherently characterised by speed, meaning that customers can pass through significant steps or procedures swiftly without paying enough attention.[391] The fourth argument relates to the high risk of mistakes and fraud in

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386 See Gatt 2002 *Computer Law and Security Report* 406.

387 Koornhof 2012 *Speculum Juris* 45.

388 See generally Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 907-946; Gautrais 2003-2004 *University of Ottawa Law and Technology Journal* 189-212; Dessent 2002-2003 *Thomas Jefferson Law Review* 1.

389 Gautrais 2003-2004 *University of Ottawa Law and Technology Journal* 206, making the point that due to the ease and simplicity of clicking an icon on a computer screen, it is possible for internet users to become habitual or compulsive clickers, especially if the customer considers the act of clicking no different from the act of turning on or off a computer.

390 Gautrais 2003-2004 *University of Ottawa Law and Technology Journal* 206; Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 939, mentioning that internet transactions, as currently construed, fail to achieve the sufficient psychological commitment on the part of the customer. This view finds much support when the clicking of a mouse is compare to a handwritten signature. Signatures are mainly used in matters of legal significance, and every person who is required to append a signature understands that he or she is performing an action which may carry significant legal implications. On the contrary, the clicking of a mouse on a computer screen is usually associated with insignificant matters such as subscription for free memberships.

391 See Gautrais 2003-2004 *University of Ottawa Law and Technology Journal* 207; Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 939-940, who makes the

internet contracts, and it is said that by considering the mere click of an assent icon as enough evidence of assent, the law does not afford adequate protection to online customers.[392] For these reasons, a point has been made for standard rules and procedures regulating contract formation in click-wrap agreements, particularly with a view to ensuring sufficient manifestation of consent or assent on the part of online customers.[393]

The issue whether or not the mere click of an assent button is a sufficient manifestation of assent is addressed, *albeit* indirectly so, by the ECT Act. According to sections 13 (5) (b) and 24 (b) of the ECT Act:

> …an expression of intent or other statement is not without legal force and effect merely on the grounds that-
>
> (b) it is not evidenced by an electronic signature but by other means from which such person's intent or other statement can be inferred.

While acknowledging that a signature is the usual means through which contracting parties traditionally express their intention to be bound, these provisions confer legal force and effect to any other conduct from which a person's intention to be bound can be inferred. Therefore, an expression of intent can validly be made through conduct other than an electronic signature. On that basis, it is clear that the clicking of an assent button by a customer will suffice to evidence his or her intention to accept and be bound by the standard terms and conditions of an online trader. In compliance with section 20 (d) of the ECT Act, the terms and conditions of an online trader using an automated website to conclude a click-wrap agreement must be capable of being reviewed by the customer prior to contract formation. Therefore, if the trader's standard terms and conditions are capable of being reviewed, and the customer clicks the mouse on an assent button to signal his or her acceptance of

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argument that the interactive nature of the internet encourages customers to hurry to the next webpage. A consumer who quickly enterers his or her personal details and clicks on the "OK" button is allowed to bypass the essential parts of the transaction. This speed negates the existence of a subjective intention on the part of the customer to be bound by the clicking of the said button. It has been argued, therefore, that the process of contract formation in click-wrap agreements must be slowed down to encourage customers to read and understand terms, see Gautrais 2003-2004 *University of Ottawa Law and Technology Journal* 207.

392 See generally Dessent 2002-2003 *Thomas Jefferson Law Review* 1-16.

393 See Dessent 2002-2003 *Thomas Jefferson Law Review* 16; Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 946; Kunz *et al* 2001 *The Business Lawyer* 401-429.

those terms, a valid and enforceable click-wrap agreement will be concluded. In the opinion of the current researcher, it makes no difference that the customer did not read the standard terms and conditions of the trader before clicking an assent button, or that he or she did not appreciate the legal significance of that conduct at the time of clicking the assent button. As shall be recalled, section 20 (d) of the ECT Act has been interpreted to mean that the terms introduced by the user of an electronic agent must be capable of being reviewed, not that they should actually be reviewed. Therefore, failure on the part of a customer to review the standard terms and conditions of an online trader when they are capable of being reviewed will not affect the enforceability of click-wrap agreements. Similarly, notwithstanding that the customer did not subjectively intend to accept the standard terms and conditions of an online trader by clicking on an assent button, sections 13 (5) (b) and 24 (b) are clear that the mere inference of such intention will suffice.

Some commentators have suggested that the enforceability of click-wrap agreements in South Africa can be justified on the basis of the *caveat subscriptor* rule.[394] In the main, this suggestion is based on certain compelling similarities between click-wrap agreements and "signed standard-form contracts." A standard-form contract is a contract of adhesion,[395] meaning a contract in which the terms are "…completely defined by one party and the other party has no bargaining power."[396] The concept of standard-form contracting, and the benefits of using standard-form contracts in modern commerce, has been explained as follows by Sachs J in the matter of *Barkhuizen v Napier*:[397]

> Standard-form contracts are contracts that are drafted in advance by the supplier of goods or services and presented to the consumer on a take-it-or-leave-it basis, thus eliminating opportunity for arm's length negotiations. They contain a common stock of contract terms that tend to be weighted heavily in favour of the supplier and to operate to limit or exclude the consumer's normal contractual rights and the supplier's normal contractual obligations and liabilities...
>
> Standard-form contracts …undoubtedly provide benefits for those who produce and rely on them. In the context of mass production of goods and services, the use of

394 See generally Koornhof 2012 *Speculum Juris* 41-65; Snail 2008 *JILT* 5.
395 See Koornhof 2012 *Speculum Juris* 43; Pistorius 1999 *SAMLJ* 291; Goodman 1999-2000 *Cardozo Law Review* 319-360.
396 Condon Jr 2004 *Regent University Law Review* 436.
397 *Barkhuizen v Napier* 2007 5 SA 323 (CC) para 135-139.

> standard forms gave rise to the most significant new phenomenon in the practice of making contracts in the 20th century - the application of mass contracts to consumer transactions. For a business dealing with consumers, lawyers devised printed contracts that purported to govern exclusively the business relationship between the parties. Standard-form contracts are thus ordinarily the product not of negotiations but of the employment of legal teams by sellers of goods and services to serve their interests. In a business context such a standard-form contract preserves the wisdom of the in-house lawyers about the best way in which to handle recurrent problems of negotiation and performance…
>
> The use of standard forms responds to two economic pressures. They reduce the transaction costs of contracting by making available at no extra cost a suitable set of terms. In addition the printed forms permit senior management of a firm to control the contractual arrangement made by subordinate sales staff. For these reasons it makes sense to permit the use of standard forms, but to control the content of the terms of the contracts.

As with traditional standard-form contracts, click-wrap agreements too are purely concluded on a take-it-or-leave-it basis.[398] There is no possibility whatsoever of the online customer negotiating the terms of a click-wrap agreement with the trader. As a matter of fact, due to the widespread use of the internet, and its internationality, it would indeed be impossible for online retailers to conclude agreements on different terms with every customer.[399] It is precisely on this basis that one author correctly concludes that "[a] clickwrap agreement … is a contract of adhesion."[400]

Having established that a click-wrap agreement is a standard-form contract, the next issue is whether or not the clicking of an assent button on a commercial website is equivalent to appending a signature on a paper-based standard-form contract? In reply, Snail maintains that "[i]t may be argued that clicking 'I agree' or 'Buy' etc amounts to 'signing'…."[401] Whether or not this argument is true depends, amongst others, on whether or not the conduct of clicking an assent button satisfies the definition of an electronic signature. In terms of section 1 of the ECT Act, the expression "electronic signature" is defined to mean "data:"

> …attached to, incorporated in or logically associated with other data and which is intended by the user to serve as a signature.

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398 Gatt 2002 *Computer Law and Security Report* 405.
399 Gatt 2002 *Computer Law and Security Report* 405-406.
400 Condon Jr 2004 *Regent University Law Review* 436.
401 Snail 2008 *JILT* 5.

The word "data" is defined in section 1 of the ECT Act to mean "electronic representations of information in any form." To constitute an electronic signature, data must first and foremost be "…incorporated in or logically associated with other data…" Secondly, the data so incorporated must be intended by the incorporating party "…to serve as a signature." That the clicking of an assent button constitutes "data" in the sense of an electronic representation of information is not hard to envisage. In the case of click-wrap agreements, such data, *i.e.* the clicking of an assent button, is clearly associated with other data, being the standard terms and conditions of an online trader. However, in accordance with the definition of an electronic signature under section 1, the clicking of an assent button will only constitute a signature if it is "…intended by the user to serve as a signature." Therefore, unless the customer clicks an assent button with the intention of signing a contractual document, the conduct of clicking an assent button cannot be construed as a signature. As Koornhof explains:[402]

> If one takes into account that the definition of an electronic signature in ECTA places a greater emphasis on the mental element of a signature rather than the physical element, it is accordingly not absurd to view the actions attributed to a click-wrap as a type of signature.

Apart from the statutory definition of an electronic signature, the click of an assent button may as well satisfy the legal definition of a signature at common law. As observed by the Supreme Court of Appeal in the matter of *Spring Forest Trading 599 CC v Wilburry (Pty) Ltd t/a ECOWASH*:[403]

> Commonly understood a signature is 'a person's name written in a distinctive way as a form of identification….' But this is not the only way the law requires a document to be signed. In the days before electronic communication[s], the courts were willing to accept any mark made by a person for the purpose of attesting a document, or identifying it as his act, to be a valid signature. They went even further and accepted a mark made by a magistrate for a witness, whose participation went only as far as symbolically touching the magistrate's pen.

Therefore, the interpretation of the click of an assent button as a signature does not appear to raise any major complications from the perspective of the common law of contract. However, it is worth noting that at common law, a signature is not only

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402 Koornhof 2012 *Speculum Juris* 64-65.

403 *Spring Forest Trading 599 CC v Wilburry (Pty) Ltd t/a ECOWASH* Case No. 725/13 para 25.

used to indicate the signatory's acceptance of the contents of a document, but also to identify the signatory. As explained by the court in *Spring Forest Trading 599 CC v Wilburry (Pty) Ltd t/a ECOWASH*,[404] courts of law:

> …look to whether the method of the signature used fulfils the function of a signature – to authenticate the identity of the signatory – rather than insist on the form of a signature used.

The ECT Act also provides in section 13 (3) (a) that a method used as a signature must identify the signatory and indicate his or her approval of the concerned information. It is common cause that the clicking of an assent button does not in any manner identify the person who executed that function. Therefore, the *advocatus diaboli* may argue, on that basis, that the clicking of an assent button does not carry the legal force and effect of a signature. Koornhof,[405] with who the current researcher is in full agreement, argues in that regard that:

> …with regards to the identification of the party, this can easily be done through either using the contact or personal details provided by an individual [when completing the standard purchase order form of an online trader], as well as through the method of recording and tracking an individual's IP address.

At this point, it is felt that a case has been made to the effect that click-wrap agreements are analogous to signed standard-form agreements at common law. A turn shall be made at this juncture to illustrate how the relevant common law principles can be used to enforce the terms and conditions of click-wrap agreements against online customers.

Because the common law principles applicable to signed written contracts are very broad, the current discussion shall be conducted uniquely with a view to addressing the aforesaid objections to the enforceability of click-wrap agreements. In summary, these objections can be compressed into one decisive point, namely that customers in click-wrap agreements habitually click on the "I Agree" icon without caring to read and understand the traders' terms and conditions,[406] or without appreciating the

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404 *Spring Forest Trading 599 CC v Wilburry (Pty) Ltd t/a ECOWASH* Case No. 725/13 para 26 (hereinafter referred to as . *Spring Forest Trading 599 CC v Wilburry (Pty) Ltd t/a ECOWASH*).

405 Koornhof 2012 *Speculum Juris* 64.

406 Koornhof 2012 *Speculum Juris* 45 also states, as a matter of fact, that "…the average person will often simply click on a link or button without taking the precaution or making the effort to read the terms completely, if at all."

legal significance and consequence of that action. Regarding the issue that online customers habitually click on icons calculated to express assent without actually reading and understanding terms and conditions, it strikes one as nothing more than "old wine in new bottles." This point reiterates a typical human behaviour well known in contract law, and it is a bit deceptive for the fact of seeking to overstate the result of that behaviour simply because it occurs online. It is well known at common law that an average person is most likely to sign a standard-form contract without caring to read or understand its contents. This point was restated by the court as follows in *Barkhuizen v Napier*:[407]

> As it is impracticable for ordinary people in their daily commercial activities to enlist the advice of a lawyer, most consumers simply sign or accept the contract without knowing the full implications of their act. The task of endlessly shopping around and wading through endless small print in endless standard forms would be beyond the expectations that could be held of any ordinary person who simply wished to get his or her car insured.

The pressing issue is whether a party should be excused from liability simply because he or she clicked on an "I Agree" icon without reading and understanding the terms and conditions to which that icon relates? The significance of clicking without reading and understanding terms in click-wrap agreements has been expressed as follows:

> Many consumers fail to read the licenses because once they install the software, they act on the reflexive impulse to click 'O.K.' to any agreement that is posted. It is difficult to say that clicking 'O.K.' constitutes a 'meeting of the minds' sufficient to indicate contractual assent, because the purchaser might be simply making an irrational act, devoid of psychological commitment.[408]

To counter this observation, South African law proceeds on the basis of the general principle of *caveat subscriptor*, which has been loosely translated to mean "let he who signs take care."[409] The effect of this rule is to create a rebuttable presumption that a person who signs a contractual document knows what it contains.[410] The

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407 *Barkhuizen v Napier* 2007 5 SA 323 (CC) para 136.

408 Harrison 1998 *Fordham Intellectual Property, Media and Entertainment Law Journal* 943.

409 See Coaker and Zeffertt *Wille and Millin's Mercantile Law* 108.

410 See *Graaff-Reinet Municipality v Jansen* 1917 CPD 604 610; *Knocker v Standard Bank of South Africa Ltd* 1933 AD 128 132; *Trans-Drakensburg Bank Ltd v Guy* 1964 1 SA 790 (D) 794C; *Glen Comeragh (Pty) Ltd v Colibri (Pty) Ltd* 1979 3 SA 210 (T) 215.

caveat subscriptor principle is admittedly based on the reliance theory of contract.[411] The other party is reasonably entitled to assume that the signatory, form his or her conduct of appending a signature, is signifying his or her intention to accept and be bound by the contents of the document.[412] This rule applies *inter alia* where the signatory did not read the contents of the document, [413] and where he or she signs a document in a language which he or she does not understand.[414] Therefore, the mere fact that online customers in click-wrap agreements habitually click assent icons without reading and understanding terms does not of itself affect the enforceability of those terms against them.

In contrast to the legal framework captured in section 13 (5) (b) and section 24 (b) of the ECT Act, the first benefit of applying the *caveat subscriptor* rule to click-wrap agreements is that it greatly simplifies the enquiry whether or not a customer clicking on an assent button has agreed to be bound. The second benefit of applying the *caveat subscriptor* rule to click-wrap agreements is that, by equating them to signed contractual documents, the law will "…award a somewhat higher status to click-wrap agreements…."[415] The third benefit of applying the *caveat subscriptor* rule to click-wrap agreements is that its application will provide online customers with an incentive to read standard terms and conditions before clicking on assent buttons. It is accordingly recommended that South African courts should apply the *caveat subscriptor* rule in determining the enforceability of click-wrap agreements.

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411 See Christie *The Law of Contract* 200.

412 As Christie *The Law of Contract* 200 puts it, "[o]n the basis of quasi-mutual assent the cases in which it is clear … that the signatory has not read the document before signing are easily understood. 'I haven't read this document but I'm signing it because I'm prepared to be bound by it without reading it' is an attitude, whether expressed or implied, that entitles the other party to regard the document as binding."

413 See *Goedhals v Massey-Harris & Co* 1939 EDL 314.

414 See *Bhikhagee v Southern Aviation (Pty) Ltd* 1949 4 SA 105 (E) 110 in which the court noted in relation to a person who signs a document which he does not understand due to language barriers that "[b]y his signature he elected to take the risk, and he is bound."

415 Koornhof 2012 *Speculum Juris* 45.

4.6.2.2 Web-wrap agreements

Another variant of standard-form contracts used online are web-wrap agreements.[416] In web-wrap agreements, a trader can present his or her terms and conditions to customers directly on the homepage, or through a hyperlink.[417] Although web-wrap and click-wrap agreements are largely used for the same purpose,[418] there is a significant difference between the two. The main difference lies in the fact that in web-wrap agreements, customers are not required to click on any icons in order to express their consent or assent to the standard terms and conditions of a trader.[419] A typical web-wrap agreement will merely state that "use of the site constitutes acceptance of terms," or that "downloading or using the software manifests your assent to these licence terms."[420] The preference of web-wrap over click-wrap agreements may be motivated by a number of factors, including the layout of the website, or because web-wrap agreements are regarded as less intrusive on the customer's ability to access the contents of a website.[421]

4.6.2.2.1 The enforceability of web-wrap agreements

Web-wrap agreements are generally thought problematic for the reason that customers are not required to perform a positive act indicating their acceptance of, or assent to, the terms and conditions of online traders.[422] Secondly, there is always a possibility that a customer may not be aware of the trader's terms and conditions since he or she can effectively access the contents of a website without performing a

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416 It is not readily clear the origins of the phrase, "web-wrap." Pistorius 2004 *SAMLJ* 570, states that web-wrap agreements take their name misleadingly from click-wrap agreements. The same author mentions further that Dunn is of the view that web-wrap agreements take their name form the computer protocol used to communicate, namely, World Wide Web protocol.

417 Pistorius 2004 *SAMLJ* 570; Koornhof 2012 *Speculum Juris* 45; Rambarran and Hunt 2007 *Tulane Journal of Technology and Intellectual Property* 176; Femminella 2003 *St. John's Journal of Legal Commentry* 97; Kutz *et al* 2003 *The Business Lawyer* 280.

418 Koornhof 2012 *Speculum Juris* 45.

419 Kutz *et al* 2003 *The Business Lawyer* 280; Condon Jr 2004 *Regent University Law Review* 435-436; Koornhof 2012 *Speculum Juris* 45; Pistorius 2004 *SAMLJ* 570.

420 Kutz *et al* 2003 *The Business Lawyer* 280.

421 Kutz *et al* 2003 *The Business Lawyer* 280.

422 Rambarran and Hunt 2007 *Tulane Journal of Technology and Intellectual Property* 178.

positive act to indicate assent.[423] From the South African point of view, however, although web-wrap agreements have not as yet been tested by the courts, there does not seem to be any difficulty to their enforceability. Where the terms are incorporated by reference through a hyperlink, the ECT Act provides an effective framework for determining whether or not the customer is bound by those terms. If the terms are introduced directly on the homepage of the trader, however, resort must be had to the common law of contract.

Web-wrap agreements find a close analogy to tickets or unsigned standard-form contracts at common law. As the court mentioned in the matter of *Barkhuizen v Napier*,[424] terms and conditions in contracts of adhesion can also be introduced through documents that do not require the customer's signature. Such documents are usually used by parties such as airline operators, railway companies, bus companies, theatre owners, sports promoters, dry cleaners, repairmen *etc*.[425] When a passenger pays for a bus or train seat, he or she is usually given a ticket containing terms and conditions of the concerned company, often limiting the liability of that company in one respect or another to the passenger. Do such terms and conditions bind the passenger despite his or her having not signed the document to indicate or manifest assent? The main problem here is that an unsigned document containing terms does not of itself proof that the customer has agreed to be bound by those terms.[426] To overcome this difficulty, the common law has developed a very rich body of jurisprudence, namely the jurisprudence of "ticket cases," to explain instances in which a customer will be bound by terms and conditions found on a ticket or an unsigned contractual document. By ticket cases is meant all instances in which a trader places before a customer a document which is not intended to be signed, which document contains terms and conditions of the trader.[427] The document does not strictly have to be a ticket, so long as an unsigned

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423 Gringras *The Laws* 53 states that a customer may, at times, click on an icon labelled "download" unaware that, according to the terms and conditions of the trader, by so doing he has consented to a contract.

424 *Barkhuizen v Napier* 2007 5 SA 323 (CC) para 138.

425 Van der Merwe *et alContract* 277; Christie *The Law of Contract* 204.

426 Van der Merwe *et alContract* 277.

427 See Christie *The Law of Contract* 204.

document imposes the terms and conditions of the trader on the customer, it falls within the ambit of ticket cases.[428]

The rule as to the enforceability of terms and conditions contained in tickets was authoritatively laid down in South Africa by Innes CJ in the matter of *Central South African Railways v McLaren*.[429] The judge mentioned in that case that in order to hold the patron or customer to such terms, one must answer the following three questions:[430]

> (a) Did the plaintiff know that there is printing or writing on the ticket?
>
> (b) Did she know that the printing or writing contains terms and conditions?
>
> (c) Did the defendant do what was reasonably sufficient to give the plaintiff notice of the conditions?

If the first two questions are answered in the affirmative, the customer will be bound by the said terms and conditions.[431] The third question only becomes relevant to the enquiry if either of the first two questions is answered in the negative.[432] Commenting on the relevance of the third question in the case of *Durban's Water Wonderland (Pty) Ltd v Botha*,[433] Scott JA stated that:

> The answer depends upon whether in all the circumstances the appellant did what was 'reasonably sufficient' to give patrons notice of the terms of the disclaimer. The phrase 'reasonably sufficient' was used by Innes CJ in Central South African Railways v McLaren 1903 TS 727 at 735. Since then various phrases having different shades of meaning have from time to time been employed to describe the standard required. (See King's Car Hire (Pty) Ltd v Wakeling 1970 (4) SA 640 (N) at 643G--644A.) It is unnecessary to consider them. In substance they were all intended to convey the same thing, viz an objective test based on the reasonableness of the steps taken by the proferens to bring the terms in question to the attention of the customer or patron.

In that case, *i.e. Durban's Water Wonderland (Pty) Ltd v Botha*, the respondent was injured while enjoying rides at an amusement park owned by the appellant,

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428 See Christie *The Law of Contract* 204.

429 *Central South African Railways v McLaren* 1903 TS 727 (hereinafter referred to as *Central South African Railways v McLaren*).

430 *Central South African Railways v McLaren* 734, referring to the dictum of the House of Lords in *Richardson, Spence & Company v Rowntree* [1894] AC 271 (HL).

431 Coaker and Zeffertt *Wille and Millin's Mercantile Law* 20.

432 *King's Car Hire (Pty) Ltd v Wakeling* 1970 4 SA 640 (N) 643E.

433 *Durban's Water Wonderland (Pty) Ltd v Botha* 1999 1 SA 982 (SCA) 991H-992A (hereinafter referred to as *Durban's Water Wonderland (Pty) Ltd v Botha*).

wherefore she sued the appellant for damages. In its defence, the appellant argued that it was not liable to the appellant because it had placed several notices in prominent places around the park disclaiming liability for injuries to customers.[434] The respondent testified that although she knew that there were normally notices to that effect at amusement parks, she could not recall seeing one at the appellant's amenities. Finding that the appellant's notice limiting liability for injuries was a term of the contract, the judge stated that:[435]

> I have previously described the notices containing the disclaimer and their location. From that description it is apparent that they were prominently displayed at a place where one would ordinarily expect to find any notice containing terms governing the contract entered into by the purchase of a ticket, viz at the ticket office. Any reasonable person approaching the office in order to purchase a ticket could hardly have failed to observe the notices with their bold white-painted border on either side of the cashier's window. Having regard to the nature of the contract and the circumstances in which it would ordinarily be entered into, the existence of a notice containing terms relating thereto would not be unexpected by a reasonable patron. This much is apparent from the evidence of Mrs Botha herself; she knew there were such notices at amusement parks. In all the circumstances I am satisfied that the steps taken by the appellant to bring the disclaimer to the attention of patrons were reasonable and that, accordingly, the contract concluded by Mrs Botha was subject to its terms.

Where the terms and conditions in issue are contained in a document, the trader may be held to have taken reasonable steps, amongst others, if he or she uses a different colour or underlines the terms and conditions. For instance, commenting on the facts of the case in the matter of *Fourie v Hansen*,[436] Blieden J made the point that:[437]

> The document as such is printed in such a manner that it does everything to discourage anyone from reading it and becoming aware of the existence of clauses such as clause 10, which one would not ordinarily expect to find in a document which is presented to the hirer as a proof of receipt, See Roomer v Wedge Steel (Pty) Ltd 1998 (1) SA 538 (N) at 542 and 543.)

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434 The notices stated that "[t]he amenities which we provide at our amusement park have been designed and constructed to the best of our ability for your enjoyment and safety. Nevertheless we regret that the management, its servants and agents, must stipulate that they are absolutely unable to accept liability or responsibility for injury or damage of any nature whatsoever whether arising from negligence or any other cause howsoever which is suffered by any person who enters the premises and/or uses the amenities provided," see *Durban's Water Wonderland (Pty) Ltd v Botha* 988C-D.

435 *Durban's Water Wonderland (Pty) Ltd v Botha* 992A-D.

436 *Fourie v Hansen* 2001 2 SA 823 (W) (hereinafter referred to as *Fourie v Hansen*).

437 *Fourie v Hansen* 833D-G.

> If the second defendant wished to rely on the terms of clause 10, the least one would expect in such a document is that this clause be printed in a different colour ink or was underlined or was printed in typesetting of a different size from the other clauses so as to draw the reader's attention to it. In the present case nothing of this sort has been done. It is just another clause squashed into two columns of close print. In my view the heading above the clause ('exemption') does not assist the second defendant as it does not alert the reader to what the second defendant has in mind.

As in the ticket cases, online traders in web-wrap agreements must similarly take reasonable steps to bring terms and conditions to the attention of their customers. Although the issue whether or not an online trader took reasonable steps to bring terms to the attention of a customer will admittedly dependent on the individual facts of a case, one must emphasise as a general rule that what is required is that the terms and conditions must not be hidden from a customer. Consequently, the trader's terms and conditions must be displayed at a prominent part of the website, or at least at a part of the website where a reasonable online customer would expect to find them. The reasonableness of the steps taken by an online trader may also depend on the gravity of a specific term or condition in issue. Where a term or condition in issue is one which a customer would not ordinarily expect to find on a website in light of the nature of the transaction concerned, the trader must take extra steps to bring that specific term or condition to the attention of the customer. This may be done for instance by using a different theme font or size for that term or condition, or by underlining it.

4.6.2.3 The enforceability of standard terms and conditions incorporated in automated transactions concluded between electronic agents

So far, the discussion has been limited to the enforceability of standard terms and conditions incorporated by the users of electronic agents, being operators of automated commercial websites, for assent by human customers. A turn shall be made at this juncture to discuss the enforceability of standard terms and conditions introduced by one electronic agent for assent by another. This is an issue which appears to have attracted very little attention, if any at all, amongst legal commentators in South African law. Despite its lack of popularity, however, the issue

of the legal force and effect of terms and conditions introduced between electronic agents raises novel and interesting challenges for the common law of contract.

4.6.2.3.1 The enforceability of standard terms and conditions incorporated by one electronic agent

Just as an electronic agent may be programmed to conclude transactions with natural persons subject to the standard terms and conditions of its user (*i.e.* subject to the standard terms and conditions of the user or owner of that electronic agent), it is easily conceivable that an electronic agent may be programmed or configured to conclude automated transactions with "other electronic agents" subject to the standard terms and conditions of its user.[438] As Bain and Subirana put it:[439]

> Not only is it possible for Agent B to include a link or other technical means of viewing and retrieving such terms before hitting the *accept* button, but also a store's general terms may be held in a central registry (especially in some continental jurisdictions such as Spain) which may be consulted/ accessed by the agent or a consumer's own contracting agent in a MAS [Multi-Agent System] contracting process.

Where electronic agents conclude a transaction in such a setting, the user of the electronic agent to which the relevant terms and conditions were introduced for assent or acceptance may challenge their enforceability on several grounds. The user may argue, for instance, that those terms and conditions were not incorporated or included in the contract.[440] The user may also argue that the electronic agent of the incorporating party did not take reasonable steps to bring the terms and conditions in issue to the notice or attention of his or her electronic agent. The user may argue lastly that the terms and conditions in issue were not incorporated or included in a manner capable of being reviewed by his or her electronic agent,[441] consequently that his or her electronic agent did not actually accept or express assent to those terms and conditions.

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438 See Bain and Subirana 2003 *Computer Law and Security Report* 381; Jurewicz 2005 http://law.bepress.com/cgi/viewcontent.cgi?article=3598&context=expresso.

439 Bain and Subirana 2003 *Computer Law and Security Report* 283.

440 Bain and Subirana 2003 *Computer Law and Security Report* 381.

441 This may be so where the format used to represent the said terms and conditions is not compatible with the programming or configuration of his or her electronic agent.

The first issue which must be addressed is whether the relevant provisions of the ECT Act, particularly section 20 (d) as discussed above, are applicable to the issue under consideration? The answer is clearly in the negative. As shall be recalled, section 20 (d) expressly states that the terms of an automated transaction must be "…capable of being reviewed by a 'natural person' … prior to agreement formation." The requirement that terms and conditions must be capable of being reviewed is, therefore, only applicable in a setting where an automated transaction is concluded between an electronic agent on one side and a natural person on another. There is, consequently, no requirement that terms must be incorporated or introduced in a manner capable of being reviewed by the other party where an automated transaction is concluded between electronic agents on both sides.

On the other hand, section 20 (c) provides that a party using an electronic agent to form an agreement is presumed to be bound by the terms of that agreement even if he or she did not review them. This provision too does not mention whether or not the terms in issue must nevertheless be capable of being reviewed by the electronic agent. However, on the basis that both section 20 (c) and 20 (d) do not prescribe that the terms of an automated transaction must be capable of being reviewed by an electronic agent, argument can be made that the user will be presumed to be bound by standard terms and conditions introduced for assent to his or her electronic agent notwithstanding that those terms and conditions were not capable of being reviewed by the electronic agent prior to contract formation. Some commentator's on the issue argue,[442] however, that the terms of an automated transaction must be introduced or incorporated in a manner that is capable of being reviewed by an electronic agent. Lodder and Voulon mention for instance that:[443]

> The reason the agent must be able to recognize and understand the information, is that the agent must have obtained all relevant information before it can order a product or service on behalf of the consumer [the user].

There are compelling reasons as why standard terms and conditions introduced to an electronic agent for assent must be capable of being reviewed thereby prior to

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442 Lodder and Voulon 2002 *International Review of Law Computersand Technology* 283.
443 Lodder and Voulon 2002 *International Review of Law Computersand Technology* 283.

agreement formation. As shall be recalled, the ECT Act proceeds on the assumption that an electronic agent is a mere conduit-pipe or channel for the transmission of the will of its user. Because the user expresses his or her will through the instrumentality of the electronic agent, it cannot logically be said that he or she has agreed, through the declarations or operations of the electronic agent, to be bound by terms and conditions that were not capable of being reviewed by that electronic agent prior to agreement formation. Therefore, it is submitted that terms and conditions incapable of being reviewed by an electronic agent prior to agreement formation have no legal force and effect, meaning that they are not enforceable against the user of that electronic agent. On the other hand, terms and conditions capable of being reviewed by an electronic agent will be enforceable against the user of that electronic agent even if his or her electronic agent did not actually review them.

What does it mean that terms and conditions must be capable of being reviewed by an electronic agent? Most importantly, should those terms and conditions be capable of being reviewed by the electronic agent of the relevant user, or by electronic agents in general? Concerning the first question, it may be argued that terms and conditions are capable of being reviewed by an electronic agent if they are presented in a structured format, *i.e.* in a format that an electronic agent is capable of processing. As Lodder and Voulon put it,[444] "…providing the information in a format that the agent understands suffices." Concerning the second question, it is worth noting that there are numerous formats that can be used to conclude automated transactions,[445] and that an electronic agent will only be capable of processing a specific format if it is programmed or configured by its user to recognise that format as a valid communication. This means in practice that the terms and conditions of a party will only be capable of being reviewed by the electronic agent of another party if they are presented in a format which that specific electronic agent is programmed or configured to recognise as a valid communication. As illustrated above,[446] apart from instances of EDI transactions, it will often be a tall order to expect a party to know for sure the specific format that

444 Lodder and Voulon 2002 *International Review of Law Computersand Technology* 283.
445 See para 2.3.1.2.1 above.
446 See para 4.5.2.3.4.3 above.

an electronic agent has been programmed or configured to recognise as a valid communication. It has consequently been argued in this work that where a party uses a "reasonable format" to communicate with an electronic agent,[447] that communication must be given legal force and effect even if the electronic agent in issue is unable to process it. Whether or not a party has used a reasonable format will depend on the individual facts of a case. For instance, if a format is commonly used by businessmen to generate and receive automated messages in the ordinary course of business within a specific industry, it is submitted that the use of that format to present standard terms and conditions to an electronic agent will be reasonable. Therefore, terms and conditions presented in that format must be enforced even though the electronic agent in issue was actually unable to process them.

4.6.2.3.2 The enforceability of standard terms and conditions introduced by both electronic agents (the battle of forms in automated transactions)

Taking the preceding discussion further, the question gets even more complicated when standard terms and conditions are incorporated by electronic agents from both sides of a transaction. A question may easily arise in such a setting whether an automated transaction is governed by the terms and conditions of the user of electronic agent A, or by those of the user of electronic agent B? This is so because each party is most likely to maintain that the agreement is concluded subject to its own terms and conditions. It shall be assumed for purposes of present considerations that each electronic agent has incorporated or introduced its user's terms and conditions in a manner capable of being reviewed by the other, or at least a reasonable format, consequently that the issue is strictly whether the agreement is governed by the terms and conditions of party A or B. This problem is by no means unique to automated transactions. In traditional contract law, this problem is known as the battle of forms. As defined by Justice Posner in the matter of *Northrop Corporation v Litronic Industries*:[448]

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447 See para 4.5.2.3.4.3 above.

448 *Northrop Corporation v Litronic Industries* 29 F. 3d (1994) 1173.

> Battle of the forms refers to the not uncommon situation in which one business firm makes an offer in the form of a pre-printed form contract and the offeree responds with its own form contract.

As one author correctly notes,[449] the battle of forms raises a unique problem because when standard forms are exchanged between contracting parties, and the terms and conditions contained in those documents clash, it becomes very difficult to determine the terms of the final contract. This issue has unfortunately received very little attention in South African contract law.[450]

At common law, if the offeror accompanies his or her offer with standard terms and conditions, and the offeree purportedly accepts that offer subject to his or her own standard terms and conditions, such is not a valid acceptance. As illustrated above,[451] it is a rule of thumb in South African contract law that a conditional acceptance does not conclude a contract because it is tantamount to a rejection of an offer. This rule is commonly referred to as the "mirror-image rule," correctly so because under that rule, a purported acceptance will only conclude a contract if it is an exact mirror-image of an offer, *i.e.* if the offeree accepts the offer in its exact terms. In the context of automated transactions, the inevitable consequence of the mirror-image rule is that no contract will arise where both electronic agents are programmed to conclude an automated transaction subject to the standard terms and conditions of their users.

Although the offeror is entitled to treat a conditional acceptance as a rejection of his or her offer, he or she is equally entitled to treat it as a counter-offer.[452] A general rule of South African law concerning counter-offers is that a counter-offer does not result in a contract unless it is accepted by the original offeror.[453]Therefore, the mirror-image rule notwithstanding, a conditional acceptance may produce a contract if the original offeror accepts the conditions or additional terms proposed by the offeree. The original offeror may accept the additional terms expressly or impliedly

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449 Kerr *The Principles* 77.
450 Van der Merwe *et alContract* 57.
451 See para 4.3.2 above.
452 See kahn as quoted in *Manna v Lotter* 2007 4 SA 315 (C) para 18.
453 See generally *Seeff Commercial & Industrial Properties (Pty) Ltd v Silberman* 2001 3 SA 952 (SCA).

by conduct in order to conclude a contract. One may cite here the case of *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd*.[454] The matter involved a civil engineering contract. The principal contract was between a mining company and the defendant as a contractor. The defendant hired a sub-contractor to perform the work. The sub-contractor, being the plaintiff, had made a tender, which was accepted by the defendant subject to the provision that the sub-contract would be governed by the terms of the principal contract. One of the terms of the principal contract was that the engineer could direct amongst others for the omission of specific work by the contractor. The tender having been accepted by the defendant, the plaintiff commenced work, but was directed by the engineer to omit part of that work. The plaintiff sued the defendant for lost profits as he was not paid for the omitted work. In its defence, the defendant argued that the plaintiff had agreed to the terms and conditions of the principal contract, meaning that he had agreed to a term authorising the engineer to direct for the omission of specific works. In going about the matter, the court commenced its decision with an analysis of offer and acceptance. It is common cause that, at common law, a call for tenders in not an offer, but rather an invitation to treat. Therefore, it is the person submitting a tender who makes an offer. Proceeding from that analysis, the court held that the defendant's acceptance of the plaintiff's tender subject to the terms and conditions of the principal contract was in effect a counter-offer, and that by proceeding with the work, the plaintiff impliedly accepted the defendant's counter-offer that the sub-contract would be governed by the terms and conditions of the principal contract.[455] It was therefore part of the agreement between the parties that the engineer could direct for the omission of certain works. Van der Merwe and co-authors support this approach on the ground that it follows a more progressive trend in systems of law

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454 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 1996 2 SA 682 (N) (hereinafter referred to as *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd*).

455 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 686G-J stating that "[i]f the plaintiff were in any doubt as to what was entailed, it had every opportunity to inquire, and if needs be, protest. It chose not to do so, but instead went ahead, giving, in my opinion, a clear impression that it was accepting the terms of the defendant's letter. I would accordingly uphold the defendant's second alternative defence as set out in para 2.2.4.3 of its plea. I find that the defendant accepted the plaintiff's tender on condition that it would be subject to the terms and conditions of the main agreement and that such terms were impliedly accepted by the plaintiff...."

which do not accept the "mirror-image rule,"[456] referring to the rule discussed above that a conditional acceptance cannot create a contract.

The rule applied in *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* will,[457] however, encounter problems when applied to automated transactions. The main difficulty here will be one of evidence. Because it is based on the mirror-image rule, it is clear that a court applying the rule of *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd*to automated transactions will have to determine which electronic agent made an offer, and which a counter-offer. Unless one of the electronic agents has been programmed or configured to keep a record or registry of the sequence in which communications leading to agreement formation were exchanged, it will be difficult to know for sure which electronic agent made an offer, and which a counter-offer. In that setting, a court will not be able to determine the identity of an electronic agent that ultimately made an acceptance of the other party's standard terms and conditions. To illustrate, consider for instance that despite a clear conflict between the terms and conditions proposed on both sides, electronic agent A effects payment of the purchase price, and electronic agent B performs the agreement, *e.g.* by granting electronic agent A access to valuable information. If a court is not able to determine whether a counter-offer was made by the electronic agent of party A or B, each party may argue that his or her standard terms and conditions were accepted by the conduct of the electronic agent of the other.

4.6.2.3.3 Recommendations for the development of the South African common law - a case for the knock-out rule

As a solution to the issue under consideration, the knock-out rule holds that in instances of a battle of forms, a contract is concluded subject to the terms and conditions of both parties to the extent that they do not conflict with each other.[458]In this manner, the conflicting terms and conditions are taken to

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456 Van der Merwe *et alContract* 58.

457 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 1996 2 SA 682 (N).

458 See Hubber and Mullis *The CISG* 94; Eiselen and Bergenthal 2006 *CILSA* 225; Hubber 2009 *Vindobona Journal of International Commercial Law and Arbitration* 129; Eiselen2007 *SAMLJ* 20-21. The rule is famously applied in cases governed by the CISG, although the CISG itself does

automatically knock each other out of the agreement,[459] and are considered for that reason not to form part of the resultant contract. To illustrate, if the terms and conditions of party A contain an arbitration clause, while those of party B contain an anti-arbitration clause, the effect of the knock-out rule will be to hold that the parties did not reach agreement on dispute resolution.[460] Consequently, instead of arbitration, any dispute between the parties will be resolved in the usual manner, namely by litigation before courts of law. On the contrary, if the standard terms and conditions of each party provide for a resolution of dispute by arbitration, the law will enforce that term on the basis that the parties are considered to have reached agreement in that regard.

The knock-out rule has been supported on the ground that it is founded on actual *consensus* between contracting parties.[461] This is so in the sense that, from the perspective of the law, there is admittedly true agreement between contracting parties to the extent that their respective standard terms and conditions do not conflict. Eiselen and Bergenthal argue that the knock-out rule is preferable to the mirror-image rule and its variants because it does not ascribe *consensus* to the parties "…by the application of intricate technical rules of offer and acceptance."[462] The same authors also support the knock-out rule on the basis that it offers a practical,[463] rather than a strictly dogmatic solution, to the problem of the battle of forms.

It is the view of the current researcher that the application of the knock-out rule to automated transactions avoids the difficulties which confront the mirror-image rule and the rule applied by the court in *Guncrete (PTY) Ltd v Scharrighuisen*

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not contain a provision to that effect. In terms of domestic jurisprudence, the knock-out approach is recognised in American law, French law, Australian and German law, see Eiselen2007 *SAMLJ* 21.

459 By which is meant that the terms cancel each other, see Murray Jr 2000-2001 *Journal of Commerce and Law* 15. The lacuna which is left by the elimination of these terms is filled by relevant principles of contract law.

460 Murray Jr 1986 *Vanderbilt Law Review* 1356, stating that "[t]he inclusion of an arbitration term in the offer and an anti-arbitration term in the acceptance illustrates the difference in these views. Under the … 'knockout' view, the contract would contain no arbitration clause because the different express terms eliminate each other."

461 Eiselen and Bergenthal 2006 *CILSA* 226.

462 Eiselen and Bergenthal 2006 *CILSA* 226.

463 Eiselen and Bergenthal 2006 *CILSA* 226.

Construction (PTY) Ltd.[464] To reiterate, the main difficulty with those two solutions is that they require clear evidence of the sequence in which the communications which led to the conclusion of an automated transaction were exchanged between electronic agents. As illustrated above, it will always be difficult for anyone to establish that fact unless one of the electronic agents is programmed or configured to keep a record or registry of the sequence in which communications leading to agreement formation are exchanged. Instead of meddling with technical evidence, which may be very difficult for ordinary lawyers and judges to understand; the knock-out rule will only require each party to tender or produce a copy of the standard terms and conditions that its electronic agent was programmed to incorporate into an agreement. Through a simple comparative interpretation of the clauses of each document, the judge will be able to determine the extent to which the terms and conditions of each agreement are enforceable. Where the knocking-out of terms creates a lacuna in the contract, a court can simply fill that lacuna by implying terms into the contract. In light of the aforesaid advantages and benefits of the knock-out rule, it is submitted that South African law on the issue must be developed or modified to that effect.

4.7 The treatment of electronic mistakes and errors in automated transactions

Mistakes and errors will inevitably occur in the course of electronic contracting.[465] As correctly noted by the High Court of Singapore in the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[466] mistakes and errors in electronic contracts can result, amongst others, from:

> …human interphasing, machine error or a combination of such factors. Examples of such mistakes would include (a) human error (b) programming of software errors and (c) transmission problems in the communication systems. Computer glitches can cause transmission failures, garbled information or even change the nature of the information transmitted.

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464 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 1996 2 SA 682 (N).

465 Kah Leng 2004 *Computer Law and Security Report* 398-399.

466 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 102. See also UN *United Nations Convention on the Use of Electronic Communications* para 224, stating that "[s]uch errors may be either the result of human actions (for example, typing errors) or the consequence of malfunctioning of the message system used."

In comparison to ordinary electronic contracts, there is admittedly a higher than usual risk of mistakes and errors in automated transactions.[467] It is for this reason that UNCITRAL mentions as a general observation that in electronic commerce,[468] the question of mistakes and errors "…is closely related to the use of automated message systems." The high risk of mistakes and errors in automated transactions is attributable to two main factors, first being the lack of direct human participation in the process of agreement formation, and second the instantaneous nature of automated transactions. The absence of a human actor in the process of agreement formation increases the likelihood that electronic agents will automatically create contractual rights and obligations on the basis of data messages that do not represent or reflect the true intention of one or both parties at the time of contract formation.[469] The absence of direct human participation means furthermore that erroneous data messages may remain unnoticed by both parties "…until the mistaken contract has been acted upon."[470] This is so because electronic agents are generally not programmed to search or identify mistakes in the communications that they receive from third parties; meaning that an electronic agent will automatically conclude a contract on the basis of an erroneous data message even if the error or mistake in issue is no obvious that a natural person who have easily indentified.

Concerning the instantaneous nature of automated transactions, it is said that where a natural person interacts with an electronic agent to conclude a transaction, all the errors and mistakes made by that person may instantly become irreversible once he or she dispatches a message of acceptance to the electronic agent.[471] This is correctly so because such a person will instantly lose control over his or her data message once it is dispatched for processing by an electronic agent, meaning that he or she cannot subsequently retrieve the message to correct or rectify errors or mistakes. Once a data message is received by the electronic agent, it is common cause that a contract will instantly be concluded. It is precisely for this reason that UNCITRAL concludes that where a natural person makes an error or mistake in the

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467 Gabriel 2006 *Uniform Law Review of Nova Scotia* 302.
468 UN *United Nations Convention on the Use of Electronic Communications* para 224.
469 UN *Yearbook of the United Nations Commission on International Trade* para 94.
470 UN *Yearbook of the United Nations Commission on International Trade* para 94.
471 UN *United Nations Convention on the Use of Electronic Communications* para 224.

course of forming an agreement with an electronic agent,[472] he or she may not be able to correct that error before the user of the electronic agent has effected performance or taken other positive action in reliance on the erroneous message.

In light of foregoing observations, it is unavoidable for this work to consider the legal effect of mistakes and errors on the validity of automated transactions in South African law. The discussion shall be limited to three types of electronic mistake common to automated transactions, namely input errors, online pricing errors and machine errors.

4.7.1 Input errors

An input error is not a mistake in the sense that the word "mistake" is traditionally understood at common law. At common law, a mistake is an error of judgement.[473] It is an error of judgement in the sense of a divergence between the actual intention of a party and his or her declared intention.[474] This divergence may be a result of the aforesaid party's ignorance or lack of knowledge about the existence or nonexistence of a specific fact or set of facts.[475] The divergence may also be a result of the other party's misrepresentation or misleading conduct. On the other hand, an input error occurs when a person interacting with an electronic agent to form a contract intends to enter "…specific information into the system but accidentally enters other information."[476] Common examples of input errors include typographical and keystroke errors. To illustrate, in the case of a typical online sale transaction conducted over an automated commercial website:

> When keying in information, a user [meaning the customer] may make typographical or keystroke errors relating to quantity, items, description, personal particulars or he may check the wrong box or unintentionally click the 'send' button.

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472 UN *United Nations Convention on the Use of Electronic Communications* para 224.

473 Gabriel 2006 *Uniform Law Review of Nova Scotia* 303.

474 Weelamantry *The Law of Contracts: Being a Treaties of Contracts* 267; Gabriel 2006 *Uniform Law Review of Nova Scotia* 303; Kahn *Contract and Mercantile Law* 85; Roberts *Wessels' The Law of Contract* para 890.

475 Weelamantry *The Law of Contracts: Being a Treaties of Contracts* 267.

476 Gabriel 2006 *Uniform Law Review of Nova Scotia* 303.

> Alternatively, he may order a certain quantity of goods for example, 1000 tons, but his information processing system may 'change' the numbers to 10,000 tons.[477]

Masadeh and Bashayreh similarly mention that:[478]

> One may mistakenly press the 'yes, I accept' button which makes him involved in a contractual relationship that that he did not intend to make. Moreover, a person may mistakenly fill certain sections of an online form with unintended information; for example, typing 11 instead of one simply by double pressing the 'one' button on the keyboard. Input errors can be in spelling, quantity, quality, etc.

There is admittedly a very thin line between input errors and common law mistakes.[479] This is so because similar errors, *e.g.* typographical errors, can easily be made by parties in traditional contracts. For instance, in the matter of *Horty Inv (Pty) Ltd v Interior Acoustics (Pty) Ltd*,[480] due to a typing error, a lease for two years ending in 1983 was inadvertently reflected in the lease agreement as ending in 1993. The foregoing notwithstanding, there are a number of guidelines that may be employed to distinguish between input errors and common law mistakes. To start with, input errors can only occur in automated transactions. Consequently, blunders made on non-interactive or passive websites do not qualify as input errors,[481] meaning that they will be treated under the common law mistake. Secondly, input errors will only occur in automated transactions concluded between a natural person and an electronic agent.[482] Consequently, errors and mistakes arising in an automated transaction concluded between electronic agents on both sides are not input errors. Thirdly, input errors can only be committed by a party acting in his or her natural person to conclude an automated transaction,[483] meaning that mistakes arising from electronic agents are not categorised under input errors. As UNCITRAL

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477 Kah Leng 2004 *Computer Law and Security Report* 157. See also Masadeh and Bashayreh 2007 *Sharia and Law Journal* 9-10.

478 Masadeh and Bashayreh 2007 *Sharia and Law Journal* 9.

479 Gabriel 2006 *Uniform Law Review of Nova Scotia* 303.

480 *Horty Inv (Pty) Ltd vInterior Acoustics (Pty) Ltd* 1984 3 SA 537 (W) (hereinafter referred to as *Horty Inv (Pty) Ltd vInterior Acoustics (Pty) Ltd*).

481 See Polanski 2007 *JICLT* 117, stating that mistakes arising in passive or non-interactive websites do not fall within the category of input errors.

482 UN *United Nations Convention on the Use of Electronic Communications* para 228, stating that the law of input errors "…is only concerned with errors that occur in transmissions between a natural person and an automated message system…."

483 Mik 2013 *JICLT* 175; Polanski 2007 *JICLT* 117, mentioning that input errors can only be committed by a natural person, meaning that mistakes committed by electronic agents are not regarded as input errors for purposes of the law.

puts it,[484] the law of input errors is concerned exclusively with mistakes or errors "…made by a natural person, as opposed to a computer or other machine."

4.7.1.1 The legal framework for the treatment of input errors

The question of the legal effect of input errors on automated transactions is expressly addressed by the ECT Act. In terms of section 20 (e) of the ECT Act:

> [N]o agreement is formed where a natural person interacts directly with the electronic agent of another person and has made a material error during the creation of a data message….

It is immediately clear from this provision that an automated transaction formed subject to an input error is *void ab initio*, meaning that it does not create valid and enforceable contractual rights and obligations between the parties. For an input error to vitiate an automated transaction, it must be material. The purpose behind the requirement that an input error must be material, it is submitted, is to ensure that trivial errors do not vitiate the contract. In this way, the ECT Act very much appears to strive for the preservation of automated transactions. Seeing that the ECT Act does not provide any guidance as to what may constitute a material error in automated transactions, the common law of contract will come in handy in determining that issue. At common law, the materiality of a mistake or error encompasses two main requirements, first being that the mistake in issue must have played "…a material role in the decision of the mistaken party to enter into the contract."[485] This means in practice that the mistake or error in issue must be such that a party would not have agreed to be bound by the contract had he or she been aware thereof prior to contract formation. This was made clear by Didcott JA in the matter of *Khan v Naidoo*.[486] In that case, the respondent had lent a sum of money to the appellant's son. The loan was given by the respondent subject to a deed of suretyship signed by the appellant, in terms of which the appellant bound herself as surety and co-principal debtor for her son's obligations. Upon the sequestration of

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484 UN *United Nations Convention on the Use of Electronic Communications* para 229.

485 *Trust Bank of Africa Ltd v Frysch* 1977 3 SA 562 (A) 587D-E. The unavoidable conclusion is, therefore, that a mistake will not be regarded as material if it did not affect the intention of a party to enter into contract, see Van der Merwe *et alContract* 22.

486 *Khan v Naidoo* 1989 3 SA 724 (N) (hereinafter referred to as *Khan v Naidoo*).

the son's estate, the respondent pursued his case for repayment of the loan against the appellant and obtained judgment against her in a magistrate's court. On appeal, the appellant contended that she was not liable to the respondent because she signed the aforesaid deed of suretyship under the impression that it was a different document altogether. Didcott JA was of the view:[487]

> By any reckoning, as I see matters, the appellant needed to prove that she would never have signed the guarantee had she realised what in truth it was. Her defence could not succeed without such proof, however sound in other respects it might notionally have been. That is surely inescapable. For she would have failed to demonstrate then that her mistake mattered. The misrepresentation by Abed Khan of the document's tenor, morally reprehensible though it was, would not have been shown to be legally material.

The second requirement for a material mistake is that the mistake or error in issue must affect the contract in "…a material or fundamental respect,"[488] *e.g.* in relation to its subject-matter, purchase price or any other material term. An input error that satisfies these two requirements will be regarded as material for purposes of section 20 (e).

An input error will not automatically vitiate a transaction on the mere basis of its materiality. The ECT Act prescribes a number of conditions under which a material input error will vitiate an automated transaction. The first condition is that a material input error will vitiate an automated transaction provided the electronic agent in issue did not provide the "…person with an opportunity to prevent or correct the error."[489] In a typical online sale transaction, an electronic agent provides a customer with an opportunity to prevent his or her input error(s) if that customer is given an option not to send or dispatch a purchase order before verifying that its contents are correct. For instance, when a customer clicks the "dispatch" or "send" button to submit a purchase order on an automated commercial website, the website may automatically display a dialog box asking "are you sure that you want to submit the order?"[490] The dialog box in issue will display a "NO" and a "YES" button below the question. If the customer suspects that he or she might have

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487 *Khan v Naidoo* 727G-H.
488 *Diedericks v Minister of Lands* 1964 1 SA 49 (N) 55G.
489 s 20 (e) (i).
490 Masadeh and Bashayreh 2007 *Sharia and Law Journal* 9.

committed an error in the course of filling in the purchase order form, he or she will click on the "NO" button to prevent the purchase order from being dispatched. If he or she wishes to proceed with the submission of the purchase order, the customer will click the "YES" button.[491] Instead of an opportunity to "prevent" input errors, an electronic agent may be programmed to provide customers with an opportunity to "correct" input errors. Error correction techniques enable customers to correct or edit the contents of their data messages before they are received and processed by electronic agents. For instance, an automated commercial website may provide a customer with a summary of the purchase order, and enable him or her to go back to the original purchase order so as to correct errors before dispatching the purchase order.[492] Both techniques are acceptable under section 20 (e) (i) of the ECT Act. What is important to note with section 20 (e) (i) is that it does not enjoin or oblige users of electronic agents to provide third parties with error prevention or correction techniques. That provision merely provides incentives for users of electronic agents to do so.[493]

The second condition is that a person who commits a material input error must notify the user of an electronic agent of that fact "…as soon as practicable after that person has learned of it."[494] It is important to note that section 20 (e) (ii) requires actual or subjective awareness of an input error, meaning that the period of giving the requisite notice starts "…from the time when the customer becomes actually aware of the error…."[495] Therefore, it is immaterial and irrelevant that the customer could have reasonably learned of the error much earlier than he or she actually learned of it. Another important aspect of section 20 (e) (ii) is that what is soon enough will admittedly depend on the individual facts of a case. The customer's ability to give prompt notice will depend amongst others on the ease with which the user of the electronic agent can be accessed. If the user of the electronic agent does not provide customers with his or her contact details on the trading website, it is easily conceivable that a customer will not be able to give the requisite notice on

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491 See Pistorius 2008 http://go.warwick.ac.uk/jilt/2008_2/pistorius2.
492 Masadeh and Bashayreh 2006 *Sharia and Law Journal* 13.
493 Polanski "Convention on E-Contracting" 7.
494 s 20 (e) (ii).
495 Masadeh and Bashayreh 2006 *Sharia and Law Journal* 18.

time. The customer's ability to give prompt notice may also be affected by the costs of making such a notice. For instance, a customer may easily be dissuaded from giving notice altogether if the costs of making such a notice exceed the total value of the transaction affected by an input error.

The third condition is that the person who has made an input error must take:

> …reasonable steps, including steps that conform to the other person's instructions to return any performance received, or, if instructed to do so, to destroy that performance.[496]

This provision contemplates the remedy of *restitutio in integrum*. As explained by Van den Heever J in the matter of *Bonne Fortune Beleggings Bpk v Kalahari Salt Works (Pty) Ltd*:[497]

> In *restitutio in integrum* an attempt is made to put the parties to a contract retrospectively declared null and void ab initio, into the position in which they would have been had the contract not been concluded.

Therefore, the purpose of section 20 (e) (iii) is to ensure that parties to an automated transaction vitiated by an input error are restored to their original position. This is achieved by requiring the customer to return any performance already received from the user of the electronic agent, or to destroy that performance if required to do so by the user of the electronic agent. Although section 20 (e) (iii) does not expressly provide to that effect, it is perfectly clear that once the customer has returned or destroyed performance, he or she will be entitled to a refund of the purchase price from the user of the electronic agent.

Section 20 (e) (iii) must be read in conjunction with section 20 (e) (iv), which provides that a person may avoid an automated transaction on the basis of an input error provided:

> [T]hat person has not used or received any material benefit or value from any performance received from the other person.

The effect of this provision is that a person who has made an input error cannot avoid an automated transaction on that basis if he or she has already received a

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[496] s 20 (e) (iii).

[497] *Bonne Fortune Beleggings Bpk v Kalahari Salt Works (Pty) Ltd* 1973 3 SA 739 (NC) 743H.

material benefit or value from the performance of the user of the electronic agent. Once a customer has received a material benefit or value from a performance, it is common cause that a subsequent return or destruction of that performance will not serve the aim of the remedy of *restitutio in integrum* contemplated by section 20 (e) (iii), hence the relevance of section 20 (e) (iv).

4.7.1.2 A critical analysis of section 20 (e) of the ECT Act

Section 20 (e) is clearly a development of the South African common law of mistake. Therefore, the current discussion shall concentrate on the desirability or justifiability of this development of the common law. The first difficulty with section 20 (e) is that it provides as a general matter that an input error automatically vitiates a contract. This is in great contrast to both the UNECIC and the South African common law of contract. The UNECIC, which is admittedly representative of the international legal framework for electronic contracts, provides in article 14 that:

> Where a natural person makes an input error in an electronic communication exchanged with the automated message system of another party and the automated message system does not provide the person with an opportunity to correct the error, that person, or the party on whose behalf that person was acting, has the right to withdraw the portion of the electronic communication in which the input error was made….

In terms of this provision, a party who has made an input error is only permitted to withdraw the relevant portion "…of the electronic communication in which the input error was made…." This is explained by UNCITRAL to mean that:[498]

> The right to withdraw relates only to the part of the electronic communication where the error was made, if the information system so allows. This has the dual scope of granting to parties the possibility to redress errors in electronic communications, when no means of correcting errors are made available, and of preserving as much as possible the effects of the contract, by correcting only the portion vitiated by the error, in line with the general principle of preservation of contracts….

Therefore, an input error does not automatically vitiate a transaction under the UNECIC. In practice, an automated transaction affected by an input error is valid

[498] UN *United Nations Convention on the Use of Electronic Communications* para 240.

and enforceable apart from the specific erroneous portion thereof.[499] This explains the statement that:

> The right to withdraw an electronic communication is an exceptional remedy to protect a party in error and not a blank opportunity for parties to repudiate disadvantageous transactions or nullify what would otherwise be valid legal commitments freely accepted.[500]

It is submitted that the approach adopted by article 14 of the UNECIC is much better than section 20 (e) of the ECT Act for the reason that it strives for the preservation of the validity and enforceability of automated transactions.

Apart from the UNECIC, it is common cause that section 20 (e) of the ECT Act also stand at odds with the South African common law of mistake. At common law, a unilateral mistake or error will only vitiate a contract if it is material and reasonable. The requirement of materiality has already been discuss above in relation to section 20 (e) of the ECT Act, and shall not be rehearsed here. A mistake or error is reasonable if it occurs in circumstances that make it excusable in the eyes of the law.[501] A mistake or error is reasonable first of all if it was caused by the misrepresentation of the other party. As put by the court in *George v Fairmead (Pty) Ltd*:[502]

> If … [a] mistake is due to a misrepresentation, whether innocent or fraudulent, by the other party, then, of course, it is the second party who is to blame, and the first party is not bound.

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499 UN *United Nations Convention on the Use of Electronic Communications* para 241, does acknowledge, however, that "…depending on the circumstances, the withdrawal of a portion of an electronic communication may invalidate the entire communication or render it ineffective for purposes of contract formation. For example, if the portion withdrawn contains the reference to the nature of the goods being ordered, the electronic communication would not be 'sufficiently definite' for purposes of contract formation under article 14, paragraph 1, of the United Nations Sales Convention. The same conclusion should apply if the portion withdrawn concerns price or quantity of goods and there are no other elements left in the electronic communication according to which they could be determined. However, withdrawal of a portion of the electronic communication that concerns matters that are not, by themselves or pursuant to the intent of the parties, essential elements of the contract, may not necessarily devoid the entire electronic communication of its effectiveness."

500 UN *United Nations Convention on the Use of Electronic Communications* para 236.

501 *Trollip v Jordaan* 1961 1 SA 238 (A) 248-249.

502 *George v Fairmead (Pty) Ltd* 1958 2 SA 465 (A) 471B-D (hereinafter referred to as *George v Fairmead (Pty) Ltd*).

Where a mistake or error was not caused by the misrepresentation of the other party, "…the scope for a defence of unilateral mistake is very narrow, if it exists at all."[503] In order to avoid a contract in such circumstances, the party alleging to have made a mistake or error must show that the other party knew, or at least that he or she reasonably ought to have known of the mistake or error in issue.[504] If the other party did not know of the alleged mistake, and a reasonable man in his or her position would equally not have known of such a mistake, the resultant contract is valid and enforceable. In this manner, the common law of contract protects the reasonable reliance of third parties on mistakes which are such that, objectively speaking, a reasonable man in the position of a third party would have equally relied thereon to conclude a contract. Consequently, in determining the question whether or not a party should be permitted to avoid a contract on the basis of a unilateral mistake, South African courts have always paid unique attention to the fact that "…there is another party involved and have considered his position."[505]

A specific difficulty with section 20 (e) of the ECT Act is that it allows a party to avoid an automated transaction on the basis of an input error without demonstrating or proving that the user of an electronic agent knew, or reasonably ought to have known of that input error. Therefore, the ECT Act fails to protect a reasonable reliance that the parties who use electronic agents to form agreements may have on input errors. In the opinion of the current researcher, it is surely a disturbing development or modification of the common law of contract which disregards the reasonable reliance of a party on the appearance of *consensus* on the part of his or her contracting partner. This development is consequently unjustifiable for failing to take into account the interests of the users of electronic agents in determining the legal effect of input errors on automated transactions.

To counter the foregoing criticism, UNCITRAL explains that:[506]

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503 *National and Overseas Distributors Corporation (Pty) Ltd v Potato Board* 1958 2 SA 473 (A) 479G-H (hereinafter referred to as *National and Overseas Distributors Corporation (Pty) Ltd v Potato Board*).

504 *Horty Inv (Pty) Ltd v Interior Acoustics (Pty) Ltd* 540 C-D.

505 *George v Fairmead (Pty) Ltd* 471B.

506 UN *United Nations Convention on the Use of Electronic Communications* para 227.

> The contract law of some legal systems further confirms the need for the article, for example in view of rules that require a party seeking to avoid the consequences of an error to show that the other party knew or ought to have known that a mistake had been made. While there are means of making such proof if there is an individual at each end of the transaction, awareness of the mistake is almost impossible to demonstrate when there is an automated process at the other end (see A/CN.9/548, para. 18).

This explanation makes no difference. Granted, it will be impossible to show "actual knowledge" of a mistake or error on the part of a party using an electronic agent to form an agreement. What about constructive knowledge? As explained by Shaw J in the matter of *Can-Dive Services Ltd v PacificCoast Energy Corp*:[507]

> The element of constructive knowledge based upon what a reasonable person 'ought to know' is premised upon that person not being 'conscious of the error.'

In the context of constructive knowledge, a unilateral mistake will not vitiate a contract "…if a reasonable man would have detected the mistake…."[508] In the opinion of the current researcher, it is possible to apply this test to automated transactions with no difficulty. Consequently, the determinative issue in automated transactions should be whether a reasonable man in the position of the user of an electronic agent would have detected the alleged input error. If a reasonable man would have detected the alleged input error, such an error will vitiate an automated transaction. On the contrary, if a reasonable man would not have detected the alleged input error, an automated transaction must be upheld and enforced despite that error. In the alternative, it is submitted that the common law of unilateral mistake can be modified or developed by simply asking whether or not the user of an electronic agent would have taken notice of an input error "had he or she been acting in his or her natural person to conclude the contract?" Such a modification, it is submitted, is much better than the total elimination of the common law of unilateral mistake to input errors.

To conclude, it is the view of the current researcher that the development or modification of the common law of contract by section 20 (e) of the ECT Act is unjustifiable to the extent that it does not protect the reasonable reliance of the

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507 *Can-Dive Services Ltd v PacificCoast Energy Corp* (1995), 21 CLR (2d) 39 (BCSC) 60-70.
508 Roberts *Wessels' The Law of Contract* para 975.

users of electronic agents on input errors. It is consequently submitted that in applying that provision, courts of law must require a customer who seeks to avoid an automated transaction on the basis of an input error to establish not only its materiality, but also the reasonableness of that error.

4.7.2 Online pricing errors

More than input errors, the reality on the ground is that mistakes and errors in automated transactions, particularly in online sale transactions, are more likely to arise from the side of the users of electronic agents in the form of online pricing errors.[509] Online pricing errors occur when an online trader, in the course of uploading prices for items sold on his or her automated commercial website, accidentally types a price lower than the intended price, or the true value of a product.[510] Real life examples do not want in that regard. In 2002, Kodak, through its UK trading website, advertised a digital camera package including a digital camera, a docking station, memory card and paper for £100 instead of its true value of £329.[511] Over a few days while the advertisement remained on the website, the company received an estimated 4000 to 5000 purchase orders for that item.[512] Kodak performed all the purchase orders in the name of good customer service.[513] It is said that as a result of the incident, the company lost an estimated £2 million in profits. In 2003, Amazon.com mistakenly advertised a television properly worth $1 049 for $99.99. Unlike Kodak, however, the company was able to avoid performance of the purchase orders on basis of its standard terms and conditions which enabled

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509 Polanski 2007 *JICLT* 117, noting that "…the most famous examples of electronic mistakes such as selling TV for price ten times less than that offered by competitors (Out-Law.com 21May 2004) involve the seller rather than the buyer."

510 Online pricing errors may, however, in other circumstances be caused by other forces such as software glitches or malfunctions. For instance, in 2014, as a result of software glitch, a wide range of items including mobile phones, games and clothes were mistakenly advertised for one penny on Amazon.com; see Kaniadaki *Impact of Pricing Errors on the Validity and Enforcement of Electronic Contracts* 3.

511 See Bates 2002 http://www.law.cam.ac.uk/faculty-resources/10000256.pdf; Groebner 2004 *Shindler Journal of Law, Commerce and Technology* para 4.

512 Bates 2002 http://www.law.cam.ac.uk/faculty-resources/10000256.pdf.

513 As noted by one author, one reason why Kodak performed the contracts was that, at the time, expert legal opinion was that the automated confirmations of the purchase orders on the part of Kodak constituted a binding acceptance, therefore that valid contracts had been concluded between the company and the customers, see Groebner 2004 *Shindler Journal of Law, Commerce and Technology* para 4.

it to cancel the orders.[514] In another instance, Buy.com agreed to a settlement of $575 000 after a total of 7000 customers sued it for its dishonour of contracts for a Hitachi monitor properly worth $588, but advertised on a website for $164.[515] The most unfortunate of all instances of online pricing errors is the so-called $200 million typing error.[516] In 2005, Mizuho Securities, a prominent brokerage firm in the Tokyo Stock Exchange, was instructed by one of its clients to sell on its behalf a total of 14 000 shares for the value of 610 000 yen per share. As a result of a typing error on the part of one of Mizuho's employees, the offer was advertised instead as a sale of 610 000 shares for 1 yen each.[517] Mizuho discovered the error in less than under two minutes, but it was too late. The sale had already been authorised and greedy online investors had already began snapping up the shares at cheap prices. Seeing the frequency of pricing errors in online sale transactions, it has been argued by some that "…pricing mistakes in large databases are inevitable from time to time."[518]

For all stakeholders, the frequency of online pricing errors must remain a cause for concern. The internationality of electronic storefronts means that erroneous prices can be taken advantage of by anyone across the globe with access to the internet. As a result, an online trader who advertises an erroneous price on its website may receive hundreds to thousands, if not millions of purchase orders. On the other hand, the automation of trading websites means that purchase orders for wrongly priced items will automatically be processed by electronic agents, thus resulting in final sale agreements. Therefore, it is immediately conceivable that, if an online trader is enjoined to perform all these purchase orders, he or she may quickly run out of stock from which to supply customers, he or she may suffer immeasurable loss in profits, or may even face liquidation if the total value of the purchase orders exceeds the totality his or her assets.

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514 Groebner 2004 *Shindler Journal of Law, Commerce and Technology* para 4.

515 Groebner 2004 *Shindler Journal of Law, Commerce and Technology* para 4.

516 For a report of these event see, The Japan Times 2005 http://www.japantimes.co.jp/news/2005/12/23/business/fsa-gives-mizuho-securities-improvement-order-for-error/#.V4fBOuvnZBd; The New York Times 2005 http://www.nytimes.com/2005/12/09/business/worldbusiness/japan-rebukes-exchange-for-costly-trading-error.html?_r=0.

517 Agencies 2005 www.theguardian.com/business/2005/dec/09/japan.internationalnews1.

518 See Bill 2003 http://news.bbc.co.uk/2/hi/technology/2872429.stm.

Unfortunately, the ECT Act does not address the legal effect of pricing errors on automated transactions. Since the ECT Act does not exclude application of the common law of contract to automated transactions, it follows logically that the legal effect of online pricing errors on automated transactions will be determined in line with the common law of mistake.

4.7.2.1 Online pricing errors and the common law of unilateral mistake

Unlike input errors, online pricing errors are mistakes in the sense that the word "mistake" is traditionally understood at common law. Online pricing errors are mistakes in the sense of a divergence between the actual and declared intention of an online trader or vendor concerning the price at which he or she is willing to sell an item. Amongst the various categories of mistake known at common law,[519] online pricing errors fit well within the category of unilateral mistake. A unilateral mistake arises where one of the contracting parties has apparently agreed to a contract, but was in actual fact labouring under a mistake about some aspect of the intended obligations at the time of contract formation.[520]

It is common cause that South African law allows a party to raise his or her own mistake in order to avoid a contract.[521] In order to avoid contractual liability on the basis of a unilateral mistake, the party alleging to have made such a mistake must show that his or her mistake was *iustus*.[522] A *iustus error* is a mistake that is both material and reasonable.[523] As mentioned already, a material mistake is one which excludes *consensus* between the parties. It excludes *consensus* because it relates to a material term of the contract, and because had it not been due to that error, the mistaken party would have not agreed to be bound by the contract. Concerning the requirement of reasonableness, it has been illustrated that a reasonable mistake is

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519 South African contract law recognises three categories of contractual mistake, namely unilateral mistake, mutual mistake and common mistake. For a detailed discussion of each type of mistake, see Christie *The Law of Contract* 363-399; Van der Merwe *et al Contract* 22-26.

520 Van der Merwe *et al Contract* 24-25.

521 Per Schreiner JA in the matter of *National and Overseas Distributors Corporation (Pty) Ltd v Potato Board* 479G-H.

522 *National and Overseas Distributors Corporation (Pty) Ltd v Potato Board* 479G-H in which it was mentioned that for a party to prevail on the defence of unilateral mistake, "…the mistake (error) would have to be reasonable (justus) and it would have to be pleaded."

523 See Hutchison *et alWille's Principles of South* 418.

one which, judged in light of the overall circumstances of the case, is excusable in law; either because it was induced by the misrepresentation of the other party, or because that other party knew or reasonably ought to have known thereof.

Under normal circumstances, online pricing errors cannot be attributed to the misrepresentation of online buyers. Consequently, an online trader will have to show either actual or constructive knowledge of an online pricing error on the part of a customer in order to avoid contractual liability. As illustrated above, if the other party knew of a mistake, or if a reasonable person in his or her position would have known of that mistake, the mistaken party is not bound by the contract. The rationale of this conclusion is easily demonstrated by cases of "snapping-up." A party snaps up an offer or bargain if despite his or her actual or constructive knowledge of a mistake in an offer; he or she continues to accept it with a view to taking advantage of the mistake.[524] As explained by the High Court of Singapore in the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*:[525]

> The essence of 'snapping up' lies in taking advantage of a known or perceived error in circumstances which ineluctably suggest knowledge of the error. A typical but not essential defining characteristic of conduct of this nature is the haste or urgency with which the non-mistaken party seeks to conclude a contract; the haste is induced by a latent anxiety that the mistaken party may learn of the error and as a result correct the error or change its mind about entering into the contract. Such conduct is akin to that of an unscrupulous commercial predator seeking to take advantage of an error by an unsuspecting prey by pouncing upon it before the latter has an opportunity to react or raise a shield of defence. Typical transactions are usually but not invariably characterised by (a) indecent alacrity; and (b) behaviour that any fair-minded commercial person similarly circumstanced would regard as a patent affront to commercial fairplay or morality.

As a general rule of law, a party who has actual knowledge or a reasonable suspicion of a mistake in the declaration of a contracting partner has an obligation to enquire with that partner whether or not the declared intention represents his or her actual intention.[526] If he or she fails or ignores to make an enquiry before accepting the offer, he or she snaps up a bargain. The snatching or snapping up of an offer

524 See *SonapPetroleum (SA) (Pty) Ltd v Pappadogianis* 235B-C.
525 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 116.
526 See *SonapPetroleum (SA) (Pty) Ltd v Pappadogianis* 235B-C.

under such circumstances does not result in a valid contract because it is not *bona fide*.[527]

The application of the common law of unilateral mistake to online pricing errors is demonstrated by *Price on Webstore*,[528] which was a matter decided in 2015 by the South African Consumer Goods and Services Ombudsman. As shall be recalled,[529] the facts of that case where that, while browsing the internet, a consumer came across a website advertising goods on a special. The consumer in issue purchased a coffee machine for R655.00. Within a period of four days after the purchase of the coffee machine, the customer returned to that website and purchased more goods to the total value of R10 530.00. As a matter of fact, however, the true value of all the goods bought ought to have been R415 500.00. The trader refused to perform the contract on the ground that the website was not supposed to be visible to the general public, and that the prices were for illustrative purposes only. However, the matter was treated by the Ombudsman as involving an online pricing error. It was held that:

> In this matter, the total paid for the ordered goods were R 10 010.00, the actual value of the goods ordered is R415 500.00.
>
> Accordingly I conclude that the discrepancy between the actual price or the price that a reasonable consumer might expect the price to be and the advertised price was so large that a reasonable consumer would have realised there was an error and not have been misled.
>
> Based on the above finding, the supplier is not bound to provide the complainants with the ordered goods at the incorrectly advertised price.

One finds nothing objectionable with this finding. The pricing error in issue was indeed so glaring that the complainant, as a reasonable person in his position would have, ought to have taken notice thereof. A decision to a similar effect has also been reached in Singapore. In the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[530] the defendant company erroneously advertised on its trading website, a HP laser printer properly worth $3 854, for $66.00. This mistake was due to the

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527 *SonapPetroleum (SA) (Pty) Ltd v Pappadogianis* 235B-C.
528 *Price on Webstore* (201502-0086) [2015] ZACGSO 1 (11 May 2015).
529 See para 4.5.2.1.2.2 above.
530 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594.

carelessness of one of the employees of the company. The company had organised a training session for its employees, and as part of that session, the employees where trained amongst others on how to upload prices onto the website. Although the training was done on a simulation website, the employee in issue mistakenly uploaded the erroneous price on the actual trading website of the company. The plaintiffs, a group of six friends, having noted the offer, placed orders for several printers each. The defendant refused to perform the contracts on the basis of the pricing error. The court found that the plaintiffs had actual knowledge of the mistake, and therefore that they had unjustifiably snapped a bargain.[531]

However, not all cases will be so straightforward. As a matter of fact, whether online or offline, it is admittedly very difficult for an average buyer to estimate with a degree of certainty the true worth or market value of any product. This conclusion was held to be true by the court in the matter of *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd*.[532] In that case, the parties contracted for the sale of a Kolbus case maker machine, together with all its accessories, for R20 000. The buyer had already tendered part of the purchase price, but the seller subsequently refused to deliver the machine as it had already sold it to a third party at a much higher price of R72 000, being its true value at the time. As a result, the buyer sued the seller for damages. In defence, the seller raised unilateral mistake, alleging that the buyer had snapped an offer of the erroneous price knowing very well that it was a mistake. The court found in favour of the buyer on the ground that the difference between the purchase price and the true value of the machine, *i.e.* a whopping R52 000, was not so glaring a mistake as to catch the attention of a reasonable man. In reaching the decision, the court took note of several factors, including the fact that

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531 In the facts of this case, it was clear that the plaintiffs had knowledge of the mistake. From available evidence, the plaintiff's had exchanged e-mails suggesting that they knew, or at least that they had a suspicion that the price posted on the website was a mistake. For instance, at para 18 the court referred to an e-mail reading "Dear friend, Someone referred me to the HP website which shows the price of this HP Colour LaserJet 4600 Series as S$66.00. *I do not know if this is an error or whether HP will honour thispurchase*. *No harm trying right? I hope by the time you see this email, the price is still atS$66.00 coz they might change it anytime.*" Judging the matter in light of this email, the court found in para 26 of the record of judgement that it was compelling evidence of knowledge of an error in the price of the printer.

532 *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 1989 1 SA 337 (W) (hereinafter referred to as *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd*).

the buyer had never purchased or used such a machine before.[533] Furthermore that the seller in this case was a financial house which did not normally deal in these kinds of machines, therefore that from the point of view of a reasonable man, the seller would have wanted to dispose of such a machine at a lower price.[534] Moreover that the buyer in this case did not wish to purchase the machine for its sophistication, on the contrary that it merely wanted the machine for a specific limited purpose. The result being that the buyer would not have appreciated the price of R20 000 to be unreasonable.[535] Most importantly for purposes of present considerations, the court took note and expressed support for the observations of one author that "market value:"[536]

> …varies with time and place and circumstance. It varies with the appetite of him who buys and with the needs of him who sells. It is easy to be mistaken in one's estimate of market value, but 'practically never is this such a mistake as will justify recission'. Because the parties are conscious of the vagaries of market value, 'each party is consciously assuming the risk of error of judgment'. As to this, by prevailing mores, by social policy and by existing law, the rule is caveat emptor. It is also and in equal degree caveat vendor. ... Market value is fickle, and there may be explicable reasons for undercutting it. It would seem unfair, in the absence of glaring errors, to impose on the offeree the onus and maybe expensive task of making comparisons (Triplady (loc cit). But in deciding whether the discrepancy is gross or the error glaring, as a matter of common cause, there would seem no harm in placing the reasonable man in the shoes of the offeree to the extent of crediting him with the offeree's experience or expertise. An error may be patent to the man with sufficient acumen when others might not have noticed it.

In comparison to traditional sales, the issue becomes more complicated when a pricing error occurs online. As one author correctly notes:[537]

> What is known or should be known creates unique problems for online retailers because what a customer would suspect was a pricing mistake at a brick-and-mortar store might appear reasonable on the Internet. Internet retailers regularly offer legitimate deals that could seem to be too good to be true. In fact, some sites like Half.com focus on that very type of sale. Super-deals, however, are not limited to liquidators. Regular retailers, like Amazon.com, often offer sales that are not typical for brick-and-mortar retailers. This makes it difficult to establish what exactly the customer had reason to know. To illustrate, in the Amazon.com and Kodak examples above, a £329 camera for £100 may not be so discounted as to give the

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533 *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 344H. In this regard, the court was of the view that neither the machine nor its price meant anything to the purchaser.

534 *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 345I.

535 *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 344H-345A.

536 Tiplady as quoted by in *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 343F-I.

537 Groebner 2004 *Shindler Journal of Law, Commerce and Technology* para 15.

> customer reason to know while the £287 iPaq for £7.32 might be enough [to] cause the customer to suspect a pricing mistake.

The effect of this observation is that online traders may have a tough time convincing a court that a customer knew, or reasonably ought to have known, of an online pricing error. Consequently, there is a genuine fear that, in a majority of cases, online traders may be forced to perform purchase orders made pursuant to online pricing errors simply because they are unable to prove knowledge thereof on the part of customers.

Another notable difficulty with the South African common law of unilateral mistake is that it is specifically relevant to cases involving direct negotiations between contracting parties. As a result, it is not immediately clear whether the concept of snapping up an offer is applicable in cases of a "mass offer." In the matter of *Donald and Richard Currie (Pty) Ltd v Growthpoint Properties (Pty) Ltd, Currie v Growthpoint Properties Limited*,[538] Mbah J in the South Gauteng High Court was of the view that:

> The case of a mass offer … can be contrasted with the facts in *Sonap* where there were direct negotiations between only two contracting parties, and the court held there actually to have been discussions about the possibility of a mistake before the contract was finally concluded. The question in *Sonap* was whether the respondent, who was presented with an addendum to a lease containing the mistake, knew or ought to have known [that] there was a mistake in the act of accepting the offer. Harms AJA disbelieved the respondent and felt that the respondent was *'snapping up … a bargain'* when he purported to accept the mistaken deed. The case … [is] distinguishable from the present and has nothing to do with contracts that are concluded by the performance of a stipulated act of acceptance that does not entail any communication or interaction between offeror and offeree other than lodging of the signed document by the offeree with the agent of the offeror to complete the contract, such as in this case. The plaintiffs' reliance on *Sonap* is accordingly misplaced.

In light of this statement, it is doubtful whether the common law of unilateral mistake is applicable to mass offers, which includes advertisements of goods for sale to the general public on commercial websites. Another difficulty with the South African common law on the issue is that it adopts an inherently individualistic approach to the question of the legal effect of a unilateral mistake on a contract. This is problematic because as correctly noted by the High Court of Singapore in the

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538 *Donald and Richard Currie (Pty) Ltd v Growthpoint Properties (Pty) Ltd, Currie v Growthpoint Properties Limited* [2011] ZAGPJHC 33 para 61.

matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[539] the legal effect of an online pricing error may "…spread over a greater magnitude of transactions." It is only when one considers the total number of purchase orders received from customers in response of an online pricing error that the real financial consequences involved become clear.

In light of the foregoing observations, it is the opinion of the current researcher that there is a genuine need for the law to intervene on behalf of online traders. Such intervention, it is submitted, can only be achieved by developing or modifying the common law.

4.7.2.2 Recommendations for the development of the common law

In what follows, an attempt shall be made to illustrate how the common law of contract can be developed or modified in order to protect online traders from being burdened with hardships or financial losses due to pricing errors on their websites.

4.7.2.2.1 Advertisements of goods on automated websites as firm offers made subject to the availability of stock

In the opinion of the current researcher, an acceptable solution to the problem of the legal effect of online pricing errors on automated transactions will depend, amongst others, on the traditional offer-and-acceptance analysis. It has been demonstrated in this work that South Africa courts are likely follow the precedent of *Crawley v Rex* to hold that advertisements of goods for sale on automated commercial websites are invitations to treat,[540] or at least that such will be their starting point in analysing the matter. If advertisements of goods on automated commercial websites are construed as invitations to treat, the unavoidable conclusion is that a customer who places a purchase order on that website makes an offer, rather than an acceptance. Therefore, a contract in that instance will be concluded by the online trader who makes an acceptance through the electronic agent. Proceeding from that analysis, it cannot be said that an online customer has

539 *Chwee Kin Keong v Digilandmall.com Pte Ltd* [2004] 2 SLR 594 para 102.
540 *Crawley v Rex* 1909 TS 1105.

"snapped an offer" in that scenario. That would be illogical because, if the customer's order is an offer, it follows logically that is the online trader who concludes the contract. It is precisely for this reason that one author argues that:[541]

> …if there is anyone who can be said to have snapped an offer, it is not the buyer, but the seller on whose behalf the website is acting.

Therefore, it is clear from the foregoing analysis that, if one adopts the attitude that advertisements of goods on automated commercial websites are invitations to treat, the common law of unilateral mistake cannot logically be applied to automated transactions.

As shall be recalled,[542] it has been recommended in this work that South African law should adopt the view that advertisements of goods for sale on interactive or automated commercial websites are offers made subject to the availability of stock. Regarding the availability of stock, it was recommended that such a term must automatically be implied by the law into website advertisements seeing that traders who use automated commercial websites to form sale agreements stand a higher risk of being inundated with purchase orders than their traditional counterparts. The risk of a trader being inundated by purchase orders is even higher in cases of online pricing errors because an online trader who makes such an error is most likely to receive a significantly higher number of purchase orders than if the item or product in issue was correctly priced. In light of the inherent difficulty in applying the common law of unilateral mistake to online pricing errors when website advertisements are classified into invitations to treat, it is submitted that South African law should be developed to the effect that advertisements of goods for sale on automated commercial websites are firm offers made subject to the availability of stock.

In this instance, the benefit of classifying website advertisements as offers made subject to the availability of stock is that such classification would pave a way for the logical application of the common law of unilateral mistake to online pricing errors. Thus, once an advertisement of goods for sale on an automated website is classified

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541 Ramokanate *A Legal Framework* 21.
542 See para 4.5.2.1.2.4 above.

as an offer made subject to the availability of stock, it would be possible to talk of a customer snatching an offer by making acceptance with actual or constructive knowledge of a pricing mistake.

Moreover, such a classification would be beneficial in that, an online trader who is unable to demonstrate actual or constructive knowledge of a pricing mistake on the part of all the customers who purported to purchase the wrongly priced item will only be forced to perform as many purchase orders as the available stock is able to satisfy. This approach, it is submitted, is commendable for the reason that it will easily release online traders from harsh and onerous obligations in circumstances where the common law of unilateral mistake stubbornly refused to give an equitable relief.

Apart from the approach proposed above, another possible solution to the current problem would be to hold that automated responses or replies are not valid acceptances for purposes of contract formation where a purchase order in issue was made by a customer subject to a pricing error. This approach will only be possible to adopt if one proceeds on a presumption that a website advertisement is an invitation to treat. Where a website advertisement is classified as an invitation to treat, it is common cause that a purchase order placed by a customer on that website will be classified as an offer. The response or reply of the electronic agent of an online trader to that purchase order will, therefore, be an acceptance. That an automated response is a valid and enforceable acceptance despite a pricing error has been upheld in, amongst others, German law. In one case where goods were erroneously offered over the Internet for a price below that intended by the seller,[543] and the seller's system automatically generated a reply stating that the customer's order would be immediately "carried out", the court affirmed the principle that automated communications were attributable to the person on whose behalf the system had been programmed and in whose names the messages were sent. The court

[543] This is a German case, and due to language barriers, the current researcher could not access the full record of the judgment. The summary provided above is taken from UNCITRAL 2003 http://daccess-dds-ny.un.org/doc/UNDOC/LTD/V03/880/47/PDF/V0388047.pdf?OpenElement. See case also as discussed by Nicolai Law Group P.C 2013 http://www.niclawgrp.com/Resource-Materials/Monthly-Memo/Online-Advertising-Error-Liability.shtml. For other cases following the same approach, see Pistorius 2008 *JILT* 12.

furthermore affirmed the legal value of messages sent by automatic reply functions as binding expressions of intention and valid acceptances for purposes of contract formation.

In one case reported by the Nicolai Group,[544] however, a German court refused to uphold the validity of an automated response where a trader had advertised a wrong price. In that case:

> …a seller displayed a price that was only one percent of the actual price. A customer ordered at the low price and got an autoreply one minute later. The following day, the seller became aware of the mistake and asked the customer whether he was willing to pay the correct price. He refused. The customer sued for fulfillment of the contract at the displayed price. The court dismissed the claim, saying the seller's mistaken invitation to bid also affected the validity of the customer's offer. Since the seller could not adjust its acceptance, which was automatic, the court allowed the seller to void its acceptance of the customer's order.[545]

This approach is commendable for the reason that it curbs the far reaching effect of automated responses in the instances of online pricing errors.

4.7.2.2.2 *Laesio enormis*— lamenting over spilled milk

The doctrine of *laesio enormis* admittedly has its origins in Roman law,[546] and was received as part of Roman-Dutch law in Holland.[547] Barnet mentions that after its reception in Europe and Roman-Dutch law,[548] the doctrine of *laesio enormis* eventually governed "…almost the whole field of contract law pertaining to price." The doctrine operates to the effect that a seller who has apparently agreed to sell a product below its true market value, or a buyer who has apparently agreed to purchase a product priced way above its true market value, can rescind the contract on that basis, or have the contract performed on the true value of the item.[549] As

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544 Nicolai Law Group P.C 2013 http://www.niclawgrp.com/Resource-Materials/Monthly-Memo/Online-Advertising-Error-Liability.shtml.

545 Nicolai Law Group P.C 2013 http://www.niclawgrp.com/Resource-Materials/Monthly-Memo/Online-Advertising-Error-Liability.shtml.

546 See Barnard 2013 *THRHR* 522-523.

547 For an insightful discussion of the historical origins of this doctrine, see *Tjollo Ateljees (Eins) Bpk v Small* 1949 1 SA 856 (A) 862.

548 Barnard 2013 *THRHR* 523.

549 *Tjollo Ateljees (Eins) Bpk v Small* 1949 1 SA 856 (A) 868 (hereinafter referred to as *Tjollo Ateljees (Eins) Bpk v Small*), in which the court explained that "[t]he majority of the Dutch commentators hold that the remedy is available whenever a contracting party has suffered

was noted by the court in *Gillig v Sonnenberg*,[550] the basis of the doctrine of *laesio enormis* is that even in the absence of "fraud or misrepresentation" on the part of the other party, a buyer or seller, on grounds of equity, must be given relief against a seriously prejudicial bargain which he has concluded. In practise, the doctrine of *laesio enormis* operated as follows:

> In determining the value of the articles sold the Court must determine what is a 'fair value', at the time and place of sale. The Court, once having determined a 'fair value', is entitled to have regard to the selling price in relation to such 'fair value' in order to determine the paramount question whether there has been 'enormous prejudice'; therefore, when determining whether a movable is of 'the more valuable kind' or not, the Court is entitled to have regard to the selling price. A person relying on the doctrine has to prove what is the 'fair value' of the article in question, and proof of such value can be furnished by arbitratores and aestimatores.[551]

The elimination of this doctrine from the South African common law of contract was achieved through a concerted effort between courts of law and the legislature. A very persuasive argument against *laesio enormis* was made by Van Der Heever JA in the matter of *Tjollo Ateljees (Eins) Bpk v Small*.[552] In that case, the learned judge noted that the doctrine in issue was arbitrary for the reason that it considered only two factors in deciding the question whether a price is enormous,[553] namely the agreed selling pricing and the true value of an item at the place and time of sale. This approach was considered to be unjustifiable because it did not take into account other incidental costs such as "…insurance, handling charges and other overhead expenses…," which may affect the selling price of an item.[554] This is

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verkorting over de helft in comparison with the true market value of the thing sold at the time of the sale; in other words the seller could rescind if he sold a thing worth £10 for £4 19s. 6d. The querela was extended to the buyer and to other parties to other synallagmatic contracts by analogy on the principle…."

550 *Gillig v Sonnenberg* 1953 4 SA 675 (T) 682H.

551 *Tjollo Ateljees (Eins) Bpk v Small* 859.

552 *Tjollo Ateljees (Eins) Bpk v Small* 1949 1 SA 856 (A) 859.

553 *Tjollo Ateljees (Eins) Bpk v Small* 873.

554 *Tjollo Ateljees (Eins) Bpk v Small* 873 in which Van Den Heever JA noted that "[i]t [referring to the doctrine of *laesio enormis*] was designed to function in an arbitrary manner. It took into consideration only two standards of value: the agreed selling price and the true market value at the date and place of sale. I may have paid £1,000 for an asset, or my cost of producing it may amount to that figure, but such considerations were ignored. If you bought it from me for £1,000 and could later on prove that its market value at the date and place of the sale was less than £500, you could have the sale rescinded. Incidents personal to me such as cost, insurance, handling charges and other overhead expenses are entirely beside the point… Since the alleged rule encourages a party to divest himself of obligations which he has freely and solemnly

without doubt a reasonable concern. It is common cause that traders commonly add such costs and expenses to the selling prices of the goods which they offer for sale. A further objection against the doctrine of *laesio enormis* is that it undermines the sanctity of *pacta sunt servanda.* As put by Van Der Heever JA in the matter of *Tjollo Ateljees (Eins) Bpk v Small*:[555]

> In *laesio enormis* a person of full legal capacity, whose free exercise of volition was in no way impaired or restricted, seeks relief not against a wrong, but against his own lack of judgment, ineptitude or folly. Since the alleged rule encourages a party to divest himself of obligations which he has freely and solemnly undertaken, I do not consider it in harmony either with immanent reason or public policy.

In this way, the doctrine of *laesio enormis* clearly operated against a fundamental principle of South African law to the effect that, if a party makes a bad bargain, "…the Court cannot, out of sympathy with him, amend the contract in his favour."[556]

In light of the fact that the doctrine of *laesio enormis* was expressly eliminated from the common law of contract by an Act of Parliament in South Africa, one cannot reasonably recommend for its application to online pricing errors. That notwithstanding, it is submitted that where an online trader is able to demonstrate that the difference between a pricing error and the true market value of the item is so enormous that the enforcement of the contract would be prejudicial, that fact must be given significant legal weight in deciding whether or not the resultant contract is valid and enforceable.

4.7.3 Machine errors

Commentators on the issue of the reliability of computer software concede that "[t]here is little software which is reliable…."[557] Almost every computer program contains bugs and errors.[558] The unreliability of computer programs is a fact so well accepted that courts of law in other jurisdictions have refused to hold software

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undertaken, I do not consider it in harmony either with immanent reason or public policy. If in addition it appears to be without juridical foundation, it should not be applied."

555 *Tjollo Ateljees (Eins) Bpk v Small* 1949 1 SA 856 (A) 873.

556 *Grinaker Construction (Tvl) (Pty) Ltd v Tvl Provincial Administration* 1982 1 SA 78 (A) 95H, referring to the following cases in support, namely *Van Rensburg v Straughan* 1914 AD 317 328; *Haviland Estates (Pty) Ltd and Another v McMaster* 1969 2 SA 312 (A) 336E-G.

557 McGettrick as quoted by Leith "Legal expertise and legal expert systems" 16.

558 Lloyd *Information Technology* 397.

manufacturers in breach of contract for delivering defective software. For instance, in the matter of *Eurodynamic Systems v General Automation Ltd*,[559] Steyn J expressed the view that it is generally regarded as acceptable practice for a software manufacturer "…to supply computer programmes [*sic*] … that contain errors and bugs."[560] The learned judge found on that basis that not every "…bug or error in a programme can be characterised as a breach of contract."[561] Similarly, in the matter of *Saphena Computing v Allied Collection Agencies Ltd*,[562] Staughton LJ expressed the view that computer software:

> [I]s not a commodity which is delivered once, only once, and once and for all, but one which will necessarily be accompanied by a degree of testing and modification. Just as no software developer can reasonably expect a buyer to tell him what is required without a process of feedback and reassessment, so no buyer should expect a supplier to get his programs right first time.

The unreliability of computer software is commonly associated with the incompetence of the programmer or flaws in the designs of the program.[563] Contrary to this perception, however, software failures are rarely attributed to poor craftsmanship as the sole cause thereof.[564] The competence or incompetence of the programmer notwithstanding, computer software is inherently unreliable. It is said that the odds are always skewed in favour of computer software containing errors and bugs no matter how much skill and care the programmer puts into developing it.[565] The defective nature of computer software is admittedly a result of a conglomeration of causes, some external while others internal. Known as system-centric causes,[566] the external causes of software failure are those related to the environment in which a computer program operates. These may include defective or

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559 Unreported case (6 September 1988) UK.
560 As quoted by Lloyd *Information Technology* 509.
561 As quoted by Lloyd *Information Technology* 509.
562 *Saphena Computing v Allied Collection Agencies Ltd* [1995] FSR 616 652.
563 Wein 1996 *Harvard Journal of Law and Technology* 389; Ogheneovo 2014 *Journal of Computer and Communications* 31, stating that "[m]ost often, software engineers or developers do not have a good design before coding or writing programs or software. This is the major cause of software failure today. Developers most times boot their computers and navigate to the programming language location and they will start coding without having a design. Such software is bound to fail."
564 Karnow 1996 *Berkeley Technology Law Journal* 161–162.
565 Bainbridge *Introduction to Computer* 220.
566 Ogheneovo 2014 *Journal of Computer and Communications* 31.

incompatible hardware,[567] electrical interferences,[568] heavy workloads and improper use,[569] virus attacks and environmental differences.[570]

Commonly referred to as software-centric causes,[571] the internal causes of software failure are those inherent in the software itself. These causes are generally associated with the inefficiency of testing procedures and the ineffectiveness of error correcting and debugging mechanisms. Although all software is tested for errors and bugs before it is delivered to customers, these tests have, however, never been proven to verify the reliability of software as a general matter.[572] Atkins mentions that originally, the metrics used to test the reliability of computer software were uniquely designed for testing the reliability of hardware,[573] the necessary implication being that these tests are not suited to testing the reliability of computer software.[574] In relation to the ineffectiveness of error correcting and debugging mechanisms, it is commonly said that removing errors and bugs from a computer program has a substantial chance of creating new errors and bugs.[575] Removing these new errors and bugs would also introduce other errors and bugs, so that if perfection was the ultimate goal, a software developer would work on one piece of software *ad infinitum*.

As a result of one or a combination of any of the causes discussed above, a computer program is likely to fail or malfunction in the course of use. According to

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567 Karnow *Berkeley Technology Law Journal* 163; Kadav *et al* 2009 http://www.sigops.org/sosp/sosp09/papers/kadav-sosp09.pdf.

568 Kadav *et al* 2009 http://www.sigops.org/sosp/sosp09/papers/kadav-sosp09.pdf.

569 Alheit *Civil Issues of Liability* 60-61.

570 Sullivan and Chillarege data unknown http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.39.4642&rep =rep1&type=pdf.

571 Ogheneovo 2014 *Journal of Computer and Communications* 28.

572 Karnow 1996 *Berkeley Technology Law Journal* 162.

573 Atkins 2013 http://ojs.qub.ac.uk/index.php/webjcli/article/view/250.

574 It is said further that exhaustive tests are impossible with software because it would take an unreasonably long time to run such tests. Karnow 1996 *Berkeley Technology Law Journal* 161-162 offers for illustration a case of "[a] stunningly simple program with (i) between one and twenty commands, (ii) that may be called in any order and (iii) that may be repeated any number of times. For a thread (or sequence) of execution one command long, there are of course exactly twenty possible threads. For a thread two commands long, we have 20 x 20 or 400 possible threads. Those familiar with the mathematics of combinatorial explosions will see this coming. As the number of commands in the thread goes up, the number of threads that need to be run and tested rises exponentially. Spending one second per test run, it would take 300,000 years to test this simple program…."

575 Lloyd *Information Technology* 498.

Pearlman,[576] a computer program malfunctions if it executes a function that it has not been programmed to perform, if it does not execute a programmed function when instructed to, or if it executes a programmed function improperly. In the case of an electronic agent, such malfunctions may easily affect the content of data messages. It is not hard to imagine that as a result of a malfunction, an electronic agent can:

> …transmit an offer or acceptance that was unintended, unforeseen or unauthorized by the person on whose behalf the electronic agent was operating.[577]

For purposes of present considerations, we shall refer to these errors and mistakes as "machine errors." The expression "machine error" is primarily intended to convey the idea that the mistake or error in issue is not caused in any manner by fault or blameworthy conduct on the part of the user of an electronic agent.

4.7.3.1 The legislative framework for the treatment of machine errors in automated transactions

As with input errors, the legal effect of machine errors on automated transactions is expressly addressed by the ECT Act. As shall be recalled, the ECT Act provides in section 25 (c) that a data message generated by an electronic agent is considered to originate from the programmer or user of that electronic agent. According to the same provision, the rule of attribution will always prevail unless it is "…proved that the information system did not properly execute such programming." The effect of this proviso is clearly that a data message generated by an electronic agent as a result of a malfunction is not considered to originate from the programmer or user. Consequently, the programmer or user of an electronic agent is not bound by the results or outcomes of such a message. The rationale of this rule has already been explained in this work.[578] To reiterate, the proviso to section 25 (c) was explained on the ground that if an electronic agent malfunctions, its operations are not attributed to the user or programmer because such operations are not part of the

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576 Perlman 1998 *Rutgers Computer and Technology Law Journal* 387; Phillips 1994 *The Business Lawyer* 156–157.

577 Kerr 2001 *Electronic Commerce Research* 195.

578 See para 4.5.1.1 above.

programmer's or user's instructions. It is on this basis that programmers and users of electronic agents are protected from the effects of machine errors.

According to Pistorius,[579] the main aim behind section 25 (c) is to mitigate the risks of defects resulting from programming malfunctions, *i.e.* machine errors.[580] In her own words:[581]

> …South African common-law principles dictate that where mistakes occur in electronic communications through the malfunction of an electronic agent, the party that installed the malfunctioning electronic agent must assume the risk of any defects or delays in the transmission. Meiring argues that the proviso in section 25(c): — … unless it is proved that the information system did not properly execute such programming is helpful, but a strictly unnecessary reference to the rebuttable nature of these provisions (2004, p 100). This argument is only partly valid. The focus in addressing attribution is not on who made decisions in relation to specific transactions but on how the risk should be structured in an automated transaction (Castell, 1997, p 4). Section 25(c) of the ECT Act mitigates the risks of defects as a result of programming malfunction. Where the electronic agent merely fails to respond to a data message or where delays occur in the transmission of a data message or in the performance of an action, section 25(c) will be of little assistance. As noted above, South African common law dictates that where mistakes occur in electronic communications through the malfunction of an electronic agent, the party that installed the malfunctioning electronic agent must assume the risk of any defects or delays in the transmission. Section 25(c) has altered this rule as the risks associated with programming malfunction have been mitigated.

For purposes of present considerations, the inevitable legal effect of section 25 (c) is that a contract concluded between a user of an electronic agent and a third party pursuant to a machine error is not valid. The user is permitted to avoid such a contract by simply demonstrating that his or her electronic agent did not properly execute its programming in concluding it.

4.7.3.2 A critical analysis of section 25(c) of the ECT Act

That section 25 (c) has developed or modified the South African common law of contract is beyond doubt. This is so because, as Pistorius demonstrates in the above quotation, South African common law principles dictate that a party who installed an

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579 Pistorius 2008 *JILT* 11.

580 To clarify the meaning of the expression "programming malfunction," she mentions that "[w]here the electronic agent merely fails to respond to a data message or where delays occur in the transmission of a data message or in the performance of an action, section 25(c) will be of little assistance," see Pistorius 2008 *JILT* 12.

581 Pistorius 2008 *JILT* 11-12.

electronic agent must assume the risk of malfunctions. The purpose of the present discussion shall be to critically consider the desirability of the development or modification of the common law by section 25 (c).

A notable difficulty with section 25 (c) is poor drafting on the part of the legislator. The proviso, unless it is proved "…that the information system did not properly execute such programming," does not offer much assistance as to when a data message will be considered not to originate from the programmer or user of an electronic agent. Is the user of an electronic agent required to demonstrate merely that a data message was generated in the course of a malfunction, or specifically that the content of that message was affected or tempered with by the malfunction? This issue is important for purposes of present considerations because of the possibility that an electronic agent may nevertheless generate and transmit a correct or programmed data message in the course of a malfunction. It is submitted that in construing section 25 (c), a court should specifically consider whether the content of a disputed data message was actually affected by an alleged malfunction. If it is established that the content of that data message was not affected by the malfunction, it must be given proper legal force and effect despite the fact that it was generated in the course of a malfunction. It is only when the content of a data message is affected by a malfunction that the user of an electronic agent must be excused from contractual liability.

Another difficulty with section 25 (c) is the unsubstantiated assumption on the part of the legislator that it will always be possible to distinguish between data messages generated by electronic agents autonomously and those affected by machine errors. A common feature of these two sets of data messages, which may render them very difficult to distinguish, is that they both do not reflect the true intention of the user of an electronic agent. To illustrate, it is common cause that an electronic agent programmed to sell a book for R500 may sell it for R240 as a result of a machine error. In the case of an autonomous electronic agent, it is common cause that such an electronic agent may also sell the book for R240, not as result of a malfunction but an autonomous decision making function. An average user may not be able to appreciate the difference between the two scenarios, and may accordingly regard

both as instances of machine error. The pressing issue is whether the unexpected, unforeseen or unanticipated actions of an autonomous electronic agent are covered in the phrase "did not properly execute such programming" in section 25 (c)? An argument can easily be made that where an electronic agent that was originally programmed or configured to sell an item for R500 autonomously decides to sell it for R240, such an electronic agent does not properly execute its programming. The foregoing notwithstanding, it is also possible to make an argument that such an electronic agent properly executed its programming since it was intentionally programmed to operate in that manner.[582] The failure of the ECT Act to address this issue is likely to breed a conflict of opinion. It is submitted that in applying section 25 (c), a distinction must be drawn between the two scenarios discussed above. Where an electronic agent autonomously generates and transmits a data message that does not represent the true intention of its user, such should not be treated as an instance of a machine error. In the absence of clear evidence that an autonomous electronic agent has malfunctioned, its data messages must be given proper legal force and effect.

Another difficulty with section 25 (c), which is the main concern for this research, is the manner in which it alters the South African common law of contract on the issue. As in many other jurisdictions, the principles of South African law on the issue were largely developed in the context of garbled telegraphic messages. As Bradfield puts it:[583]

> The main difficulty raised by the use of telegrams (and phonograms) is that they may be garbled in transmission, so both offer and acceptance may appear to the recipient in a form different from that dispatched by the sender.

Where a garbled telegraphic message results in a contract, the validity of that contract will understandably be an issue. The first and only case to decide that issue in South Africa is *Darter & Son v Dold*.[584] In that case, the plaintiff wrote to the defendant offering him agency in H.M.V products at Kokstad. The defendant replied

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582 Mik 2013 *JICLT* 173, stating that "…a computer is autonomous because it was programmed to be autonomous. It did not self-acquire this feature. It is always a human person who instructs and controls a computer."

583 Bradfield *Christie's Law of Contract* 91.

584 *Darter & Son v Dold* 1928 EDL 42.

back with a telegram stating that 'Accept sole agency Kokstad sending orders confirm.' If the telegram reached the plaintiff in this form, his reply would have been a counter-offer and not an acceptance. The telegram was, however, unfortunately garbled, and as a result reached the plaintiff reading 'Accept hope agency Kokstad sending orders confirm.' On receipt, the plaintiff assumed the telegram to mean 'Accept H.M.V agency Kokstad sending orders confirm.' The main issue before court was whether the plaintiff was entitled to 'sole agency Kokstad?' The court held that the defendant's telegram was a valid acceptance of the plaintiff's offer, therefore that the defendant was not entitled to 'sole agency Kokstad.' The authority of this case remains somewhat a matter of argumentation. Chirstie contents that while:[585]

> No fault can be found with this decision … it offers very little guidance for future cases since it does not indicate the principles on which it was based.

Francis argues, however, that the case is authority to the effect that the sender of a telegram is responsible for the form in which it is received by the addressee.[586] Following this analysis, a majority of academic commentators in South Africa favour the view that a person who chooses or selects a tool of communication must bear the risk of erroneous communications transmitted by that tool to a contracting partner.[587] With specific reference to electronic agents, Olmesdahl has similarly argued that a person who installs a machine "…must take the risk of any defects or delays in transmission…."[588] This rule is traced back by its proponents to the Netherlands,[589] and is clearly stated in article 3. 37 (4) of the *Dutch Civil Code* to the effect that:

> When a person's statement has been transmitted incorrectly because of a fault made by the selected messenger or as a result of an error caused by the chosen means of communication, then the statement, as received by the addressee, will be regarded as the statement of the person who made it, unless this way of transmission was used on instruction of the addressee.

For purposes of present considerations, the effect of this rule is that a mistake or error caused by the malfunction of a tool of communication does not *ipso facto*

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585 Christie *The Law of Contract* 86.
586 Francis 1967 *SALJ* 283.
587 See Francis 1967 *SALJ* 287-288; Kahn 1955 *SALJ* 266; Bradfield *Christie's Law of Contract* 91.
588 Olmesdahl 1987 *SALJ* 553.
589 See Francis 1967 *SALJ* 290; Kahn 1955 *SALJ* 266.

vitiate a contract. Unless it is demonstrated that it is the addressee who instructed the originator to use that tool of communication, an erroneous message transmitted by that tool will be given its proper legal force and effect. The addressee is entitled to rely and act on the strength of such a message "…as the statement of the person who made it…." If that statement or message results in a contract, it logically follows that the contract in issue is valid and enforceable. The originator cannot avoid contractual liability on the simple basis that the statement in issue resulted from an error caused by a tool of communication. Commentators in Dutch law mention that article 3.37 (4) operates subject to the condition that the addressee's reliance on the erroneous message was reasonable.[590] Therefore, the originator will not be bound by an erroneous message if the error or mistake in that message was so glaring that the addressee should reasonably have known that a mistake has been made.

Kahn supports this approach on the basis that:[591]

> …assuming our courts adopt this solution, there would still be room for holding that there was no contract where the party not initiating the use of telegrams knew or suspected or should have known of the error, whether through the prior dealings of the parties, his knowledge of the market or any other cause. 'Snatching at a bargain' cannot be permitted under any circumstances.

Francis supports the same approach on the basis that it:[592]

> …is in accordance with the modem objective conception of the nature of contract, i.e. a logical extension of the rule that a person is bound by what he says rather than by what he intends.

To the same effect, Bradfield makes the point that:[593]

> The question is simply whether the doctrine of quasi-mutual assent finds a place here … The Netherlands cases favoured by professor Kahn, and *Darter & Son v Dold*, proceed on the basis that the initiator of the telegraphic method of communication has conduct[ed] [himself or herself] in such [a manner] as to lead the other party reasonably to believe that there is a contract on the terms understood by the other party.

In comparison to the approach discussed above, the main difficulty with section 25 (c) is that it fails to protect the reasonable reliance of third parties on machine

590 Van Esch "The Netherlands" 632.
591 Kahn 1955 *SALJ* 266.
592 Francis 1967 *SALJ* 287.
593 Bradfield *Christie's Law of Contract* 92.

errors. It is easily conceivable that a third party who receives a data message transmitted by an electronic agent in pursuance of a machine error may reasonably rely on such a message to conclude a contract. The failure of the ECT Act to protect such reliance is surely indefensible. It is accordingly submitted that the proviso to section 25 (c) must be interpreted in accordance with the reliance theory of contract as discussed in this research. A party using an electronic agent to form an agreement must not be permitted to avoid that agreement on the basis of a machine error if the other party reasonably relied on the communications of his or her malfunctioning electronic agent to conclude the contract.

In the minority, some South African commentators have demonstrated support for an approach common in German law.[594] In terms of section 120 of the *German Civil Code* 2002 (hereinafter referred to as the BGB):

> A declaration of intent that has been incorrectly transmitted by the person or facilities used for its transmission may be avoided subject to the same condition as a declaration of intent made by mistake may be avoided under section 119.

This provision admittedly applies to instances where a contractual message is garbled or altered by complications or problems with a tool of communication used for its transmission. In terms of section 119, a party is entitled to avoid a contract on the basis of a mistake if at the time of making a declaration or statement of intention, he or she was mistaken about its "content" or had no intention whatsoever of making that statement.[595] For purposes of present considerations, it may be concluded that in German law, a user of an electronic agent is permitted to rescind an automated transaction on the basis of a machine error. The BGB provides that if a statement or declaration relevant to section 120 was communicated or transmitted to the other party, the user of the tool of communication which transmitted that message must:

> …pay damages to this person, or failing this to any third party, for the damage that the other or the third party suffers as a result of his relying on the validity of the

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[594] See specifically Kerr *The Principles of the Law* 38.
[595] s 19 (1).

> declaration; but not in excess of the total amount of the interest which the other or the third party has in the validity of the declaration.[596]

Kerr has suggested that this approach must be adopted in South Africa.[597] In his own words:

> [I]t is suggested that South African courts should hold that in such circumstances there is no contract, but that the party who chose or authorised or indicated the method of communication in question should make good any useless expenditure by the other party and/ or any loss of profit for the period during which the other party, relying on the erroneous communication, is inactive or unable to make other arrangements.[598]

As with the Dutch approach discussed above, the German approach is praiseworthy for the reason that it protects the reasonable reliance of third parties on erroneous contractual messages. The only difference is that, while Dutch law protects reasonable reliance on erroneous messages by enforcement of the contract, German law protects that reliance by awarding damages.

It is submitted that section 25 (c) may also be interpreted to the effect that, while the user of an electronic agent is permitted to avoid an automated transaction on the basis of a machine error, he or she must compensate a third party who relied on the communications of the electronic agent to conclude the contract. The nature of damages in issue must strictly be "reliance damages," *i.e.* damages or losses incurred as a result of reliance on the erroneous data messages of the electronic agent. Consequently, where the reliance of a third party on the erroneous communications of the electronic agent was not reasonable, the contract must be annulled without any award of damages. This approach is commendable specifically for affording some protection to the reasonable reliance of third parties on automated data messages affected by machine errors.

4.8 Conclusions

The objective of this chapter was to discuss and critically analyse the extension of the South African common law of contract to automated transactions. This task was

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596 s 122 (1).
597 Kerr *The Principles of the Law* 38.
598 Kerr *The Principles of the Law* 38-39.

undertaken primarily with the aim of determining the extent to which the common law theory of contract formation is able to accommodate the statutory validity of automated transactions, and to make recommendations for the development or modification of the common law where it is insufficient or inadequate to accommodate automated transactions. In relation to those topics covered in this chapter in relation to which the development or modification of the common law has been done by the ECT Act, the purpose of this chapter was to critically consider the desirability of such modifications in light of the common law rules or principles to which they relate.

The first part of the chapter entailed an introduction. The second part of the chapter outlined and interpreted the legislative framework for automated transactions in South Africa. It was demonstrated in that regard that according to section 20 (a) of the ECT Act, a valid and enforceable agreement will be formed where an electronic agent performs an action required by law for agreement formation. It was explained that the aim of this provision is to validate automated transactions in South Africa, meaning that on its basis, the operations of an electronic agent are permitted to create valid and enforceable contractual rights and obligations. It was also demonstrated that in terms of section 20 (b), a valid agreement will be formed where one or both parties use an electronic agent. This provision was interpreted to mean that a transaction cannot be denied legal validity, enforceability or effectiveness on the sole ground that no human being took part in its conclusion.

The third part of this chapter discussed the relationship between the legislative framework for automated transactions and the South African common law of contract. It was demonstrated in that regard that the provisions of the ECT Act are primarily intended to remove legal barriers and obstacles to the validity and enforceability of automated transactions, and not to prescribe new rules for the formation of those transactions. To support this conclusion, reference was made to section 3 of the ECT Act which provides that the provisions of that statute should not be interpreted to exclude the application of the common law to electronic transactions. It was consequently concluded that, as with all other contracts,

automated transactions too must meet or satisfy the requirements of a valid contract at common law.

The fourth part of this chapter entailed an outline of the South African common law understanding or theory of contract formation. It was illustrated that at common law, a valid contract is formed at the instance of an offer and a corresponding acceptance, both of which must be made by the contracting parties with a serious and a deliberate intention to create a binding agreement. These requirements, *i.e.* offer, acceptance and *animus contrahendi*, were discussed in full separately. The fourth part of the chapter also discussed the theories of contractual liability in South African law, namely the will theory, the declaration theory and the reliance theory of contract. It was demonstrated in that regard that South African courts primarily employ the will theory to determine contractual liability, meaning that the basis of contractual liability in South African law is actual *consensus*, which is a meeting of the subjective minds or wills of the contracting parties. It was demonstrated furthermore, however, that in the case of a *dissensus*, meaning the absence of a meeting of minds, South African courts normally employ the reliance theory to determine contractual liability.

The fifth part of this chapter discussed the extension of the common law theory of contract formation to automated transactions. The discussion highlighted the problem of *consensus ad idem* in automated transactions. It was demonstrated in that regard that automated transactions do not fit well within the general rule that the primary basis of contractual liability is a meeting of the minds of contracting parties. It was argued that, theoretically, it is impossible to a have a meeting of minds where one or both parties do not directly participate in the negotiation and conclusion of a transaction. In light of this difficulty, the discussion explored a number of approaches which may be employed to explain or rationalise the basis of contractual liability in automated transactions. These approaches are the mere-tool theory, the declaration theory, reliance theory, and the risk theory. The strengths and weaknesses of each of these approaches were considered in full. It was suggested as a better solution to the problem of the basis of contractual liability in automated transactions that the South African common law of agency must be

extended to automated transactions. Because the applicability of the common law of agency to automated transactions is a very contentious issue, the possible application of the law of agency to automated transactions shall be explored in full in the next chapter.

The fifth part of this chapter also covered a critical analysis of the common law rules on offer and acceptance in the context of automated transactions. Concerning offers, the primary aim of the discussion was to consider whether declarations or advertisements made to the general public via electronic agents are firm offers or invitations to treat? This issue was discussed with reference to advertisements made via automatic vending machines, passive websites and automated or interactive websites. With reference to automatic vending machines, it was demonstrated that a majority of commentators in South African law are of the view that a trader who displays goods for sale via a vending machine makes a firm offer which is accepted when a customer inserts a coin in the machine. A proposition was made in this work that this rule must be amended or modified to the effect that a trader who displays goods for sale in a vending machine does not make an unconditional offer, but an offer to sell the displayed goods subject to the availability of stock. This proposition was made on the basis that a vending machine contains a very limited supply of physical stock, which can have grave consequences if the conduct of a trader is construed as an unconditional offer. Concerning advertisements of goods on trading websites, it was demonstrated with reference to a case decided by the South African Consumer Goods and Services Ombudsman that such are classified as invitations to treat. While this classification might be correct in relation to passive websites, it was demonstrated that the same cannot be said with reference to automated websites. In relation to automated websites, argument was made that advertisements on such websites are not invitations to treat but firm offers. In light of the grave consequences which may befall online traders if advertisements of goods on automated websites are classified as unconditional offers, a recommendation was made that South African law must be developed to the effect that offers of goods on automated transactions are made subject to the availability of stock. In relation to acceptances, the main purpose of the discussion was to consider whether automated

responses or replies are valid acceptances for purposes of contract formation? It was demonstrated that if one adopts the recommendation made in this work that the advertisement of goods on an automated website is an offer made subject to the availability of stock, it is the customer who places a purchase order on such a website, and not the automated message system of an online trader, who makes an acceptance. In that event, it was submitted that automated responses should be classified as acknowledgements of receipt of purchase orders. However, if one adopts the view that an advertisement of goods on an automated website is an invitation to treat, the question whether an automated response is a valid acceptance becomes relevant. It was demonstrated with reference to the ECT Act, and case law from other jurisdictions, that automated replies are valid acceptances for purposes of contract formation.

The fifth part hereof also dealt the issue of the time and place of the formation of automated transactions. It was demonstrated that South African law traditionally employs two different theories, being the expedition theory and the declaration theory, to determine the time and place of contract formation. Each of these theories was discussed in full. It was demonstrated, however, that none of these theories is applicable to automated transactions because South African law on the issue has been developed or modified by the ECT Act to the effect that the reception theory shall be applied to determine the time and place of conclusion of electronic contracts. The reception theory was discussed in full, and its advantages and weaknesses considered in the context of automated transactions.

The sixth part of the chapter considered the enforceability of the terms of an automated transaction. The discussion was commenced with an outline and interpretation of the statutory framework for the inclusion or incorporation of terms and conditions in automated transactions. It was demonstrated that in terms of section 20 (c), a party who uses an electronic agent to form an agreement is presumed to be bound by the terms of that agreement notwithstanding that he or she did not review those terms prior to the formation of the agreement. It was demonstrated furthermore that in terms of section 20 (d), a person who interacts with an electronic agent to form an agreement is not bound by the terms of that

agreement if those terms were not capable of being reviewed by a natural person prior to agreement formation. The second part of the discussion considered the validity and enforceability of standard terms and conditions in internet sale agreements, namely click-wrap and web-wrap agreements. The main purpose of the discussion was to consider the validity of the manner in which customers are normally required to indicate assent to the standard terms and conditions of online traders on automated websites. It was demonstrated that in click-wrap agreements, *i.e.* where customers are required to click the "I Accept" or "Ok" button as a form of manifesting assent to standard terms and conditions, those terms and conditions are enforceable on the basis of the common law rules of signed contractual documents. In relation to web-wrap agreements, *i.e.* where online customers are not required to click on assent buttons in order to manifest their acceptance of the terms and conditions displayed on a trading website, those terms and conditions are enforceable on the basis of the rules of the ticket cases. The third part of the discussion considered the battle of forms in automated transactions. It was demonstrated that, at common law, where both parties purport to incorporate their standard terms and conditions into an agreement, a contract is not formed until the original offeror accepts the terms and conditions of the offeree. Possible difficulties in extending this rule to automated transactions were highlighted, and a recommendation subsequently made in light of those difficulties that South African law on the issue must be modified to adopt the knock-out rule to resolve a battle of forms in automated transactions.

The seventh part of this chapter considered the legal effect of errors and mistakes on the validity of automated transactions. The discussion was limited to three types of errors or mistakes common to automated transactions, namely input errors, online pricing errors and machine errors. In relation to input errors, it was demonstrated that the ECT Act has modified the common law of unilateral mistake to the effect that a person who makes a material error while inputting data into the electronic agent of another can avoid the resultant contract. This modification was found to be problematic on the basis that it fails to protect the reasonable reliance of the users of electronic agents on the mistakes or errors of third parties. To rectify

this defect, a recommendation was made that section 20 (e) should be interpreted to mean that a party who makes an input error can avoid the resultant agreement provided the other party (the user of an electronic agent) knew or ought reasonably to have known of that input error. Concerning online pricing errors, the main purpose of the discussion was to determine whether a pricing mistake on an automated website vitiates a contract. It was demonstrated that the common law can be applied to such instances to hold that a pricing mistake does not vitiate an automated transaction unless the customer knew or reasonably ought to have known of that pricing mistake. A point was made, however, that the application of this rule is likely to produce harsh results in light of the inherent difficulty in proving actual or constructive knowledge of a pricing error on the part of an online customer. Recommendations were made on how the common law can be developed or modified to produce better and commercially acceptable results. Concerning machine errors, it was demonstrated that section 25 (c) of the ECT Act has modified the common law to the effect that a data message generated by an electronic agent in the course of a malfunction cannot produce a valid and enforceable agreement. This modification of the common law was found to be problematic for the fact that it does not protect the reasonable reliance of third parties on machine errors. It was recommended on that basis that section 25 (c) must be interpreted to mean that a data message generated by an electronic agent pursuant to a machine error does not vitiate a contract unless it is proved that the other party had actual or constructive knowledge of the error in that data message. It was submitted in the alternative that, if the reasonable reliance of a third party on a data message affected by a machine error is not protected by enforcing the resultant agreement, that reliance must be protected by awarding him or her damages suffered in reliance on the concerned data message, *i.e.* reliance damages.

CHAPTER 5

5 Extending the South African common law of agency to autonomous electronic agents

5.1 Introduction

The aim in this chapter is to argue for the extension of the South African common law of agency to transactions concluded by autonomous electronic agents. The first part of this chapter will demonstrate that, as the law currently stands, autonomous electronic agents do not enjoy the legal status of human agents, meaning for purposes of present considerations that the common law of agency is not applicable to automated transactions. Against the *status quo* as described above, argument will be made in justification of the proposition that the common law of agency be extended to transactions concluded by autonomous electronic agents. It will be demonstrated in that regard that, unlike passive electronic agents, which find analogy with human messengers at common law, autonomous electronic agents resemble human agents in the performance of their functions. The similarity between human agents and autonomous electronic agents lie primarily in their ability to exercise discretion or control over the terms of agreements that they conclude with third parties on behalf of their principals. It will furthermore be demonstrated that the use of autonomous electronic agents to conclude agreements creates the same risk (as created by human agents for principals and third parties in the real world) for users and third parties in electronic commerce. In light of the aforementioned similarities between human agents and autonomous electronic agents, a recommendation will be made that, instead of the attribution rule, the statutory validity of transactions concluded by autonomous electronic agents can be accommodated within the common law theory of contract formation by application of the common law of agency. The benefits of applying the common law of agency, instead of the attribution rule, to transactions concluded by autonomous electronic agents will be discussed in full.

The second part of the discussion will critically analyse and counter three main objections that have been raised by commentators on the issue against the

extension of the common law of agency to transactions concluded by autonomous electronic agents. The first objection is that electronic agents lack the necessary capacity to express consent to the creation of the relationship of agency. The second objection is that, by reason of their lack of assets, electronic agents cannot be made liable in damages to their users or third parties under circumstances that human agents would be liable. The third objection is that electronic agents cannot be made "personally" liable on contracts in circumstances that human agents would, *i.e.* in instances of undisclosed principals. Concerning the first objection, it will be demonstrated that at common law, the creation of the relationship of agency does not depend on the consent of an agent to represent the principal, but rather on the unilateral granting of authority by the principal to the agent. Consequently, an autonomous electronic agent can validly represent its user in the creation of agreements as long as he or she has granted it the requisite authority to bind him or her with third parties. Concerning the second and third objections, it shall be demonstrated in a general manner that at common law, the mere fact that an agent cannot be made liable in damages to the principal or third party, or personally liable on contracts concluded with third parties, does not *ipso facto* render the machinery of commercial agency inoperative. To support that conclusion, it will be demonstrated that at common law, a minor can validly act as an agent despite the fact that he or she cannot be held liable in damages to the principal or third party, and despite the fact that he or she cannot personally bear contractual liability if he or she fails to disclose the principal to a third party. Consequently, the mere fact that an electronic agent cannot be made liable, whether in damages or on contracts, does not of itself justify the non-extension of the common law of agency to automated transactions.

The third part of the discussion will demonstrate how the rules of the common law of agency can be applied to transactions concluded by autonomous electronic agents. The discussion will demonstrate first of all how the concept of authority can be utilised to explain or rationalise the validity of transactions concluded by autonomous electronic agents. The discussion will also demonstrate how the

doctrine of agency by estoppel and ratification can be used to rationalise the validity of transactions concluded by autonomous electronic agents.

The fourth part of the discussion will consider instances under which electronic agency or representation will terminate. Lastly, in the fifth part of the discussion, the possibility, the benefits and the difficulties of granting autonomous electronic agents legal personality shall be considered. Conclusions will follow.

5.2 Electronic agents as representatives of their users in the creation of contractual rights and obligations—a case for the extension of the South African common law of agency to autonomous electronic agents

As a matter of fact, electronic commerce law does not equate electronic agents with human agents. As UNCITRAL explains,[1] the expression "electronic agent" is used for purposes of convenience only, meaning that the analogy between an electronic agent and a traditional sales agent is not appropriate. The prevailing view is that an electronic agent is only an "agent" in the sense that it does what its user instructs it to do,[2] *i.e.* it executes programmed instructions automatically so that the user does not need to perform them manually.[3] Therefore, the expression "electronic agent" is not meant to insinuate that a computer and its user share a relationship of common law agency,[4] meaning that the rules and principles of the common law of agency cannot be applied to hold or release users of electronic agents from automated transactions.[5] Contractual liability in automated transactions is strictly based on the rule that all the data messages and operations of an electronic agent are attributed to its programmer or user.[6] The programmer or user of an electronic agent is considered to be the originator or author of its data messages, wherefore it is said

1 UN *United Nations Convention on the Use of Electronic Communications* para 212.
2 Middlebrook and Muller 2000 *The Business Lawyer* 342.
3 Radin 2000 *Indiana Law Journal* 1130.
4 Middlebrook and Muller 2000 *The Business Lawyer* 342.
5 UN *United Nations Convention on the Use of Electronic Communications* para 212, stating that "[g]eneral principles of agency law (for example, principles involving limitation of liability as a result of the faulty behaviour of the agent) could not be used in connection with the operation of such systems."
6 UN *United Nations Convention on the Use of Electronic Communications* para 212.

that he or she must "… ultimately be responsible for any message generated by the machine…."[7]

As illustrated in the preceding chapter,[8] the rule that all the data messages and operations of an electronic agent are attributed to its user is based on the view that an electronic agent is a mere conduit-pipe for the transmission of the will of its user. It was also demonstrated in the same chapter that,[9] according to this mere-tool theory, an automated transaction is considered to have been concluded by the will of the user as expressed or communicated to a third party by his or her electronic agent. It was argued in the preceding chapter that this rule is most suited to passive transactional electronic agents, *e.g.* automatic vending machines and EDI systems, because the conclusion of transactions through such machines is a result of pre-programmed human will.[10] For purposes of present considerations, passive transactional electronic agents may be likened to human messengers at common law. A messenger is one who relays, transmits or conveys his or her principal's intention to a designated third party.[11] A messenger is purely a conduit-pipe for transmitting pre-determined messages,[12] and cannot therefore bind the principal beyond the exact terms that he or she has been instructed to convey.[13] Passive transactional electronic agents resemble human messengers in that they do not exercise any discretion over the final terms of the contracts that they conclude on behalf of their users, hence their description by some authors as "conduit automation."[14]

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7 UN *United Nations Convention on the Use of Electronic Communications* para 212.

8 See para 4.5.1.1 above.

9 See para 4.5.1.1 above.

10 See para 4.5.1.1 above.

11 See Van der Merwe *et alContracts* 221; Sharrock *Business Transactions* 131; De Wet "Agency and Representation" para 104; Sohn *The Institutes, A Textbook of the History and System of Roman* 220; Holmes 1890-1891 *Harvard Law Review* 347-348.

12 Sohn *The Institutes, A Textbook of the History and System of Roman* 220; Kerr *The Law* 18, describes messengers as mere channels of communication. He gives the example of a secretary who is sent to inform a third party of the decision of a board regarding a proposed variation of a contract, or a person who delivers an offer and comes back with an acceptance.

13 See *Saambou-Nasionale Bouvereniging v Friedman* 1979 3 SA 978 (A) 989F-G.

14 Kerr 2003-2004 *University of Ottawa Law and Technology Journal* 291; Kerr 2001 *Electronic Commerce Research* 184; Kerr *University of Ottawa Law and Technology Journal* 291.

At common law, the main difference between a messenger and an agent is that an agent is permitted to exercise choice or control over the terms on which he or she binds the principal.[15] The exercise of this discretion means that there can be no meeting of minds between the principal and a third party, wherefore it is said at common law that a contract is concluded through the expression of the will of the agent.[16] The agent is essentially a representative who creates contractual rights and obligations on behalf of the principal by the expression of his or her own independent will, *i.e.* the representative's will, as opposed to the principal's will. The current chapter proceeds on a strong view that, instead of messengers, autonomous electronic agents find a close analogy with human agents or conventional representatives at common law. To adopt the sentiments of Wong:[17]

> The concept of an electronic agent shares certain important similarities to that of a human agent. Similar to a human agent, an electronic agent is a computer program designed to act independently, on behalf of its owner or user. In effect, an electronic agent 'stands-in' for its human owner or user in performing certain tasks. Like a human agent, an electronic agent thus embodies the concept of independent action, performed on behalf of another.

Fischer, with who the current researcher is in full agreement, similarly demonstrates that:[18]

> When computers are given the capacity to communicate with each other based upon preprogrammed instructions, and when they possess the physical capability to execute agreements on shipments of goods without any human awareness or input into the agreements 'beyond the original programming of the computer's instructions,' these computers serve the same function as similarly instructed human agents of a party and thus should be treated under the law identically to those human agents.

When a party programs, or consciously uses an electronic agent programmed to operate autonomously, he or she admittedly permits that electronic agent to exercise a degree of discretion over the final terms of prospective agreements. An

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15 De Wet "Agency and Representation" para 104; Kerr *The Law* 18.
16 See para 3.3 above.
17 Wong 1999-2000 *Suffolk University Law Review* 87.
18 Fischer 1996-1997 *Indiana Law Journal* 570.

electronic agent that operates in this fashion cannot reasonably be categorised as a simple tool, a conduit-pipe or a messenger. As Koops *et al* put it:[19]

> … (autonomic) electronic agents do more than just transport messages; they influence the terms of the contract and are therefore not mere messengers.

The overall picture that emerges from the operations of an autonomous electronic agent is that such a machine functions as a representative of its user, understandably so because it literally "stands-in" for the user in the negotiation and conclusion of agreements. Argument can be made on that basis that instead of the common law of contract, the common law of agency is *prima facie* the correct *corpus iuris* to determine the liability of the users of autonomous electronic agents to third parties.

The extension of the common law of agency to autonomous electronic agents can be justified on a number of grounds. First of all, there seems to be no harm in adopting the attitude that it is a duck if it walks and quacks like a duck. It is submitted that the very similarity between human agents and autonomous electronic agents justifies the extension of the common law of agency to autonomous electronic agents. It would surely be disastrous to overlook this compelling analogy seeing that one would then be left with no feasible legal tools to explain or rationalise the basis of agreements concluded by autonomous electronic agents. After all, none can dispute the fact that the success of the law in accommodating social changes is largely attributable to its ability to reason by analogy. As one author eloquently puts it:[20]

> The right to reason by analogy from things which are settled in order to establish principles to govern things which are unsettled, can never be abandoned in any well-sustained system of law. Lord BACON, in one of his essays, mentions this analogical method of reasoning as one of the striking peculiarities of the jurist, and as worthy of attention by the general scholar as a means of education. He says :— 'If a man's wit be wandering, let him study the mathematics; if his wit be not apt to distinguish or find differences, let him study the schoolmen; if he be not apt to beat over matters, and to call upon one thing to prove and illustrate another, let him study the lawyer's cases….

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19 See Koops, Hildebrandt and Jaquet-Chiffelle 2010 *Minnesota Journal of Law, Science and Technology* 538.

20 W 1865 *The American Law Register* 193.

Kotzè CJ in the matter of *Houghton Estate Co v McHaffie and Barrat*,[21] has similarly advised that:

> When new circumstances arise we must adapt long-established principles to them, for the law is not so stereotyped and narrow that it cannot be extended and applied to new cases which arise out of the increasing and changing requirements and necessities of the times.

The extension of the common law of agency to automated transactions can secondly be justified on the ground that the conclusion of agreements by autonomous electronic agents introduces the same risk as introduced by human agents at common law. As shall be recalled, the following was said concerning the risk of agency at common law:[22]

> Interrogated behind a thicker lens, the law of agency appears to be a very broad web of rules designed mainly for the purpose of the allocation of risk. Risk is defined as an impending threat that one will not get what he or she bargained for, or feels to be legally entitled to receive from another. The risk of agency inheres in one key player, namely the agent. For the principal, the risk of dealing with third parties through an agent is that the agent may exceed his authority, and consequently bind him to transactions for which he did not consent to be bound. For third parties, the risk of dealing with an agent is that he may exceed or act without authority, with the result that the principal may reject contracts.

It is common cause that the same risk is created by autonomous electronic agents in automated transactions. Kerr correctly notes that an autonomous electronic agent is most likely to generate and transmit an offer or acceptance that was "…unintended, unforeseen or unauthorised…" by the user.[23] Sartor mentions that because the user of an autonomous electronic agent is not in a position to anticipate or predict its operations,[24] there is always a possibility that he or she may reject the contracts concluded thereby. The pressing issue is to determine how the law should deal with this risk. It is submitted that instead of adopting a hard and fast rule that all the unintended, unforeseen and unauthorised contracts concluded by autonomous electronic agents are binding on its user, the risk of electronic agency is best allocated between the parties in the same manner as the risk of human agents at common law. The application of the concept of "authority" to autonomous electronic

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21 *Houghton Estate* Co *v McHaffie andBarrat* (1894) 1 Off Rep 92 104.
22 See para 3.9.1 above.
23 Kerr 2001 *Electronic Commerce Research* 194.See also para 4.5.1.1.1 above.
24 Sartor 2009 *Artificial Intelligence and Law* 278.

agents appeals to one as a much better solution than the attribution rule because the scope of an agent's authority effectively affords the principal a measure of protection against unintended, unforeseen or unauthorised transactions.[25] The benefit of limiting the contractual liability of the users of autonomous electronic agents is that:

> Without some sort of limiting principle, electronic agents will have an unlimited power to bind those who use them. Not only is this unjust, it is impractical. Strict or even absolute liability simply will not foster the growth of electronic commerce.[26]

Another benefit of applying the concept of authority to autonomous electronic agents is that by upholding or enforcing only those transactions that have been concluded by electronic agents within the scope of their authority, the law would protect the contractual intentions of principals and third parties by ensuring the existence of a real *consensus*.[27] As illustrated in chapter three,[28] if an agent properly transacts on behalf of his or her principal within the scope of the granted authority, it is clear that the principal in that case is privy to such a transaction because its terms were dictated and authorised by him. The same view is held in this chapter to be true in relation to automated transactions concluded by autonomous electronic agents.

The last benefit of extending the common law of agency to autonomous electronic agents is that, as illustrated in chapter three,[29] the common law of agency allocates the risk of agency between principals and third parties in a just, fair and equitable

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25 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=, stating that "[t]he authority concept, as applied to electronic commerce, can be used to set limits on the liability of persons utilizing electronic devices. In other words, authority can be used in conjunction with an attribution rule to set parameters that will help to determine when a person is liable for transactions generated by her electronic devices and when she is not."

26 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

27 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

28 See para 3.9 above.

29 See para 3.9.1 above.

manner. Chopra,[30] with who the current researcher is in full agreement, argues that the extension of the common law of agency to autonomous electronic agents:

> …will enable us to draw upon a vast body of well-developed law that deals with the agent-principal relationship, and in a way that safeguards the rights of the principal user and all concerned third parties. Without this framework, neither third parties nor principals are adequately protected.

Unlike the current legal framework embodied by the ECT Act, the application of the common law of agency to autonomous electronic agents promises to deal with the risk of agency in a manner that pays due regard to the commercial interests and expectations of both parties. It is, amongst many others, on the basis of the reasons advanced above, that this study recommends for the extension of the common law of agency to transactions concluded by autonomous electronic agents.

5.3 Objections to the extension of the common law of agency to autonomous electronic agents

On the face of it, the suggestion that the common law of agency should be extended to electronic agents is riddled with several difficulties. The first difficulty is that the relationship of agency can only arise between legal persons.[31] These two "persons," being the principal and the agent, must agree or consent to the creation of the relationship of agency.[32] It has been argued by one author in the context of automated transactions that "[t]here being no two separate *persons*, there can be no agency relationship."[33] The lack of legal personality on the part of electronic agents automatically affects their ability in law to consent to the creation of the relationship of agency because "…only legal persons can make contracts."[34]

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30 Chopra 2010 *Communications of the ACM* 39.

31 Weitzenboeck 2001 *International Journal of Law and Information Technology* 215; Mik 2013 *JICLT* 173; Balke and Eyman "Conclusion of Contracts by Software Agents" 774.

32 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 408; Wong 1999-2000 *Suffolk University Law Review* 96; Bellia Jr 2001 *Emory Law Journal* 1060.

33 Mik 2013 *JICLT* 173.

34 Balke and Eyman "Conclusion of Contracts by Software Agents" 774. See also Andrade *et al* 2007 *Artificial Intelligence and Law* 360; Kis *Contracts and Electronic Agents: When Commercial Pragmatism and Legal Theory Diverge* 35; Bellia Jr 2001 *Emory Law Journal* 1060, stating that "[a]gency with actual authority requires *consent* between the principal and the agent. Software cannot consent to act as a user's agent."

The second difficulty with the extension of the common law of agency to autonomous electronic agents is that they cannot be held liable in damages to either their users or third parties. As shall be recalled,[35] an agent can be held liable to the principal for failure to exercise reasonable care, skill and diligence in the performance of the mandate. This is so because a person who accepts a mandate is taken in law as holding out himself to possess the necessary skills requisite for the performance of that mandate, and will therefore be liable to the principal in damages for any negligence. The agent can also be held liable in damages to third parties for breach of warranty of authority.[36] It has been argued that due to their lack of legal personality,[37] and the absence of ownership on their part of assets or patrimony from which they may be made to pay damages, electronic agents cannot be liable to principals and third parties. This is unfair to third parties who, for one reason or another, may wish to recoup their losses from electronic agents.

The third difficulty with the extension of the common law of agency to autonomous electronic agents is the perceived impossibility of holding electronic agents "personally" liable on contracts. As shall be recalled,[38] an agent who fails to disclose to a third party that he or she is transacting on behalf of a principal can be held personally liable on the contract if the undisclosed principal is not subsequently discovered, or if despite the identity of the principal having been discovered, the third party nevertheless chooses to enforce the contract against the agent. It has been argued that an electronic agent cannot "…appear to be a principal thereby triggering the law of undisclosed principals."[39] The effect of its observation is that an electronic agent cannot be made to bear contractual liability in instances where a human agent would,[40] which is also unfair to third parties.

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35 See para 3.6.1 above.
36 See para 3.7 above.
37 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 410; Bellia Jr 2001 *Emory Law Journal* 1067.
38 See para 3.7 above.
39 Sommer 2000 *Berkeley Technology Law Journal* 1178.
40 As Chopra and White 2009 *Journal of Law, Technology and Policy* 402, "[o]n the current state of development, artificial agents are indeed not capable of appearing to be principals, as a principal is an entity able to enter contracts in its own right: i.e., a legal person."

As can readily be seen, a common element in all the objections levelled against the extension of the common law of agency to autonomous electronic agents is their lack of legal personality. In other words, the opponents believe that the extension of the common law of agency to autonomous electronic agents is impossible, or at least that it will not produce the expected results, in light of the lack of legal personality on the part of those artefacts. This has led others to argue that considering autonomous electronic agents to be legal persons "…would be a more efficient solution than reforming the concepts of agency…."[41] Contrary to this view, it is the opinion of the current researcher that the aforementioned objections can effectively be countered without dragging the concept of legal personality into the discussion.

According to the first objection, a specific difficulty introduced by the lack of legal personality on the part of autonomous electronic agents is that they cannot validly give consent to the creation of the relationship of agency. There are two parts to this objection. The first part of the argument is that consent is necessary for the creation of the relationship of agency. The second part, which logically follows from the first, is that only legal persons can be agents. Regarding the first part of the objection, it suffices to refer to the decision of *Totalisator Agency Board, OFS v Livanos*,[42] in which the court made it clear that consent is not necessary to give rise to an instance of commercial representation. In that case, the court advised that a distinction "…should be drawn between a contract of 'agency' and representation."[43] A contract of agency is an agreement between a principal and his agent. However, agency as a legal relationship is not dependent on such a contract. Absent such agreement, agency can also arise by "authority." As explained by De Wet,[44] authority is a unilateral juristic act of the principal through which he or she empowers the agent to affect his or her position in relation to third parties. As a unilateral act, the granting of authority does not require the consent of an agent to act as a representative of the principal. To demonstrate, De Wet points out that a father can authorise his son to purchase a blazer from a shopkeeper without

41 Bayamlioğlu 2008 *Ankara Bar Review* 49.
42 *Totalisator Agency Board, OFS v Livanos* 1987 3 SA 283 (W) 291B-F.
43 *Totalisator Agency Board, OFS v Livanos* 291B-F.
44 De Wet "Agency and Representation" para 101.

entering into a contract of agency with the son.[45] Additionally, a husband can authorise his wife (to whom he is married in community of property),[46] to conclude contracts on his behalf without entering into a contract of agency with her. Therefore, it is clear that under South African Roman-Dutch law, the consent of an agent to represent the principal is not necessary to give rise to the relationship of agency between the two. Since the consent of an agent is not necessary to create a relationship of agency between him and the principal, the inevitable conclusion is that a duly authorised electronic agent can validly act as a representative of its user.[47]

The foregoing conclusion, however, does not address the second part of the objection, namely the argument that the relationship of agency, whether arising from consent or authority, can only ensue between "persons." At this point, it is necessary to avoid taking the law *ex facie*. On the contrary, one is better advised to enquire into the rationale of legal rules and principles in order to understand their purpose. For purposes of present considerations, the question may be formulated as follows; why is it that the relationship of agency can only arise between legal persons? The answer is fairly straightforward. As illustrated in chapter three,[48] the relationship of agency at common law automatically creates legal rights and obligations between the parties. An agent must have a legally recognised personality, because in law, only persons can acquire legal rights and obligations. The main emphasis is therefore on the acquisition of legal rights and obligations. Therefore, if the agent has no personality, whether natural or legal personality, he or she cannot validly acquire the rights and obligations attaching to the purported relationship at common law.

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45 De Wet "Agency and Representation" para 101.

46 De Wet "Agency and Representation" para 101.

47 See Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=, who states that "[s]o long as it can be established that the 'principal' (i.e., the person initiating the electronic device) did confer 'authority' in one way or other, the 'agency' relationship will be established and the 'principal' will be bound by the operations of the electronic 'agent'."

48 See para 3.6 above.

If it is agreed that the requirement of legal personality on the part of an agent is premised on the rule that only legal persons can acquire enforceable rights and obligations; the next question is whether in a setting of electronic agency, there is any need at all for electronic agents to acquire rights and obligations *vis-à-vis* their users? If the answer is in the affirmative, it is then inevitable to justify by demonstration, the advantages or benefits of permitting electronic agents to enjoy enforceable rights and obligations against their users. As shall be recalled,[49] the rights of an agent at common law are that he or she must be remunerated for the work done on behalf of the principal, reimbursed for all expresses personally incurred in the execution of the mandate, and indemnified for all losses and liability incurred in the execution of the mandate. Concerning the right to be reimbursed for work done on behalf of the principal, it is submitted that an electronic agent cannot conceivably pursue that right seeing that unlike a human agent, a computer has no needs, and consequently no conception of the utility of money. Apart from that, an electronic agent is admittedly the property of its user. It would not be proper to enjoin the user, who has expended his or her own resources to acquire the electronic agent, to remunerate it for performing a work for which he or she bought it. Concerning the right to be reimbursed and indemnified, it is common cause that electronic agents conduct business directly from the funds of their users, or in the very least from a sort of *peculium* allotted for their independent management by their users.[50] Consequently, it is inconceivable that electronic agents can pursue the right to be reimbursed or indemnified for expenses incurred in the performance of mandates. Therefore, it is the conclusion of this study that, in contrast to human

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49 See para 3.6.2 above.

50 The idea of a *peculium* was developed in Roman law to enable slaves to independently conduct business on behalf of their masters. *Peculium* is defined as "…the sum of money or property granted by the head of the household to a slave or son-in-power. Although considered for some purposes as a separate unit, and so allowing a business run by slaves to be used almost as a limited company, it remained technically the property of the head of the household," see Watson as quoted by Pagalo "The Roads to Complexity" 54. The Roman slaves were, therefore, able to trade on behalf of their masters through the *peculium*. Therefore, third parties who contracted with these slaves could institute the *actio de peculio et in rem verso* against their masters. This action was possible even where the slaves contracted without authorisation and in the absence of ratification by masters, see Van Den Bergh 2015 *Fundamina* 364. Modern commentators have argued that the funds allotted to electronic agents to conduct business on behalf of their users constitutes *peculium*, see Pagalo "The Roads to Complexity" 54; Katz 2008 http://www.scl.org/site.aspx?i=ed1107.

agents, there is no compelling basis on which electronic agents can be granted legally enforceable rights against their users.

What about the rights of programmers and users against their electronic agents? As shall be recalled,[51] a principal enjoys a significant number of rights against the agent at common law. These include the right to have the authorised mandate performed with reasonable care, skill and diligence, failing which the agent will be rendered liable in damages to the principal. The issue here is whether, under the proposed extension of the common law of agency to automated transactions, an electronic agent will owe the ordinary duties of an agent to its user? It suffices in reply to adopt the sentiments of Fischer,[52] who argues that:

> …the parts of agency law that deal with agents as humans (the part, for instance, relating to breach of duty of the agent to the principal) are insensible as applied to computers. A human agent has many non-agent features to his or her existence. Human agents may misunderstand the directions given them by their principals. Human agents may be improperly influenced by persons other than their principals, and may choose of their own free will to disregard the instructions of their principals. These non-agent features of human agents are the reasons why law dealing with duties of agents to their principals is necessary.

The effect of this argument is essentially that it is unnecessary to grant programmers and users rights against their electronic agents. As controversial as it might be,[53] there are a number of reasons in support of that conclusion. First of all, argument can be made that if an electronic agent is denied the ordinary rights of an agent against its user, he or she must similarly be denied the ordinary rights of a principal against it because the respective rights and obligations of parties to a relationship of agency are reciprocal. Secondly, it is said that disputes in electronic agency "…will involve only the relations between principal and third party…."[54] As much as it is inconceivable that an electronic agent may seek a right of action

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51 See para 3.6.1 above.

52 Fischer 1997 *Indiana Law Journal* 558.

53 See Blake and Eymann "The Conclusion of Contracts by Software Agents" 774, who oppose this conclusion on the basis that it "…leads to the problem of the principal being without any recourse against the software agent in situations where the agent exceeds its sphere of influence or when it employs another incompetent agent. Consequently, the principal is in the situation of having rights and duties with respect to the third party, but not with respect to internal relations."

54 See Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

against its user, it is equally inconceivable that a programmer or user may reasonably want to recover damages from his or her computer.

In conclusion on the issue under consideration, it is submitted that in extending the common law of agency to automated transactions, South African courts should only concentrate on the external aspect of agency. The difference between the internal and the external aspect of agency has been explained as follows by one author.[55]

> The external aspect is that under which the agent has the powers to affect the principal's legal position in relation to third parties. The internal aspect is the relationship between principal and agent, which imposes on the agent (subject to contract) special duties vis-a-vis the principal, appropriate to the powers which he can exercise on the principal's behalf.

In support of the recommendation made above, Kerr mentions that:[56]

> Obviously, given that electronic devices are not presently the subject of rights or duties, only the external aspects of agency law are relevant to electronic commerce. In other words, the only aspects of agency law relevant to electronic commerce are those that pertain to the relationship between the person who initiates an electronic device and third parties who transact with that person through the device.

Therefore, the respective rights and obligations of principals and agents at common law must not form part of the legal framework extended to instances of representation by autonomous electronic agents.

The second objection to the extension of the common law of agency to automated transactions is that it would be impossible to hold an electronic agent liable in damages to its user or third parties in circumstances where a human agent would be liable. As discussed above, this objection holds that, due to their lack of legal personality and ownership of assets, electronic agents cannot be held liable in damages to users for breach of duties, and to third parties for breach of warranty of authority. A specific difficulty with this objection is its implicitly fallacious assumption that principals and third parties enjoy an unconditional right of action against agents; therefore, that there can be no agency in the proper sense where the agent cannot be made liable in damages to them. Such an argument is flawed. As

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55 Reynolds *Bowstead & Reynolds's* 8.
56 Kerr 1999 *Dalhousie Law Journal* 241.

illustrated in chapter three,[57] at the core of the machinery of the law of agency is not the liability of an agent, but the liability of the principal to third parties, and *vice-versa*. That the creation of the relationship of agency can arise independently of the possibility of holding the agent liable in damages to either the principal or third parties is made perfectly clear by instances of agents with limited contractual capacity, namely minors. It is common cause in both Civil and Common law systems that:

> …the capacity of a minor to act as an agent is not impaired by the fact that because of his infancy he may not be liable to the principal, although an adult would have been personally liable [under similar circumstances].[58]

Where the principal employs a minor to represent him, he is taken to have assumed the risk of poor or improper representation.[59] Because of his lack of full contractual capacity, the minor cannot be held liable to the principal for breach of duties, which are essentially contractual in nature.[60] Such a principal may therefore be said to have also assumed the risk of not being able to recoup his losses against the minor. It is submitted that in electronic agency, the user must equally be taken to have assumed the risk of not being able to recoup losses for breach of duties against the electronic agent. Therefore, by consciously using a nonhuman agent, or even worse, an entity without legal personality, the user of an electronic agent must be taken to have reconciled himself or herself with the fact that he or she will not be able to lay any claims for breach of duties against the computer.

Concerning the right of a third party to recover damages against an agent for breach of warranty of authority, it is common cause that the mere impossibility of holding an agent liable in that regard does not *ipso facto* render the machinery of commercial agency inoperative. Kerr mentions that,[61] in South African law, whether express or implied, a warranty of authority is a contract "…[or more properly a quasi-contract] between the agent and the third person." In one case discussed by

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57 See para 3.9.1 above.
58 Muller-Frieienfels 1964 *The American Journal of Comparative Law* 204.
59 Muller-Frieienfels 1964 *The American Journal of Comparative Law* 204; Reynolds and Devenport *Bowstead* 21.
60 Kerr *The Law* 135.
61 Kerr *The Law* 246.

Bowstead,[62] it has been held that a quasi-contractual claim against a minor is controlled by his or her contractual capacity. Therefore, a third party cannot claim damages for breach of warranty of authority against a minor because a minor cannot incur contractual obligations by reason of his or her limited contractual capacity. The mere fact of not being able to hold a minor liable in damages for breach of warranty of authority does not necessarily mean that a minor cannot be an agent. On that basis, it is clearly deceiving to argue that the common law of agency cannot effectively be extended to automated transactions solely because of the impossibility of holding electronic agents liable to third parties in damages for breach of warranty of authority.

Concerning the last objection, namely that the common law of agency cannot effectively be extended to automated transactions because of the impossibility of holding electronic agents "personally" liable in contracts in instances of undisclosed principals, the argument made above applies with equal effect. De Villiers and Macintosh,[63] mention as a general matter that an agent will only be liable on a contract made by him with a third party if he or she has the capacity to contract, meaning that one who lacks such capacity cannot be held liable. Adopting the recommendation that an autonomous electronic agent must be treated in the same manner as a minor for purposes of addressing issues of "personal liability," it follows that third parties will not be allowed to enforce contracts against electronic agents where these artefacts have been programmed or configured to hide the identity of their users. Alternatively, one may adopt the sentiments of Chopra and White,[64] when they argue that:

> …the doctrine of undisclosed principals should be treated as severable from the rest of the doctrine of agency. It is unknown to civil law jurisdictions which still have an agency law doctrine. Its inapplicability should not lead to the conclusion that the rules that constitute the doctrine of agency should not apply to artificial agents.

To conclude, it is submitted that in considering the possible application of the common law of agency to automated transactions, South African courts should adopt the view that the mere fact of not being able to hold electronic agents liable

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62 *Cowern v Nielde* [1912] 2 KB 419 as discussed by Reynolds and Devenport *Bowstead* 23.
63 See Silke *De Villiers and Macintosh The Law of Agency* 65.
64 Chopra and White 2009 *Journal of Law, Technology and Policy* 402.

does not automatically render the machinery of electronic agency unworkable. It is recommended that, similar to minors, autonomous electronic agents must be regarded as representatives who lack the capacity to incur liability to principals and third parties. Consequently, in extending the common law of agency to automated transactions, all the portions of the law of agency that permit an agent to be held liable must be eliminated from the picture.

5.4 The authority of an autonomous electronic agent to bind its user

As demonstrated above, absent a contract of mandate, the relationship of agency can arise through the granting of authority. To reiterate, authority is defined as a unilateral juristic act of the principal through which he or she empowers the agent to bind him or her in contract with third parties. In what follows, the power of an autonomous electronic agent to bind its user with third parties will be considered with reference to the principles of the common law of agency. This power shall be considered under the categories of authority known at common law, namely actual and apparent authority. The following discussion shall also consider the contractual liability of the user of an autonomous electronic agent under the doctrine of agency by estoppel and ratification.

5.4.1 The actual authority of an autonomous electronic agent to bind its user

To reiterate, actual authority has been defined in chapter three as the real or factual authority conferred on an agent by his or her principal.[65] It was also demonstrated in that chapter that actual authority may be express or implied.[66] The aim of the present discussion is to demonstrate how actual authority, both express and implied, may arise in electronic agency. It shall also be demonstrated in the course of the discussion how the doctrine of actual authority can be employed to explain or rationalise the contractual liability of the users of autonomous electronic agents to third parties.

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65 See para 3.5.2.1 above.
66 See para 3.5.2.1 above.

5.4.1.1 The express authority of an autonomous electronic agent to bind its user

Express authority has been defined as authority conferred expressly, being either verbally or in writing, by the principal on his or her agent.[67] Fischer,[68] with who the current researcher is in full agreement, mentions with regard to the actual authority of an electronic agent to bind its user that:

> The kind of authority a computer agent has to act on behalf of its principal most closely resembles actual authority. Computers do not (yet) have the capability to do anything without a human first instructing them; thus, the idea that authority is actual only when the principal instructs the agent perfectly describes the way the principal/computer agent relationship works.

As with human agents, actual authority can be granted expressly, *i.e.* verbally or in writing, to autonomous electronic agents. For purposes of present considerations, a user may be taken to have verbally granted his or her electronic agent actual authority if he or she instructed it to conclude a transaction by voice command. This will admittedly be possible only if an electronic agent is programmed to interpret verbal commands, otherwise known as speech recognition. To illustrate how such an electronic agent may be instructed to conclude a transaction, one author mentions that:[69]

> …if a buyer wants to buy a product he can give the voice command to open the web app through microphone and the web app will open and the buyer will give the name of the product by voice through microphone and the web app which is with softwares called web content mining and opinion mining will give the product given by buyer with reviews of the product from different shopping sites by the reviews he will decide to buy from which site and will complete the order by voice and there will be a voice back during the completion of order for confirmation details.

However, it is common cause that most electronic agents will take mandates or instructions in writing on their user interfaces. This is so because most electronic agents today only respond to what interface designers call "direct manipulation," which means that electronic agents remain inactive until their users give command from a keyboard, mouse or touch screen. Therefore, it is easily conceivable that most users will instruct their electronic agents by actually typing sentences in appropriate fields on user interfaces, or at least by clicking icons or selecting items

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67 See para 3.5.2.1 above.
68 Fischer 1996-1997 *Indian Law Journal* 561.
69 Reddy "Voice Command" 109-111.

from menus or catalogues.[70] It is the view of the current researcher that the instructing of an electronic agent by direct manipulation must be considered as the granting of actual authority in writing. There appears to be no difficulty in adopting such an attitude because, as illustrated in chapter three,[71] apart from a power of attorney, written authority can be conferred through any other informal document such as a letter or a piece of note. Consequently, in cases of automated commercial websites, when a trader uploads data such as the description of goods, the amount and currency of payment, and the terms and conditions of prospective contract(s), he or she must be regarded as granting written authority to the electronic agent running that website to bind him or her with online customers along the specified lines.[72] Similarly, in online auctions on websites such as eBay,[73] the entering of the maximum amount for which a user is prepared to bid for a specified item, accompanied with the clicking of the "place bid" button on the bidding screen, must be regarded as an act of granting written authority to the electronic agent of eBay to bid on his or her behalf.[74]

As mentioned in chapter three,[75] the most important aspect of express authority is the scope or limit of the agent's authority. In relation to both verbal and written authority, the question of the scope of the agent's authority will admittedly depend

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70 Wooldridge *An Introduction to MultiAgent* 258.

71 See para 3.5.2.1.1 above.

72 This process of authorisation can be likened to situations where the owner of a retail store instructs a cashier or shopkeeper as to which products to sell, the price at which those products are to be sold, and the terms and conditions, if any, upon which those products are to be sold. The electronic agent running that website occupies a similar position to a shopkeeper or cashier in a brick-and-mortar retail store. Olmesdahl 1984 *SALJ* 553 has suggested that, in dealing with advanced machines, such should be personified according to their role in a transaction. Therefore, some commentators have likened the process of online shopping as very much similar to what goes on in a self-service store, the only difference being that the cashier or shopkeeper is a computer program, see Sasso 2016 *Pravo. Zhurnal Vyssshey Shkoly ekonomiki* 208; Tedeschi 1971 *Israel Law Review* 470.

73 For a description of how the bidding process through the electronic agent of eBay operates, see eBay 2013 http://www.ebay.com/gds/EBAY-AUTOMATIC-BIDDING-SYSTEM/10000000006909959/g.html.

74 See Middlebrook and Muller 2000 *The Business Lawyer* 358, who mention that the process of bidding through the website of eBay makes that company an agent of the individual bidder. In this setting the electronic agent is not under the ownership of the bidder but eBay. However, as an agent of the bidder, eBay performs the mandate through an electronic agent. Therefore, as the authors cited immediately above put it, "[b]ecause agency law binds the principal to the actions of his agent, should our bidder win the auction in which his bids are placed by eBay's proxy bidding system, he would be legally obligated to complete the transaction with the seller."

75 See para 3.5.2.1.1 above.

on the proper interpretation of the specific words used by the principal in instructing the agent. The same rule will apply to autonomous electronic agents, meaning that their scope of express authority will depend on the proper interpretation of the specific words and figures spoken, typed, clicked on or selected by users on their interfaces. As with human agents, the expectation with autonomous electronic agents is that they will conclude agreements within the confines of their expressly granted authority. However, as stated by the court in *Colonial Banking and Trust Co Ltd v Estate Hughes*,[76] if the language used by the principal so permits, express authority will "…be benevolently interpreted so as to validate the acts of the agent…." Consequently, the words and symbols used in instructing an autonomous electronic agent may be interpreted by the court to include other acts which the programmer or user may not have contemplated, *i.e.* actions performed by the electronic agent autonomously.

5.4.1.2 The implied authority of an autonomous electronic agent to bind its user

As discussed in chapter three,[77] the concept of implied authority envisages two factual scenarios; the first scenario being where it is sought to illustrate from the overall circumstances of a case that one person is another's agent. Such may be the case where the principal is aware of the act of representation by the agent but fails to object,[78] or where an agent who has completed his or her assigned mandate continues to act on behalf of the principal in other transactions, and the principal does not object to the agent so acting.[79] In the context of electronic agency, where the willingness of the user to have his or her legal position altered by the operations of an electronic agent is implied by circumstances, it may be argued that the device has an "actual authority" to operate on his or her behalf.[80]

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76 *Colonial Banking and Trust Co Ltd v Estate Hughes* 1932 AD 119.
77 See para 3.5.2.1.2 above.
78 See Kerr *The Law* 68.
79 Kerr *The Law* 68.
80 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

The second scenario envisaged under the concept of implied authority is that of residual powers. As mentioned in chapter three,[81] the residual powers of an agent to bind the principal are normally implied by law into his or her actual authority. As a general matter, every agent has an implied authority to bind his or her principal through acts that are reasonably incidental to his or her actual authority. The agent also has an implied authority to bind the principal by doing what is usual or customary in the particular trade, line of business or profession in which he or she is employed. The concept of implied authority may be very useful in determining the extent to which the user of an autonomous electronic agent is bound by unintended, unexpected and unforeseen automated transactions concluded by his or her device. Kerr mentions, for instance, that an electronic agent authorised to buy certain shares would also have an implied authority to operate autonomously within the scope of that "…which is necessary in the usual course of business to complete the transaction."[82] If it is found that the operations of an autonomous electronic agent are reasonably incidental to its actual authority, or that such operations are usual or customary in the line of business that the electronic agent is deployed, the user of that electronic agent will be bound by the outcomes even if he or she did not intend, expect or foresee them.

5.4.2 The apparent authority of an autonomous electronic agent to bind its user

As explained by the Constitutional Court of South Africa in *Makate v Vodacom (Pty) Ltd*,[83] apparent authority is "…the authority of the agent as it appears to others." What is required to create apparent authority is a general impression or appearance that a person has power to represent or bind another.[84] Therefore, if from the relationship between a principal and another person, an appearance of agency is created in the eyes of third parties, that other person may be taken to have apparent authority to bind the principal. The intention of the person appearing to be

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81 See para 3.5.2.1.2 above.

82 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

83 *Makete v Vodacom (Pty) Ltd* 2016 ZACC 13 para 46.

84 *Makate v Vodacom (Pty) Ltd* para 47, stating that "[t]he means by which that appearance is represented need not be directed at any person. In other words the principal need not make the representation to the person claiming that the agent had apparent authority."

the principal is totally irrelevant to the issue whether or not the one appearing to be his or her agent is truly an agent.

In the context of electronic commerce, an autonomous electronic agent may be taken to have apparent authority to bind its user if such appears to be the case to third parties. Kerr mentions in that regard that:[85]

> In some instances, the person initiating an electronic device will make things appear to the outside world as though the electronic device is operating under her authority. In situations where a representation is made which makes it appear as though a person has initiated an electronic device to operate on her behalf and another person relies on the representation in a manner that results in the alteration of his position, the person initiating the device effectively confers a power which allows the device to alter her legal position…To describe this process in the language of agency, one might say that the device has an apparent authority to act [on] the behalf of the person who initiated its use.

For illustration, consider the case of an autonomous electronic agent used on a website of a bank to determine the eligibility of clients or customers to receive quick short-term loans. If the criteria for eligibility is met in any one case, the electronic agent is programmed to unilaterally authorise a loan not exceeding the amount of R12 000. Consider that in one case, a client with a good credit record and repayment history requests a loan of R18 000, and the electronic agent having reviewed the record of the client, autonomously authorises a loan of that amount. Following the common law position, the bank will be liable to transfer that amount to the client's account because to the general public, there is an appearance of authority on the part of the electronic agent to authorise or grant loans. As stated in the decision of *NBS Bank Ltd v Cape Produce Company Pty Ltd*,[86] members of the public do not have a duty to investigate the scope of the agent's apparent authority. Members of the public are entitled to assume that the agent knows his own limits, and that he will respect them, "…so that when he speaks, he speaks with the full authority of the bank."[87]

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85 Kerr 1999 *Dalhousie Law Journal* 243.
86 *NBS Bank Ltd v Cape Produce Company Pty Ltd* 2002 1 SA 396 (SCA) para 29.
87 *NBS Bank Ltd v Cape Produce Company Pty Ltd* para 29.

5.4.3 The creation of electronic agency by estoppel

The user of an autonomous electronic agent can also incur contractual liability by estoppel. As mentioned in chapter three,[88] agency by estoppel arises where a principal represents, either by words or conduct, to a third party that another person is his or her agent. To reiterate, the representation must not be made to the general public, as is the case with apparent authority. On the contrary, the representation in issue must have been made to the specific individual who alleges power on the part of the agent to bind the principal.[89] To succeed in his claim, the third party must allege and prove the individual elements of estoppel at common.[90] These requirements are;[91] (1) there must be a representation by words or conduct, (2) the representation must be made by the principal that a person has authority to act on his or her behalf, (3) the representation should be in such a form that the principal should have reasonably expected that third parties would act on it, (4) the party who seeks to estop the principal must have relied on that representation, and (5) in relying on that representation, such a party must have suffered a prejudice. If these requirements are met, the principal will be held liable for the contract(s) concluded by the alleged agent.

In automated transactions, agency by estoppel will understandably arise only where the user of an electronic agent has represented to a third party that his or her device has power to bind him or her. EDI transactions would qualify as instances of agency by estoppel, for under such circumstances each party would have represented to the other under the EDI agreement that his or her electronic agent has power to conclude binding agreements. Agency by estoppel will not arise in a majority of online transactions where a trader merely deploys an electronic agent into the virtual marketplace to negotiate and conclude transactions with members of the general public.[92] Although the deployment of an electronic agent under such circumstances qualifies as an instance of representation on the part of the user that it has power to

88 Para 3.5.1.2 above.
89 Para 3.5.1.2 above.
90 See *Monzali v Smith* 385.
91 See para 3.5.1.2 above.
92 As instances of general representation, a majority of cases in which electronic agents are unilaterally used online will, on the contrary, raise issues of apparent authority.

bind him or her, such a representation cannot give rise to agency by estoppel because it is an instance of general representation. In open networks, agency by estoppel will arise exclusively where a principal leads a third party to assume mistakenly that an electronic agent is operating on his or her behalf, and the principal fails to correct the mistaken assumption.[93]

5.4.4 The liability of the user of an autonomous electronic agent based on ratification

When an agent concludes an agreement on behalf of the principal without authority, the principal can *post hoc facto* authorise that agreement by ratification. Ratification is a unilateral juristic act of the principal,[94] and its effect is to grant validity to the unauthorised contracts of the agent.[95] The requirements of ratification have been outlined in chapter three,[96] and shall not be reiterated here. If those requirements are met in electronic agency, the user of an electronic agent will be held liable for its contracts with third parties. The main benefit of extending the doctrine of ratification to autonomous electronic agents is that:

> The doctrine of ratification aims to complete the relationship between a principal and third party by seeking to accomplish what both parties had actually intended. In the case of electronic commerce, the third party's intentions are satisfied in the sense that she or he had always intended to contract with the person in whose name the device purported to be operating. Likewise – notwithstanding the fact that the device in question 'exceeded its authority' – the 'principal's' ultimate intentions are also satisfied through the doctrine, though not until the moment of ratification.[97]

It is easily conceivable that in most instances, users of autonomous electronic agents will not voluntarily ratify automated transactions if those transactions do not match their subjective or true intentions, or if for one reason or another, the ratification of those transactions would not be in their interest. It is comforting to note that in South African law, the intention to ratify an unauthorised agreement can be inferred from the conduct of a principal even if he or she did not subjectively intent to ratify

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93 Chopra and White 2009 *Journal of Law, Technology and Policy* 397.
94 Sharrock *Business Transactions* 135.
95 Para 3.5.1.2 above.
96 Para 3.5.1.2 above.
97 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

it. As mentioned by Ogilvie Thompson AR in the matter of *Van Niekerk v Van den Berg*:[98]

> Ratification may sometimes be inferred from the acquiescence of the principal or his failure to repudiate the unauthorised transaction within a reasonable time….

For instance, in the matter *Legg & Co v Premier Tobacco Co*,[99] the plaintiff wrote a letter to the defendant company confirming a lease entered into by one of its directors who apparently lacked the authority to do so. The respondent company failed to reply to that letter within a reasonable time, which led the court to hold that the company had impliedly ratified the aforesaid lease. Similarly, in the matter of *Dreyer v Sonop Bpk*,[100] a son, who was a boarder at a school, bought a school blazer on discount without the authorisation of his father. The father knew that his son had bought the blazer, and had ignored several claims by the seller. The court held that the father had tacitly ratified the sale contract for the purchase of the blazer by his son, consequently that he was liable to pay the price. The general principles of implied ratification are that:

> An affirmance of an unauthorised transaction may be inferred from a failure to repudiate it … Silence under such circumstances that, according to the ordinary experience and habits of men one would naturally be expected to speak if he did not consent, is evidence from which an assent may be inferred. Such inference may be drawn although the purported principal had no knowledge that the third person would rely upon the supposed authority of the agent; his knowledge of such fact, however, coupled with his silence, would ordinarily justify an inference of assent by him … Acquiescence may be inferred from silence, even though the purported agent was theretofore a stranger to the purported principal. Nevertheless, the latter's silence is usually more significant where an agency relationship already exists and the agent in the particular case has exceeded his powers. If such an agent reports the matter to the principal at a time or in a manner calculated to call for dissent if the principal was unwilling to affirm, the latter's failure to dissent, if unexplained, furnishes sufficient evidence of affirmance.[101]

It is submitted that the principle of inferred ratification can be used in electronic agency whenever the user of an autonomous electronic agent fails to expressly repudiate an unauthorised automated transaction. For instance, if an electronic agent informs its user by e-mail that a transaction which he or she did not authorise

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98 *Van Niekerk v Van den Berg* 1965 2 SA 525 (A) 527.
99 *Legg & Co v Premier Tobacco Co* 1926 AD 132.
100 *Dreyer v Sonop Bpk* 1951 2 SA 392 (O) (hereinafter referred to as *Dreyer v Sonop Bpk*).
101 See *Restatement of Law of the Agency* as quoted by *Dreyer v Sonop Bpk*398.

has been concluded with a specified third party, but the user fails to inform that party of his or her intention to repudiate the transaction, he or she must be taken to have impliedly ratified that transaction.

5.5 The termination of electronic agency

Electronic agency will terminate under several instances recognised at common law. The first instance will be upon the death of the principal, being the user of the electronic agent. The second instance will be upon completion of a mandate by the electronic agent.[102] The third instance will be upon deactivation of the electronic agent, which may be equated to unilateral revocation of authority by the principal in human agency.

5.6 Electronic agents and legal personality

Contrary to general view of this chapter, *i.e.* the view that the validity of transactions concluded by autonomous electronic agents can be accommodated by developing or modifying the common law of contract and agency, it has been suggested by one author that:[103]

> …considering…intelligent agents to be legal persons would be a more efficient solution than reforming the concepts of agency and attorneyship, as well as the principles of forming contracts as regulated by the law of obligations.

This observation calls for careful consideration to the extent that it casts some doubt on the general view of this research. In what follows, the concept of legal personality in South African law shall be discussed in detail. The discussion shall also consider, in the context of automated transactions, the benefits or advantages of granting legal personality to autonomous electronic agents. Lastly, the discussion shall highlight a number of difficulties or complexities confronting the proposition that autonomous electronic agents must be granted legal personality.

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102 Following the common law position, this will be relevant where the electronic agent has a single clearly defined mandate, *e.g.* to purchase a specific item. After the electronic agent has purchased that item and arranged for its delivery to the user, its authority to represent the user ceases.

103 Bayamlioğlu 2008 *Ankara Bar Review* 49.

Legal personality is simply defined as the capacity to acquire legal rights and incur obligations.[104] As correctly noted by the court in the matter of *Nathan's Estate v Commissioner for Inland Revenue*,[105] the primary meaning of the word "person" is "a human being." Apart from human beings, however, the law recognises the capacity of specific entities, collectively referred to as artificial, fictitious, legal or juristic persons, to acquire legal rights and incur liabilities. An artificial person is elaborately defined as:

> …an entity, with a name of its own, but having no physical existence, and existing only in the contemplation of the law, on which the law confers personality, which is the capacity to acquire rights and incur obligations.[106]

A ready example of a legal person, (as opposed to a natural personal), is a company duly incorporated in terms of the relevant laws of South Africa.[107] A company so registered is regarded for purposes of the law as a legal person, separate and independent of its shareholders. The effect of granting legal personality to a company is demonstrated by the decision of *Daddo Ltd v Krugersdorp Municipal Council*.[108] The case concerned a specific law,[109] which provided that members of the native races of Asia could not own immovable property within South Africa. During the reign of that law, a company named Daddo Ltd was formed and duly registered in Pretoria with two members of the Indian race, one of them being Mr Daddo, as its sole shareholders. Following its incorporation, the company in issue purchased a piece of land in the township of Krugersdorp. This land was subsequently let by the company to Mr Daddo, wherein he operated a grocery store. The Krugersdorp Municipal Council challenged the sale and transfer of land to Daddo Ltd on the basis of the aforesaid law, *i.e.* on the basis that its shareholders were of Asian descent. The court held that the fact of the shareholders being of Indian descent notwithstanding, the sale and transfer of land to the company was a valid transaction. In reaching the decision, the court noted that a company was a

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104 See *Webb & Co Ltd v Northern Rifles* 1908 TS 462 464-465; *Mostert v Old Mutual Life Assurance Co (SA) Ltd* 2001 4 SA 159 (SCA) para 49.

105 *Nathan's Estate v Commissioner for Inland Revenue* 1948 3 SA 866 (N) 882.

106 Bradfield "Artificial Persons" 395.

107 Namely the *Companies Act* 61 of 1973.

108 *Daddo Ltd v Krugersdorp Municipal Council* 1920 AD 530 (*Daddo Ltd v Krugersdorp Municipal Council*).

109 Law 3 of 1885.

separate person from its shareholders; therefore, that ownership of the land in issue did not vest with the shareholders, but rather with the company in its own right.[110] The overall effect of legal personality is therefore that an entity can acquire assets and liabilities in its own name, and can sue and be sued independently of its shareholders.[111]

Admittedly, the granting of legal personality to autonomous electronic agents would solve many of the contract law issues mentioned in the previous Chapter. The granting of legal personality to autonomous electronic agents would automatically guarantee the legal force and effect of "autonomous consent,"[112] meaning the independent consent of an electronic agent to the creation of contractual rights and obligations. In contrast to the prevailing legal framework, which holds that an electronic agent is a conduit-pipe for the expression of the will of its user, legal personality would endow autonomous electronic agents with the capacity to form enforceable agreements by the expression of their own will. Consequently, agreements formed through autonomous electronic agents "…would be deemed formed between buyers (customers) and intelligent agents."[113] According to the proponents,[114] the granting of legal personality to autonomous electronic agents:

> …would solve the question of consent and of validity of declarations and contracts enacted or concluded by electronic agents without affecting too much the legal theories about consent and declaration, contractual freedom, and conclusion of contracts.[115]

The second benefit of granting legal personality to autonomous electronic agents is that they would acquire legal rights and duties in their own names,[116] which would in turn limit or curb the liability of their users for unintended, unpredicted or

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110 *Daddo Ltd v Krugersdorp Municipal Council* 550-551. See case as discussed by Visser *et alGibson's South African Mercantile* 269.

111 Bradfield "Artificial Persons" 396; Visser *et alGibson's South African Mercantile* 267-268.

112 Blake and Eymann "The Conclusion of Contracts by Software Agents" 773; Andrade *et al* 2007 *Artificial Intelligence and Law* 366.

113 Al-Majid "Electronic Agents and Legal Personality" 3.

114 Blake and Eymann "The Conclusion of Contracts by Software Agents" 773; Andrade *et al* 2007 *Artificial Intelligence and Law* 366.

115 Andrade *et al* 2007 *Artificial Intelligence and Law* 366.

116 Al-Majid "Electronic Agents and Legal Personality" 3.

unforeseen contracts.[117] With legal personality, electronic agents would also be able to acquire assets in their own names, meaning that they would be able to meet or satisfy claims by third parties from their own assets. As to how an electronic agent would acquire assets to satisfy claims laid on it by third parties, Solum suggests that users could insure their devices against specific risks,[118] *e.g.* breach of contract. On the other hand, Sartor suggests that users of autonomous electronic agents could make bank deposits to function as the assets of their devices.[119]

The aforementioned benefits notwithstanding, the idea that electronic agents should be granted legal personality for purposes of accommodating automated transactions is very difficult to sustain. In the first place, the proponents of that approach miss the point that electronic agents present "…simply another mode by which natural persons can conduct their business."[120] In discussions such as the present, the aim is not to find a way in which autonomous electronic agents can be made personally liable on contracts, but rather to devise a sensible approach under which users (being the real stakeholders in automated transactions) can be made liable for contracts made by their electronic agents. As Allen and Widdison explain,[121] the main concern of the law must be to protect those who use electronic agents to conclude commercial transactions, not to protect electronic agents, because they have no interest in automated transactions. Therefore, the proponents of the view that electronic agents be granted legal personality may be said to miss the real issue to the extent that they seek to make computers subjects of legal rights and obligations.

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117 Blake and Eymann "The Conclusion of Contracts by Software Agents" 773; Andrade *et al* 2007 *Artificial Intelligence and Law* 366.

118 Solum 1992 *North Carolina Law Review* 1245, stating that "[i]f the AI could insure, at a reasonable cost, against the risk that it would be found liable for breaching the duty to exercise reasonable care, then functionally the AI would be able to assume both the duty and the corresponding liability."

119 Sartor 2009 *Artificial Intelligence and Law* 283.

120 Bellia Jr 2001 *Emory Law Journal* 1067. Therefore, some authors have argued for the granting of legal personality, not as a means to rendering electronic agents personality liable for contracts which they make, but in order to facilitate the agency approach which is suggested in this chapter, see Chopra 2010 *View Point* 38-40; Chopra and White 2009 *Journal of Law Technology and Policy* 378-379.

121 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 36.

The second difficulty with the proposition that electronic agents must be granted legal personality relates to the identity of an electronic agent. Although the ECT Act defines an electronic agent as computer program, it was demonstrated in chapter two that an electronic agent will also be composed of hardware.[122] The pressing issue is whether, for purposes of granting legal personality, an electronic agent would be identified as the software, the hardware, or both components?[123] Assuming for argument's sake that an electronic agent would be identified as the software, which the ECT Act *prima facie* appears to suggest, what would be the legal effect, on the legal personality of an electronic agent, of any subsequent modifications, developments or alterations made to the software? To illustrate the difficulty of identifying an electronic agent, Sartor mentions further that:[124]

> SAs may disappear, definitely (being cancelled) or temporarily (being registered on an inaccessible storage device), they can divide themselves into the modules they include, they can multiply themselves into indistinguishable copies. How is it possible to identify precisely the entity that holds the obligations and rights of the SA?

Thirdly, it remains a matter of doubt about the type of legal personality most suitable for electronic agents. Is it the "humanly" personality such as that which was granted to slaves at the end of slavery time in jurisdictions such as America,[125] or the fictional personality of companies? Fourthly, what are the specific features in any entity which warrant the granting of personality in law?[126]

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122 See para 2.3 1.3.1 above.

123 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 42, noting that "[t]here is one practical difficulty which must be overcome: How do we identify the subject computer? Is it the hardware? Is it the software?"

124 Sartor 2009 *Artificial Intelligence and Law* 283.

125 For an interesting discussion of the history of the liberation of slaves in America, the various social policies which propelled that change, and on the issue whether electronic agents in the current setting can be granted legal personality pursuant to the same policies, see Willick 1983 *The AI Magazine* 7-8.

126 Allen and Widdison 1996 *Harvard Journal of Law and Technology* 35, mention that "[n]o single principle dictates when the legal system must recognize an entity as a legal person, nor when it must deny legal personality." This notwithstanding, several authors have suggested the following qualities as sufficient indication of the need to grant legal personality to an entity, namely moral entitlement, social reality and capacity, and legal convenience. For a detailed discussion of each of these qualities, see Weitzenboeck 2001 *International Journal of Law and Technology* 211-212; Allen and Widdison 1996 *Harvard Journal of Law and Technology* 35-42; Kerr 1999 *Dalhousie Law Journal* 214-217; Andrade *et al* 2007 *Artificial Intelligence and Law* 365-366.

A fifth difficulty with the fiction of legal personality for electronic agents is that its advocates overlook the far-reaching results that it has beyond the field of contract law. To those familiar enough with the evolution of the doctrine of legal personality, particularly in relation to companies, a bitter lesson that history has taught us is that the granting of legal personality in one field of the law can seriously complicate matters of liability in other fields of the law, *e.g.* criminal law. By enabling companies to assume contractual liability in their own names, legal corporate personality admittedly presented shareholders with the benefit of limited liability.[127] As was to become apparent later on, however, the logical consequence of granting legal personality for commercial purposes was that companies also had to bear criminal liability for their actions.[128] However, unlike with natural persons (human beings), it was not until fairly recently that the law was able to devise effective ways for punishing corporations.[129] The difficulty in punishing companies was neatly captured in the maxim "no soul to be damned and no body to be kicked,"[130] which is fairly self-explanatory. If electronic agents are granted legal personality, it is conceivable that a similar difficulty will be encountered in criminal law. As the law currently stands, there is no doubt that electronic agents can satisfy the requirement of *actus reus*.[131] However, it is not readily clear if an electronic agent can satisfy the requirement of criminal intent or *mens rea*. Most importantly, how would an electronic agent, being a simple computer system, be prosecuted and punished for its crimes?[132]

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127 Limited personality means that the creditors of a company can only have an action against it, as opposed to shareholders directly. It is only in limited circumstances, under which the veil of legal personality, behind which shareholders are protected from liability, may be lifted to hold them personally liable for the debts of the company.

128 See Coaker and Zeffertt *Wille and Millin's Mercantile Law* 807.

129 For statutory provisions regulating corporate criminal liability, see s 332 of the *Criminal Procedure Act* 51 of 1977.

130 Since it is impossible to punish a corporation by imprisonment or any other punishment for humans, the most appropriate punishment for a company is a fine, see *R v G & M Builders' Suppliers Ltd* 1942 AD 114 146.

131 See Hildebrandt2001 http://works.bepress.com/mireille_hildebrandt/35.

132 The difficulty in persecuting an electronic agent was encountered in 2015 in Switzerland. It is reported that in 2014, a group of artists in that jurisdiction programmed a piece of software to do random shopping on the darknet, and to arrange for the delivery of the purchased items to an art exhibition. The electronic agent was allotted a weekly budget of $100 in bitcoins from which it could make the contemplated purchases. Among the various illegal items which it purchased were pills of ecstasy, a fake Hungarian passport, a pair of bootlegged jeans and

To conclude, it is the opinion of the current researcher that the granting of legal personality to autonomous electronic agents with the sole purpose of accommodating the statutory validity of automated transactions in South Africa is unjustifiable. For purposes of present considerations, the main difficulty with the proposition that electronic agents should be granted legal personality is that it makes computers holders of legal rights and obligations. It does not appear to the current researcher that such a far-reaching result can be justified exclusively on the basis of accommodating the validity of automated transactions within the South African common law of contract. On the contrary, if autonomous electronic agents are to be made subjects of legal rights and obligations, there are many other factors apart from the validity of automated transactions which will factor in, *e.g.* economical, political and policy considerations. Therefore, one is better advised to concentrate on developing the common law contract and agency if his or her aim is to explain or rationalise the validity and enforceability of automated transactions.

5.7 Conclusions

The aim of this chapter was to argue for the extension of the common law of agency to transactions concluded by autonomous electronic agents. The first part of the discussion entailed a justification for the extension of agency law to instances of electronic agency. The second part of the discussion considered at length the various arguments which have been advanced by some commentators against the extension of the common law of agency to electronic agents. In total, these objections centre on the point that the extension of the common law of agency to electronic agents would be improper because electronic agents lack legal personality. Various arguments were made in this work to demonstrate that the lack of legal personality on its own is not a sufficient ground to justify the non-extension of the common law of agency to electronic agents. The third part of the discussion illustrated how the principles of the common law of agency, especially those relating

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sneakers. The Swiss Police seized all these items, and arrested the electronic agent by seizing the computer on which it was installed. Not knowing how to proceed against the artists or the electronic agent, the illegal items were destroyed and the computer returned to the owners. See Eveleth 2015 http://www.bbc.com/future/story/20150721-my-robot-bought-illegal-drugs; The Washington Times 2015 https://www.washingtonpost.com/news/wonk/wp/2013/03/05/how-to-punish-robots-when-they-inevitably-turn-against-us/.

to the authority of an agent to bind the principal, can be applied to instances of electronic agency. The fourth part of the discussion considered the instances under which electronic agency may be terminated. The fifth part of the discussion considered the possibility, advantages and difficulties to the granting of legal personality to autonomous electronic agents. The following chapter shall entail a comparative research of the treatment of automated transactions in American and English law with the view to distilling valuable lessons for the development of South African law.

CHAPTER 6

6 The validity and enforceability of automated transactions in the US and UK

6.1 Introduction

The aim in this chapter is to discuss the validity and enforceability of automated transactions from the perspective of US and UK law. These two jurisdictions have been purposefully selected for comparison in this research because they "…comprise the largest proportion of electronic commerce transactions in the world."[1] On its own, this fact makes the US and the UK the best markets to test the legal aspects of electronic commerce; including the validity of agreements concluded by electronic agents. Therefore, it is fitting and proper to consider the opinions of legislators, judges and academic commentators from these jurisdictions *vis-a-vis* the issue of this research, namely the development or modification of traditional contract law with a view to accommodating the validity and enforceability of automated transactions.

The US and the UK have also been selected for comparative research in this work because of their respective influences on South African law. US law, particularly in the field of electronic commerce law, has been very inspirational in the drafting of the provisions relevant to automated transactions in the ECT Act.[2] It is common cause that the UNCITRAL Model Law, on which most of the provisions in the ECT Act are based,[3] does not directly address the validity of automated transactions.[4] As a result, it is generally admitted that section 20 of the ECT Act is"…based closely on section 10 of UETA...."[5] Apart from the UETA, several other statutes which have a

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1 Almajid *The Legal Enforceability of Contracts made by Electronic Agents under Islamic Law* 10.

2 Pistorius 2008 *Journal of Information, Law and Technology* 8.

3 Department of Communications 1999 http://www.dpsa.gov.za/dpsa2g/documents/acts&regulations/frameworks/e-commerce/ecomm-paper.pdf.

4 The UNCITRAL Model Law provides, in art. 11, that contracts shall not be denied legal validity and enforceability for the sole reason that they were formed through the exchange of data messages. Commentary on this provision suggests that it is also intended to cover instances where agreements are formed between computers without any human intervention, see UN *UNCITRAL Model Law* para 46.

5 Pistorius 2008 *JILT* 8.

bearing on automated transactions have been approved for adoption in the US. One such statute being the UCITA, as amended.[6] Although with little success, attempts have also been made to revise Article 2 of the *Uniform Commercial Code* (hereinafter referred to as the UCC) with the purpose of rendering it more suited to transactions involving the sale of goods over the internet.[7] Apart from electronic commerce legislation, the US has also in recent years witnessed a surge of case law addressing various aspects of internet contracts, some of which aspects have a direct bearing on this research. In light of these statutes and case law, it is important in this work that US law is discussed with the aim of ascertaining the extent to which the common law of contract and agency in that jurisdiction have been modified in order to accommodate the validity of automated transactions; consequently, to draw valuable lessons for the development of South African law.

UK law has also been very influential on the law of contract and agency in South Africa.[8] It is common cause as mentioned above that the reliance theory of contract in South Africa was borrowed exclusively from UK law,[9] notably from the *dictum* of Lord Blackburn in the matter of *Smith v Hughes*.[10] Since the reliance theory of contract has been cited by some authors as sufficient to accommodate the validity of contracts concluded by autonomous electronic agents,[11] it is fitting for this research to consider how the theory has been applied in UK law. It is also fitting for this research to study whether as expounded in UK law, the reliance theory is flexible

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6 Another relevant statute is the *Electronic Signatures in Global and National Commerce Act* 2000 (hereinafter referred to as the E-SIGN).

7 The revision of Art. 2 of the UCC, particularly the portions thereof dealing with "sales" was completed and recommended for adoption by the National Conference of Commissioners on Uniform State Laws in 2003. See Daniel 2004 *Santa Clara Computer and High Technology Law Journal* 321; National Conference of Commissioners on Uniform State Laws 2003 http://www.uniformlaws.org/Narrative.aspx?title=Why%20States%20Should%20Adopt%20UCC%20Article%202A. It is common cause, however, that due to its controversial nature, the 2003 amendments to Art. 2 of the UCC were subsequently withdrawn, see Cornell University Law School 2003 https://www.law.cornell.edu/ucc/2/article2.

8 See generally Pretorius 2004 *The Comparative and International Law Journal of Southern Africa* 96-128.

9 See para 4.4.3 above.

10 *Smith v Hughes* (1871) LR 6 QB 597. Quoted with approval in several decisions by South African courts, including *HNR Properties CC v Standard Bank of SA Ltd* 2004 4 SA 471 (SCA) 480; *Davids en Andere v Absa Bank Bpk* 2005 (3) SA 361 (C) 367; *Peri-Urban Areas Health Board v Breet* 1958 (3) SA 783 (T) 789; *Dole South Africa (Pty) Ltd v Pieter Beukes (Pty) Ltd* 2007 (4) SA 577 (C) 590; *Constantia Graswerke Bk v Snyman* 1996 (4) SA 117 (W) 124.

11 See Weitzenboeck 2010 *International Journal of Law and Information Technology* 219-223.

enough to cover instances of communications generated by electronic agents autonomously. Furthermore, it is noteworthy that some of the earliest decisions on automated transactions, *albeit* involving first generation electronic agents such as ticket machines, were made in UK law. One can cite here the case of *Thornton v Shoe Lane Parking Ltd*,[12] in which Lord Denning translated the interaction between a customer and an automatic ticket machine into a contract. The judge in that case also discussed the validity of terms and conditions introduced by users of machines in automated transactions. The study of UK law in this research will therefore shed light on the common law principles applicable to automated transactions. What makes UK law particularly interesting for this research in the fact that apart from a few relevant Directives of the European Union, it does not have any electronic commerce legislation specific to the issue at hand. This means in practical effect that in UK law, the validity of automated transactions will be addressed by traditional contract law principles, hence its relevance to this research.

As was done in chapter four in relation to South African law, the discussion of this chapter shall focus on five main issues, namely the basis of contractual liability in automated transactions, offer and acceptance, the time and place of contract formation in automated transactions, the enforceability of standard terms and conditions, and the treatment of electronic mistake.

6.2 US law

6.2.1 Outline of the legal landscape for electronic commerce in the US

The legal landscape for electronic commerce in the US is composed of two main statutes, namely the UETA and the UCITA. The UETA was approved and recommended for enactment by the National Conference of Commissioners on Uniform State Laws (hereinafter the NCCUSL) in 1999 at its annual conference meeting held in Denver, Colorado.[13] The aim of this statute is:

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12 *Thornton v ShoeLane Parking* [1971] 1 All ER 686 (hereinafter referred to as *Thornton v ShoeLane Parking*).

13 National Conference of Commissioners on Uniform State Laws (23-30 July 1999 Denver).

> …to remove barriers to electronic commerce by validating and effectuating electronic records and signatures.[14]

In this manner, the UETA guarantees the validity of electronic acts that would otherwise be unenforceable under individual state laws.[15] The scope of the statute is limited to electronic transactions relating to conduct of business, commercial or governmental affairs.[16] The terms "business and commerce" in the scope of the UETA are interpreted liberally to cover not only Business-to-Customer transactions, but Customer-to-Customer transactions too.[17] Unilateral acts such as the execution of wills and trusts, however, fall outside the scope of UETA.[18] As the NCCUSL mentions in its commentary, to fall under the provisions of UETA, a transaction must involve an interaction between two or more persons.[19] Other transactions excluded under the scope of the EUTA are those governed by selected provisions if the UCC,[20] and the UCITA. What is important to note about the UETA is that it does not introduce new substantive laws for contracts. It merely permits electronic transactions "…to be accomplished with certainty under existing substantive rules of law."[21] The general principles of the law of contract are therefore still applicable to transactions governed by the UETA. As is the norm in the US, a statute authorised by the NCCUSL is not a binding law until it has been adopted in a particular state through its legislative process.[22] The UETA has so far been adopted by a total of 48 states,[23] and may for that reason be said to be a success.

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14 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 1.

15 Poggi 2000-2001 *Virginia Journal of International Law* 238.

16 In § 2(16), a transaction for the purpose of UETA is defined as "an action or set of actions occurring between two or more persons relating to the conduct of business, commercial, or governmental affairs."

17 Poggi 2000-2001 *Virginia Journal of International Law* 239; The National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 12.

18 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 13.

19 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 13.

20 § 3 (b) (2). In terms of this provision, the UETA is nevertheless applicable to transactions governed by § 1-107, 1-206, Art. 2 and 2A of the UCC. Therefore, the UETA and UCC will apply concurrently to the sale of goods over the internet.

21 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 3.

22 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 6.

23 The UETA has been enacted by the following states: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii,

Unlike the UETA, the UCITA has a narrower scope of application. The UCITA is applicable strictly to transactions involving "computer information."[24] A "computer information transaction" is an agreement to create, modify, transfer, or licence computer information.[25] "Computer information" is any information which is obtained through the use of a computer, or capable of being processed by a computer.[26] The UCITA began as a joint venture between the NCCUSL and the American Law Institute (hereinafter the ALI).[27] The venture was prompted by concerns over the applicability of the UCC to transactions involving the sale of computer related goods and services.[28]The provisions of Article 2 of the UCC were considered inadequate for computer information transactions because they were drafted with specific reference to the sale of physical goods.[29] Initially, the drafting of UCITA was undertaken with a view to revising Article 2 of the UCC into Article 2B, which revision would render the UCC accommodative of computer information transactions.[30] This was, however, a highly controversial undertaking; and the ALI soon left the task to the NCCUSL due to irreconcilable concerns over some aspects of the proposed law.[31] The intended "revised Article 2B of the UCC" was subsequently approved and recommended for enactment as an independent statute in 1999,[32] the statute being UCITA. In

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Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, West Virginia, Wisconsin and Wyoming. See The National Conference of Commissioners on Uniform State Laws 2016 http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Electronic%20Transactions%20Act.

24 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 6; Poggi 2000-2001 *Virginia Journal of International Law* 240.

25 § 102 (11). Computer information transactions normally include "…transfers (e.g., licenses, assignments, or sales of copies) of computer programs or multimedia products, software and multimedia development contracts, access contracts, and contracts to obtain information for use in a program, access contract, or multimedia product," see The National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 19. It is notable, however, that the UCITA is also applicable to "mixed transactions," *e.g.* transactions involving digital goods such computer software.

26 § 102 (10).

27 McDonald 2001 *Berkeley Technology Law Journal* 462.

28 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 418-419.

29 Ghoshray 2004-2005 *Texas Wesleyan Law Review* 618; Daniel 2004 *Santa Clara Computer & High Technology Law Journal* 328.

30 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 418-419.

31 McDonald 2001 *Berkeley Technology Law Journal* 462.

32 At the National Conference of Commissioners on Uniform State Laws (23-30 July 1999 Denver).

comparison to the UETA, the UCITA has not met with much success, and has only been adopted by two states up to this point.[33]

Apart from the UETA and the UCITA, there are of course other sources of law relevant to electronic contracts. For instance, Article 2 of the UCC shall also be applicable where an electronic transaction involves the sale of physical goods.[34] The *Restatement (Second) of Contracts* 1981 (hereinafter the *Restatement of Contracts*) shall also be applicable as it governs the general aspects of contract formation. One should also not lose count of the relevance of the common law of contract, *i.e.* case law, to some aspects of electronic contracts.

6.2.2 The validity of automated transactions in US law

Slightly different from the South African ECT Act, the UETA defines an automated transaction as:[35]

> [A] transaction conducted or performed, in whole or in part, by electronic means or electronic records, in which the acts or records of one or both parties are not reviewed by an individual in the ordinary course in forming a contract, performing under an existing contract, or fulfilling an obligation required by the transaction.

The main difference here is that the ECT Act defines an automated transaction as an electronic contract in which data messages of one or both parties are not reviewed by a natural person "…in the ordinary course of such…[a] person's business or employment."[36] The EUTA, on the other hand, seems to be focussed solely on contract formation by making it clear that in automated transactions, the data messages of a party are "…not reviewed by an individual in the ordinary course in forming a contract…." In explanation of this definition, the NCCUSL mentions in its commentary that automated transactions are contracts in which machines are used without any human intervention to form and perform obligations under

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33 These two states are Maryland and Virginia. See The National Conference of Commissioners on Uniform State Laws 2016 http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Computer%20Information%20Transactions%20Act.

34 Rambarran and Hunt 2007 *Tulane Journal of Technology and Intellectual Property* 187.

35 § 2(2).

36 § 1.

contracts.[37]By unattended machines is meant electronic agents. The definition of an electronic agent under the UETA is very similar to that found in the ECT Act,[38] and needs no further consideration here.

Concerning the formation of contracts by electronic agents, the UETA provides in § 14 (1) that:

> A contract may be formed by the interaction of electronic agents of the parties, even if no individual was aware of or reviewed the electronic agents' actions or the resulting terms and agreements.

This provision grants legal recognition to the validity and enforceability of contracts formed by "…machines functioning as electronic agents for parties to a transaction."[39] In its own terms, § 14 (2) is concerned with transactions formed by electronic agents on both sides, *e.g.* EDI transactions. Such transactions are valid and enforceable notwithstanding that no individual was aware of or reviewed the actions of the electronic agents or the terms of the resultant contracts. Therefore, the absence of a human actor on both sides of a transaction cannot be evoked as the sole basis on which that transaction is denied legal validity and enforceability. In the same spirit, the mere fact that a transaction was formed exclusively between electronic agents cannot be evoked as the sole basis on which that transaction is denied legal validity and enforceability.

The UETA provides furthermore in § 14 (2) that:

> A contract may be formed by the interaction of an electronic agent and an individual, acting on the individual's own behalf or for another person, including by an interaction in which the individual performs actions that the individual is free to refuse to perform and which the individual knows or has reason to know will cause the electronic agent to complete the transaction or performance.

§ 14 (2) is predominantly concerned with the validity and enforceability of transactions formed between electronic agents and human beings. In terms of that

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37 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 7.

38 See § 2(6) of the UETA which defines an electronic agent as "…a computer program or an electronic or other automated means used independently to initiate an action or respond to electronic records or performances in whole or in part, without review or action by an individual."

39 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 43.

provision, transactions formed between individuals and electronic agents are valid and enforceable, regardless of whether the human actor in issue is acting on his or her own behalf, or as an agent or representative of another. Therefore, a valid and enforceable automated transaction may be concluded between an "electronic agent" on one side and a "human agent" on another.

§ 14 (2) also grants legal validity to click-wrap agreements. This is made clear by the statement that a contract may be formed where:

> …the individual performs actions that the individual is free to refuse to perform and which the individual knows or has reason to know will cause the electronic agent to complete the transaction or performance.

As interpreted by the NCCUSL,[40] this part of § 14 (2) "…validates an anonymous click-through transaction." It is common cause as noted in chapter four that click-wrap agreements will often involve an electronic agent,[41] being an automated commercial website, on one side. The official commentary mentions in that regard that, a valid agreement will arise if the individual interacting with an electronic agent manifests assent or agreement to the terms and conditions of the user of that electronic agent,[42] *e.g.* by clicking the "I Agree" button. If the individual in issue clicks the "I Agree" button, he or she will be taken to have performed an action that he or she was free to refuse to perform, and which he or she knew or had reason to know would cause the electronic agent to complete or perform a transaction. Therefore, under the UETA, the absence of actual or constructive knowledge on the part of an individual that his or her actions will cause an electronic agent to complete or perform a transaction may affect the validity and enforceability of that transaction. This will be the case, amongst others, where the user of an electronic agent does not warn customers that they will be taken to have manifested assent by performing specific actions.[43] In the opinion of the current researcher, this provision is primarily intended to ensure that online customers are not ambushed into

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40 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 43.

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42 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 43.

43 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 43.

contracts by online traders and their electronic agents. Concerning the clicking of assent buttons, the official commentary on the UETA clarifies that such conduct amounts to a signature.[44]

The UCITA defines an automated transaction as:[45]

> [A] transaction in which a contract is formed in whole or part by electronic actions of one or both parties which are not previously reviewed by an individual in the ordinary course.

The same statute defines an electronic agent to mean:[46]

> [A] computer program, or electronic or other automated means, used independently to initiate an action, or to respond to electronic messages or performances, on the person's behalf without review or action by an individual at the time of the action or response to the message or performance.

These are fairly standard definitions, and one need not dwell much on them seeing that they introduce nothing new. Concerning the validity and enforceability of automated transactions, the UCITA provides in § 107 (d) that:

> A person that uses an electronic agent that it has selected for making an authentication, performance, or agreement, including manifestation of assent, is bound by the operations of the electronic agent, even if no individual was aware of or reviewed the agent's operations or the results of the operations.

This provision grants legal force and effect to the operations of electronic agents. According to this provision, the user of an electronic agent is bound by its operations even if he or she was not aware of or did not review its operations or the results of those operations. What must be emphasised with reference to § 107 (d) is the fact that the user of an electronic agent will not be bound by its operations

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44 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 10-11, mentioning that "[t]his definition [referring to the definition of a signature] includes as an electronic signature the standard webpage click through process. For example, when a person orders goods or services through a vendor's website, the person will be required to provide information as part of a process which will result in receipt of the goods or services. When the customer ultimately gets to the last step and clicks 'I agree,' the person has adopted the process and has done so with the intent to associate the person with the record of that process. The actual effect of the electronic signature will be determined from all the surrounding circumstances, however, the person adopted a process which the circumstances indicate s/he intended to have the effect of getting the goods/services and being bound to pay for them. The adoption of the process carried the intent to do a legally significant act, the hallmark of a signature."

45 § 102 (a) (7).

46 § 102 (a) (27).

indiscriminately. On the contrary, that provision makes it clear that the user of an electronic agent will be bound by its operations if the electronic agent in issue was selected for performing those operations. As that provision suggests, an electronic agent may be selected, amongst others, for making "…authentication, performance, or agreement, including manifestation of assent…." Therefore, if an electronic agent is selected for one purpose, *e.g.* making an authentication, the user is not be bound by its operations if they produce a different result altogether. As the NCCUSL explains:[47]

> This rule is limited to situations where the party selects the agent, and includes cases where the party consciously elects to employ the agent on its own behalf, whether that agent was created by it, licensed from another, or otherwise adopted for this purpose. The term "selects" does not require a choice from among several electronic agents, but merely a conscious decision to use a particular agent.

The UCITA provides in terms of § 206 (a) that "[a] contract may be formed by the interaction of electronic agents." As with § 14 (1) of the UETA, § 206 (a) of the UCITA is primarily concerned with the validity and enforceability of transactions concluded by electronic agents on both sides. In such cases, a valid and enforceable contract will only arise if the interaction of the concerned electronic agents results in "…operations that under the circumstances indicate acceptance of an offer…."[48] Therefore, the issue whether or not a contract has been formed between electronic agents will predominantly depend on the interpretation of the operations of the concerned electronic agents. As the NCCUSL explains:[49]

> Whether a contract is formed focuses on the operations of the agents. The issue is whether those operations indicate that a contract is formed, such as by sending and receiving the benefits of the contract, initiating orders, or indicating in records that a contract exists.

The foregoing notwithstanding, the UCITA provides in § 206 (a) that a court of law may grant appropriate relief if the operations of an electronic agent resulted from fraud, electronic mistake or other similar causes. Therefore, notwithstanding that the operations of an electronic agent indicate an acceptance; a valid and enforceable

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47 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 52.

48 §206 (a).

49 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 89.

contract will not arise if that acceptance was induced by the fraudulent manipulation of its programming by the other party or its electronic agent.[50]

Concerning the validity and enforceability of transactions formed between electronic agents and humans, the UCITA provides in § 206 (b) that:

> A contract may be formed by the interaction of an electronic agent and an individual acting on the individual's own behalf or for another person. A contract is formed if the individual takes an action or makes a statement that the individual can refuse to take or say and that the individual has reason to know will:
>
> (1) cause the electronic agent to perform, provide benefits, or allow the use or access that is the subject of the contract, or send instructions to do so; or
>
> (2) indicate acceptance, regardless of other expressions or actions by the individual to which the individual has reason to know the electronic agent cannot react.

In terms of this provision, a contract formed between an electronic agent and a human being is valid and enforceable regards of whether the human actor in issue was transacting on his or her own behalf, or as an agent or representative of another person. In such cases, a valid and enforceable agreement will arise if the concerned human actor takes an action or makes a statement that he or she can refuse to take or say, and has reason to know that the action or statement in issue will cause the electronic agent to perform a contract or indicate acceptance. As with § 14 (2) of the UETA, § 206 (b) of the UCITA appears to be concerned predominantly with the validity and enforceability of click-through process. The NCCUSL mentions, however, that § 206 (b) "… does not define all cases…."[51]

6.3 Outline of the legal framework for the formation of contracts in the US

A contract is defined in the *Restatement of Contracts* as:[52]

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50 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 89.

51 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 89.

52 § 1. In § 2(1), a promise is defined as "[a] manifestation of intention to act or refrain from acting in a specified way, so made as to justify a promise in understanding that a commitment has been made." The Reporter's Note makes it clear that the term "contract" may be understood as synonymous to "agreement" or "bargain," see American Law Institute

> … [A] promise or set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty.

For a contract to come about there must be an offer, an acceptance and consideration. An offer is the manifestation of willingness to bargain.[53] To constitute a valid offer, the manifestation of willingness must be made so as to justify the other party in understanding that his or her assent is invited to conclude a contract.[54] The advertisement of goods and services in public media and self-service stores does not constitute an offer but an invitation to treat.[55] The same is true also of public auctions.[56] Acceptance is defined in the *Restatement of Contracts* as the manifestation of assent to the terms of an offer.[57] Consideration on the other hand is a price bargained, and paid, for a promise.[58] Although the requirement of consideration is sometimes associated with *quid pro quo*,[59] the *Restatement of Contracts* makes it clear that consideration may be constituted, amongst others, by an act, a forbearance, a creation, modification or destruction of a legal relation.[60]

Restatement of the Law 6. For definitions of the terms "agreement" and "bargain," see § 3 of the *Restatement of Contracts*.

53 § 24.

54 § 24.

55 § 26. See also *Georgian Co v Bloom* 108 SE 813 (1921); *Stenberg v Chicago Medical School* 371 NE 2d 634 (1977); *Craft v Elder & Johnson* Co 38 NE 2d 416 (Ohio App 1941); *Lovett v FrederickLoeser Co* 207 NYS 753 (1924); Simpson *Contracts* 17.

56 § 28 (1)(a), stating that at an auction, unless intention to the contrary is manifested, the auctioneer invites offers from bidders, which he may accept or reject.

57 § 50(1). The same provision continues to state further that acceptance must be made in the manner indicated or required by the offer. In terms of § 50(2) acceptance by conduct or performance is only valid where at least the offeror requires acceptance by performance.

58 Simpson *Contracts* 17. The *Restatement of Contracts* provides in § 71 (1) in relation to the requirement of consideration that "[t]o constitute a consideration, a performance or return promise must be bargained for." A performance or return promise is bargained for if it is sought by the offeror in exchange for his offer, and is given by the offeree in exchange for the offer, see § 71 (2). In this spirit, it is usually said that American law does not enforce gratuitous promises, *i.e.* promises for which no price is requested or paid. As stated by Lamar J in the matter of *Davis & Co v Morgan* 43 SE 732 (1903) "[Courts] can not enforce promises binding on the conscience, except in those cases where some pecuniary damage flows from the breach, or where, in addition to the moral obligation, the promise is also supported by consideration. Where one receives a naked promise and such promise is broken, he is on worse off than he was." See case as discussed by Fuller and Eisenberg *Basic Contract* 109-110.

59 See Reporter's Note in American Law Institute *Restatement of the Law* 172-173.

60 § 71(3). See examples in American Law Institute *Restatement of the Law* 173-174.

The basis of contractual liability in US law is a meeting of minds between the contracting parties.[61] This rule is neatly captured in the requirement of mutual assent. Each party must therefore manifest assent to the creation of a binding contract.[62] Assent may be manifested through either a promise, or the rendering of performance.[63] As a general matter, US law embraces the objective theory of contract.[64] Therefore, in determining whether or not there is mutual assent, the mental reservations of the parties do not impair the rights and obligations which they purportedly created by contract. As explained by Judge Learned Hand in the matter of *Hotchkiss v National City Bank*:[65]

> A contract has, strictly speaking, nothing to do with the personal, or individual, intent of the parties. A contract is an obligation attached by the mere force of law to certain acts of the parties, usually words, which ordinarily accompany and represent a known intent. If, however, it were proved by twenty bishops that either party, when he used the words, intended something else than the usual meaning which the law imposes on them, he would still be held, unless there were mutual mistake or something else of the sort.

Therefore, what is important in determining whether or not an agreement has been reached is the manifested or expressed assent of the parties. Assent can be manifested in various ways including by written and spoken words, or by conduct or failure to act.[66] However, conduct alone is not a sufficient manifestation of assent unless the actor intends to engage in that specific conduct, and knows or has reason to know that the other party will deduce from his or her conduct that he or she is agreeing to be bound.[67] Therefore, the creation of apparent assent, *i.e.* assent as it appears to the other party, requires either an intentional or negligent conduct on the part of the actor.

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61 Fuller and Eisenberg *Basic Contract* 257; Calamari and Perillo *Contracts* 25; Simpson *Contracts* 8-9, defining the "meeting of minds" to mean that the parties must be in agreement on the same bargain and on similar terms.

62 § 18.

63 § 18.

64 See Calamari and Perillo *Contracts* 26; Simpson *Contracts* 9-10.

65 *Hotchkiss v National City Bank* 200 5 287, (DCNY 1913) 293.

66 § 19(1).

67 § 19(2). For a Reporter's Note see American Law Institute *Restatement of the Law* 55-58.

6.4 The formation of agreements by electronic agents in US law

Having outlined and discussed the legal landscape for electronic commerce in the US, the validity and enforceability of automated transactions, and the legal framework for the formation of agreements in that jurisdiction, a turn shall be made at this juncture to discuss the formation of agreements by electronic agents in US law. The first part hereof shall discuss the basis of contractual liability in automated transactions. The purpose of that discussion shall be to determine the basis on which the assent manifested by electronic agents bind the users thereof. Because the manifestation of mutual assent ordinarily takes the form of offer and acceptance,[68] the second part hereof shall entail the analysis of offer and acceptance in automated transactions. The third part shall discuss the time and place of contract formation in automated transactions.

6.4.1 The basis of contractual liability in automated transactions

6.4.1.1 A solution under the UETA

As with the ECT Act in South Africa, the UETA adopts the mere-tool theory to rationalise or explain the basis of contractual liability in automated transactions. The NCCUSL explains in relation to the definition of an electronic agent under the UETA that:[69]

> This definition establishes that an electronic agent is a machine. As the term 'electronic agent' has come to be recognized, it is limited to a tool function.

This explanation makes it clear that, under the UETA, an electronic agent is considered to be a tool of communication or conduit-pipe for the manifestation of the assent of its user. For all intents and purposes, the intention of the user of an electronic agent to be bound by an automated transaction is taken to flow "…from the programming and use of the machine."[70] Because an electronic agent is a conduit-pipe for the manifestation of the assent of its user, it follows logically that

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68 § 22 (1) of the *Restatement of Contracts*.

69 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 8-9.

70 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 43.

the communications and operations of an electronic agent are attributed to its user. On that basis, the user of an electronic agent is ultimately responsible for the outcomes of its communications and operations. This is so, because, as put by the NCCUSL:[71]

> An electronic agent, such as a computer program or other automated means employed by a person, is a tool of that person. As a general rule, the employer of a tool is responsible for the results obtained by the use of that tool since the tool has no independent volition of its own. However, an electronic agent, by definition, is capable within the parameters of its programming, of initiating, responding or interacting with other parties or their electronic agents once it has been activated by a party, without further attention of that party.

The rule that the user of a computer is responsible for its communications and operations appears to have been adopted in the US long before the EUTA. In the matter of *State Farm Mutual Automobile Insurance Co v Bockhorst*,[72] Murray J explained as a general matter that:

> Holding a company responsible for the actions of its computer does not exhibit a distaste for modern business practices … A computer operates only in accordance with the information and directions supplied by its human programmers. If the computer does not think like a man, it is man's fault.

If the communications or operations of an electronic agent produce a contract, that contract is attributed or attributable to the user of the electronic agent, meaning that he or she is bound its terms. As shall be recalled, the UETA provides in § 14 (1) that the user of an electronic agent will be bound by a contract concluded thereby, notwithstanding that he or she was not aware of or did not review the operations of the electronic agent, or the terms of the agreements concluded thereby.

What has been demonstrated in chapter four is that the mere-tool theory and the attribution rule are not adequate or sufficient to explain the basis of contractual liability in the instance of contracts concluded by autonomous electronic agents.[73]

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71 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 9.

72 *State Farm Mutual Automobile Insurance Co v Bockhorst* 453 F.2d 533 (1972)537.

73 See para 4.5.1.1.1 above.

The official commentary to the UETA mentions in relation to the "autonomy" of electronic agents that:[74]

> While this Act proceeds on the paradigm that an electronic agent is capable of performing only within the technical strictures of its preset programming, it is conceivable that, within the useful life of this Act, electronic agents may be created with the ability to act autonomously, and not just automatically. That is, through developments in artificial intelligence, a computer may be able to 'learn through experience, modify the instructions in their own programs, and even devise new instructions.' Allen and Widdison, 'Can Computers Make Contracts?' 9 Harv. J.L.&Tech 25 (Winter, 1996). If such developments occur, courts may construe the definition of electronic agent accordingly, in order to recognize such new capabilities.

It is not immediately clear what is meant by the statement that courts of law may construe the definition of an "…electronic agent accordingly, in order to recognize such new capabilities." Most important for purposes of present considerations, the commentary does not make it clear what effect that new definition will have on the general scheme of the UETA; which, as illustrated above, propagates the mere-tool theory and attribution rule. Some commentators have suggested that, the autonomy of electronic agents notwithstanding, the objective theory of contract as understood and applied by courts of law in the US will suffice to explain the basis of contractual liability in transactions formed by autonomous electronic agents.[75] Lerouge argues for instance that:[76]

> The objective theory … permits us to go further, since, notably, a party's mental assent is not necessary to complete the transaction and create legal obligations. Indeed, the above analysis shows that many questions remained unanswered. For example, it would conform with the objective theory to consider that the mere offering to a company of the possibility to contract through the use of its electronic agent is a sufficient outward of expression of assent to form a contract? Is the fact that the company does not know the content and the moment of the contract formation relevant according to the objective theory? One answer would be to consider that the assent may be expressed in any way including via an electronic agent and the fact that the contractual theory does not require that a party must be aware of the exact time of the formation and content of the contract.

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74 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 9.

75 See Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 417.

76 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 417.

As illustrated in chapter four,[77] the objective theory of contract "…refers to the relationship between actions and intentions of a single actor."[78] Therefore, the statements and actions of one person or entity cannot be considered, for purposes of contract formation, as a manifestation of assent on the part of another person or entity. Proceeding from that analysis, it follows that operations performed by electronic agents autonomously cannot reasonably be construed as a manifestation of assent on the part of their users. Wherefore, one author concludes that, in the case of autonomous electronic agents, "…agreements will be generated by machines, not merely through them."[79] In finality, it is the opinion of the current researcher that, as currently understood and applied by courts of law in the US, the objective theory of contract is not adequate to explain the basis of contractual liability in automated transactions concluded by autonomous electronic agents.

6.4.1.2 A solution under the UCITA

As with the UETA, the UCITA too proceeds on a general rule that the user of an electronic agent is bound by and responsible for its operations.[80] In contrast to the UETA, however, this rule is not based on the mere-tool theory or the attribution rule under the UCITA. As shall be recalled, the UCITA provides in § 107 (d) that a person who "selects" an electronic agent for a specific purpose will be bound by its operations, notwithstanding that he or she did not review those operations. This provision was interpreted above to mean that the user of an electronic agent will not be bound by its operations indiscriminately. On the contrary, that provision makes it clear that the user of an electronic agent will be bound by its operations if the electronic agent in issue was selected for performing those operations. As that provision suggests, an electronic agent may be selected, amongst others, for making "…authentication, performance, or agreement, including manifestation of assent…." Therefore, if an electronic agent is selected for one purpose, *e.g.* making

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77 See para 4.5.1.2 above.

78 Chopra and White 2009 *Journal of Law, Technology and Policy* 375.

79 Nimmer 2001 *Electronic Commerce Research* 188.

80 See National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 23, stating that "…parties that use electronic agents are ordinarily bound by the results of their operations."

authentication, the user will not be bound by its operations if those operations produce a different result altogether. The NCCUSL explains that:[81]

> The concept here 'embodies principles like those in agency law,' but it does not depend on agency law. The electronic agent must be operating within its intended purpose. For human agents, this is often described as acting within the scope of authority. Here, 'the focus is on whether the agent was used for the relevant purpose.' For a similar concept in a different context, see *Playboy Enterprises, Inc. v. Webbworld, Inc.,* 991 F. Supp. 543 (N.D. Tex. 1997), *aff'd,* 168 F.3d 486 (5th Cir. 1999)….

This commentary makes it clear that the user of an electronic agent will only be bound by its operations if they fall within the scope of the purpose for which the electronic agent was selected and used. In determining whether or not the operations of an electronic agent fall within the scope of the purpose for which it was selected, a court of law will apply principles similar to those of the common law of agency, especially the concept of "authority." The NCCUSL mentions in that regard, however, that the legal relationship between an electronic agent and its user "…is not equivalent to common law agency since the 'agent' is not a human."[82]It is the view of the current researcher that, by making it clear that the "agent" in electronic agency is not a human, the NCCUSL hopes to address and dispel issues such as whether a machine can consent to the creation of the relationship of agency. Being a machine without legal personality, an electronic agent cannot give consent to the creation of such a relationship. Yet that fact alone does not preclude application of principles similar to those of the common law of agency where they are relevant under the UCITA. In this manner, the UCITA treats electronic agents as hybrid entities with elements of human agents and a tool of communication.[83]

That the UCITA puts electronic agents at par with authorised human agents is evidenced, amongst others, by § 112 (b), which deals with the manifestation of assent by electronic agents. According to the terms of that provision:

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81 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 52.

82 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 22.

83 Kiss *Contracts* 13.

> An electronic agent manifests assent to a record or term if, after having an opportunity to review it, the electronic agent:
>
> (a) authenticates the record or term; or
>
> (b) engages in operations that in the circumstances indicate acceptance of the record or term.

From the wording of this provision, it is clear that assent to the terms of an automated transaction is not manifested by the user through the operations of an electronic agent. On the contrary, it is the electronic agent which independently manifests assent on behalf of its user. As one author correctly notes:[84]

> A quick review … shows that it is intended to empower the electronic agents with the power to 'manifest assent' on behalf of an entity.

Therefore, under the UCITA, the manifestation of assent by an electronic agent is not the same as the manifestation of assent by conduct on the part of the user of that electronic agent.[85] It is the opinion of the current researcher that, if an electronic agent is empowered to manifest assent on behalf of its user, the only feasible conclusion is that the concerned device is an "agent or representative" of its user.

One may conclude this part of the discussion by summarising that, under the UCITA, the basis of contractual liability in automated transactions is the "authority" of an electronic agent to bind its user through the performance of operations that fall within the scope of the purpose for which it was selected. In the opinion of the current researcher, this approach provides a comprehensive and adequate solution to the issue of the basis of contractual liability in automated transactions concluded by autonomous electronic agents. Because autonomous electronic agents operate in a random and unpredictable manner, it appeals to one as commercially sensible and fair that the contractual liability of the users of such devices should be premised on the paradigm of the "scope of authority."

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84 As Ghoshray 2004-2005 *Texas Wesleyan Law Review* 620. See also Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 423; Bellia Jr 2001 *Emory Law Journal*1071-1071.

85 Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 423.

6.4.2 The analysis of offer and acceptance in automated transactions

Having dealt above with the issue of the basis of contractual liability in automated transactions, a turn shall be made at this point to analyse automated transactions in terms of offer and acceptance from the perspective of US law. Concerning the requirement of an offer, the discussion will concentrate mainly on the issue whether proposals made through electronic agents are offers or invitations to treat? Concerning the requirement of acceptance, the discussion will concentrate mainly on the issue whether an automated reply is a valid acceptance for purposes of contract formation, or whether it is a mere acknowledgement of receipt?

6.4.2.1 Offers and invitations to treat

Neither the UETA nor the UCITA address the issue whether the advertisement of goods for sale on automated websites constitutes a firm offer or an invitation to treat. The issue in that regard is whether the fact of automation of a trading website affects the classification of advertisements posted thereon into offers or invitations to treat? By automation in this context is meant the ability of a trading website to automatically process purchase orders, and at times to perform contracts by allowing visitors to download items or information.

Traditional contract law in the US proceeds on a rebuttable presumption that the advertisement of goods for sale in newspapers does not constitute an offer but an invitation to treat. This has been held to be so in numerous decisions,[86] including *O'Keefe v Lee Calan Imports Inc*.[87] In that case, the defendant advertised a station wagon for sale in a local newspaper. The plaintiff had gone to the store of the defendant to inspect the wagon and arrange for its purchase. Although the

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[86] See *Ehrlich v Willis Music Co* (Ohio App), 113 NE 2d 252 (1952); *People v Gimbel Bros* 202 Misc 229, 115 NYS2d 857 (1952); *Foremost Pro Color Inc v Eastman Kodak Co* 703 F.2d 534, 539 (9th Cir.1983); *Arnold Pontiac-GMC Inc v General Motors Corp* 786 F.2d 564, 571-72 (3d Cir.1986); *Lane v Hopfeld* 160 Conn. 53, 273 A.2d 721 (1970); *Montgomery Ward & Co v Johnson* 209 Mass. 89, 95 N.E. 290 (1911); *Osage Homestead Inc v Sutphin,* 657 S.W.2d 346 (Mo.App.1983). For a discussion of some of these cases, see Cohen 2000 *Missouri Law Review* 553-569; Warner Jr 1956 *Louisiana Law Review* 226-229. The rule stated above is equally applicable to public auctions, s § 28 1(a) of the *Restatement of Contracts*, and to other forms of advertisements such as catalogues and shop window displays.

[87] *O'Keefe v Lee Calan Imports Inc* 128 Ill. App.2d 410 (1970) (hereinafter referred to as *O'Keefe v Lee Calan Imports Inc*).

defendant initially agreed to sell the wagon to the plaintiff, it subsequently refused to perform on the ground that the newspaper company had mistakenly advertised a lower unintended price. The plaintiff instituted an action against the defendant, alleging that the advertisement was an offer, which offer he had accepted.[88] The issue before the court was whether or not an agreement had been formed between the parties? The court held that there was no contract between the parties because the advertisement was not an offer but an invitation to treat.[89]

The rule that an advertisement is an invitation to treat applies with equal effect even in instances where the advertisement in issue is accompanied by a purchase order form.[90] In the decision of *Mesaros v US,*[91] and *Alligood v Procter & Gamble Co*,[92] it has been held that the inclusion of a purchase order form in a catalogue does not *ipso facto* make the catalogue a firm offer. The filling and dispatch of a purchase order form does not, therefore, constitute an acceptance but an offer from the customer to the trader. Considered in the context of present considerations, it may be concluded from the foregoing that the inclusion of an electronic purchase order form for the purchase of goods advertised on a trading website does not make the advertisements posted on that website offers. A website advertisement is an invitation to treat. The completion and dispatch of an electronic purchase order form is an offer, which offer the trader is free to accept or reject at will. It is in this sense that contemporary scholars in the US have argued that the original offer remains "…in the control of the customer ordering goods per mouse click or per e-mail."[93]

The foregoing conclusion is, however, rebuttable. As noted by the court in the matter of *Je Ho Lim v The TV Corporation International*:[94]

> [A]n advertisement can constitute an offer, depending on how it is phrased and perhaps on other circumstances.

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88 *O'Keefe v Lee Calan Imports Inc* 411.

89 *O'Keefe v Lee Calan Imports Inc* 413.

90 See amongst others *Chicago Joint Board, Amalgamated Clothing Workers of America, AFL-CIO v Chicago Tribune Co* 307 F.Supp. 422, 424 (N.D.Ill.1969); *Bissell Carpet Sweeper Co v Masters Mail Order Co* 140 F.Supp.165, 172 (D.Md.1956).

91 *Mesaros v US* 845 F.2d 1576 (1988) 1580 (hereinafter referred to as *Mesaros v US*). See case as discussed by Cohen 2000 *Missouri Law Review* 558.

92 *Alligood v Procter & Gamble Co* 72 Ohio App.3d 309 (1991).

93 Thot and Behling "United States" 688.

94 *Je Ho Lim v The TV Corporation International* Super Ct No BC 236227.

The Supreme Court of Minnesota in *Lefkowitz v Great Minneapolis Surplus Store Inc* held in light of the words used that an advertisement in a newspaper was a firm offer.[95] The defendant in that case had published on two occasions an advertisement reading "SATURDAY 9 A.M. SHARP, 3 BRAND NEW FUR COATS Worth to $100.00, First Come First Served, $1 EACH." On both occasions, the defendant refused to sell the coats to the plaintiff even though he was the first to show up. In refusing to sell to the plaintiff the defendant mentioned that in terms of the store policy, the advertisements were intended for women not men. The plaintiff instituted an action against the defendant for breach of contract. The issue before court was whether the advertisement was an offer or an invitation to treat? Holding for the plaintiff, the court found that the advertisement in issue was an offer because its wording was "…clear, definite, and explicit, and left nothing open for negotiation."[96] The plaintiff had duly accepted that offer by being the first customer to show up at the store.[97]

In borderline cases, *i.e.* in instances where it is not clear from the wording or circumstances of a case whether an advertisement is an offer or an invitation to treat, resort will be had to the objective theory of contract.[98] As stated by the court in *Mesaros v US*:[99]

> …whether an offer has been made depends on the objective reasonableness of the alleged offeree's belief that the advertisement or solicitation was intended as an offer.

Argument may be made that where the merchant making an advertisement is a public trader, it would be unreasonable for a customer to construe the advertisement as an offer seeing the trader's limitation of stock. In *Mesaros v US*,[100] the court continued that:

> Generally, it is considered unreasonable for a person to believe that advertisements and solicitations are offers that bind the advertiser. Otherwise, the advertiser could

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95 *Lefkowitz v Great Minneapolis Surplus Store Inc* 86 N.W. 2d 689 (Minn. 1957) (hereinafter referred to as *Lefkowitz v Great Minneapolis Surplus Store Inc*).
96 *Lefkowitz v Great Minneapolis Surplus Store Inc* 192.
97 *Lefkowitz v Great Minneapolis Surplus Store Inc* 192.
98 Murray *Murray on Contracts* 39.
99 *Mesaros v US* 845 F.2d 1576 (1988) 1580 1581.
100 *Mesaros v US* 845 F.2d 1576 (1988) 1580 1581.

be bound by an excessive number of contracts requiring delivery of goods far in excess of amounts available.[101]

If such was not so, it is conceivable that a trader would be exposed to numerous lawsuits for his failure to perform.[102]

What then is the final conclusion in relation to advertisements of goods for sale on automated commercial websites? The conclusion, it is submitted, will depend on the reasonableness of the customer in construing the advertisement as an offer. *Prima facie*, advertisements posted on such websites may be said to be invitations to treat. A reasonable customer understands very well that the trader operating the website has a limited stock, and therefore that he would be greatly prejudiced if he was enjoined to perform every purchase order placed on the website. On the other hand, a reasonable online buyer may construe an advertisement as an offer based on a number of factors. For instance, an advertisement of downloadable material can reasonably be construed as a firm offer. This is so because the stock or supply of digital goods cannot be depleted, meaning that a trader who advertises such goods for sale cannot be inundated by purchase orders.[103] A reasonable online buyer understands furthermore that, by automating a commercial website, a trader has impliedly waived the right to exercise his personal discretion on whether or not to accept purchase orders.[104]This is so because, when a trader uses an automated website to conclude agreements, the website will automatically accept a purchase order if and when the purchase order form is correctly completed and payment successfully processed.[105] Of course, the terms and conditions of the trader will almost always invariably play a dominant role in deciding the issue. Therefore, notwithstanding the reasonableness of the customer in assuming that a trader who advertises goods for sale on an automated website makes an offer, those

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101 See also *Moulton v Kershaw* 18 N.W. 172 (1884).

102 Thot and Behling "United States" 688.

103 See Mik 2007 http://works.bepress.com/elizamik/7/, stating that "…as digital products or the contents of the website never run out of stock, the risk of over-acceptance is often absent."

104 Mik 2007 http://works.bepress.com/elizamik/7/, stating that "[i]t can also be assumed that in the majority of circumstances the final choice regarding whether to contract need not be retained: why would the web-merchant refuse to contract in a mass-market transaction where the identity of the other party is generally irrelevant and almost impossible to verify? The reservation of such choice is only necessary when the creditworthiness of the other party must be examined."

105 See Middlebrook and Muller 2000 *The Business Lawyer* 346.

advertisements will nevertheless be construed as invitations to treat if the trader has reserved the right to be bound subject to the availability of stock.

6.4.2.2 Automated replies and acceptances

A direct answer to the question whether an automated reply is a valid acceptance for purposes of agreement formation can be found in both the UETA and UCITA. Under the UETA, if the words used in an automated reply indicate a clear acceptance of a purchase order placed by a customer, it will be construed to be a valid acceptance binding on the user of the electronic agent or automated website. An automated reply or response is binding because the words used therein are attributed to the user of the electronic agent which generated them. The mere fact that the reply is generated by an electronic agent without the awareness or review of its user does not affect its legal effect as an acceptance. However, an automated reply will not conclude a contract if it is found to be an acknowledgement of receipt, as opposed to an acceptance. In terms of § 15 (f) of the UETA, an acknowledgement of receipt generated by an information system only serves to establish that "… a record was received…." It is easily conceivable that there may be difficult cases in which it is not readily clear whether an automated reply in an acceptance or a mere acknowledgement of a data message containing an offer. Nimmer advices in such instances that:[106]

> The distinction does not and should not turn on whether the response was triggered automatically. The capability to create an automated acceptance system rests fully within the range of conduct that, under general contract law, constitutes a form of acceptance sufficient to create a contract. Yet, some methodology should be created for stabilizing the distinction in practice between electronic confirmation that an offer was received and electronic acceptance of that offer.

In terms of § 206 (a) of the UCITA, an automated response will be considered as a valid acceptance if the electronic agent in issue engages "…in operations that under the circumstances indicate the acceptance of an offer…." Therefore, words and conduct on the part of an electronic agent will be predominately indicative of whether or not an automated reply is an acceptance. However, one needs keep it in mind that, under the UCITA, the words and operations of an electronic agent will

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[106] Nimmer 1996 *John Marshall Journal of Information Technology and Privacy Law* 217.

only binds the user if they fall within the scope of the purpose for which that electronic agent was selected. Therefore, notwithstanding that the words or operations of an electronic agent are indicative of an acceptance; that acceptance will not bind the user if the electronic agent in issue was not selected for purposes of making an offer. This approach, it is submitted, will be helpful in cases where it is not clear from the words of an automated reply whether it is an acceptance or an acknowledgement of receipt. If an electronic agent was selected for purposes of making an acknowledgement of receipt, a reply generated thereby will not be construed as a valid acceptance for purposes of contract formation. As Nimmer explains:[107]

> …there must be some indication that the automated system was intended to signify acceptance, rather than merely to confirm receipt. Modern communications systems make possible immediate and routine confirmation of the receipt of an offer and even of the terms of the offer. This confirmation can be an important safeguard against garbled messages and other system-based problems. Merely issuing a confirmation of receipt of the offer cannot create a contract, whether confirmation occurs automatically or by action of a human actor.

6.4.3 The time and place of contract formation in automated transactions

As a general matter, US law adopts the same theories as South African law concerning the time and place of contract formation. These theories are discussed in detail below.

6.4.3.1 The time and place of contracts concluded by post

For contracts concluded by post and telegram, the *Restatement of Contracts* provides that:[108]

> [A]n acceptance made in a manner and by a medium invited by an offer is operative and completes the manifestation of mutual assent as soon as put out of the offeree's possession, without regard whether it ever reaches the offeror….

The earliest decision cited in US law in support of this rule is *Adams v Lindsell*.[109] That case concerned a contract for sale of wool between the defendants, being

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107 Nimmer 1996 *John Marshall Journal of Information Technology and Privacy Law* 217.

108 § 63.

109 *Adams v Lindsell* 1 B. & Ald. 681 (1818).See case as reported by Fuller and Eisenberg *Basic Contract* 341-342; Simpson *Contracts* 54-56.

dealers in wool at St. Ives, and the plaintiffs, being wool manufacturers in Bromsgrove. The defendants wrote a letter to the plaintiffs on 2 September 1817 offering eight hundred tons of wether fleeces, and requesting a reply within 6 days by post. The said letter was, however, unfortunately misdirected by the defendants with the result that it was not received by the plaintiff until 5 September 1817. Upon receipt of the offer, the plaintiffs duly accepted the offer by post as requested by the offeror. The route of the post between St. Ives and Bromsgrove was through London, and the letter of acceptance was only received by the defendants on 9 September 1817. The letter of acceptance was clearly late, and the defendants had already sold the merchandise to another buyer on 8 September when they did not receive a reply from the plaintiffs as expected. The plaintiffs sued the defendants for non-delivery of the wool. The plaintiffs argued that the contract of sale in issue was concluded on 5 September when they posted their letter of acceptance to the defendants. The defendants argued on the other hand that the contract was concluded on the 9 September when they actually received the letter of acceptance, and the said acceptance was ineffective because they had already retracted their offer by selling to another buyer. Therefore, the issue for decision was about the time of formation of the contract in issue. The court held that the contract was concluded upon the posting of the letter of acceptance by the plaintiffs on 5 September.

Unlike in South African law, the basis of the postal rule in US law is not so much commercial convenience. The postal rule in US law is based on a fiction that a party who makes his or her offer by post authorises the offeree to make acceptance by post, and effectively makes the post office his or her agent for receiving acceptance.[110] Acceptance communicated by post consequently becomes effective once the letter of acceptance is left with that agent.[111]

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[110] See *Dickey v Hurd* 33 F.2d 415 (1st Cir. 1929) (hereinafter referred to as *Dickey v Hurd*) discussed by Fuller and Eisenberg *Basic Contract* 347.

[111] See Murray *Murray on Contracts* 103. It must be made clear in that regard that, if the offeror did not authorise (whether expressly or impliedly) communication of acceptance by post, acceptance made by post does not in fact come into effect upon posting of the letter of acceptance. Acceptance in that instance must actually come to the knowledge of the offeror. This was illustrated in the matter of *Dickey v Hurd* where the court noted that "…in this case, although the

6.4.3.2 The time and place of contracts concluded by instantaneous modes of communication

Concerning contracts by telephone, the *Restatement of Contracts* provides that:[112]

> Acceptance by telephone or other medium of substantially instantaneous two-way communication is governed by the principles applicable to acceptances where the parties are in the presence of each other.

Where contracting parties are in the presence of each other, *i.e. inter praesentes*, acceptance becomes effective once the words or signs used to communicate acceptance are heard or seen, and understood by the offeror.[113] For acceptances communicated by telephone and other instantaneous modes of communication, it follows logically that such acceptances will become effective once they are heard by the offeror.

6.4.3.3 The time and place of conclusion of electronic contracts

As with the ECT Act in South Africa, US law adopts the reception theory to determine the time and place of conclusion of electronic contracts. The UETA provides concerning the time of receipt of data messages (referred to as electronic records in that statute) that:[114]

> Unless otherwise agreed between a sender and the recipient, an electronic record is received when:
>
> (1) it enters an information processing system that the recipient has designated or uses for the purpose of receiving electronic records or information of the type sent and from which the recipient is able to retrieve the electronic record; and
>
> (2) it is in a form capable of being processed by that system.

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offer was by mail, the acceptance was by telegraph, and not being sent through the medium, it cannot be said that Mr. Hurd authorized an acceptance by telegraph and constituted that medium his agent to receive the acceptance. In this situation the acceptance, when delivered at the telegraph office, was neither actually nor constructively communicated to Mr. Hurd, and the contract was not consummated, until it was ever consummated, until the telegram was delivered to Mr. Hurd…." See decision as quoted by Fuller and Eisenberg *Basic Contract* 347.

112 § 64.

113 Murray *Murray on Contracts* 103.

114 § 15 (b).

If an electronic record communicating the acceptance of an offer fulfils these conditions, it will be considered to have been received by the recipient, consequently to have concluded a contract. These conditions are discussed in full below.

As a starting point, it is important to note that, in terms of § 15 (e) of the UETA, an electronic record will be considered to have been received by the intended recipient even if he or she is not aware of its receipt. The official commentary explains in that regard that:[115]

> Subsection (e) makes clear that receipt is not dependent on a person having notice that the record is in the person's system. Receipt occurs when the record reaches the designated system whether or not the recipient ever retrieves the record. The paper analog is the recipient who never reads a mail notice.

For purposes of present considerations, § 15 (e) of the UETA may be interpreted to mean that acceptances received by electronic agents without the immediate awareness of their uses are valid and binding.

The first condition is that an electronic record must actually enter the recipient's information processing system. As explained by the NCCUSL,[116] this condition is intended to ensure that the sender of an electronic record does not avoid receipt by "…leaving messages with a server or other service..." which is not accessible by the intended recipient. This condition is also intended to ensure that the recipient "…retains control of the place of receipt...."[117] These objectives are met by granting the recipient a right or opportunity to designate the information processing system to which communications relating to a particular transaction must be sent. Therefore, an electronic record that is delivered to a different information processing system from the one designated by the recipient will not be considered to have been received.[118] If the recipient has not designated an information processing system to

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115 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 47-48.

116 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 47.

117 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 47.

118 See National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 47, stating that "…the recipient retains the ability to designate a home e-mail for personal matters, work e-mail for official business, or a separate organizational e-mail solely for the business purposes of that organization. If A sends B a notice at his home which relates to

which electronic records must be sent in relation to a particular transaction, electronic records sent to an information processing system that he or she uses for purposes of receiving information of the type concerned will be considered to have been received.

The second condition for the receipt of electronic records is that an electronic record must be communicated in a form capable of being processed by the recipient's information processing system. Therefore, if an electronic record enters the recipient's information processing system in a form which is not capable of being processed by that system, it will be considered to have never been received by the intended recipient. This provision is very relevant to automated transactions where contracts are concluded and performed by computers without the direct intervention of human beings. It is very important in automated transactions that an acceptance must be communicated in a form that the recipient's electronic agent is capable of processing.

Concerning the place of contract formation, the UETA provides as a general matter that:[119]

> Unless otherwise expressly provided in the electronic record or agreed between the sender and the recipient, an electronic record is deemed … to be received at the recipient's place of business.

According to § 15 (c), an electronic record will be deemed to have been received at the recipient's place of business:

> ...even if the place the information processing system is located is different from the place the electronic record is deemed to be received under subsection (d)

Therefore, in determining the place of receipt of an electronic record, attention will be paid to the place of business of the recipient, as opposed to the physical location

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business, it may not be deemed received if B designated his business address as the sole address for business purposes. Whether actual knowledge upon seeing it at home would qualify as receipt is determined under the otherwise applicable substantive law."

[119] § 15 (d).

of the information processing system.[120] Concerning the manner of ascertaining the place of business of the recipient, the UETA provides that:[121]

> If the ... recipient has more than one place of business, the place of business of that person is the place having the closest relationship to the underlying transaction.

An underlying transaction is the main or primary transaction between contracting parties, which is distinguishable from other ancillary or secondary transactions related thereto. For instance, where parties to a contract of sale agree to solve any dispute arising from that contract by arbitration, the contract of sale in that example is the underlying transaction. The arbitration agreement in that instance is only secondary or ancillary to the sale contract. The effect of § 15 (d) (1) is that, where the recipient of a data message has more than one place of business, a contract will be taken to have been concluded at his or her place of business which has the closest relationship to the underlying contract. Whether or not a place of business has the closest connection to a contract will obviously dependent on the individual facts of a case, which relieves one from the onerous task of developing hard and fast rules in that regard.

If the recipient has no place of business, § 15 (d) (2) will be applicable in determining the place of receipt of electronic records. According to that provision:

> If the ... recipient does not have a place of business, the place of business is the … recipient's residence, as the case may be.

In the opinion of the current researcher, the provisions of the UETA concerning the place of receipt of electronic records will be very helpful in determining the place of contract formation in automated transactions (especially in cases of transactions concluded by mobile electronic agents). Because the actual location of an information system is irrelevant for purposes of determining the place of receipt of an electronic record, acceptances received by mobile electronic agents will be deemed to have been received at the place of business or place of residence of their users. In this manner, courts of law are relieved from the difficult task of

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120 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 47.

121 § 15 (d) (1).

determining the actual location at which acceptances were received by electronic agents.

The UCITA provides that:[122]

> Receipt of an electronic message is effective when received even if no individual is aware of its receipt.

The term "receipt" is defined in the same statute to mean:[123]

> …coming into existence in an information processing system …in a form capable of being processed by or perceived from a system of that type by a recipient….

Official commentary on the meaning of the word "receipt" makes it clear that an electronic message will be considered to have been received by the intended recipient even if he or she is not aware thereof.[124]

As with the UETA, it is clear from the definition of the word "receipt" in the above quotation that, for an electronic message to be considered as having been received by the intended recipient, it must be in a form capable of being processed by his or her information system. Most important to this research, official commentary on the aspect of "processability" of an electronic message mentions that:

> The message must be capable of being processed by an ordinary system of the type involved. This refers to the type of system in its general, reasonably expected configuration and not to an atypical configuration known or knowable only to the party operating the system. Whether the message actually is processed is not relevant to receipt; similarly, a letter placed in a party's post office box is received even if not opened.[125]

This commentary sheds light on what it means that an electronic message must be capable of being processed by the recipient's information system. This requirement means that an electronic message must be in a format that an ordinary information

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122 § 214 (a).

123 § 102 (53) (B) (II).

124 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 28, stating that " [t]he message is 'effective' when received, not when read or reviewed by the recipient, just as written notice is received even if not read or acknowledged. This applies traditional common law theories to electronic commerce. In electronic transactions, automated systems can send and react to messages without human intervention. A rule that demands human assent would add an inefficient and error prone element or inappropriately cede control to one party."

125 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 28.

system of the kind or type used by the recipient is able to process. It is, consequently, not necessary that a data message must be specifically formatted to suit the configuration or programming of the information system of the recipient. On the contrary, it merely suffices that the format used is the one usually "processable" by information systems of that type.

In the context of automated transactions, the foregoing rules of the UCITA may be translated to mean that an acceptance will be considered to have been received by the electronic agent of the offeror when it enters that electronic agent in a form which that electronic agent can process. Concerning the form or format in which an acceptance must be communicated to an electronic agent, it is clear from the foregoing discussion that the message of acceptance must be in a format that an electronic agent of the type used by the offeror is capable of processing. A message of acceptance generated in such a format will be regarded to have been received by the offeror even if his or her electronic agent is unable to process that particular format. Therefore, for purposes of receipt, it does not matter under the UCITA whether the offeror's electronic agent has actually processed the message of acceptance. It is sufficient that the message of acceptance has entered the offeror's electronic agent in a form processable by an ordinary electronic agent of that type.

Concerning the place of conclusion of electronic contracts, the official commentary on the meaning of the word "receipt" under the UCITA mentions that:[126]

> With respect to notices, a notice is received when a message is delivered to a place designated or held out by the recipient for such notices even if the place is controlled by a third party.

A contract is therefore concluded where a message of acceptance is actually received by the addressee or recipient. The place in issue must be either a place that has been designated by the addressee for receipt of messages, or a place that he or she has held out for receipt of messages.[127] If the place to which a message is

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126 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 28.

127 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 28, stating that "[t]he definition [of 'receipt'] is met by arrival at a location onlyif the person holds out that location or system as a place for receiving notices of the kind."

addressed is different from the one designated or held out by the addressee, such a message will be regarded to have never been received by the addressee. Note must be taken that a message is considered to have been received by the addressee at a designated or held out place even if that place is controlled by a third party. For instance, if a company situated in Kentucky uses the services of a VAN situated in New Jersey to transmit and receive messages, a message will be considered to have been received by that company in New Jersey.

Where no place has been designated or held out for receipt of messages, the UCITA lists a number of rules which may be used to decide the law applicable to that contract, especially in international or cross-border contracts.[128] Where a contract involves electronic delivery of a copy of an item, a contract will be governed "…by the law of the jurisdiction in which the licensor was located…" when the agreement was concluded.[129] Where the contract involves delivery of a copy on a tangible medium, *e.g.* a CD or DVD, that contract will be governed by the law of the jurisdiction in which "…the copy is or should have been delivered to the consumer."[130] In all other cases, a contract will be governed by the law having the closest relationship to the contract.[131] Official commentary mentions in this regard that:[132]

> Applying this test requires consideration of factors including the: (a) place of contracting, (b) place of negotiation, (c) place of performance, (d) location of the subject matter of the contract, (e) domicile, residence, nationality, place of incorporation and place of business of one or both parties, (f) needs of the interstate and international systems, (g) relative interests of the forum and other interested states in the determination of the particular issue, (h) protection of justified expectations of the parties, and (i) promotion of certainty, predictability and uniformity of result.

Concerning the manner of determining the place or jurisdiction in which a party is situated or located, the UCITA provides that:[133]

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128 § 109.
129 § 109 (b) (1).
130 § 109 (b) (2).
131 § 109 (b) (3).
132 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 56.
133 § 109 (d).

> …a party is located at its place of business if it has one place of business, at its chief executive office if it has more than one place of business, or at its place of incorporation or primary registration if it does not have a physical place of business. Otherwise, a party is located at its primary residence.

While it might be fairly easy in EDI transactions and transactions concluded by vending machines to determine that a party has designated or held out a specific place for receipt of acceptance, it will be very difficult to determine a place of formation of an automated transaction concluded on the internet. It is submitted that the rules of § 109 discussed above will be very helpful in determining the place of contract formation for internet based automated transactions, or at least the governing law of such transactions.

6.5 The inclusion of standard terms and conditions in automated transactions

A turn shall be made at this juncture to discuss the validity and enforceability of internet contracts, namely click-wrap and web-wrap agreements in US law. The main focus of the discussion shall be to ascertain the conditions under which standard terms and conditions incorporated into internet transactions are enforceable, and to determine whether or not there are reliable guidelines for the proper incorporation of standard terms and conditions in internet contracts in US law.

Concerning statutory law, it shall be recalled that the UETA and the UCITA grant legal validity and enforceability to contracts concluded between electronic agents and human actors. In terms of § 14 (2) of the UETA, a contract between an electronic agent and a human being will be concluded whenever the concerned human actor:

> ...performs actions that …[he or she] is free to refuse to perform and which … [he or she] knows or has reason to know will cause the electronic agent to complete the transaction or performance.

As illustrated above,[134] this provision grants legal validity and enforceability to click-through processes. This provision was interpreted above to mean that the terms and conditions of the user of an electronic agent must be made available for review by

[134] See para 6.2.2 above.

an individual interacting with that electronic agent to form a contract,[135] furthermore that the clicking of an assent button by that individual will be construed as a signature.[136] However, § 14 (2) makes it clear that an individual interacting with a electronic agent to form a contract will only be bound if he or she knows or has reason to know that his or her actions "…will cause the electronic agent to complete the transaction or performance." Therefore, if an individual clicks an assent button without actual or constructive knowledge that such conduct "…will cause the electronic agent to complete the transaction or performance," he or she will not be bound by the resultant agreement.

As with the UETA, the UCITA provides in § 206 (b) that a valid and enforceable contract will be formed between an electronic agent and a human actor if he or she:

> …takes an action or makes a statement that the individual can refuse to take or say and that the individual has reason to know will:
>
> (1)cause the electronic agent to perform, provide benefits, or allow the use or access that is the subject of the contract, or send instructions to do so; or
>
> (2) indicate acceptance, regardless of other expressions or actions by the individual to which the individual has reason to know the electronic agent cannot react.

For purposes of present considerations, this provision must be read in conjunction with § 112 (a), which provides that:

> A person manifests assent to a record or term if the person, acting with knowledge of, or after having an opportunity to review the record or term or a copy of it:
>
> (a) authenticates the record or term with intent to adopt or accept it; or
>
> (b) intentionally engages in conduct or makes statements with reason to know that the other party or its electronic agent may infer from the conduct or statement that the person assents to the record or term.

These provisions clearly grant legal validity and enforceability to click-through processes. As with § 14 (b) of the UETA, § 206 (b) and § 112 (a) of the UCITA require that a person interacting with an electronic agent to form an agreement must be given an opportunity to review the terms and conditions of the user of an electronic agent. These provisions require furthermore that an individual interacting

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135 See para 6.2.2 above.
136 See para 6.2.2 above.

with an electronic agent to form a contract must have reason to know that his or her actions will cause that electronic agent to conclude a contract or infer assent. Therefore, a person who clicks on an assent button without knowledge that such conduct will cause an electronic agent or its user to infer assent will not be bound by the resultant contract and its terms. Unlike the UETA, the UCITA does not consider the click of an assent button to constitute a signature.

Having considered the legislative framework for the validity and enforceability of click-through processes, a turn shall be made at this juncture to discuss how courts of law in the US have dealt with such agreements.

6.5.1 Click-wrap contracts

That click-wrap agreements are valid and enforceable in the US is common cause.[137] As noted by the court in the matter of *Burcham v Expedia Inc*,[138] online agreements that require:

> A customer [to]…click a box on a website acknowledging…assent to the contract terms before he or she is allowed to proceed using the website…have been routinely upheld by circuit and district courts.

The general attitude of these courts is that a contract does not become less of a contract simply because it is concluded over the internet.[139]In upholding click-wrap agreements, courts in the US have applied the principles of traditional contract law.[140] The first of these principles is that the customer must be given adequate or reasonable notice of the terms of the contract, and must have assented to those

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137 *Salco Distributors LLC v iCode Inc* 2006 WL 449156 (M.D.Fla. 2006) 2. See the following cases in which click-wrap agreements were upheld, *Segal v Amazon. Com Inc* 763 F. Supp. 2d 1367 (S.D. Fla. 2011) 1369-1370; *Treiber & Straub Inc v UPS Inc* 474 F.3d 379 (7th Cir. 2007); *Hotmail Corp v Van Money Pie Inc* 1998 U.S. Dist. LEXIS 10729 (N.D. Cal. April 16, 1998). In those cases where courts have refused to enforce click-wrap agreements, it is mainly because they contain a clause or number of clauses which are either unreasonable or unconscionable, see *Doe I V AOL LLC* 552 F.3d 1077 (9th Cir. 2009); *Dix v ICT Group Inc* 125 Wash. App. 929 (Wash. App. Div. 3, 2005); *Aral v Earthlink Inc* 134 Cal. App. 4th 544, 36 Cal. Rptr. 3d 229 (Cal. App. 2 Dist., 2005). The latter cases are discussed by Anderson 2007 *Shilder Journal of Law, Commerce and Technology* paras 1-23.

138 *Burcham v Expedia Inc* No. 4:07CV1963, 2009 WL 586513 (E.D.Mo. March 6, 2009) 2 (hereinafter referred to as *Burcham v Expedia Inc*).

139 *Forrest v Verizon Communications Inc* 1011.

140 *Burcham v Expedia Inc* 2.

terms.[141] The second principle is that absent fraud and mistake, a party who signs a contract which he or she has had an opportunity to read will be bound thereby.[142] The validity and enforceability of click-wrap agreements usually depends on whether the customer was given reasonable notice of the terms and conditions of a website.

In the matter of *Forrest v Verizon Communications Inc*,[143] the appellant instituted a class action against the defendant for misrepresentation and violation of Virginia's consumer protection laws. The defendant offered high speed internet services, and required customers to subscribe online for the services. The appellant had subscribed for the services of the defendant, but never received the services he had bargained for until he unsubscribed. Other customers who had received the services had experienced constant interruption of their internet connection, and the speed of the internet was much lower than promised; hence the class action against the defendant. On its behalf, the defendant asked the court to dismiss the action based on a forum-selection clause in its standard terms and conditions. The clause stated that all disputes between the parties would be litigated before the courts of Fairfax County, Virginia.[144] The appellant argued that he was not given adequate notice of the terms and conditions, especially the forum-selection clause. To substantiate, the appellant argued that the click-wrap agreement in issue was too long (approximately 13 pages when printed in hardcopy),[145] and that the scroll box displaying the contract was very small.[146] The effect of these factors was that the appellant could only view a limited portion of the agreement at a time. The issue before court was whether the appellant was given adequate and reasonable notice of the forum-selection clause? The court held that the appellant was given adequate notice of the terms and conditions under the circumstances.[147] In reaching the decision, the court was of the view that use of a scroll box which displays only part of the terms at a

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141 *Feldman v Google, Inc* 513 F. Supp. 2d 229, 236 (E.D. Pa. 2007) 237-238.
142 *Nickens v Labor Agency of Metro Washington* 600 A.2d 813 (D.C.1991) 817.
143 *Forrest v Verizon Communications Inc* 805 A.2d 1007 (D.C. App. 2002) (hereinafter referred to as *Forrest v Verizon Communications Inc*).
144 Note that the appellant had instituted the matter in Colombia.
145 *Forrest v Verizon Communications Inc* 1010.
146 *Forrest v Verizon Communications Inc* 1010.
147 *Forrest v Verizon Communications Inc* 1010-1011.

time was not "inimical to the provision of adequate notice."[148] Moreover, the court found that for adequate notice, the clause in issue did not have to be placed in a section entitled "Limitations of Liability and Remedies."[149]

In *Fteja v Facebook Inc*,[150] the issue was similarly whether the plaintiff was given adequate notice of the terms and conditions of the defendant. The plaintiff had opened a Facebook account, but that account was subsequently closed by the defendant. The plaintiff instituted an action alleging that the closure of his account was discriminatory. In its defence, the defendant relied on a forum-selection clause stating that all disputes would be resolved in California.[151] The plaintiff argued that he was not given adequate notice of the terms and conditions, and did not recall ever consenting to them. To open an account with Facebook, the plaintiff had to go through several webpages on which he was requested to enter personal information. One of these webpages was the "Sign Up" page. Immediately below the "Sign Up" button was a sentence reading:

> By clicking Sign Up, you are indicating that you have read and agree to the Terms of Service.

The phrase "Terms of Service" in the foregoing sentence was underlined, which made it a hyperlink.[152] The issue before court was whether the hyperlink constituted

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148 *Forrest v Verizon Communications Inc* 1011, citing *Kilgallen v Network Solutions Inc* 99 F.Supp.2d 125, 129-30 (D.Mass.2000).

149 *Forrest v Verizon Communications Inc* 1010, citing *Vitricon Inc v Midwest Elastomers Inc* 148 F.Supp.2d 245, 247(E.D.N.Y.2001); *Caspi v MicrosoftNetwork L.L.C.* 323 N.J.Super.118, 732 A.2d 528, 532 (App.Div.1999).

150 *Fteja v Facebook Inc* 2012 U.S. Dist. LEXIS 12991 (S.D.N.Y. 2012) (hereinafter referred to as *Fteja v Facebook Inc*). The electronic copy used for this work is available at http://madisonian.net/downloads/contracts/fteja.pdf, and unfortunately has no page numbers.

151 Note that the action was instituted in New York.

152 The case is interesting because, as noted by the court, the effect of introducing terms via a hyperlink was that the contract in issue included elements of both click-wrap and web-wrap agreements. In the words of the court, "Facebook's Terms of Use are not a pure-form clickwrap agreement, either. While the Terms of Use require the user to click on 'Sign Up' to assent, they do not contain any mechanism that forces the user to actually examine the terms before assenting. By contrast, in assenting to a clickwrap agreement, 'users typically click an 'I agree' box after being presented with a list of terms and conditions of use . . .' Hines, 668 F.Supp.2d at 366 (emphasis added). Facebook's Terms of Use are somewhat like a browsewrap agreement in that the terms are only visible via a hyperlink, but also somewhat like a clickwrap agreement in that the user must do something else—click 'Sign Up'—to assent to the hyperlinked terms. Yet, unlike some clickwrap agreements, the user can click to assent whether or not the user has been presented with the terms," See Fteja *v Facebook Inc*http://madisonian.net/downloads/contracts/fteja.pdf.

adequate notice of the terms of service?[153] The court held that the hyperlink constituted adequate notice despite the fact that the terms of service were made available on a different webpage from that on which the plaintiff was required to indicate his assent thereto. In reaching the decision the court was of the view that to a modern internet user, the hyperlinked phrase "Terms of Use" is "…really a sign that says 'Click Here for Terms of Use." The plaintiff in this case was therefore not only given adequate notice, he was also notified of the consequence of his assenting click of the "Sign Up" button.

The last case that shall be discussed is *CoStar Realty Information Inc v Field*.[154] In that case, the plaintiff operated a website offering information on real property around the US. To obtain this information from the plaintiff's databases, customers had to register on the website. Upon completion of the registration process, a customer was given an ID and password to enable him or her to log into the website in order to access the information in the future. Upon logging into the website for the first time, a customer was presented with a pop-up screen containing terms and conditions, to which he or she was requested to click an assent button.

Alliance Valuation Group (hereinafter referred to as AVG) had subscribed for the services of the plaintiff. One of the terms to which AVG consented was that it would not share its ID and password with third parties. In violation of this term, AVG shared that information with two other defendants. For a period of approximately four years, the two defendants used the ID and password of AVG to access the databases of the plaintiff. Upon discovering this, the plaintiff sued AVG and the two other defendants. In their defence, the two defendants argued that they had no contractual relationship with the plaintiff because they had never consented to its terms and conditions. The court found that by using the ID and password of AVG,

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153 In light of the sentiments expressed in the foregoing footnote, the issue was formulated somewhat differently by the court. In formulating the issue, the court stated that "What result follows? Have terms been reasonably communicated where a consumer must take further action not only, as in a clickwrap agreement, to assent to the terms but also, as in a browsewrap agreement, to view them? Is it enough that Facebook warns its users that they will accept terms if they click a button while providing the opportunity to view the terms by first clicking on a hyperlink?" See *Fteja v Facebook Inc*http://madisonian.net/downloads/contracts/fteja.pdf.

154 *CoStar Realty Information Inc v Field* 612 F. Supp. 2d 660 (D. Maryland 2009) 669 (hereinafter referred to as *CoStar Realty Information Inc v Field*).

the two defendants were sub-licensees of the agreement between AVG and the plaintiff; therefore, that they were similarly bound by the terms and conditions of the plaintiff. In reaching the decision, the court cited the decision of *Motise v America Online Inc*,[155] in which it was held that a third party who uses a contracting party's account is bound by the terms and conditions to which that party agreed, despite the fact that such a third party was not presented with the terms and never assented to the online agreement.

From the foregoing decisions, several lessons can be inferred. The case of *Forrest v Verizon Communications Inc*[156] is authority for the rule that terms and conditions in click-wrap agreements will qualify as adequate notice even when presented in fine print. The length of the contract and the size of the scroll box in which it is presented will have little bearing on whether the customer was given adequate notice. What is determinative of the validity of the contract is whether the customer assented to the terms. From the case of *Fteja v Facebook Inc*,[157] the lesson can be deduced that for the validity of click-wrap agreements, terms and conditions do not necessarily have to be presented on the same webpage on which the customer is required to manifest his assent thereto. Terms and conditions can be presented through a hyperlink, which when clicked upon, leads to a different webpage. If the customer neglects to follow the link, and clicks on the "I Agree" button without reading the terms, he will still be bound. The case of *CoStar Realty Information Inc v Field*[158] is clear authority for the rule that a third party who neither read nor assented to the terms and conditions of a click-wrap agreement will be bound thereby if he or she takes advantage of the contract of a party who consented thereto.

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155 *Motise v America Online Inc* 346 F. Supp. 2d 563, 566 (S.D.N.Y.2004).
156 *Forrest v Verizon Communications Inc.*, 805 A.2d 1007 (D.C. App. 2002).
157 *Fteja v Facebook Inc* 2012 U.S. Dist. LEXIS 12991 (S.D.N.Y. 2012).
158 *CoStar Realty Information Inc v Field* 612 F. Supp. 2d 660 (D. Maryland 2009).

6.5.2 Web-wrap contracts

In *Specht v Netscape Communications Corp*,[159] a web-wrap agreement was held to be invalid because the plaintiffs were not given adequate notice of the licensing terms before they downloaded software from the website of the defendants. The terms and conditions in issue were placed at the bottom of a webpage, below the "download" button. The court in that case was of the view that:[160]

> …a reference to the existence of license terms on a submerged screen is not sufficient to place consumers on inquiry or constructive notice of those terms.

The court also found that the mere downloading of the software by the plaintiffs was not a sufficient manifestation of assent to the licensing terms of the defendants.[161] The precedent of this decision is therefore that for a web-wrap agreement to be valid, terms and conditions must be made available for review by customers before they can be said to have assented thereto. Similarly, a web-wrap agreement was held to be invalid in *Cven Inc v Eventbrite Inc*.[162] In that case, the terms and conditions of the plaintiff were made available through a hyperlink at the bottom of the website amongst twenty-eight other links.[163] The court held that the defendants were not given sufficient notice of the terms.[164] In *Pollstar v Gigmania Ltd*,[165] the court expressed the view that a browse-wrap agreement may be invalid where terms are presented through a hyperlink in a small gray text on a gray background.[166]

Apart from the cases discussed above, web-wrap agreements have been upheld in several decisions. In *Register.com Inc v Verio Inc*,[167] the plaintiff sold domain names on a website. Visitors were allowed to search information about customers on that website. The search results were accompanied with a notice that the information

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159 *Specht v Netscape Communications Corp* 306 F. 3d 17 (2d Cir. 2002) (hereinafter *Specht v Netscape Communications Corp*).
160 *Specht v Netscape Communications Corp* 32.
161 *Specht v Netscape Communications Corp* 32.
162 *Cvent Inc v Eventbrite Inc* 739 F. Supp. 2d 927 (E.D. Va. 2010) (hereinafter *Cvent Inc v Eventbrite Inc*).
163 *Cvent Inc v Eventbrite Inc* 933.
164 *Cvent Inc v Eventbrite Inc* 932.
165 *Pollstar v Gigmania Ltd* 170 F.Supp.2d 974 (2000) (hereinafter referred to as *Pollstar v Gigmania Ltd*).
166 *Pollstar v Gigmania Ltd* 981.
167 *Register.com Inc v Verio Inc* 356 F.3d 393 (2d Cir. 2004) (*Register.com Inc v Verio Inc*).

would not be used for advertising or e-mail solicitation. The defendant used an electronic agent to gather information from the said website, and used that information for marketing. The issue was whether the notice restricting the use of search results from the website of the plaintiff was valid, seeing that it was only communicated to the defendant after he had already submitted his search? In holding for the plaintiff, the court found that the defendant had visited and searched for information on the website of the plaintiff numerous times, so much in fact, that with every subsequent search he can be said to have already known of the notice that the information should not be used for marketing.[168] In *Hubbert v Dell Corp*,[169] the plaintiffs, who had purchased computers from the website of the defendant, sued it for false advertising. The defendant argued that its terms and conditions made available on the website through which the sale transactions were concluded provided for arbitration. The court held that the plaintiffs were bound by the arbitration clause because they had adequate notice of the defendant's terms and conditions.[170] The terms and conditions in issue were made available in blue hyperlinks on all five of the web pages that the plaintiffs had to pass through in completing their purchase orders.

What is easily gatherable from the foregoing decisions is that for the validity of web-wrap agreements, all which is required is that terms and conditions should be made conspicuous to customers. The mere fact that a customer is not required to click on an "I Agree" or "I Accept" button in order to manifest his assent does not affect the validity of web-wrap agreements. If terms and conditions are made conspicuous, a customer will be held to have assented thereto if he continues with the transaction.

6.5.3 The assent of an electronic agent to contractual terms

The UETA does not address the issue of how standard terms and conditions intended for assent by an electronic agent should be incorporated into a contract, particularly the issue whether such terms and conditions must be incorporated in a manner capable of being reviewed by an electronic agent prior to agreement

168 *Register.com Inc v Verio Inc* 401-402.
169 *Hubbert v Dell Corp* 835 N.E.2d 113 (Ill. App. Ct. 2005) (*Hubbert v Dell Corp*).
170 *Hubbert v Dell Corp* 121-122.

formation. However, it is worth noting, as a general matter, that the UETA places a requirement for electronic records to be generated in a form or format capable of being processed by the recipient's information processing system.[171] For purposes of present considerations, this requirement may be interpreted to mean that standard terms and conditions intended for assent by an electronic agent must be generated in a form or format capable of being processed by that device. Consequently, that requirement may be interpreted furthermore to mean that standard terms and conditions must be capable of being reviewed by an electronic agent prior to agreement formation.

Unlike the UETA, the UCITA contains an elaborate framework for the proper incorporation of terms and conditions intended for assent by an electronic agent. As shall be recalled, § 112 (b) of the UCITA empowers an electronic agent to manifest assent on behalf of its user. In terms of that provision:

> An electronic agent manifests assent to a record or term if, after having an opportunity to review it, the electronic agent:
>
> (1) authenticates the record or term; or
>
> (2) engages in operations that in the circumstances indicate acceptance of the record or term.

According to this provision, an electronic agent must be given an opportunity to review the terms of a contract before it can be said to have manifested assent thereto. In terms of § 113 (b) of the UCITA:

> An electronic agent has an opportunity to review a record or term only if it is made available in a manner that would enable a reasonably configured electronic agent to react to the record or term.

Therefore, if a party incorporates its standard terms and conditions in a manner that would enable a reasonably configured electronic agent to react thereto, the specific electronic agent with which that party is contracting will be taken to have had an opportunity to review those terms and conditions. This will be so, notwithstanding that, by reason of its programming or configuration, the specific electronic agent with which that party is contracting was actually not able to review the concerned

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171 § 15 (a) and § 15 (b).

terms and conditions. What matters is the fact that those terms and conditions were capable of being reviewed by a reasonably configured electronic agent.

Once it is established that standard terms and conditions were capable of being reviewed by a reasonably configured electronic agent, the specific electronic agent to which those terms and conditions were introduced for assent will be taken to have manifested assent if "[It] engages in operations that in the circumstances indicate acceptance…." In terms of § 112 (d):

> Conduct or operations manifesting assent may be proved in any manner, including a showing that … an electronic agent obtained or used the information or informational rights and that a procedure existed by which … an electronic agent must have engaged in the conduct or operations in order to do so.

One may conclude by summarising that, under the UCITA, the operations of an electronic agent will play a decisive role in determining whether or not it has manifested assent to standard terms and conditions. The burden of proving assent on the part of an electronic agent will rest with the party incorporating terms and conditions into a contract.

6.5.4 The battle of forms

A turn shall be made at this point to discuss the battle of forms in automated transactions, *i.e.* instances in which both parties seek to introduce their terms and conditions through electronic agents. Traditionally, US law applied the "mirror-image rule," also known in that jurisdiction as the "ribbon-matching rule," to the battle of forms.[172] According to this rule, a purported acceptance that introduces new terms over and above those proposed in the offer is not a valid acceptance but rather a counter-offer.[173] As explained by the court in one case,[174] to conclude a contract, an acceptance must be positive, unambiguous, unconditional and unequivocal, "…and must not add to, or qualify the terms [of] the offer." A conditional acceptance

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172 Calamari and Perillo *Contracts* 102.
173 Murray *Murray on Contracts* 111-112.
174 *Gyurkey v Babler* 103 Idaho 663, 651 P. 2d 928 (1982) as quoted by Calamari and Perillo *Contracts* 102.

cannot therefore result in a contract between the parties because it is, in essence, not an acceptance but a counter-offer.[175]

The relevance of this rule to the battle of forms is illustrated in the frequently cited case of *Poel v Brunswick-Blake-Collender Co*.[176] The case involved negotiations between the parties for the sale of rubber. On 4 April 1910, the plaintiff, being the seller, had sent a copy of the contract together with its standard terms and conditions for acceptance by the defendant, being the buyer. On 6 April 1910, the defendant requested the plaintiff to deliver the rubber at once, but included its own terms and conditions in that reply. One of the terms included in the reply was that the plaintiff should promptly acknowledge acceptance of the terms and conditions of the defendant. The plaintiff never acknowledged acceptance of those terms, but instead proceeded to ship the rubber. The defendant rejected the shipment and refused to pay the purchase price, wherefore the plaintiff sued. The issue before the court was whether there was a contract between the parties? Per Pound J, the court was of the view that the plaintiff's letter of 4 April was an offer to the defendant. Because it proposed new terms over those stated in that offer, the defendant's reply of 6 April was not an acceptance but a counter-offer. This counter-offer was never accepted by the plaintiff because it failed to acknowledge its acceptance of the terms proposed therein. Therefore, the inevitable conclusion was that no valid contract had been formed between the parties.[177]

In electronic commerce legislation, the mirror-image rule as discussed in the proceeding paragraphs has been extended to electronic transactions governed by the UCITA. In terms of § 205:

> …a conditional offer or acceptance precludes formation of a contract unless the other party agrees to its terms….

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175 See *Northrop Corporation v Litronic Industries*29F. 3d1173 (1994) 1174 in which the court stated that "At common law, any discrepancy between the forms would prevent the offeree's response from operating as anacceptance. There would be nocontractin such a case."

176 *Poel v Brunswick-Blake-Collender Co* 216 N.Y. 310, 110 N.E. 619 (1915) (hereinafter referred to as *Poel v Brunswick-Blake-Collender Co*).

177 See full record of the decision in Fuller and Eisenberg *Basic Contract* 525-529.

The same rule applies with equal effect in instances where conditions are introduced via standard forms.[178] Where a variation or condition is introduced through a standard form, it shall preclude formation of a contract so long as the conduct of the party proposing the variation or condition is consistent with the language used in its terms.[179] For instance, conduct will be regarded as consistent with the language if such a party refuses to perform, rejects performance of the other party or the benefits of a contract, until its terms and conditions are accepted.[180] As the commentary of §205 of the UCITA states:[181]

> If the party whose form is conditional on acceptance of its terms ignores that condition by its own conduct, the condition is not enforced....

There is no real dispute that the provisions of §205 of the UCITA will also apply to automated transactions. The application of the mirror-image rule to automated transactions will, however, conceivably be problematic. The first and main difficulty will lie in determining with a matter of accuracy which electronic agent made an offer, and which made a counter-offer or acceptance. This is conceivably problematic seeing that the whole bargaining process under such circumstances will occur in cyberspace beyond the reach of the human eye. Other likely difficulties will lie in determining whether or not an electronic agent had adequate notice of the terms and conditions introduced by another/the other, and whether its conduct was actually a manifestation of assent to those terms, or a mere mechanical function unrelated to the terms.

The UETA on the other hand is silent on the issue of the battle of forms. This silence implies that traditional contract law will apply. US law has since varied the "mirror-image" rule under both the *Restatement of Contracts* and the UCC. In terms of § 61 of the *Restatement of Contracts*:

> An acceptance which requests a change or addition to the terms of the offer is not thereby invalidated unless the acceptance is made to depend on the assent to the changed or altered terms.

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178 § 205 (1).
179 § 205 (1).
180 § 205 (1).
181 The National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 87.

This provision is inspired by the UCC,[182] which provides that:

> A definite and seasonable expression of acceptance or a written confirmation which is sent within a reasonable time operates as an acceptance even though it states terms additional to or different from those offered or agreed upon, unless acceptance is expressly made conditional on assent to the additional or different terms.

The additional terms are to be construed as proposals for addition to the contract. Between merchants, additional terms become part of the contract unless:

> (a) the offer expressly limits acceptance to the terms of the offer;
>
> (b) they materially alter it; or
>
> (c) notification of objection to them has already been given or is given within a reasonable time after notice of them is received.
>
> (3) Conduct by both parties which recognizes the existence of a contract is sufficient to establish a contract for sale although the writings of the parties do not otherwise establish a contract. In such case the terms of the particular contract consist of those terms on which the writings of the parties agree, together with any supplementary terms incorporated under any other provisions of this Act.[183]

As explained by the court in the matter of *Uniroyal Inc V Chambers Gasket & MFG Co*,[184] § 2-207 of the UCC"…was specifically designed to alter the common-law 'mirror-image' rule." Under both the *Restatement of Contracts* and the UCC, an acceptance is valid despite the fact that it introduces new terms over and above those proposed in an offer. The mere fact of it proposing new terms does not render a purported acceptance a counter-offer. Under the *Restatement of Contracts*, an acceptance that introduces new terms will, however, be invalidated if it specifically requires the offeror to assent or accept those new terms, just as was the case in *Poel v Brunswick-Blake-Collender Co*[185]discussed above. A determining factor will be

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182 American Law Institute *Restatement of the Law* 148. The main difference between the *Restatement of Contracts* and the UCC is that the provisions of the UCC are specifically limited to contracts between merchants, *i.e.* business-to-business transactions. The provisions of the *Restatement of Contracts* on the other hand will be applicable to business-to-customer, and customer-to-customer electronic contracts.

183 §2-207.

184 *Uniroyal Inc V Chambers Gasket & MFG Co* 380 N.E.2d 571 (1978) 575 (hereinafter *Uniroyal Inc V Chambers Gasket & MFG Co*). See also *Transwestern Pipeline Co v Monsanto Co* [No. B083489. Second Dist., Div. Seven. Jun 17, 1996.] para 2 similarly stating that "Section 2207 replaces the common law 'mirror image' rule which required an acceptance to 'mirror' the offer, i.e., to reiterate all terms and conditions exactly."

185 *Poel v Brunswick-Blake-Collender Co* 216 N.Y. 310, 110 N.E. 619 (1915).

the language used in the new term or condition.[186] Under the UCC, an acceptance that proposes new terms will be invalidated under the conditions stated in § 2-207 (2). Therefore, in the context of this research, the inevitable conclusion is that the battle of forms in automated transactions will not *ipso facto* preclude formation of the contract.

Specific attention must also be given to § 2-207 (3) of the UCC, which introduces the "knock-out" rule to the battle of forms. Under that provision, where the terms and conditions of the parties are in writing, as will inevitably be the case in automated transactions concluded between electronic agents *per se*, a valid agreement will be held to exist between the parties despite a conflict between the written terms of each party. Under such circumstances, the contract will be governed primarily by "… those terms on which the writings of the parties agree…." As explained by the court in the matter of *Transwestern Pipeline Co v Monsanto Co*,[187] the effect of § 2-207 (3) of the UCC is that "… all of the terms on which the parties' forms do not agree drop out...." Only those terms on which the terms and conditions of the parties agree remain to govern the contract.[188] In the context of this research, the knock-

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186 In one of its examples, the American law Institute *Restatement of the Law*148, mentions that a valid agreement will be formed where in response to an offer for 100 tons of steel, the offeree responds that "I accept your offer. I hope that if you arrange to deliver the steel in weekly instalments of 25 tons you will do so." The language of this acceptance does not require the offeror to assent or accept the proposed term, *i.e.* one relating to weekly instalments. A valid agreement will be formed between the parties, and the offeror is not mandated to perform in instalments.

187 *Transwestern Pipeline Co v Monsanto Co* [No. B083489. Second Dist., Div. Seven. Jun 17, 1996.] para 4.

188 Had it not been subsequently withdrawn, the 2003 revised Article 2 of the UCC would have formally extended the "knock-out" rule to electronic transactions. In terms of § 2-207 (i) (1) of that Article, it was similarly provided that "If (i) conduct by both parties recognizes the existence of a contract although their records do not otherwise establish a contract, (ii) a contract is formed by an offer and acceptance, or (iii) a contract formed in any manner is confirmed by a record that contains terms additional to or different from those in the contract being confirmed, the terms of the contract, subject to § 2-202, are: (1) terms that appear in the records of both parties…." In explanation of this provision, the Commentary gives the example that if both records of terms and conditions called for a resolution of disputes through arbitration, a court would find that the parties had agreed to solve their disputes through that mechanism. This is so despite variances in the arbitration clause, *e.g.* variances on the forum in which matters would be arbitrated. The Commentary goes further to state that trade customs and prior dealings would also be relevant in determining the terms applicable, see American Law Institute and National Conference of Commissioners on Uniform State Laws 2000 http://www.uniformlaws.org/shared/docs/ucc2and2a/21100.pdf. For a discussion of this provision, see Jurewicz 2005 http://law.bepress.com/cgi/viewcontent.cgi?article=3598&context=expresso.

out rule appears to be most relevant for automated transactions. This rule would solve many of the difficulties stated above in relation to the mirror-image rule. Under the knock-out rule, all that would be required is a matching of the records of standard terms and conditions of the parties, to uphold the terms on which those records agree, and knock-out those terms on which the records disagree. There is no need, therefore, to identify the electronic agent which made an offer, acceptance or counter-offer. Another benefit of the knock-out rule over the mirror-image rule is that it preserves automated transactions by upholding their validity and enforceability despite a battle of forms.

6.6 The treatment of mistake in automated transactions

6.6.1 Input errors

The UETA and UCITA address instances of input errors in a very similar manner to the South African ECT Act. The law of input errors in both statutes will be applicable where a person interacting with an electronic agent makes an error or mistake, and the electronic agent with which he is dealing does not provide him with an opportunity to correct or prevent his error.[189] In contrast to the South African ECT Act, however, the UETA and UCITA do not require that the error in issue must be material in order to vitiate a contract. It simply suffices that an error was committed, and no error prevention or correction techniques were provided by the electronic agent for the avoidance of that error. For an input error to vitiate a contract, there are a number of requirements which must be met by the party seeking to avoid the contract. The first requirement is that the party alleging an input error must promptly notify the user of the electronic agent of the error.[190] The UETA requires that such a party must specifically indicate in the notice that he did not "…intend to be bound by the electronic record received by the other person."[191] The second requirement is that the party who alleges an input error should take reasonable

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189 See § 10 (2) of the UETA, and § 213 of the UCITA. As far as it concerns input errors, the UCITA does not use the phrase "electronic agent," but "information processing system." It is clear, however, from the wording of § 213 (b) that the rules are applicable to automated transactions.

190 § 213 (b) (1) (A) of the UCITA.

191 § 10 (2) (a).

steps to return the performance already tendered by the other party.[192] He can also destroy that performance, or forward it to a third party if instructed to do so.[193] The last requirement is that the party seeking to avoid a contract on the basis of an input error should not have used or derived any benefit from the performance of the other party.[194]

6.6.2 Machine errors

Apart from input errors, the UETA and UCITA mention that all other forms of electronic mistake shall be governed by relevant laws, including by the law of mistake.[195] This is in great stark to the South African ECT Act, which provides that the malfunctions of an electronic agent *ipso facto* cannot yield a valid agreement between the parties.[196] The *Restatement of Contracts* defines a mistake as a "…a belief that is not in accord with the facts."[197] In terms of the same statute, a unilateral mistake will vitiate a contract if enforcement thereof would be unconscionable,[198] or if the other party had reason to know of the mistake or if the mistake was caused by his fault.[199] The foregoing notwithstanding, a unilateral mistake will nevertheless, however, result in a valid agreement in terms of the rules of the allocation of risk.[200] The risk of a mistake may be attributed to a party under the contract.[201] Risk may also be attributed to a party if, despite his limited knowledge about some facts relevant to the contract, he nevertheless agrees to be bound.[202] Lastly, the risk of a mistake may be attributed to a party by a court if it is reasonable to do so under the circumstances of a case.[203]

There is little doubt that the foregoing provisions of the *Restatement of Contracts* on mistake were drafted with specific reference to contracts formed between humans.

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192 § 10(2) (b) of the UETA and § 213 (b) (1) (B) of the UCITA.
193 §10(2) (b) of the UETA and §213 (b) (1) (B) of the UCITA.
194 § 10 (2) (c) of the UETA and § 213 (2) of the UCITA.
195 § 10(3) of the UETA and § 213 (c).
196 See the rule of attribution in s 25(c).
197 § 151.
198 § 153 (a).
199 § 153 (b).
200 § 154.
201 § 154 (a).
202 § 154 (b).
203 § 154 (c).

The UETA and UCITA nevertheless hold that those rules shall be equally applicable to machine errors in automated transactions. A commentary on § 10 (3) of the UETA makes it clear that:[204]

> If the error results from the electronic agent, it would constitute a system error. In such a case the effect of that error would be resolved under … the general law of mistake.

Commentary on the UCITA similarly states in relation to section 206 that:[205]

> Under subsection (a), restrictions analogous to common law concepts of fraud and mistake are made applicable to this automated context to prevent abuse or clearly unexpected results. Of course, parties may allocate risk of mistake or fraud in an agreement.
>
> Assent does not occur if the operations are induced by mistake, fraud or the like, such as where a party or its electronic agent manipulates the programming or response of the other electronic agent in a manner akin to fraud. Such acts vitiate the assent that would occur through normal operations of the agent. Similarly, the inference is vitiated if, because of aberrant programming or through an unexpected interaction of the two agents, operations indicating existence of a contract occur in circumstances that are not within the reasonable contemplation of the parties. Such circumstances are analogous to mutual mistake. Courts applying these concepts should refer to mistake or fraud doctrine, even though an electronic agent cannot actually be said to have been misled or mistaken.

Although the principles of the common law of mistake were developed with specific reference to the mistakes of human beings, it is conceivable; however, that some of the common law rules contained in the *Restatement of Contracts* may be applied with relative ease to automated transactions. For instance, the rules in § 153 that a mistake will vitiate a contract if; (a) enforcement would be unconscionable, and (b) if the non-mistaken party had reason to know of that mistake; appear to be neutral enough to cover machine errors in automated transactions. If enforcement of the mistake of an electronic agent would not be unconscionable, or if the other party had no reason to know of a mistake in a communication of an electronic agent, an automated transaction will be upheld. The rule in § 154 (c) that a court may attribute the risk of a mistake to a party where it is reasonable to do so also appears to be neutral enough to apply to electronic agents. It has been suggested by some

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204 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 36.

205 National Conference of Commissioners on Uniform State Laws "Uniform Computer Information" 89.

authors that it would be reasonable to attribute the risk of machine errors to a user if his electronic agent "habitually" malfunctions and he fails to take steps necessary to correct that state of affairs.[206]

In US law, another prominent rule applicable to faulty or erroneous communications is that a person who chose the tool of communication must bear the risk.[207] This was stated to be so in the matter of *Ayer v Western Union Telegraph Co*.[208] In that case, the Supreme Court of Maine stated in relation to a garbled telegraphic message that:

> We think the safer and more equitable rule, and the rule the public can most easily adapt itself to, is, that, as between sender and receiver, the party who selects the telegraph as the means of communication shall bear the loss caused by the errors of the telegraph. The first proposer can select one of many modes of communication, both for the proposal and the answer. The receiver has no such choice, except as to his answer. If he cannot safely act upon the message he receives through the agency selected by the proposer, business must be seriously hampered and delayed.

It is submitted that this rule can be applied with relative ease to machine errors in automated transactions. If this rule is adopted in relation to automated transactions, users of electronic agents must be saddled with the risk of machine errors because they consciously chose to use electronic agents as their means to contract formation. The Louisiana Court of Appeals appears to have had the same rule in mind when it held in the matter of *Ledoux v Grand Casino-Coushatta*[209]that a casino was bound to pay a patron more than what a gambling machine was programmed to award. In that case, two patrons respectively won bonuses to the tune of $ 65 581 and $ 32 790.50. Both bonuses were won from the same gambling machine. Although the patrons were initially congratulated by the employees of the casino after their wins, the casino subsequently refused to pay out the bonuses. To substantiate its refusal, the casino alluded to the fact that the machine in issue had malfunctioned, and as a result awarded the bonuses way above what it was

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206 Chopra and White 2009 *Journal of Law, Technology and Policy* 298.

207 See *Butler v Foley* 211Mich. 668, 179 N.W. 34 (1920) as discussed by Krugman 1950-1951 *South Carolina Law Quarterly* 79.

208 *Ayer v Western Union Telegraph Co* 10 Atl. 495 (Me. 1887) 497.

209 *Ledoux v Grand Casino-Coushatta* 954 So.2d 902, 904, 909 (La. Ct. App. 2007) (hereinafter referred to as *Ledoux v Grand Casino-Coushatta*).

programmed to award. The issue before the court was whether in light of the alleged malfunction, valid agreements had been formed between the casino and the patrons? The court held in favour of the patrons that valid agreements had been formed, and consequently compelled the casino to pay out the bonuses despite the alleged malfunction. In the view of the court:[210]

> [A] casino may not rely on the argument that the machine was not intended [programmed] to register the particular jackpot to deny payment.

6.6.3 Online pricing errors

The law of unilateral mistake discussed above is equally applicable to instances of pricing errors on automated websites.[211] A website pricing error will therefore vitiate a contract if enforcement thereof would be unconscionable, or if the other party had reason to know that there is a mistake in/with the advertised price. In the matter of *Gill v Waggoner*,[212] Sweeney J defined an unconscionable contract as a contract which:

> …no man in his senses, not under delusion, would make…and which no fair and honest man would accept…..

The principle of unconscionability has been applied to instances of pricing errors.[213] Commenting on § 153 (a) of the *Restatement of Contracts*, the ALI mentions that, a party who raises the defence of unconscionability in relation to a pricing error:[214]

> …must show the profit or loss that will result if he is required to perform, as well as the profit he would have made had there been no mistake.

A court will therefore declare a contract unconscionable if enforcement of a pricing error would result in an unconscionably unequal exchange of values between the

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210 *Ledoux v Grand Casino-Coushatta* 912.

211 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 11.

212 *Gill v Waggoner* 828 P.2d 55, 58 (Wash. Ct. App. Div. III 1992) para 6, citing *Montgomery Ward & Co v Annuity Bd* 16 Wn. App. 439, 444, 556 P.2d 552 (1976); *Re Greer* 61 Wn.2d 741, 749, 380 P.2d 482 (1963).

213 See Svensson *The Unconscionability Doctrine in U.S.* 17-18; *Hume v United States. United States v Hume* 132 U.S. 406 (10 S.Ct. 134, 33 L.Ed. 393).

214 American Law Institute *Restatement of the Law* 395.

parties;[215] *i.e.* if enforcement would cause a trader loss as opposed to mere diminished profits.[216]

Apart from unconscionability, another defence against enforcement of an online pricing error can be founded on § 153 (b) of the *Restatement of Contracts*, *i.e.* on the basis that the customers who placed orders for the wrongly priced items "had reason" to know that the advertised price was a mistake. The words "reason to know" effectively places the non-mistaken party in the shoes of a reasonable person. If the non-mistaken party fails through negligence to realise a mistake where a reasonable person would have done so, the mistaken party will be entitled to rescind the contract.[217] For illustration, the price of $ 1.00 would be so low for a brand-new iPod that a reasonable person would have reason to know that it is a mistake. The basis for granting avoidance here is not that the non-mistaken party has engaged in any inequitable conduct by accepting the erroneous offer, but that:

> …he would not be acting adequately in the protection of his own interests were he not acting with reference to the facts which he has reason to know.[218]

In terms of § 161 (b) of the *Restatement of Contracts*, a contract may also be avoided where the non-mistaken party is demonstrated to have had actual knowledge of a mistake. It is said that a party who is aware of the mistake of another has a duty to correct it, even if he did not cause that mistake.[219]Grobner, with who the current author is in full agreement, expresses some doubt whether the aforesaid provision is sufficient to protect online traders from pricing errors.[220] In his own words:[221]

> What is known or should be known creates unique problems for online retailers because what a customer would suspect was a pricing mistake at a brick-and-

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215 Calamari and Perillo *Contracts* 387; *American Home Improvement Inc v Maciver* 105 N.H. 435, 201 A.2d 886 (1964), in which a contract was declared unconscionable because purchasers were required to pay a large purchase price in exchange for services and goods of very little value. A contract may also be declared unconscionable if the purchase price is too high in comparison to the retail price of similar objects, see *Central Budget Corp v Sanchez*53 Misc. 2d 620, 279 N.Y.S.2d 391 (1967); *Toker v Westerman* 113 N.J. Super. 452, 274 A.2d 78 (1970).

216 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 13.

217 Eisenburg 2009 *Michigan Law Review* 1426.

218 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 14.

219 Calamari and Perillo *Contracts* 368.

220 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 15.

221 Groebner 2004 *Shidler Journal of Law, Commerce & Technology* para 15.

> mortar store might appear reasonable on the Internet. Internet retailers regularly offer legitimate deals that could seem to be too good to be true. In fact, some sites like Half.com focus on that very type of sale. Super-deals, however, are not limited to liquidators. Regular retailers, like Amazon.com, often offer sales that are not typical for brick-and-mortar retailers. This makes it difficult to establish what exactly the customer had reason to know. To illustrate, in the Amazon.com and Kodak examples above, a £329 camera for £100 may not be so discounted as to give the customer reason to know while the £287 iPaq for £7.32 might be enough cause the customer to suspect a pricing mistake.

In the matter of *Chwee Kin Keong v Digilandmall.com Pte Ltd*,[222] Rajah JC in the High Court of Singapore has suggested a simple solution to this problem that a customer must be imputed with knowledge of an online pricing error because he can cheaply search out the true value of an item by browsing from website to website on the very same computer screen from which he is making his purchase order. One finds nothing objectionable with that suggestion. Prudence dictates that if a customer does not enquire with an online trader to ascertain whether or not the advertised price is real, he or she must at least compare the advertised price with prices on other websites offering the same item.

6.7 Analysis and conclusion

The response of US law to the challenges of automated transactions is, to say the least, commendable. Both the UETA and UCITA adopt a futuristic approach to the validity of automated transactions, especially in relation to the issue of the "intentionto be bound" and mutual assent. Granted, as with the South African ECT Act, the UETA proceeds on a general rule that an electronic agent is a mere-tool of communication. Commentary on the UETA, however, acknowledges that within the lifespan of the statute, the technology behind electronic agents may develop to a level where such entities are capable of autonomous activity.[223] In the event that such a possibility materialises into reality, the drafters of the EUTA acknowledge that:[224]

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222 *Chwee Kin Keong v Digilandmall.com Pte Ltd* para 146.

223 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 9.

224 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 9.

> …courts may construe the definition of electronic agent accordingly, in order to recognize such new capabilities.

It is only unfortunate that the commentary does not go further to state what effect or bearing this new interpretation will have on the legal principles applicable. That decision is left for the courts of law to make. The UCITA on the other hand views electronic agents as tools of communication with similar capabilities to those of human agents in the real world. That this is so is made abundantly clear in the commentary that:

> The legal relationship between the person and the automated agent is not fully equivalent to common law agency, but takes into account that the 'agent' is not human.[225]

In this manner, the UCITA invites the rules of agency and representation to regulate the validity of automated transactions. As the comment quoted above readily indicates, the rules of agency and representation will be applied subject to relevant modifications necessitated by the fact that the "agent" is not human but electronic.[226] Following the dictates of agency and representation, the UCITA logically allows that an electronic agent can manifest independent assent on behalf of its user. The UCITA moreover provides that the user of an electronic agent can only be bound by the actions of the electronic agent falling squarely within the scope of its "authority."

From the foregoing discussion of the provisions of the UCITA, the modification of the traditional law of contract in the US is readily clear. The first modification is that electronic agents are granted the power to bind their users through the manifestation of their independent assent, which power is not dependent upon any legal personality on their part. The second modification, which logically follows from the first, is the modification of the common law rule that users of electronic agents are bound by their actions simply because electronic agents are tools of communication. As demonstrated above, instead of the attribution rule, the binding

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225 As quoted by Lerouge 1999-2000 *John Marshall Journal of Computer and Information Law* 421.

226 These modifications will include the fact that, by reason of it being electronic, the agent cannot give consent to the relationship of agency; and cannot be held "personally" liable to either its user or third parties for breach of duties or warranty of authority.

effect of the activities of an electronic agent is made dependent on the idea of the "scope of authority."

Another notable modification of traditional contract law under the UCITA is in the fact that it does not only empower electronic agents to manifest independent assent to a contract, it also mandates that an electronic agent must be given adequate notice of the terms of a contract for review. While traditional contract law employs the standard of a reasonable man in determining whether a party has been given adequate notice of the terms of a contract, the UCITA has modified that standard to that of a "reasonably configured electronic agent." If a party does not introduce its terms in a manner that a "reasonably configured electronic agent" would be able to access and review, no contract will be formed. This modification is necessary for ensuring that contractual terms are not oppressively imposed on users of electronic agents without proof that their electronic agents "consciously" consented thereto. In this manner, it can be said of this rule that it counters the harshness of the "mere-tool" theory, which attributes all contracts to users.

Apart from the aforesaid modifications of traditional contract law in the US, there are a number of notable differences between the US and South African responses to some of the challenges of automated transactions. Under US law, a valid automated transaction between an electronic agent and a human being can only arise if the individual in issue engages in conduct which he "knows or has reason to know" will cause the electronic agent to conclude the transaction or complete performance.[227] No similar provision is found in the ECT Act. In the view of this research, a rule to that effect is necessary, seeing that it protects third parties from unintended automated transactions. The rule will specifically benefit those third parties who are not familiar with the practices and customs of the internet community, and therefore with the legal significance of their actions on automated commercial websites. The rule is commendable, seeing the instantaneous nature of automated transactions, which is a potential snare for ignorant parties to be caught in contract. An ignorant conduct which causes an electronic agent to conclude or perform a contract cannot therefore give rise to a valid automated transaction. Another benefit of this rule is

[227] See § 14 (2) of the UETA and § 206 (b) (1)-(2) of the UCITA.

that it provides an incentive to users of electronic agents to make it clear that a performance of specific actions or conduct on an automated commercial website will cause the electronic agent to conclude a transaction or to effect performance.

The second noteworthy difference between South African and US law, referring here specifically to their electronic commerce statutes, is in the rules of the time and place of contract formation. It is common cause that in both South Africa and the US, the common law of contract has been altered or amended to the effect that the time and place of formation of electronic contracts shall be determined with reference to the reception theory. In the context of automated transactions, a particular weakness with the ECT Act is that in dealing with the time of contract formation, it only requires that a data message must be "…capable of being retrieved and processed by the 'addressee.'"[228] As argued in chapter four,[229] this requirement is problematic for the fact that it does not expressly provide that a data message must be capable of being processed by the information system of the addressee; the requirement specifically refers to the addressee as a natural person. In the US, both the UETA and the UCITA expressly mention that a data message must be generated in a form capable of being processed by the information processing system of the addressee. Therefore, the UETA and UCITA take into account that in automated transactions, data messages must be duly formatted to enable automatic processing by electronic agents. Commentary on the UCITA expressly mention that the format used to generate a data message must be capable of being processed by an ordinary system of the type used by the addressee. If the format used is not capable of being processed by an ordinary system of the type used by the addressee, a data message will not be taken to have been received by an electronic agent.

The third noteworthy difference between the South African and US response to the challenges of automated transactions is in the resolution of the battle of forms. As shall be recalled from chapter four,[230] South African law employs the "mirror-image" rule to resolve the battle of forms. The first difficulty with that rule is that it does not

228 s 23 (b).
229 Para 4.5.2.3.4.3 above.
230 Para 4.6.2.3.2 above.

preserve contracts. This is so in the sense that the mere fact of a divergence between an offer and acceptance automatically vitiates a contract. The second difficulty with the "mirror-image" rule is that in the face of the battle of forms, it often takes the silence or conduct of a party as indicative of assent to the conflicting terms.[231] The harshness of this rule is likely to be felt in automated transactions where electronic agents may act automatically without necessarily assenting to the conflicting terms. This will be the case in those instances where there is no proof that the terms were presented by an electronic agent in a manner which enabled the other to access or review them. On the contrary, American law as provided for under the *Restatement of Contracts* and the UCC proceeds on a presumption that a mere conflict in the terms of an offer and acceptance does not *ipso facto* vitiate a contract. This rule *prima facie* strives for the preservation of contracts, automated transactions included. The UCC in §2-207 (3) furthermore provides for the application of the "knock-out" rule in cases of written terms. If the written records of the terms of the parties are in conflict, § 2-207 (3) states that the resultant contract shall be governed by the terms which appear in the record of both parties. Therefore, the mere conduct of an electronic agent will not justify the imposition of terms which do not appear in the record of its user. This rule is therefore less oppressive than the "mirror-image" rule.

The fourth difference is the treatment of electronic mistake, especially machine errors. Per section 25 (c) of the ECT Act, South African law adopts a hard and fast rule that the malfunction of an electronic agent will not give rise to a valid automated transaction. US law on the other hand permits the traditional law of unilateral mistake to be applied to systems errors. A particular problem with the South African approach is that it does not protect the reasonable reliance of third parties who may be led to reasonably believe that a valid contract has been concluded. The South African approach can therefore be said to go against the grain of the objective or reliance theory of contract. It is important to protect the reasonable reliance of third parties seeing that in their position, they are often oblivious to the fact that they are dealing with an electronic agent, or that the

[231] See *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* discussed in para 4.6.2.3.2 above.

communication which they rely on was a result of an error. By permitting the traditional law of mistake to solve the issue, US law is considerate of the reasonable reliance of third parties, which reliance is often prejudicial to those parties if not legally protected.

6.8 UK law

6.8.1 Outline of the legislative framework for electronic contracts in the UK

The legislative framework for electronic contracts in the United Kingdom (hereinafter referred to as the UK) is greatly influenced by the Directives of the European Parliament.[232] This is so because the UK is a member of the European Union (hereinafter referred to as the EU). The European Commission in 1997 promulgated an "Initiative on Electronic commerce" with a view to creating a standard legal framework for electronic commerce in Europe.[233] In pursuance of the objective of the aforesaid initiative, the European Parliament passed several Directives dealing with electronic commerce and other related matters. The Directives of the European Parliament which are specific to electronic commerce, and which have been duly implemented in the UK include:

(1) Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (hereinafter referred to as the Directive on Electronic commerce);[234]
(2) Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts (hereinafter referred to as the Distance Selling Directive),[235] and
(3) Directive 1999/93/EC of the European Parliament and of the Council of 13 December 19993 on a Community Framework for Electronic Signatures.[236]

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232 Shepherd and Wedderburn 2016 https://www.shepwedd.co.uk/sites/default/files/Brexit_Analysis_Bulletin_Contracts_and_E-Commerce.pdf. The UK is composed of England, Wales, Scotland and Northern Ireland.
233 Kis *Contracts* 17.
234 Published in the Official *Journal of the European Communities* No L178 17.7. 2000 at 1-16.
235 Published in the Official *Journal of the European Communities* No L144 4.6. 1999 at 19-27.

Amongst these Directives, the most relevant for purposes of present considerations is the *Directive on Electronic Commerce*. Unlike the *Distance Selling Directive*, which is applicable only to contracts involving the ordering of goods by consumers at a distance by electronic and non-electronic means,[237] the *Directive on Electronic Commerce* is applicable exclusively to "electronic contracts" concluded by consumers and professionals. As the full title of this Directive readily suggests, the *Directive on Electronic Commerce* is concerned with legal aspects "…of information society services, in particular electronic commerce." The phrase "information society services" means services offered for remuneration by a "service provider" at a distance by means of electronic equipment for processing and storage of data.[238] This definition covers a wide range of activities undertaken online, including the buying and selling of goods online.[239] The party providing these services is known as a "service provider,"[240] while the one receiving the services is referred to as the "recipient of the service."[241] The recipient of the service may be a "consumer" or a professional. The recipient is considered to be a consumer if he or she "…is acting for purposes which are outside his or her trade, business or profession."[242]

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236 Published in the Official *Journal of the European Communities* No L13 19.1.2000 at 12-20.

237 Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 281.

238 See art. 2 (a), which refers to the definition in Art.1 (2) of Directive 98/34/EC as amended by Directive 98/48/EC.

239 Recital 18 of the *Directive on Electronic Commerce* makes it abundantly clear that "[i]nformation society services span a wide range of economic activities which take place on-line; these activities can, in particular, consist of selling goods on-line; activities such as the delivery of goods as such or the provision of services off-line are not covered; information society services are not solely restricted to services giving rise to on-line contracting but also, in so far as they represent an economic activity, extend to services which are not remunerated by those who receive them, such as those offering on-line information or commercial communications, or those providing tools allowing for search, access and retrieval of data; information society services also include services consisting of the transmission of information via a communication network, in providing access to a communication network or in hosting information provided by a recipient of the service…."

240 See art. 2 (b) defining the phrase "service provider" to mean "any natural or legal person providing information society service." Unless the context indicates otherwise, the phrase "service provider" shall be used interchangeably with "online trader" throughout this discussion.

241 See art. 2 (d) defining the phrase "recipient of the service" to mean "any natural or legal person who for professional ends or otherwise, uses an information society service, in particular for the purposes of seeking information or making it accessible." Unless the context indicates otherwise, the phrase "recipient of the service" shall be used interchangeably with "customer" throughout this discussions.

242 art. 2(e).

The provisions of the *Directive on Electronic Commerce* cover various aspects of electronic contracts including the setting of standards for the validity of electronic commercial communications,[243] the provision of pre-contractual information by online traders to customers,[244] and the placing of purchase orders on trading websites by customers.[245] The broadness of the scope of the *Directive on Electronic Commerce* notwithstanding, it remains a matter of debate regarding the extent to which its provisions are applicable to automated transactions. The controversy arises in light of the fact that, unlike the UNECIC and the *UNCITRAL Model Law on Electronic Commerce*, the *Directive on Electronic Commerce* contains no provision(s) addressing the validity and other legal aspects specific to automated transactions. Initially, the Executive Summary of the proposal of the *Directive on Electronic Commerce* stated that Member States will "...not prevent the use of electronic systems as intelligent electronic agents…."[246] However, it is common cause that this statement was subsequently deleted or omitted, with the result that the final draft of the *Directive on Electronic Commerce* makes no mention of the terms "electronic agent" or "automated transaction" in any of its provisions. This approach has been severely criticised by one author as follows:[247]

> The EU law lags behind technological developments, instead of anticipating them. The explanatory notes of the proposal of the Ecommerce Directive mention that Member States should refrain from preventing the use of certain electronic systems such as intelligent electronic agents for making a contract. However, the final version makes no reference to electronic agents in the main text or in the recital. The deletion of the proposed text reflects EU's failure to respond to the tremendous growth of e-commerce. The preamble of the Directive states that the purpose of the Directive is to stimulate economic growth, competitiveness and investment by removing the many legal obstacles to the internal market in online provision of electronic commerce services. However, the exclusion of the provision giving legal recognition to electronic agents is a step backward and a failure to recognize the role of electronic agents in fostering the development of e-commerce such as, lower transaction costs, facilitate technology and adherence to international conventions.

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243 art. 6.
244 art. 10.
245 Art. 11.
246 See Executive Summary as quoted by Weitzenboeck 2001 *International Journal of Law and Information Technology* 224; Kis *Contracts* 19.
247 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 42.

Other authors, however, take a view that the *Directive on Electronic Commerce* is applicable to automated transactions despite the failure to expressly provide to that effect.[248] This conclusion is based on Article 9 of the *Directive on Electronic Commerce*, which states that:

> Member States shall ensure that their legal system allows contracts to be concluded by electronic means. Member States shall in particular ensure that the legal requirements applicable to the contractual process neither create obstacles for the use of electronic contracts nor result in such contracts being deprived of legal effectiveness and validity on account of their having been made by electronic means.[249]

Although it is not defined anywhere in the *Directive on Electronic Commerce*, it has been argued that the phrase "electronic means" in the above quoted provision is wide enough to cover electronic agents.[250] There is admittedly a measure of sense in this conclusion. To illustrate, note must be taken that the scope of application of the *Directive on Electronic Commerce* does not appear to depend on the technology used in concluding a contract. On the contrary, the scope of application of that Directive is expressly limited to contracts falling within the realm of "information society services." Regardless of the technology used to conclude it, an electronic contract will be subject to the provisions of the *Directive on Electronic Commerce* if ever it falls within the scope of "information society services." Automated transactions too will therefore be governed by the *Directive on Electronic Commerce* if they are concluded within that scope. This does not mean, however, that automated transactions will *ipso facto* be accepted as valid and enforceable in all Member States that have implemented the Directive. The issue of the "validity and enforceability" of electronic contracts in general is left for determination by individual State laws, for as Article 9 states:

> Member States shall in particular ensure that the legal requirements applicable to the contractual process neither create obstacles for the use of electronic contracts

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248 See Weitzenboeck 2001 *International Journal of Law and Information Technology* 224; Kis *Contracts* 18-19; Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 278.

249 Art. 9 (1).

250 Kis *Contracts* 18; Groom 2004 *SCRIPT-ed* 89, makes a point that "[t]here is no suggestion in the above paragraph that the requirement of legal effect be limited to *automatic* electronic activities. One could forcefully argue therefore that…it must have been the intention of the drafters of the Directive to grant legal effect to the actions of agents."

nor result in such contracts being deprived of legal effectiveness and validity on account of their having been made by electronic means.

It is clear, therefore, that any necessary modifications or amendments intended to accommodate the validity of automated transactions will be made by relevant authorities in individual Member States. If the law of a Member State recognises the validity of automated transactions, or is subsequently amended pursuant to Article 19 to recognise that validity, the provisions of the *Directive on Electronic Commerce* shall apply to regulate the legal aspects of those transactions.

Because the Directives of the European Parliament are not self-executing in Member States of the EU, the *Directive on Electronic Commerce* was implemented in the UK through the *Electronic Commerce (EC Directive) Regulations* 2013 of 2002 (hereinafter referred to as the *Electronic Commerce Regulations*).[251] It is this instrument which is representative of the general legislative framework for electronic contracts in the UK. The provisions of the *Electronic Commerce Regulations* have been interpreted by the UK Department of Trade and Industry in the *Guide for Business to the Electronic Commerce (EC Directive) Regulations* 2002 (hereinafter referred to as *Guide for Business to the Electronic Commerce Regulations*).[252] Another important statute in relation to electronic commerce in the UK is the *Electronic Communications Act* 27 of 2000 (hereinafter referred to as the ECA). The ECA was passed by the Parliament of the UK in 2000, and its main purpose is to "…facilitate the use of electronic communications and electronic data storage…."[253]

6.8.2 Outline of the legal framework for contract formation in UK law

There are in the main three requirements for the formation of a valid contract in UK law, namely agreement, intention and consideration. In determining whether or not the parties have reached agreement,[254] UK law employs the traditional test of offer

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251 Electronic copy available at http://www.legislation.gov.uk/uksi/2002/2013/pdfs/uksi_20022013_en.pdf.

252 Electronic copy available at http://webarchive.nationalarchives.gov.uk/20121212135622/http:/www.bis.gov.uk/files/file14635.pdf.

253 See recital.

254 The word "agreement" is sometimes used synonymously with "contract" in UK law. For instance, in exploring the various meanings of the term "contract" in UK law, Trietel *The Law* 1, explains that a contract "…is an agreement giving rise to obligations which are enforced or recognised by law." An agreement requires the participation of two or more parties, and the communication on

and acceptance.[255] Offer is defined as the expression of "…an unequivocal willingness to be bound upon the offeree's acceptance…."[256] To fit this definition, an offer must be certain and definite in its terms, meaning that it must leave no space for further negotiations or bargaining between the parties. As Cheshire and Fifoot explain it,[257] a valid offer must leave the offeree with only two options, namely to accept or reject it. A proposal to do business that is not certain and definite in its terms is not an offer but rather an invitation to treat.[258] Examples of invitations to treat include advertisements of goods in public media,[259] public auctions,[260] tenders,[261] displays of goods on shelves in self-service stores,[262] and in windows of shops.[263] In the instance of invitations to treat, a trader invites members of the public to make offers to him for the purchase of the goods which he advertises.[264] At all times, a trader who makes an invitation to treat retains the right to accept or reject offers by members of the public at will.

To result in an agreement between the parties, an offer must have been accepted by the offeree. Acceptance is defined as "…a final expression of assent to the exact terms of an offer."[265] Acceptance can be made in any manner including by writing,

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the part of each party of its intention to conclude a binding contract, *i.e.* mutual promises, see Cartwright *Contract Law* 91; Barrows *A Casebook* 3.

255 Trietel "Formation of Contract" 143; Furmston *Cheshire and Fifoot's Law* 25; Smith *Atiyah's Introduction to the Law* 36. It is common cause, however, as mentioned by Lord Diplock in the matter of *Gibson v Manchester City Council* [1979] 1 W.L.R. 294 (HL) 296-297 that "…there may be certain types of contract, though…they are exceptional, which do not fit easily into the normal analysis of a contract as being constituted by offer and acceptance…." As the learned judge went on to note in that decision, the analysis of an agreement as offer and acceptance is mostly relevant where the contract was formed through the exchange of communications or correspondence between the parties.

256 Andrews *Contract* 39; Burrows *A Casebook* 4.

257 Furmston *Cheshire and Fifoot's Law* 26.

258 Atiyah *An Introduction to the Law* 35.

259 See *Grainger & Sons v Gough* [1896] AC 325 (HL) (hereinafter referred to as *Grainger & Sons v Gough*); *Partridge v Crittenden* [1968] 1 W.L.R. 1204 (QB) (hereinafter referred to as *Partridge v Crittenden*).

260 See *Barry v Davies* [2000] 1 W.L.R. 1962 (CA); *Payne v Cave* (1789) 3 T.R. 148; *British Car Auctions v Wright* [1972] 1 W.L.R. 1519.

261 See *Spencer v Harding* (1870) L.R. 5 C.P. 516.

262 See *Pharmaceutical Society of Great Britain v Boots Cash Chemists (Southern) Ltd* [1953] 1 QB 401 (CA) (hereafter referred to as *Pharmaceutical Society of Great Britain v Boots Cash Chemists (Southern) Ltd*).

263 See *Fisher v Bell* [1961] 1 QB 394 (hereinafter referred to as *Fisher v Bell*).

264 Trietel *The Law* 10-11.

265 Barrows *A Casebook* 25; Trietel *The Law* 16.

verbally or even by conduct.[266] There are a number of requirements for the validity of an acceptance at English law. The first requirement is that an acceptance can only be made by the offeree.[267] The second requirement for a valid acceptance is that it must comply with the terms of the offer,[268] meaning that it must be absolute and unconditional.[269] This rule is a reflection of the "mirror-image" rule.[270] To constitute a valid or effective acceptance, a response to an offer must therefore manifest assent to the terms of that offer without any conditions or modifications. A purported acceptance which proposes new terms is usually considered to be a counter-offer,[271] and cannot result in a contract until it is accepted by the original offeror. This fact is demonstrated by the decision of *Hyde v Wrench*.[272] In that case, Wrench offered to sell a farm to Hyde for £1000. In his reply, Hyde stated that he was prepared to give £950, wherefore Wrench wrote him a letter refusing to sell him the farm at that price. Hyde instituted an action for specific performance alleging that a valid agreement had been formed. Finding in favour of Wrench, the court held that no contract had arisen on the facts of the case. Lord Langden held that Hyde's response was a counter-offer, and Wrench had rejected that offer in his letter.[273] A third requirement for a valid acceptance is that it must be communicated to the offeror.[274] An acceptance which is never communicated to the offeror, or which

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266 Cartwright *Contract Law* 110 mentions that "[a]nything which shows to the offeror the offeree's unequivocal assent is sufficient…." Acceptance by conduct occurs, for instance, through the supply or dispatch of goods in response of a purchase order, the rendering of services pursuant to a request for them, and the use of goods supplied by the other party, see generally *Harvey v Johnston* (1848) 6 C.B. 295; *Re Charge Card Services* [1989] Ch. 497; *Interfoto Picture Library Ltd v Stiletto Visual Programmes Ltd* [1989] QB 433; *The Kurnia Dewi* [1997] 1 Lloyd's Rep 533; *Weatherby v Banham* (1832) 5 C. & P. 228; *Hart v Mills* (1846) 15 L.J.Ex. 200.

267 Smith *Atiyah's Introduction to the Law* 50. In most cases, the offeree is often clearly identified or identifiable. However, as shall be illustrated later on, UK law admits that a valid offer can be made to the entire world, and is nevertheless valid despite the fact that the offeree under such circumstances is not a single person or limited number of people.

268 Cartwright *Contract Law* 112.

269 Atiyah *An Introduction to the Law* 43.

270 Barrows *A Casebook* 25.

271 Andrews *Contract* 57; Furmston *Cheshire and Fifoot's Law* 32; Smith *Atiyah's Introduction to the Law* 50.

272 *Hyde v Wrench* (1840) 3 Beav 334 (hereinafter referred to as *Hyde v Wrench*).

273 *Hyde v Wrench* as discussed by Barrows *A Casebook* 54.

274 Trietel *The Law* 22, citing *M'Iver v Richardson* (1813) 1 M. & S. 557; *Ex Parte Stark* [1897] 1 Ch. 575; *Mozley v Tinker* (1835) C.M. & R. 692; *Holwell Securities Ltd v Hughes* [1974] 1 W.L.R 155.

never reaches him, is therefore generally ineffective.[275] The only recognised exception to this rule is in instances of communications by post, which as a general rule become effective upon mere delivery of the letter of acceptance to the post office.[276] The fourth requirement for a valid acceptance in UK law is that, at the moment of acceptance, the offeree must have been aware of the existence of the offer and its terms.[277] An acceptance which is made by one who is oblivious to the existence of an offer and its terms cannot, therefore, result in a valid contract.

Offer and acceptance must both be made with an intention to create a binding agreement.[278] It is common cause that "English law generally adopts an objective theory…" to determine whether or not a contract has been formed between the parties.[279] The objective theory of contract means that the subjective intentions of a party are irrelevant for purposes of determining whether or not he or she made an offer or acceptance with an intention to be bound. This rule was neatly encapsulated as follows by Slade LJ in the matter of *Centrovincial Estates plc v Mercant Investors Assurance Co*:[280]

> …an offer falls to be interpreted not subjectively by reference to what has actually passed through the mind of the offeror….

A leading decision on the objective theory of contract formation in UK law is *Smith v Hughes*.[281] Hughes, a professional racehorse trainer, ordered a specific quantity of oats for animal feed from Smith. Before the purchase, Smith had brought a sample

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275 It is for this reason that UK law does not generally recognise the validity of acceptance by silence, see *Felthouse v Bindley* (1862) 11 CB NS 869 as discussed by Cartwright *Contract Law* 111.

276 See generally the often-cited decision of *Household Fire Insurance Co Ltd v Grant* (1879) 4 Ex.D. 216. For a discussion of this case, see Trietel "Formation of Contract" 173-174; Barrows *A Casebook* 37-38.

277 See Andrews *Contract* 44; Trietel "Formation of Contract" 166.

278 See Trietel *The Law* 149. Traditionally, contracts made at social and domestic arrangements are *prima facie* regarded as lacking the necessary intention to be bound, see generally *Balfour v Balfour* [1919] 2 KB 571; *Wyatt v Kreglinger & Fernau* [1933] 1 KB 793; *Rose & Frank Co v JR Crompton & Bros Ltd* [1923] 2 KB 261.

279 Per Steyn LJ in *G Percy Trentham Ltd v Archital Luxfer Ltd* [1993] 1 Lloyd's Rep 25 (CA) 27.See also *Paal Wilson & Co A/S v Partenreederei Hannah Blumenthal (The Hannah Blumenthal)* [1983] 1 AC 854 (HL) 924; *RTS Flexible Systems Ltd v Molkerei Alois Muller GmbH & Co* [2010] 1 WLR 753 para 86-87.

280 *Centrovincial Estates plc v Mercant Investors Assurance Co* [1983] Com LR 158 (CA) 158 (hereinafter referred to as *Centrovincial Estates plc v Mercant Investors Assurance Co*).

281 *Smith v Hughes* (1871) LR 6 QB 597.

of green oats for inspection by Hughes. Smith thereafter delivered a portion of the total quantity of oats as ordered, but Hughes rejected the delivery and refused to pay. The reason for this refusal was that Hughes thought he was buying old oats, which are the only oats that horses can feed on. Smith on the other hand thought the sale was for green oats, which he duly delivered. Smith consequently sued Hughes for breach of contract. The issue before court was whether a valid contract had been concluded despite the apparent misunderstanding between the parties? The court *a quo* found in favour of Hughes that there was no contract because Hughes was labouring under a mistake at the time of ordering the oats, and Smith knew that he had intended to order old as opposed to green oats. On appeal, the Queen's Bench held that the mere fact of a unilateral mistake did not vitiate a contract between the parties. The most cited decision in this case is that of Blackburn J, who similarly held that the mere lack of *consensus ad idem* between the parties did not necessarily negate the existence of a valid agreement. In a *dictum* which was to become a resounding chant for judges, lawyers and academics from then until today, Blackburn J expressed the view that:

> …if one of the parties intends to make a contract on one set of terms, and the other intends to make a contract on another set of terms, or, as it is sometimes expressed, if the parties are not ad idem, there is no contract, unless the circumstances are such as to preclude one of the parties from denying that he has agreed to the terms of the other. The law is that stated in *Freeman v Cooke.* If, whatever a man's real intention may be, he so conducts himself that a reasonable man would believe that he was assenting to the terms proposed by the other party, and that other party upon the belief enters into the contract with him, the man thus conducting himself would be equally bound as if he had intended to agree to the other party's terms.[282]

The analysis of contract formation through the objective theory focuses mainly on the interpretation "…which a reasonable man in the shoes of the offeree would place on the offer."[283] If a reasonable man would interpret the words and conduct of the other party to be an offer, a court will hold that an offer was made by that other party. To reach this conclusion, the contract-assertor needs to firstly demonstrate that the mistaken party conducted himself or herself in a manner which entitled or

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[282] *Smith v Hughes* 607.
[283] *Centrovincial Estates plc v Mercant Investors Assurance Co* 158.

induced him to assume or believe that he was agreeing to be bound.[284] Secondly, it must be demonstrated that the contract-assertor "…*did assume*, that the contract was agreed to…."[285] It must thirdly be demonstrated that the assumption, belief or interpretation of the contract-assertor was reasonable under the circumstances, *i.e.* that a reasonable man would have equally been led to believe that the mistaken party was agreeing to be bound. If this criterion is met, a court will hold that a valid contract has been concluded despite the lack of subjective *consensus ad idem* between the parties.

The last requirement for a valid contract is consideration.[286] The legal definition of consideration in English law revolves around the requirement that "…'something of value' must be given [by one party to another]…."[287] As defined by Lush J in the matter of *Currie v Misa*:[288]

> A valuable consideration, in the sense of the law, may consist of either in some right, interest, profit, or benefit accruing to the one party, or some forbearance, detriment, loss, or responsibility, given, suffered, or undertaken by the other party.[289]

Following the foregoing definition, consideration is traditionally referred to as "…a benefit to the promisor, or a detriment to the promisee."[290] In an archetypal contractual setting, "benefit" and "detriment" in the definition of consideration is often the same thing viewed from different angles.[291] Consideration may be rendered through performance or a mere promise. Consideration by performances is usually envisaged in unilateral contracts,[292] *e.g.* where party A undertakes to pay

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284 Cartwright *Contract Law* 98.

285 *Centrovincial Estates plc v Mercant Investors Assurance Co* 924.

286 As Smith *Atiyah's Introduction to the Law* 106-107 mentions, only those undertakings which are accompanied by legal consideration are legally binding. All other undertakings are not legally binding in UK law even if they are assumed with an intention to be bound.

287 Trietel "Formation of Contract" 225.

288 *Currie v Misa* (1875) L.R. 10 Exe 153 (hereinafter referred to as *Currie v Misa*).

289 *Currie v Misa* 162.

290 Barrows *A Casebook* 87 mentions, however, that an emphasis must be added to this definition that the benefit or detriment must be specifically requested by the promisor from the promisee.

291 Trietel "Formation of Contract" 225. From the point of view of the promisor, consideration is a benefit, and a detriment from the point of view of the promisee.

292 Unilateral contracts are those contracts in which the offeree is taken to have abandoned the need for express acceptance on the part of the offeree, precisely so because he has expressly required acceptance to be demonstrated by conduct or performance of a specified act, see Andrews *Contract* 39.

party B if he does something, for instance if he sings him a certain song. The performance of that condition, *i.e.* the singing of the song, shall be construed as consideration.[293] Consideration through a promise simply requires mutual promises between the parties, *i.e.* one party must promise to do or refrain from doing something against the promise of the other party to do or refrain from doing another thing. For illustration, Andrews offers a case in which party A mentions that "I promise to mow your lawn if you promise to feed my prize pig,"[294] and party B replies that "sure, it's a deal." He mentions that there is sufficient consideration to give rise to a valid and enforceable contract in that scenario.

6.9 The validity and enforceability of automated transactions in UK law

Unlike in South Africa and the US, the validity and enforceability of automated transactions in the UK is not based on any statutory enactment. Neither the *Electronic Commerce Regulations*, nor the ECA, make any mention of the validity of contracts formed by an electronic agent on one or both sides. The validity of automated transactions in UK law is, therefore, based solely on the common law of contract.

The most cited decision upholding the validity and enforceability of automated transactions in UK law is that of Lord Denning in the matter of *Thornton v Shoe Lane Parking Ltd*.[295] The defendant in that case operated a multi-storey automatic car park. Traffic in and out of the car park was controlled by an automatic ticket machine installed at the entrance. The plaintiff was injured while his car was being brought down from the upper floor of the storey, wherefore he sued the defendant

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293 For illustration, in the matter of *Soulsbury v Soulsbury* [2007] EWCA Civ 968, the deceased had made a promise to his ex-wife that he would leave her £100 000 if she refrained from enforcing a maintenance order against him, which she did. Just before his death, the deceased remarried another wife, and his will was as a result automatically revoked by the law, consequently depriving the ex-wife of the promised money. The court found in the favour of the ex-wife that she had complied with the condition of the offer by not enforcing a maintenance order; therefore, that she was entitled to receive the promised sum against the deceased's estate. For other cases, see *Daulia Ltd v Four Millbank Nominees Ltd* [1978] Ch. 231; *Budgett v Stratford Co-operative and Industrial Society Ltd* (1916) 32 T.L.R. 378; *Melhuish v Redbridge Citizens Advice Bureau* [2005] I.R.L.R. 415.

294 Andrews *Contract* 129.

295 *Thornton v Shoe Lane Parking Ltd* [1971] 2 Q.B. 163 (hereinafter referred to as *Thornton v Shoe Lane Parking Ltd*).

for damages. In defence, the defendant argued that it was not liable on the basis of a clause in a ticket which was issued by the said machine to the plaintiff when he entered the car park. The issue for decision was whether the defendant was indeed exempted from liability by that clause? For their part, Megaw LJ[296] and Sir Gordon Willmer[297] proceeded to deal with the issue on the presumption that a valid contract had been formed between the parties. Niether of the judges found it necessary to interpret the interaction between the plaintiff and defendant's machine into a contract, nor to determine the precise moment at which that contract was formed. Lord Denning on the other hand seized the opportunity to cast his thoughts specifically on the issue of contract formation between a man and a machine. His Lordship mentioned that:

> None of those cases [referring to earlier decisions dealing with the legal aspects of the ticket cases] has any application to a ticket which is issued by an automatic machine. The customer pays his money and gets a ticket. He cannot refuse it. He cannot get his money back. He may protest to the machine, even swear at it. But it will remain unmoved. He is committed beyond recall. He was committed at the very moment when he put his money into the machine. The contract was concluded at that time. It can be translated into offer and acceptance in this way: the offer is made when the proprietor of the machine holds it out as being ready to receive money. The acceptance takes place when the customer puts his money into the slot. The terms of the offer are contained in the notice placed on or near the machine stating what is offered for the money. The customer is bound by those terms as long as they are sufficiently brought to his notice before-hand, but not otherwise.[298]

Lord Denning found on the facts of the case that the ticket issued by the machine did not form part of the contract because the contract had already been concluded at the moment of the issuance of that ticket.[299] The decision of Lord Denning quoted above has been cited by multiple authors in and out of the UK as authority to the effect that automated transactions are valid and enforceable at common law.[300] Some of these authors have drawn specific lessons worth mentioning from that decision. Smith cites the decision as authority for the rule that a valid contract can be created "…without the intervention of a human being at the time of

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296 *Thornton v Shoe Lane Parking Ltd* 170H.
297 *Thornton v Shoe Lane Parking Ltd* 174B.
298 *Thornton v Shoe Lane Parking Ltd* 169C-D.
299 *Thornton v Shoe Lane Parking Ltd* 169G.
300 See Chissick and Kelman *Electronic Commerce* 84; Smith *Internet Law* 818; Gringras *The Laws* 41-42; Mik 2013 *JICLT* 173.

formation…."[301] Chissick and Kelman cite the decision as authority to the effect that all the actions of a machine are attributable to the one who "…instruct[s] it to execute a particular routine."[302] Gringras cites the decision as support for the idea that the intention to be bound on the part of the user of a machine is programmed into that machine.[303] Mik on the other hand cites the decision as authority to the effect that the machine is only a presenter of its user's offer or acceptance.[304] He argues further that the decision supports the idea that the law "…protects those who reasonably rely on the communications of a computer…."[305] Pulled together, the foregoing views lead inevitably to the conclusion that UK law adopts the "mere-tool" theory to explain the validity and enforceability of automated transactions. One finds nothing objectionable with that conclusion, more so when it is drawn from a decision dealing with a passive, as opposed to an autonomous, electronic agent.

As illustrated in chapter four,[306] serious doctrinal difficulties relating to the validity and enforceability of automated transactions arise when the electronic agent bringing about the contract is not passive but autonomous. Autonomous electronic agents pose a challenge to the doctrine of programmed intention, because, unlike passive electronic agents, they do not stick to their original programming. Therefore, they are able to negotiate and conclude contracts on terms that they were not programmed to, and which their users would probably not have endorsed or agreed to had they been aware thereof at the time of contract formation. This fact, in turn, raises the issue whether users can be said to have had the intention to be bound by an automated transaction when the contract was negotiated and concluded by an electronic agent on terms which they did not know, and would not have accepted if they had the opportunity to review.

Some authors have argued that the fact of autonomy notwithstanding, the validity of automated transactions can still be upheld on the basis of the objective theory of

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301 Smith *Internet Law* 818.
302 Chissick and Kelman *Electronic Commerce* 84.
303 Gringras *The Laws* 41.
304 Mik 2013 *JICLT* 173.
305 Mik 2013 *JICLT* 173.
306 See para 4.5.1.1.1 above.

contract.[307] Weitzenbock and Kaniadaki maintain that in dealing with automated transactions;[308] a court needs simply to determine whether a reasonable man would have interpreted the statement of an electronic agent as an offer or acceptance. If an automated statement is an offer or acceptance when judged objectively, then a valid and enforceable contract will be held to have been concluded between the user of an electronic agent and a third party. According to both authors,[309] it makes no difference that the statement was generated by an electronic agent autonomously. As Kaniadaki explains, it is the statements which are "…important, regardless of where they derive from, humans or computers."[310]

Confronted with an argument that statements by autonomous electronic agents cannot bring a valid agreement under the objective theory of contract because they derive from the "will" of an electronic agent as opposed to the will of its user, Weitzenbock argues back that:

> …for the purposes of the objective theory, what is relevant is that a person should be deemed to be expressing his assent by his/her conduct when using an electronic agent for the purposes of contract formation. The manifestation of assent that is relevant for our purposes here is that of the *person* and not of the *electronic agent.*[311]

There are several notable difficulties with this line of reasoning. Contrary to the views of Weitzenbock above, Kerr argues that when an offer is initiated by an electronic agent autonomously, it:

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307 See Weitzenboeck 2001 *International Journal of Law and Information Technology* 220-221; Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 12-13; Gringras *The Laws* 41.

308 Weitzenboeck 2001 *International Journal of Law and Information Technology* 221; Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 13.

309 Weitzenboeck 2001 *International journal of Law and information Technology* 221, explaining that "…the actual internal workings of the intelligent agent and questions as to whether this could have formed an intent to enter into an agreement are irrelevant. What is relevant is whether a reasonable man would believe that assent to the terms proposed was being manifested by the other party."

310 Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 13.

311 Weitzenboeck 2001 *International journal of Law and information Technology* 222.

> …cannot be said that the party employing the electronic device has conducted himself such that a reasonable person would believe that he or she was assenting to the terms proposed by the other party.[312]

Chopra and White similarly respond that:

> …Even in a relatively straightforward shopping-website agent example, without anything resembling autonomous behaviour, a —reasonable person would not plausibly believe the principal —was assenting to the terms proposed by the other party. At most, the reasonable person might believe the principal, if she turned her mind to the contract in question, would agree to it. This is equivalent to modifying the doctrine to refer to the principal's assent to a class of possible contracts of the same kind as the particular contract entered into.[313]

It is, therefore, a matter of debate whether or not a reasonable man would construe the act of installing and using an autonomous electronic agent as sufficiently indicative of the intention to be bound by every contract made thereby. It is also difficult to agree with Weitzenbock that automated transactions formed by autonomous electronic agents are formed by the assent of users as opposed to the assent of those electronic agents. This line of reasoning is unrealistic. Chopra and White correctly point out that,[314] more often than not, it is the electronic agent as opposed to its user which is the best source of information about transactions. The same authors argue that where an electronic agent operates autonomously,[315] *i.e.* where the electronic agent is able to modify programmed instructions:

> Reference to the principal's intentions, whether in respect of a particular contract or a class of contracts, adds nothing to the description of the situation. It is the agent's intentions, as revealed by its actions, which are the salient ones.

In conclusion on the issue of the objective theory of contract, it is the view of this research that the objective theory of contract as applied in UK law can only explain the validity and enforceability of automated transactions if one ignores the fact of autonomy on the part of electronic agents.

Assuming, for purposes of a meaningful discussion, that the objective theory of contract is sufficient or adequate to explain the validity of contracts formed by

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312 Kerr 1999 http://www.ulcc.ca/en/annual-meetings/359-1999-winnipeg-mb/civil-section-documents/362-providing-for-autonomous-electronic-devices-in-the-electronic-commerce-act-1999?showall=1&limitstart=.

313 Chopra and White 2009 *Journal of Law, Technology and Policy* 375.

314 Chopra and White 2009 *Journal of Law, Technology and Policy* 375.

315 Chopra and White 2009 *Journal of Law, Technology and Policy* 375-376.

autonomous electronic agents, it would still be necessary to determine the extent to which that autonomy would be permitted to bind users in law. It has been illustrated in chapter four that another effect of autonomy on contract formation is that it exposes the users of electronic agents to random, dynamic and unpredictable contractual liability.[316] The importance of the issue raised in this discussion has also been acknowledged by some authors who support the application of the objective theory of contract to automated transactions.[317] For instance, Kaniadaki mentions that:[318]

> In truth, identifying the intention of the party who uses automated means of communication is only a first step to answer the real question, which is, to what extent this type of communication may bind the parties. The question how we can establish the parties' intention in automated messages is a pseudo-question to which various theories of contract law may give the answer.

In recognition of this fact, Kaniadaki is cautious enough not to drive the objective theory of contract to extremes that would expose the users of autonomous electronic agents to uncapped contractual liability. He argues that in cases of autonomous electronic agents, the user's intention is "…deducted from the fact that…he actually authorises the electronic agent…" to bind him.[319] This means in turn that autonomous electronic agents will only bind their users to the extent that they have been "authorised" to do so. A couple of commentators in UK law have referred to the decision of *Henthorn v Fraser*[320] to illustrate how the concept of authority can be applied to electronic agents. According to that case, an acceptance delivered to an agent will only result in a contract if the agent in issue has been authorised to receive that acceptance on behalf of his or her principal.[321] Werner

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316 See para 4.5.1.1.1 above.

317 Weitzenboeck 2004 *Artificial Intelligence and Law* 90 appears to endorse the need to limit exposure to liability on the part of the users of electronic agents. She mentions, in that regard, that it is not "…a better solution to consider autonomous electronic agents as nothing more than a tool of the user because this would imply that the user would be responsible for all actions and omissions of the agent, and possibly even if it malfunctions, in spite of the fact that the user may not have been directly involved or 'consulted' by the electronic agent in the conclusion or performance of the contract…."

318 Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 13.

319 Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 14.

320 *Henthorn v Fraser* [1892] 2 Ch 27 (hereinafter referred to as *Henthorn v Fraser*). Discussed by Savirimuthu 2004 http://www2.warwick.ac.uk/fac/soc/law2/elj/jilt/2004_2/savirimuthu/; Werner 2000-2001 *International Journal of Communications Law and Policy* 7.

321 *Henthorn v Fraser* 33-34.

mentions with regard to this decision in the context of automated transactions that:[322]

> ...the host computer could be the agent of the principal (offeror)…in Henthorn v Fraser it was held that the communication of acceptance to the agent only becomes effective when the agent has authority to accept it and not only authority to forward it. Obviously, the latter case applies to electronic host computers.

It is not immediately clear, however, what these commentators fancy the "authorisation" of an electronic agent to entail. For instance, does the mere use of an electronic agent with a view that it shall bring about contracts with third parties suffice as an act of authorisation? Does the scope of authority of an electronic agent depend on the programmed instructions, or on the subjective intention of the person using it? It is submitted that the best option in UK law would be to adopt an approach similar to that found under the UCITA in the US, *i.e.* to determine the scope of authority of an electronic agent with reference to the purpose for which the user selected and put the electronic agent to use. As Weitzenbock puts it,[323] it is conceivable that in determining the extent to which a user is bound by an automated transaction, a judge may put "…weight on the user's actual choice of an electronic agent for a particular purpose."

6.10 The formation of automated transactions in UK law

6.10.1 Pre-contractual information requirements

Unlike the South African and US legislative frameworks for electronic commerce, the *Electronic Commerce Regulations* in the UK impose an obligation on online traders to provide customers with specific information before the conclusion of contracts. This information must be provided by online traders on their websites prior to customers placing their purchase orders for items advertised thereon. The rationale behind the obligation on the part of online traders to provide customers with pre-contractual information is to foster consumer confidence in electronic commerce.[324] By providing some of the requisite information, *e.g.* the code of conduct to which a trader

322 Werner 2000-2001 *International Journal of Communications Law and Policy* 7.
323 Weitzenboeck "Electronic agents and contract performance" 71.
324 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 23.

subscribes,[325] online traders will foster consumer confidence by demonstrating their reliability and genuineness. The provision of pre-contractual information is also intended to ensure that consumers or customers have sufficient information to "…evaluate both the product and the offer before the contract is concluded."[326]

In terms of Regulation 9 (1) of the *Electronic Commerce Regulations*:

> 9.—(1) Unless parties who are not consumers have agreed otherwise, where a contract is to be concluded by electronic means a service provider shall, prior to an order being placed by the recipient of a service, provide to that recipient in a clear, comprehensible and unambiguous manner the information set out in (a) to (d) below—
>
> (a) the different steps to follow to conclude a contract;
>
> (b) whether or not the concluded contract will be filed by the service provider and whether it will be accessible;
>
> (c) the technical means for identifying and correcting input errors prior to the placing of the order; and
>
> (d) the languages offered for the conclusion of the contract.

It is important to emphasise at the very beginning that Regulation 9 (1) is applicable specifically to electronic contracts involving the placement of purchase orders by customers. These contracts must exclusively be "concluded by electronic means." The phrase "concluded by electronic means" *prima facie* appears to envisage contracts concluded online over trading websites. As explained in the *Guide for Business to the Electronic Commerce Regulations*:[327]

> These requirements do not apply where, for example, initial contact is made via a website but, for reasons relating to the complexity of the contract, it is actually concluded offline.[328]

It is also important to emphasise the fact that the provisions of Regulation 9 (1) quoted above do not appear in any manner to be limited to automated transactions.

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325 Regulation 9 (2).

326 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 23.

327 Part 5.19.

328 It is submitted that a contract will be taken to have been made online over a trading website, but concluded offline, for instance where acceptance of a purchase order is not communicated electronically to a customer, but by the conduct of delivering the ordered goods. Acceptance of an online purchase order by delivery of goods is not an electronic acceptance, and the contract so formed is not concluded by electronic means for purposes of Regulation 9 (1).

An online trader is required to provide customers with the information outlined in that Regulation regardless of whether it's trading website is automated or passive. As long as the website allows customers to place purchase orders, and those purchase orders are accepted electronically, Regulation 9 (1) shall be applicable. In what follows, the provisions of Regulation 9 (1) (a)-(d) quoted above will be interpreted, discussed and critically analysed.

Regulation 9 (1) (a) obliges online traders to provide customers with information about "the different steps to follow to conclude a contract." This provision is intended to serve a number of useful purposes, specifically in instances of contracts formed on trading websites. The first aim of the provision is to ensure that both parties have demonstrated their intention to be bound before a contract can be said to have been concluded. It is said that by providing customers with information about the different steps to follow in order to conclude contracts, online traders by so doing demonstrate the intention to be bound with anyone who follows those steps.[329] Customers on the other hand demonstrate their intention to be bound by actually following those steps with sufficient knowledge or understanding that a contract will be concluded.[330] The second aim of the provision is to ensure that customers at all times "…can better assess what stage of the transaction they are at."[331] The third aim of the provision is to ensure that customers are not bound by online contracts without their knowledge or intention, especially inexperienced customers who are not accustomed to the processes of online contracting.[332]

Information about the different steps that will lead to a contract can be provided in any fashion, provided the manner used by an online trader is "clear, comprehensible and unambiguous."[333] The most common manner of providing the information is by

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329 Polanski 2007 *JICLT* 116.

330 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 28.

331 Polanski "Common Practices in Electronic Commerce" 7.

332 Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 285.

333 In explanation of what is "clear, comprehensible and unambiguous," Part 5.20 of the *Guide for Business to the Electronic Commerce (EC Directive) Regulations*, states that "[t]he Regulations do not prescribe how the requirement for information about the placement of an order to be provided 'in a clear, comprehensible and unambiguous manner' should be met. Again, the Government envisages that this latter requirement should be capable of being met if the information is accessible by means other than the one which the service provider transacts with recipients of his services."

a "breadcrumb trail," which is a pictorial depicting "…a number of steps on it that highlight the stage of the transaction…."[334] The information can also be provided through a hyperlink leading to a different webpage altogether.[335]

Regulation 9 (1) (b) requires online traders to provide customers with information on whether or not contracts formed on their websites will be filed and accessible. It is not readily clear what the "filling" of a contract entails in the context of UK contract law. In explanation, the *Guide for Business to the Electronic Commerce Regulations* mentions that:[336]

> 'Filing' is a legal concept in other Member States that would apply in the UK only where contracts are made with service providers established in those Member States.

This explanation makes it clear that the process of filling a contract will not be relevant where an online trader has its place of business in the UK. This fact, however, does not excuse an online trader situated in the UK from informing its customers about whether or not contracts will be filed or accessible. An online trader situated in the UK is therefore still required to provide customers with that information. A provision to a similar effect can be found under section 43 of the South African ECT Act, which obliges online traders to provide customers with information about the manner and period within which they can "…access and maintain a full record of the transaction."[337] The main difference between section 43 (1) (m) of the ECT Act and Regulation 9 (1) (b) of the *Electronic Commerce Regulations* is that section 43 (1) (m) of the ECT Act is limited to consumer contracts. Although Regulation 9 (1) (b) of the *Electronic Commerce Regulations* is mandatory to consumer contracts, it is still applicable to all other contracts concluded by electronic means "[u]nless parties who are not consumers have agreed otherwise…."[338]

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334 Polanski "Common Practices in Electronic Commerce" 7.

335 Gringras *The Laws* 77. The same author agues, however, that the use of a hyperlink made available in the terms and conditions of a trader will not qualify as "clear, comprehensible and unambiguous" for purposes of Regulation 9 (1) (a).

336 Part 5.18 (b).

337 S 43 (1) (m).

338 Regulation 9 (1).

Regulation 9 (1) (c) obliges online traders to provide customers with information about "the technical means for identifying and correcting input errors…." Note must be taken that online traders under Regulation 9 (1) (c) are not required to provide customers with "actual or practical" means for identifying and correcting input errors. On the contrary, they are simply required to provide customers with "information" on how input errors can be identified and corrected.[339] By comparison, the ECT Act,[340] UETA and UCITA,[341] do not require users of electronic agents to provide customers or traders beforehand with information on how input errors can be identified, corrected or prevented. On the contrary, the ECT Act, UETA and UCITA obliges the users of electronic agents to provide contracting partners with the actual means for correcting and preventing input errors.

Regulation 9 (1) (d) obliges online traders to provide customers with information about the languages offered on a trading website for concluding a contract. It is common cause that a trading website may be programmed to display contents in different languages. Note must be taken that Regulation 9 (1) (d) does not require online traders to provide their customers with different languages for the conclusion of contracts. That would be too onerous an obligation to impose on any online trader. Regulation 9 (1) (d) simply obliges online traders to provide customers with information about the different languages in which customers may conclude contracts on their websites. If contracts on a website can be concluded in only one language, the online trader operating that website must make that information available before customers proceed to place their orders. Where a website is programmed to enable contract formation in different languages, the benefit of providing customers with that information beforehand is to ensure that each customer can select the language which he or she knows or understands better.

In terms of Regulation 9 (4):

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339 As explained by Reifa 2009 *Lex Electronica* 30, "Regulation 9(1) (c)…concerns the 'information' that should be made available to consumers prior to the conclusion of a contract regarding the technical means for identifying and correcting input errors prior to the placing of the *order*."

340 S 20 (e).

341 § 10 (2) of the UETA and § 213 (b) of the UCITA.

> The requirements of paragraphs (1) and (2) above shall not apply to contracts concluded exclusively by exchange of electronic mail or by equivalent individual communications.[342]

This provision is clearly intended to delimit the scope of application of Regulation 9 (1) (a)-(d) discussed above. It follows, therefore, that the obligation on the part of online traders to provide customers with the pre-contractual information will be irrelevant where a contract is concluded by "…electronic mail or by equivalent individual communications." The main difficulty with Regulation 9 (4) is that the phrase "individual communications" is not defined anywhere in the *Electronic Commerce Regulations*. This is problematic seeing that this phrase is central to the scope of application of Regulation 9 (1) (a)-(d). The foregoing difficulty notwithstanding, commentators on the issue are agreed that the pre-contractual information requirements in Regulation 9 (1) (a)-(d) are applicable only to contracts of adhesion concluded on trading websites.[343] A logical conclusion is therefore that the phrase "individual communications" in Regulation 9 (4) envisages all instances in which contracts are negotiated and concluded by the exchange of data messages between parties, as opposed to instances of contracts of adhesion in which there is no space for "individual communications" between the parties. It is not difficult to appreciate the rationale behind the exclusion of the obligation to provide pre-contractual information in instances of contracts formed by the exchange of "…electronic mail or by equivalent individual communications." It is presumed that relevant information can always be easily requested and promptly provided to a contracting party in cases of individual communications.[344]

6.10.1.1 A critical analysis of the pre-contractual information requirements

The obligation to provide customers with pre-contractual information outlined in Regulation 9 (1) (a)-(d) appears *prima facie* to be most relevant to consumer contracts. Some of the information required to be provided in that provision will,

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342 Regulation 9 (2) provides that "[u]nless parties who are not consumers have agreed otherwise, a service provider shall indicate which relevant codes of conduct he subscribes to and give information on how those codes can be consulted electronically."

343 See Reifa 2009 *Lex Electronica* 29; Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 285.

344 Kierkegaard 2007 *Shidler Journal of Law, Commerce and Technology* para 20.

however, be relevant even to automated transactions that are not consumer contracts. The first provision most relevant to automated transactions is Regulation 9 (1) (a) which requires online traders to provide customers with information about different steps to follow in order to conclude a contract. Since automated transactions are inherently instantaneous, it means that customers, especially those who are not familiar with the processes of online contracting, are always at the risk of being "ambushed" by electronic agents into contractual liability. Therefore, it is fitting and proper that those who use electronic agents are burdened with an obligation to warn contracting parties beforehand about activities that will lead to the conclusion of contracts. The legal effect of this requirement is no different from § 14 (2) of the UETA and § 206 (b) of the UCITA, both of which provide that an automated transaction will be formed where a party engages in conduct which he or she "knows or has reason to know" will cause an electronic agent to conclude a contract. The only difference is that Regulation 9 (1) (a) obliges the users of electronic agents to provide customers with information, while § 14 (2) of the UETA and § 206 (b) of the UCITA do not place such an obligation on users. Nevertheless, it is clear that in both the US and the UK a party contracting with an electronic agent must have foreknowledge, whether actual or constructive knowledge, of the conduct or activities that will result in the conclusion of an automated transaction.

Another provision that is particularly relevant to automated transactions is Regulation 9 (1) (c) which obliges online traders to provide customers with information about "technical means for identifying and correcting input errors." It is not difficult to appreciate the importance of Regulation 9 (1) (c) in the context of automated transactions. The first benefit of providing the information contemplated in Regulation 9 (1) (c) is to ensure that customers are notified beforehand about the presence or existence of "technical means for identifying and correcting input errors" as part of the process of contract formation. It is conceivable that absent such notice, customers may remain oblivious to the fact that they can identify and correct any input errors in their purchase orders. Being oblivious to the aforesaid fact, customers will therefore fail to use the technical means provided by online traders for the identification and correcting of input errors. The second benefit of requiring

online traders to provide their customers with information about the "technical means for identifying and correcting input errors" is that the means provided by some online traders may be too technical or complicated for customers to use without special "know-how" or guidance. The lack of knowledge on the part of customers on how to use the technical means provided by an online trader for identifying and correcting input errors may result in ineffective use of those means by customers. Therefore, it is only proper that online traders are obliged to provide customers with sufficient information about those technical means.

The main difficulty with Regulation 9 (1) is that it does not appear to contemplate or appreciate that consumers or customers may use electronic agents to place purchase orders on their behalf. What is of interest in such circumstances is whether online traders should be enjoined to present the requisite pre-contractual information in a manner intelligible to those electronic agents? Lodder and Voulon argue that the pre-contractual information required under the Directives of the European Parliament should be presented:[345]

> …in a format the agent can understand. The reason the agent must be able to recognize and understand the information, is that the agent must have obtained all relevant information before it can order a product or service on behalf of the consumer. As said, if the agent understands the information, the user will always have the opportunity to obtain this information through his agent interface.

This approach is very similar to § 113 (b) of the UCITA which provides that a document or term intended to form part of an automated transaction should be presented in a manner that will "…enable a reasonably configured electronic agent to react to the record or term."[346] Lodder and Voulon propose further that in imposing an obligation on online traders to present pre-contractual information in a manner intelligible to electronic agents, a distinction has to be drawn between websites that support "…the contracting of agents and those that do not."[347] It is only in the instance of websites designed to support contracting by electronic agents that online traders should be obliged to provide pre-contractual information in a manner intelligible to electronic agents.

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345 Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 283.
346 § 113 (b).
347 Lodder and Voulon 2002 *International Review of Law, Computers and Technology* 286.

6.10.2 The placing of purchase orders: offer and acceptance in automated transactions

Unlike the ECT Act, UETA and the UCITA, the *Electronic Commerce Regulations* contain some provisions dealing with the formation of contracts, *i.e.* with aspects of offer and acceptance. These provisions are mainly relevant to transactions involving the placing of purchase orders by customers for goods or services advertised on trading websites. Because the *Electronic Commerce Regulations* do not distinguish between passive and automated websites, it is common cause that these provisions are applicable to all contracts falling within the scope of "information society services," including automated transactions. The aim in this part of the discussion is to consider the extent to which the provisions of the *Electronic Commerce Regulations* dealing with offer and acceptance are consistent or inconsistent with traditional contract law rules in the UK. Effort shall also be made to explain and reconcile these provisions with the common law rules on offer and acceptance in UK law.

6.10.3 Offers and invitations to treat in automated transactions

One of the main criticisms against the *Directive on Electronic Commerce* is that, in an effort to lay a framework suitable for both Common law and Civil law Member States of the EU, the drafters of that Directive refrained from using "contract law terminology."[348] This fact in turn has rendered the Directive particularly "…hard to interpret in the English law context…."[349] An obvious example of this fact is illustrated by the repetitive use of the term purchase "order" instead of "offer, invitation to treat or acceptance" throughout the Directive. It is common cause that the term "order" has no legal significance as far as contract formation in UK law is concerned. It was a common understanding at the time of the drafting of the *Directive on Electronic Commerce* that, in implementing the Directive by domestic legislation, Member States shall define the term "order" in line with their contract law rules. The opportunity to define this term was seized in the UK with the passing of the *Electronic Commerce Regulations*.

348 Riefa 2009 *Lex Electronica* 30.
349 Riefa 2009 *Lex Electronica* 30.

In terms of Regulation 12 of the *Electronic Commerce Regulations*:

> Except in relation to regulation 9(1) (c) and regulation 11(1) (b) where "order" shall be the contractual offer, "order" may be but need not be the contractual offer for the purposes of regulations 9 and 11.

As shall be recalled, Regulation 9 (1) (c) places an obligation on online traders to provide customers with information about "technical means for identifying and correcting input errors" prior to the placing of purchase orders. Regulation 11 (1) (b) imposes an obligation on online traders to:

> [M]ake available to the recipient of the service appropriate, effective and accessible technical means allowing him to identify and correct input errors prior to the placing of the order.

The treatment of input errors under the *Electronic Commerce Regulations* shall be discussed at length later on in this work. For purposes of present considerations, the relationship between Regulation 12 and Regulations 9 (1) (c) and 11 (1) (b) is of interest. Regulation 12 has been interpreted to mean that a purchase order placed on a website shall be construed as a contractual offer under only two instances, being under circumstances envisaged in Regulations 9 (1) (c) and 11 (1) (b).[350] Simply put, a purchase order shall have the legal effect of a contractual offer under the *Electronic Commerce Regulations* in instances where the Regulations require an online trader to provide customers with information about technical means for identifying and contracting input errors,[351] and where an online trader is required to provide customers with actual means for identifying and correcting input errors.[352] As has been demonstrated in chapter four,[353] the doctrine of input errors is unique to automated transactions, although this does not appear to be entirely true in

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350 Reifa 2009 *Lex Electronica* 30. As explained under Part 5.13 of the *Guide for Business to the Electronic Commerce Regulations*, "[t]he Regulations do not deal with contract formation itself. This remains subject to common law, existing statutory provisions or the law of another relevant Member State. Consequently, Regulation 12 provides that, except in relation to Regulations 9(1) (c) and 11(1) (b) where 'order' is the contractual offer, 'order' may be but need not be the contractual offer for the purposes of Regulations 9 and 11."

351 Being under Regulation 9 (1) (c).

352 Being under Regulation 11 (1) (b).

353 See para 4.7.1 above.

relation to the *Electronic Commerce Regulations*.[354] It suffices, therefore, to conclude in the context of the present discussion that a purchase order placed on an automated commercial website shall always be construed as a firm offer under the *Electronic Commerce Regulations*.

Regulation 12 is premised on a rule in UK contract law that an advertisement of goods to the general public is not an offer but an invitation to treat.[355] According to that rule, a merchant who advertises goods for sale to the public invites members of the public to make "offers" to him for the purchase of those items. At all times, such a merchant retains a right to accept or reject these offers at will, *i.e.* he or she is not legally bound to sell to any member of the public who attempts to make a purchase. This rule is applicable, amongst others, to advertisements in traditional media such as newspapers, to displays of goods in shop windows,[356] and to displays of goods on shelves in self-service stores.[357] The rationale of the rule that advertisements are not

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354 As shall be recalled from earlier discussions, the *Electronic Commerce Regulations* are applicable to all contracts falling within the scope of "information society services," regardless of whether those contracts qualify as automated transactions or ordinary electronic contracts.

355 Riefa 2009 *Lex Electronica* 30-31.

356 See specifically *Fisher v Bell*. In that case, the defendant displayed on the window of his shop a flick knife to which was attached a price tag reading "Ejector knife—4s." He was charged under the *Restriction of Offensive Weapons Act* 1959 with offering that knife for sale. The issue was whether by displaying the knife for sale on the window of his shop, the defendant had "offered it for sale?" The court held that the display was not an offer but an invitation to treat, therefore that the defendant did not violate the statute under which he was charged. See case as discussed by Burrows*A Casebook* 7-8.

357 See specifically *Pharmaceutical Society of Great Britain v Boots Cash Chemists (Southern) Ltd*. In that case, the defendant operated a self-service store offering amongst others, medicinal drugs for sale. The drugs were displayed openly on shelves. A customer would select and place into a shopping basket whichever drug he or she wanted, and then pay for it at the cashier's desk next to the exit door. At all times, there was a pharmacist near the cashier to supervise and oversee the transaction. The defendant was charged with contravening section 18(1) of the *Pharmacy and Poisons Act* 1933 which provided that "…it shall be unlawful (a) for a person to sell any poison listed in Part I of the Poisons List, unless…(iii) the sale is effected by, or under the supervision of, a registered pharmacist." Although there was a pharmacist in the store of the defendant, the plaintiff argued that the practice in that store violated the statute because the pharmacist intervened after a contract of sale had already been concluded. In the view of the plaintiff, a contract of sale in a self-service store was concluded when a customer selected drugs off a shelf into his or her shopping basket, not upon acceptance of the purchase price by the cashier. The issue before court was whether or not the defendant had violated the statute? To decide the issue, the court had to determine the point at which a contract of sale is concluded in a self-service store. It was held in that case that a contract is concluded when the cashier accepts the purchase price, therefore that the defendant did not violate the statute because the contract was concluded under the supervision of a pharmacist. The mere display of goods in such a setting is therefore not an offer but an invitation to treat. It is the customer who offers to buy the goods displayed, and the contract is only concluded if the cashier accepts that offer. See case as discussed by Burrows*A Casebook* 8-9.

offers but invitations to treat is premised on policy considerations, especially the need to protect public traders from inundation by purchase orders due to limitations of stock.[358] As explained by Lord Hershell in relation to a wine merchant in the matter of *Grainger & Sons v Gough*:[359]

> The transmission…of a price-list does not amount to an offer to supply an unlimited quantity of the wine described at the price named, so that as soon as an order is given there is a binding contract to supply that quantity. If it were so, the merchant might find himself involved in any number of contractual obligations to supply wine of a particular description which he would be quite unable to carry out, his stock of wine of that description being necessarily limited.

Winfield provides further explanation for the application of the doctrine of invitation to treat in relation to shop-window displays and self-service stores.[360] He states that:

> …a more natural interpretation of a display of goods in a shop with a marked price upon them would be that the shopkeeper impliedly reserves to himself a right of selecting his customer. A shop is a place for bargaining, not for compulsory sales. Presumptively, the importance of the personality of the customer cannot be eliminated. If the display of such goods were an offer, then the shopkeeper might be forced to contract with his worst enemy, his greatest trade rival, a reeling drunkard, or a ragged and verminous tramp. That would be a result scarcely likely to be countenanced by the law.

A majority of commentators in English law support the application of the doctrine of invitation to treat to website advertisements.[361] The argument that website advertisements are invitations to treat is premised on the grounds already expounded above, especially the need to protect online traders from inundation by purchase orders.[362]

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358 Kadir 2013 *International Journal of Law and Management* 43; Smith *Internet Law* 812.

359 *Grainger & Sons v Gough* 334.

360 See Winfield 1939 *Law Quarterly Review* 517-518.

361 See Werner 2000-2001 *International Journal of Communications Law and* Policy 4-5; Chessick and Kelman *Electronic Commerce* 82; Edwards and Waelde *Law and the Internet* 21-22; Wood *et al* "Great Britain" 253-254; Fleminton and Ashford "England" 260; Gringras *The Laws* 23-24; McDonalds and Atkins *Koffman and McDonald's Law* 20-22; Woodroffe and Lowe *Woodroffe and Lowe'sConsumer law* 85, stating that "…although there is no authority on this point, we consider that the offer is made by theconsumer, e.g. by clicking on 'submit' or 'order', and acceptance occurs if – and onlyif – the supplier accepts by a further communication to the consumer, e.g. by sending anemail acknowledgement or confirmation with a reference to the order or booking."

362 See McDonalds and Atkins *Koffman and McDonald's Law* 21, stating that "[o]ne of the arguments for holding that sellers should be free to advertise goods without being bound to supply to any customer who places an order is that it avoids sellers being liable if their stocks cannot meet the number of orders received. A similar argument can be applied to goods advertised on websites and it is unlikely that suppliers would intend to be contractually bound to

6.10.3.1 A critical analysis of Regulation 12 of the *Electronic Commerce Regulations*

That Regulation 12 is in line with the UK common law of contract is only true to a limited extent. At common law, the act of a customer who purports to purchase an advertised item will be regarded as an offer only if the advertisement in issue is objectively construed to be an invitation to treat. In the context of electronic commerce, a purchase order placed by a customer in response to a website advertisement will similarly be an offer only if that website advertisement is objectively construed to be an invitation to treat.[363] It is strictly to this extent that Regulation 12 can be said to be in line with the common law of contract in the UK. Apart from that, Regulation 12 does not appear to acknowledge, contrary to the position at common law, that an advertisement under relevant circumstances can be construed to be an offer. A landmark decision to that effect is *Carlill v Carbolic Smoke Ball Co*.[364] In that case the defendants were manufacturers of a medicinal product known as "carbolic smoke ball." In an effort to promote sales, the defendants published in various newspapers an advertisement in the following terms:

> £100 reward will be paid by the Carbolic Smoke Ball Company to any person who contracts the increasing epidemic influenza, colds, or any disease caused by taking cold, after having used the ball three times daily for two weeks according to printed directions supplied with each ball. £100 is deposited with the Alliance Bank Regent Street, shewing our sincerity in the matter.

Mrs Carlill used the product as directed but nevertheless contracted influenza, wherefore she claimed the reward as advertised. The issue for decision was whether the advertisement in issue was an offer or an invitation to treat? It was held that the advertisement in issue was not an invitation to treat, but rather a firm offer which Mrs Carlill had accepted by satisfying the conditions published in the advertisement

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any potential customer who places an order via an internet." See also Chessick and Kelman *Electronic Commerce* 83; Kadir 2013 *International Journal of Law and Management* 47-48; Woodroffe and Lowe *Woodroffe and Lowe'sConsumer law* 83.

363 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

364 *Carlill v Carbolic SmokeBall Co* [1892] 1 Q.B. 256 (CA) (hereinafter referred to as *Carlill v Carbolic SmokeBall Co*).

for payment of the reward.[365] The authority of this case is precisely that the intention of a trader, as gathered from the words used in an advertisement and other surrounding circumstances, will always be determinative of the issue whether an advertisement is an offer or an invitation to treat.[366] Where an advertisement is objectively construed to be an offer, the act of a customer who purports to purchase an advertised item will be an acceptance sufficient to conclude a contract. In the context of electronic commerce, Nuth correctly argues that if a website advertisement is construed to be an offer "…an order placed by the customer will constitute an acceptance."[367] Therefore, Regulation 12 effectively goes against the grain of the common law by providing as a general matter that purchase orders placed by customers on trading websites should always be regarded as contractual offers. A better approach would have been to follow the example of the UNECIC in drafting Regulation 12. As shall be recalled, Article 11 of the UNECIC provides that:

> A proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties, but is generally accessible to parties making use of information systems, including proposals that make use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance.

While this provision clearly proceeds, as does Regulation 12, on the presumption that website advertisements are not offers but invitations to treat, Article 11 nevertheless envisages that such advertisements may also be offers in the case of a clear intention to be bound on the part of the advertiser.

Another difficulty with Regulation 12 is that by stating that purchase orders placed by customers on trading websites are offers, it does not distinguish between passive and automated websites. As a matter of fact, in deciding whether an advertisement is an offer or an invitation to treat, the common law of contract in the UK effectively distinguishes between advertisements made on passive and automated mediums. Advertisements in newspapers, the display of goods in shop windows and on shelves in self-service stores are most likely to be construed as invitations to treat. On the

365 *Carlill v Carbolic SmokeBall Co* 268-269.
366 See Burrows *A Casebook* 15.
367 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

other hand, it is settled law in the UK that the advertisement or display of goods in an automatic vending machine is a firm offer to sell those goods to the public.[368] This offer expires as soon as the machine runs out of stock. As McDonalds and Atkins put it,[369] once the machine "…is empty, it must be implied that the offer continues only whilst stocks last." Acceptance of that offer occurs when a customer inserts a coin into the machine.[370] As shall be recalled, the same conclusion was unequivocally reached by Lord Denning in *Thornton v Shoe Lane Parking Ltd* in his endeavour to translate into a contract the interaction between a customer and an automatic ticket machine.[371] Applying this rule in the context of automated transactions, it has been argued by some that:

> …the traditional analysis with respect to automated processes generally is different to that for shop displays and advertisements. For example, the setting up of a vending machine has been regarded as making a standing offer. By analogy, it follows that where electronic agents are used in clickwrap contracts by online vendors, the latter should also be regarded as making a standard offer….[372]

Had the drafters of the *Electronic Commerce Regulations* been mindful of this state of the law, it would have been obvious to them that purchase orders placed by customers on automated websites are *prima facie* acceptances as opposed to offers.

As outrageous as the above conclusion might seem, it is nevertheless the most logical under the UK common law of contract. It is a fact that in automated transactions, "…no further bargaining between the parties is either possible or necessary."[373] Indeed such transactions have been described by one author as contracts formed on a "take-it-or-leave-it" basis.[374] When an online trader makes an offer, the customer cannot negotiate the terms of the contract as proposed by the trader in his or her offer. Either the customer accepts those terms and concludes a contract, or he or she leaves the website. This state of affairs confronts an argument

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368 McDonalds and Atkins *Koffman and McDonald's Law* 20; Tedeschi 1971 *Israel Law Review* 470.
369 McDonalds and Atkins *Koffman and McDonald's Law* 20.
370 McDonalds and Atkins *Koffman and McDonald's Law* 20; Christensen 2001 *Queensland University of Technology Law and Justice Journal* 28-29.
371 *Thornton v Shoe Lane Parking* [1971] 2 Q.B. 163 169C, stating that "…the 'offer' is made when the proprietor of the machine holds it out as being ready to receive money."
372 Squires 2000 *Deakin Law Review* 103. See also Chistensen 2001 *Queensland University of Technology Law and Justice Journal* 28-29.
373 McDonalds and Atkins *Koffman and McDonald's Law* 20.
374 Chessick and Kelman *Electronic Commerce* 99.

made by Winfield that displays of goods on shop windows and shelves should be construed as invitations to treat because "[a] shop is a place for bargaining, not for compulsory sales."[375] Automated electronic storefronts are more properly a place for compulsory sales, and not for bargaining.

Automated transactions also confront an argument by Winfield that advertisements of goods on shop windows and shelves should be construed as invitations to treat because a trader has reserved a right to select his customers.[376] Unlike traders in brick-and-mortar stores, online traders are generally not concerned with the personality of their customers.[377] As one author eloquently explains:

> …in the majority of circumstances the final choice regarding whether to contract need not be retained: why would the web-merchant refuse to contract in a mass-market transaction where the identity of the other party is generally irrelevant and almost impossible to verify?[378]

In most instances, an electronic agent running a website will be programmed to conclude a contract with anyone who completes and dispatches a purchase order for processing. It is generally admitted that the need to select customers in automated transactions is only relevant as far as it concerns the creditworthiness of a customer.[379] Electronic agents are usually programmed to check the creditworthiness of customers and to process their orders if they have a good credit record,[380] or to reject those orders in cases of customers with a bad credit record.[381] Apart from

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375 Winfield 1939 *Law Quarterly Review* 517.

376 Winfield 1939 *Law Quarterly Review* 518.

377 Online traders, however, still do select customers, *albeit* on other grounds independent to the personality of a customer. Smith *Internet Law* 812 mentions that "…the web page owner may wish to reserve the right not to supply goods or services to certain jurisdictions, to applicants under a certain age or to exercise other forms of discretion, such as requiring payment to be received prior to despatch." The right to select customers in this manner is, however, not implied by law on the part of online traders. These traders must actually state their selection of customers in their terms and conditions. As Chessick and Kelman *Electronic Commerce* 82 put it, "…if the vendor intends to accept orders from only U.K.-based customers, a notice on the web site stating that 'The contents of this web site are for U.K. customers only' is advisable." Absent such express selection, the law will not imply that right on the part of online traders.

378 Mik 2007 http://works.bepress.com/elizamik/7/.

379 Mik 2007 http://works.bepress.com/elizamik/7/.

380 See Liegl *et al* "Germany" 394.

381 Liegl *et al* "Germany" 394. Mostly, today, the user agent will not check creditworthiness as such. It will contact the bank, request the transaction and if approved, the sale goes through. The bank is, therefore, concerned with the creditworthiness and not the agent.

that, online traders are normally prepared to be bound in contract with anyone who places a purchase order on their websites regardless of their personality.

What remains a highly debateable issue is whether, the foregoing arguments notwithstanding, advertisements on automated commercial websites should not be classified as invitations to treat specifically with a view to protecting online traders from inundation by purchase orders. Opinions are at variance on this issue. There are those who passionately argue that:

> [d]espite the potential complexity, a default rule vis-a-vis the nature of an online vendor's presence may be stated: a Web site presence should normally be regarded as an invitation to treat even where electronic agents are used to enable contract formation.[382]

These authors cite the need to protect online traders from inundation by purchase orders as the main reason for the conclusion.[383] Other authors, on the other hand, have argued that advertisements on automated websites should be treated as offers, because online traders "…do not necessarily require the protective function of invitations."[384] This is particularly true in the instance of websites selling virtual goods because the supply of virtual goods can never be depleted.[385] It has also been argued that in cases of automated transactions, traders do not need the protection of the doctrine of invitation to treat because:

> …the risk of over-exposure can be prevented by technological means. E-commerce applications can be programmed not to accept orders of goods low on stock and dynamically change product information in real-time to reflect the number of items available.[386]

Both schools of thought are highly convincing in their arguments, which makes it particularly difficult for one to pick a side without the fear of contraction, criticism and ridicule. Trietel, however, has attempted to formulate a middle-ground rule

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382 Squires 2000 *Deakin Law Review* 104.

383 Smith *Internet Law* 812.

384 Mik 2007 http://works.bepress.com/elizamik/7/.

385 Gringras *The Laws* 77; Stone *The Modern Law* 55; Bainbridge *Introduction to Computer* 268; Wener *International Journal of Communication Law and Policy* 5; Squires 2000 *Deakin Law Review* 104, stating that "[w]ith respect to digital products, the latter are potentially available in 'an unlimited number of copies', in which case, at least on this point, breach of contract is not relevant, notwithstanding the effect of copyright law may be such that reproduction is restricted and vendors should not, therefore, be held bound to an unlimited number of acceptance."

386 Mik 2007 http://works.bepress.com/elizamik/7/.

which, in the opinion of the current researcher, would strike a just and fair deal between the opposing schools of thought.[387] He mentions that:

> It has been said that, if such statements [referring to public advertisements] were offers, a merchant could be liable to anyone who purported to accept his offer even though his stocks were insufficient to meet the requirements of all 'acceptors.' But this result would not necessarily follow even if the advertisement were an offer; for it could be construed as one which expired as soon as the merchant's stock was exhausted.[388]

The author in short suggests that instead of invitations to treat, advertisements of goods to the public should be construed as offers to sell to all prospective customers, subject to the availability of stock. The benefits of adopting this rule in the context of automated transactions have already been expounded in chapter four,[389] and shall not be reiterated here. It suffices to note, in conclusion on the matter, that apart from being a general rule of UK contract law in relation to displays of goods in automatic vending machines, the rule proposed by Trietel above is also part of "soft law" in the UK. In terms of the *Principles of European Contract Law* (2000) (hereinafter referred to as PECL):

> A proposal to supply goods or services at stated prices made by a professional supplier in a public advertisement or a catalogue or by a display of goods, is presumed to be an offer to sell or supply at that price until the stock of goods, or the supplier's capacity to supply the service, is exhausted.[390]

It is submitted that the adoption of this rule in relation to advertisements of goods on automated websites in the UK would serve well to settle the ongoing battle of opinions in relation to the issue of whether such advertisements are offers or invitations to treat.

6.10.4 Acceptance and acknowledgment of receipt in automated transactions

Unlike the ECT Act, the UETA and UCITA, electronic commerce legislation in the UK contains provisions relevant to "acceptance and acknowledgement of receipt" in electronic contracts. In terms of Regulation 11 (1) (a) of the *Electronic Commerce Regulations*:

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387 Trietel "Formation of contract" 153.
388 Trietel "Formation of contract" 153.
389 See para 4.5.2.1.2.4 above.
390 Art. 2.201 (3).

> 11.—(1) Unless parties who are not consumers have agreed otherwise, where the recipient of the service places his order through technological means, a service provider shall-
>
> (a) acknowledge receipt of the order to the recipient of the service without undue delay and by electronic means.

Whether or not an acknowledgement of receipt was made "without undue delay" will depend primarily on the individual facts and other surrounding circumstances of a case.[391] In relation to the requirement that an acknowledgement of receipt must be made "by electronic means," the *Guide for Business to the Electronic Commerce Regulations* explains that:[392]

> The Regulations do not require receipt of the order to be acknowledged by the same electronic means as that by which the order was placed. The Government envisages that this requirement may also be satisfied by a confirmation that appears at the end of the ordering process (e.g. on a screen) but is not necessarily "sent" to the recipient by email or an equivalent communication.

In the event that acknowledgements of receipt are actually "sent" to customers, *e.g.* by automated e-mails, they shall be deemed to have been received "…when the parties to whom they are addressed are able to access them."[393] The *Electronic Commerce Regulations* do not define the term "access" in the above quoted provision.[394] That provision has, however, been interpreted by some to mean that the "receipt rule," as opposed to the "postal rule," shall apply to determine the effectiveness of acknowledgements of receipt.[395] According to the receipt rule, a communication becomes effective when it reaches the designated address of the addressee.[396] In the context of electronic communications, an acknowledgement of receipt will be deemed to have been received under the receipt rule when it reaches

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391 Part 5.27 of the *Guide for Business to the Electronic Commerce (EC Directive) Regulations* explains that "[t]he Regulations do not specify what is meant by 'without undue delay' as this may vary according to circumstances."

392 Part 5.28.

393 Regulation 11 (2) (a).

394 Part 5.29 of the *Guide for Business to the Electronic Commerce (EC Directive) Regulations* explains that "the order and the acknowledgement of receipt will be deemed to be received when the parties to whom they are addressed are able to access them (i.e. they are capable of being accessed). The Regulations do not specify what is meant by 'access' as this may vary according to circumstances"

395 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

396 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

or enters the electronic mail box of the addressee.[397] It is only in this instance that the addressee can be "able to access" it.

6.10.4.1 Analysis of Regulation 11 in relation to acceptance and acknowledgement of receipt

The main difficulty with the *Electronic Commerce Regulations* on the matter under consideration is that they do not define the phrase "acknowledgement of receipt" as used in Regulation 11 (1) (a). This is particularly problematic because the phrase "acknowledgement of receipt" is foreign to the UK's common law of contract terminology. Failure to define that term raises an interesting question as to the legal effect of an acknowledgement of receipt. For instance, does it conclude a contract as does an acceptance? It has been suggested, in light of the failure of the *Electronic Commerce Regulations* to define an "acknowledgement of receipt," that resort must be had to prevailing commercial practice,[398] otherwise referred to as *internet lex mercatoria*.[399]

Polanski refers to an "acknowledgement of receipt" as a "confirmation of a purchase order."[400] He argues that the practice of acknowledging receipt of online purchase orders has become "…one of the most fundamental principles of online contracting."[401] However, this is doubtful seeing that the UNECIC, which is admittedly representative of the international legal framework for electronic commerce, does not place an obligation on online traders to provide customers with acknowledgements of receipt of purchase orders.[402] Polanski defines an

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397 Eiselen 1999 http://www.cisg.law.pace.edu/cisg/biblio/eiselen1.html. Once a message has entered the electronic mailbox of the addressee, it shall be deemed to have been received, notwithstanding that he or she might not have seen or read it. As put by Bainbridge *Introduction* 315, "[t]he language of… [Regulation 11 (1) (a)] tends to suggest that this does not require that the party actually does access the communication. It seems enough that it is available for the party to access, that is, it is accessible rather than accessed."

398 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

399 The phrase "*Internet lex mercatoria*"is a phrase adopted by Paul Polanski in his contribution to the 18th Bled conference in 2005 in Slovenia. He defines it as customary practices or norms self-developed by the internet community with both an international and cross-cultural character. See Polanski "Common practices in the electronic commerce" 8.

400 Polanski "Common practices in the electronic commerce" 8.

401 Polanski "Common practices in the electronic commerce" 8.

402 Polanski "Convention on E-Contracting" 9 says of the UNECIC in this regard that "[f]lexibility of e-contracting is seriously undermined by lack of recognition of electronic trade usages that have

acknowledgement of receipt as to "…usually take … the form of web confirmation and/or e-mail confirmation."[403] This confirmation normally contains "…an order tracking number together with other details of the transaction."[404]

Nuth similarly explains that:[405]

> The acknowledgement of the receipt…will usually only contain a repetition of the terms of the order. As such, it serves as a confirmation of receipt of the order.

It is clear, therefore, that an acknowledgement of receipt is not an acceptance of a purchase order, and will therefore not conclude a contract. Its main purpose is to inform a customer merely that his or her purchase order has been received for processing. Therefore, in order to conclude a contract, an online trader under the *Electronic Commerce Regulations* must also send an "acceptance" over and above an acknowledgement of receipt.

Having established that an acknowledgment of receipt is not an acceptance, it is correctly said that Regulation 11 (1) (a) amends contract law in the UK by requiring the provision of acknowledgements of receipt.[406] This provision amends contract law in the sense that it adds a further step over and above "offer and acceptance." With the advent of Regulation 11 (1) (a), a valid electronic contract in the UK is formed in the instance of an offer, acknowledgement of receipt and an acceptance. This development is extremely disturbing when one bears in mind that an acknowledgement of receipt has no legal effect whatsoever on the process of contract formation. As Nuth puts it, the requirement that an addressee shall acknowledge receipt:

> …is contrary to the general rule of contract formation, which provides that a contract is concluded when the acceptance is communicated to the offeror without the need for confirmation to be given. A mere exchange of offer and acceptance is enough. When a contract has been formed, the acknowledgement or confirmation

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emerged in electronic commerce, such as order confirmation or encryption of transactions. In fact, the drafters have expressed their resentment towards customs of Internet community. Such an approach ignores the most promising source of norms and does not seem to take into account the values of Internet community enshrined in its practices."

403 Polanski "Common practices in the electronic commerce" 8.

404 Polanski "Common practices in the electronic commerce" 8.

405 Nuth 2008 http://www.complexserien.net/sites/complexserien/files/Complex%202008-02.pdf.

406 Chissick and Kelman *Electronic Commerce* 87.

> has no legal importance except for evidentiary purposes. Consequently, the lack of acknowledgement or confirmation has no legal effect in private law.

This explains the silence of the UNECIC on that issue. In the US, the UETA similarly does not impose an obligation to acknowledge receipt. It provides, however, that where an acknowledgement of receipt is provided, its effect shall be to establish "…that a record was received…."[407] Commentary on this provision similarly explains that its aim is to bring legal certainty with regard to the legal effect of acknowledgements of receipt, which is "…the fact of receipt…."[408] Recognising that the practice of acknowledging receipt of messages contributes nothing to the process of contract formation, the ECT Act in South Africa provides that an acknowledgement of receipt of message "…is not necessary to give legal effect to that message."[409] It does not, however, prohibit parties from acknowledging receipt of data messages, and goes further to state that an acknowledgment can be made in any manner including by conduct of the addressee to the originator.[410]

One can conclude by stating that Regulation 11 (1) (a) introduces an amendment which serves no useful purpose as far as it concerns the common law of contract in the UK. Lloyd is therefore correct in his observation that:[411]

> [t]here appears … to be an element of unnecessary complication by adding the requirement of acknowledgment of receipt of acceptance as a condition for the conclusion of a contract.

This provision is furthermore burdensome and costly to the extent that it imposes an obligation on users to program their electronic agents to generate and dispatch two messages, being an acknowledgement of receipt and acceptance, in order to conclude a single automated transaction.

6.10.5 The time and place of contract formation

Unlike in South Africa and the US, the question of time and place of contract formation is not addressed by legislation in the UK. What this means for purposes of

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407 §15 (f).
408 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 48.
409 s 26 (1).
410 s 26 (2) (a)-(b).
411 Lloyd *Legal Aspects* 243.

present considerations is that the time and place of formation of automated transactions will be determined with reference to common law rules in that jurisdiction. As with South African and US law, UK law distinguishes between postal and telephonic communications. Common law rules for determining the time and place of contracts concluded by each of these channels are discussed in detail below, with specific focus on the justifications which have been advanced by courts and scholars for those rules. A turn shall be made thereafter to determine which rule is better suited for application to automated transactions.

6.10.5.1 The time and place of contracts concluded by post

The most cited decision concerning the time and place of contracts concluded by post in UK law is *Henthorn v Fraser*.[412] In that case, the plaintiff was granted an option by the defendants to purchase certain property for £ 750. The option was granted on 7 July 1891, and could be accepted or rejected by the plaintiff within fourteen days from that date. On the 8 July, *i.e.* the following day, another person offered to purchase the same property for £ 760. The said offer was duly accepted by the defendants. Later that day, *i.e.* the 8 July, the defendants wrote a letter to the plaintiff informing him that the option which he had been granted for the purchase of the aforesaid property was being withdrawn. This letter was delivered at the plaintiff's address between 5 pm and 6 pm, and did not reach his hands until 8 pm. Meanwhile, the plaintiff had instructed his attorney on the same day to write a letter of acceptance to the defendants. This letter was posted at 3.50 pm, and was only received by the defendants the next morning due to late delivery.

Facts being as they are, the plaintiff sued the defendants for specific performance on the ground that a contract of sale had been concluded. The defendants argued on the other hand that a contract had not been concluded because the offer was withdrawn before the plaintiff's acceptance was communicated to them. The issue for decision was therefore whether the contract was concluded at the posting of the letter of acceptance by the plaintiff's attorney, or upon receipt of that letter by the defendants? Per Lord Herschell, the court found that a binding agreement was

[412] *Henthorn v Fraser* [1892] 2 Ch. 27 (hereinafter referred to as *Henthorn v Fraser*). See case as discussed by Fuller v Eisenberg *Basic Contract* 345-347.

concluded at the time of the posting of the letter of acceptance.[413] In reaching the decision, His Lordship was of the view that although the offer or option in issue was not made by post, the plaintiff had implied authority to communicate his acceptance by that mode. That authority was implied from the fact that:

> Although the plaintiff received the offer at the defendants' office…he resided in another town, and it must have been in contemplation that he would take the offer, which by its terms was to remain open for some days, with him to his place of residence, and those who made the offer must have known that it would be according to the ordinary usages of mankind that if he accepted it he should communicate his acceptance by means of the post.[414]

His Lordship went further to note that it was not immediately clear why the postal rule was premised:

> …upon an implied authority by the person making the offer to the person receiving it to accept by those means.[415]

His Lordship regarded such a view as somewhat artificial because the offeree does not need or require the offeror's authority to communicate his or her acceptance through a particular mode. The offeree may select whatever means he pleases to communicate his or acceptance to the offeror. His Lordship, however, rationalised the need for authority as follows:[416]

> The only effect of the supposed authority is to make the acceptance complete as soon as it is posted, and authority will obviously be implied only when the tribunal considers that it is a case in which this result ought to be reached.

To illustrate the extent to which he was not convinced that the postal rule depends on any authority of the offeror, His Lordship went further to state that:

> I should prefer to state the rule thus: Where the circumstances are such that it must have been within the contemplation of the parties that, according to the ordinary usages of mankind, the post might be used as a means of communicating the acceptance of the offer, the acceptance is complete as soon as posted.[417]

What must be emphasised is that Lord Herschell did not overrule or supplant implied authority as the basis of the postal rule. On the contrary, His Lordship merely

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413 See decision as reported by Fuller and Eisenberg *Basic Contract* 346.
414 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.
415 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.
416 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.
417 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.

advanced another basis for the postal rule, namely that it is within the contemplation of contracting parties that a letter of acceptance shall conclude a contract upon its posting. That this is so is made clear from his statement that, whether one bases that rule on implied authority or on the basis which he proposed, "…the present case is in either view within it."[418] One can consequently conclude in relation to the case of *Henthorn v Fraser* that the postal rule will apply where the offeree has been impliedly authorised by the offeror to transmit his or her acceptance by post, or where it was within the contemplation of the parties that acceptance shall be transmitted by post. In *Household Fire and Carriage Accident Insurance Co v Grant*,[419] Thesiger LJ was of the view that the postal rule is also based on the principle that the post office is a common agent of the parties,[420] *i.e.* the offeror and the offeree. He noted in that regard that:[421]

> …if the post-office be such common agent, it seems to me that, as soon as the letter of acceptance is delivered to the post-office, the contract is made as complete and final and absolutely binding as if the acceptor had put his letter into the hands of a messenger sent by the offeror himself as his agent to deliver the offer and receive the acceptance.

Several other justifications have been advanced by academic commentators in support of the postal rule. It has been suggested that the postal rule is based amongst others on the perceived efficiencies of postal services.[422] Christensen mentions that at the time of the development of the postal rule, "…a letter once posted was considered to be as good as delivered."[423] It is precisely for this reason that one author argues that the postal rule is generally applicable where communications or messages are transmitted by a trusted third party.[424] Trietel mentions three persuasive grounds on which the postal rule finds support.[425] He mentions that the first benefit of the postal rule is that it curbs the unfettered power

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418 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.
419 *Household Fire and Carriage Accident Insurance Co v Grant* (1878-1879) L.R. 4 Ex. D. 216 (hereinafter referred to as *Household Fire and Carriage Accident Insurance Co v Grant*).
420 See decision as quoted by Fuller and Eisenberg *Basic Contract* 343.
421 See decision as quoted by Fuller and Eisenberg *Basic Contract* 346.
422 Christensen 2001 *Queensland University of Technology Law and Justice Journal* 30.
423 Christensen 2001 *Queensland University of Technology Law and Justice Journal* 30.
424 See Werner 2000-2001 *International Journal of Communications Law and Policy* 6.
425 Trietel "Formation of Contract" 173.

of offerors to withdraw their offers.[426] This is so because an acceptance will always prevail over any purported withdrawal of the offer once it has been posted to the offeror.[427] Without this assurance, there would be no assurance of posted offers. The second benefit of the postal rule is that it attributes or allocates the risk of lost or delayed acceptances to parties who are in the best position to avoid them, being offerors.[428] Trietel shows in this regard that:[429]

> …it may be hard to hold an offeror liable on an acceptance which, through no fault of his own, was never received by him; on the other it may be equally hard to deprive the offeree of the benefit of an acceptance if he had taken all reasonable steps to communicate it. Moreover, each party may act in reliance on his (perfectly reasonable) view of the situation: the offeror may enter into other contracts, believing that his offer had not been accepted, while the offeree may refrain from doing so, believing that he had effectively accepted the offer.

UK law allocates the risk to the offeror because it is he or she who chose to trust the post office.[430] It is said further that the offeror must bear the risk of lost or delayed acceptances because he can easily safeguard himself by expressly stating in the offer that acceptance must actually be communicated to him.[431] The third benefit of the postal rule is that it gives the offeree priority over any subsequent agreement which might have been made by the offeror (after the posting of the letter of acceptance by the offeree) with a third party in relation to the same subject matter.[432] The fourth benefit of the postal rule is that it is always easier to prove the time of posting of a letter than its actual receipt by the addressee.

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426 Trietel "Formation of Contract" 173.

427 Trietel "Formation of Contract" 173, citing *Harris' Case* (1872) L.R. 7 Ch.App. 587; *Byrne & Co v Leon van Tienhoven* (1880) 5 C.P.D. 344; *Re London & Northern Bank* [1900] 1 Ch .200; *Henthorn v Fraser*.

428 Trietel "Formation of Contract" 173-154.

429 Trietel "Formation of Contract" 174.

430 *Household Fire and Carriage Accident Insurance Co v Grant* 223; McDonalds and Atkins *Koffman and McDonald's Law* 31-32, stating that "… it is the offeror who chooses to use the post and therefore it is he who should be at a disadvantage."

431 Trietel "Formation of Contract" 174; Christensen 2001 *Queensland University of Technology Law and Justice Journal* 30, stating that "… the offeror could make a stipulation to the contrary if it were not willing to take the risk of non-delivery."

432 Trietel "Formation of Contract" 174.

6.10.5.2 The time and place of contracts concluded by instantaneous modes of communication

Concerning the time and place of contracts concluded by instantaneous modes of communication, which includes amongst others telephone and telex, the most cited authority in UK law is *Entores Ltd v Miles Far East Corp*.[433] The plaintiffs in that case were an English company, and the defendants an American corporation based in Holland. The plaintiffs offered by telex to purchase 100 tons of copper cathodes from the defendants. This offer was accepted by the defendants from Amsterdam through telex. During the subsistence of the contract, the plaintiffs lodged an application in England for leave to issue a writ out of jurisdiction on the basis of a claim for damages for breach of contract by the defendants. The application was made in England on the ground that the contract was made in that jurisdiction. The defendants on the other hand disputed that the contract was made in England, arguing on the contrary that it was concluded in Holland. It is common cause that the courts of England would only allow service of such a writ out of jurisdiction if the contract was found to have been concluded in England, which made the time and place of contract formation an issue for decision.

The requested leave was granted by the court of first instance, wherefore the defendants noted an appeal to the court of second instance. Per Mr Justice Donovan, the court of second instance dismissed the appeal against the Order of the court of first instance. The defendants noted an appeal against the decision of Mr Justice Donovan. On appeal, the England and Wales Court of Appeal unanimously found that the contract was indeed concluded in England,[434] consequently upholding the decisions of the first two courts, and dismissing the appeal.

In reaching its decision, the court commenced its analysis of the issue with the view that, as with telephonic communications, communications by telex are virtually instantaneous.[435] This was explained by Parker LJ to mean that:[436]

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433 *Entores Ltd v Miles Far East Corp* [1955] 2 QB 327 (hereinafter referred to as *Entores Ltd v Miles Far East Corp*).

434 See *Entores Ltd v Miles Far East Corp* 334.

435 *Entores Ltd v Miles Far East Corp* 332.

> So far as Telex messages are concerned, though the despatch and receipt of a message is not completely instantaneous the parties 'are to all intends and purposes in each other's presence….

This analysis meant for the court that the postal rule could not be used to determine the time and place of conclusion of the contract in issue.[437] On the contrary, the court had to apply a rule for instantaneous communications to decide the matter. As noted by Lord Denning,[438] the only problem confronting the court in that regard was that "…there is no clear rule about contracts made by telephone or by Telex." Lord Denning then proceeded to analyse the matter as follows:[439]

> The problem can only be solved by going in stages. Let me first consider a case where two people make a contract by word of mouth in the presence of one another. Suppose, for instance, that I shout an offer to a man across a river or a courtyard but I do not hear his reply because it is drowned by an aircraft flying overhead. There is no contract at that moment. If he wishes to make a contract, he must wait till the aircraft is gone and then shout back his acceptance so that I can hear what he says. Not until I have his answer am I bound. I do not agree with the observation of Mr Justice Hill in Newcomb v De Roos (1859) 2, Ellis & Ellis at page 275.
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> Now take a case where two people make a contract by telephone. Suppose, for instance, that I make an offer to a man by telephone and, in the middle of his reply, the line goes 'dead' so that I do not hear his words of acceptance. There is no contract at that moment. The other man may not know the precise moment when the line failed. But he will know that the telephone conversation was abruptly broken off: because people usually say something to signify the end of the conversation. If he wishes to make a contract, he must therefore get through again so as to make sure that I heard. Suppose next that the line does not go dead, but it is nevertheless so indistinct that I do no catch what he says and I ask him to repeat it. He then repeats it and I hear his acceptance. The contract is made, not on the first time when I do not hear, but only the second time when I do hear. If he does not repeat it, there is no contract. The contract is only complete when I have his answer accepting the offer.
>
> Lastly take the Telex. Suppose a clerk in a London office taps out on the teleprinter an offer which is immediately recorded on a teleprinter in a Manchester office, and a clerk at that end taps out an acceptance. If the line goes dead in the middle of the sentence of acceptance, the teleprinter motor will stop. There is then obviously no contract. The clerk at Manchester must get through again and send his complete acceptance. But it may happen that the line does not go dead, yet the message does not get through to London. Thus the clerk at Manchester may tap out his message of acceptance and it will not be recorded in London because the ink at the

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436 *Entores Ltd v Miles Far East Corp* 337.
437 *Entores Ltd v Miles Far East Corp* 332.
438 *Entores Ltd v Miles Far East Corp* 332.
439 *Entores Ltd v Miles Far East Corp* 332-334.

> London end fails or something of that kind. In that case the Manchester clerk will not know of the failure but the London clerk will know of it and will immediately send back message 'not receiving.' Then, when the fault is rectified, the Manchester clerk will repeat his message. Only then is there a contract. If he does not repeat it, there is no contract. It is not until his message is received that the contract is complete.
>
> In all the instances I have taken so far, the man who sends the message of acceptance knows that it has not been received or he has reason to know it. So he must repeat it. But suppose that he does not know that his message did not get home. He thinks it has. This may happen if the listener on the telephone does not catch the words of acceptance, but does not trouble to ask for them to be repeated: or the ink on the teleprinter fails at the receiving end, but the clerk does not ask for the message to be repeated: so that the man who sends an acceptance reasonably believes that his message has been received. The offeror in such circumstances is clearly bound, because he will be estopped from saying that he did not receive the message of acceptance. It is his own fault that he did not get it. But if there should be a case where the offeror without any fault on his part does not receive the message of acceptance- yet the sender of it reasonably believes it has got home when it has not- then I think there is no contract.
>
> My conclusion is that the rule about instantaneous communications between the parties is different from the rule about the post. The contract is only complete when the acceptance is received by the offeror; and the contract is made at the place where the acceptance is received.

Lord Birkett and Lord Parker agreed with this analysis. The main justification for this rule is that the sender of an instantaneous message will often know immediately if his or her message has not been received by the addressee, and will instantly have an opportunity to make a proper communication in that instance.[440] This is very different from postal communications where the sender of a letter may not know about its loss or delay until it is too late to post another letter.[441] Likewise, the addressee of an instantaneous communication will always know immediately if the complete message of the sender did not pass through, and can instantly ask for a repetition of that message. It is therefore proper in the instance of instantaneous communications to apply the receipt rule.

The receipt rule has been applied by courts in a rather flexible manner in the UK. That the rule must be applied in a flexible manner was first suggested by the House

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[440] Trietel "Formation of Contract" 171.
[441] Trietel "Formation of Contract" 171.

of Lords in *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*.[442] The case involved a contract of sale between Brinkibon, an English company, and Stahl, which was an Australian company. Stahl's offer was made by telex from Vienna, and was accepted by Brinkibon through the same mode from London to Vienna. When Stahl breached the contract by failing to perform, Brinkibon sought leave in England to issue a writ against Stahl out of jurisdiction. As in *Entores Ltd v Miles Far East Corp*,[443] leave to issue writ out of jurisdiction could only be granted if the contract in issue was found to have been concluded in England. The court therefore had to determine the place of conclusion of the contract. The court held that the contract in issue was concluded in Vienna, being the place where acceptance was received on behalf of Stahl.[444] Lord Wilberforce was, however, at pains to caution that the receipt rule as laid down in *Entores Ltd v Miles Far East Corp*[445] cannot be applied indiscriminately in light of the numerous variants in the use of telex. He stated in that regard that:[446]

> The senders and the recipients may not be the principals to the contemplated contract. They may be servants or agents with limited authority. The message may not reach, or be intended to reach, the designated recipient immediately: messages may be sent out of office hours, or at night, with the intention, or on the assumption, that they may be read at a later time. There may be some error or fault at the recipient's end which prevents receipt at the time contemplated and believed in by the sender. The message may have been sent and/or received through machines operated by third persons. And many other variations may occur. No universal rule can cover all such cases; they must be resolved by reference to 'the intentions of the parties, by sound business practice and in some cases by a judgment where the risk should lie.

In the matter of *Apple Corps Ltd v Apple Computer Inc*,[447] Mann J was of the view that the *dictum* of Lord Wilberforce quoted immediately above recognises the need "…to be appropriately flexible in reflecting the needs and practices of commerce." The claimant in that case was a record company based in England. The defendant company was based in California, USA. These companies had concluded a "trade

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442 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* [1983] 2 AC 34 (hereinafter referred to as *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*).

443 *Entores Ltd v Miles Far East Corp* [1955] 2 QB 327.

444 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* 42.

445 *Entores Ltd v Miles Far East Corp* [1955] 2 QB 327.

446 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* 42.

447 *Apple Corps Ltd v Apple Computer Inc* [2004] EWHC 768 (Ch) (hereinafter referred to as *Apple Corps Ltd v Apple Computer Inc*).

mark" agreement, which the defendant was alleged by the claimant to have breached. The agreement was drafted in writing, and subsequently completed or concluded by telephone between the lawyers of the parties. In light of the alleged breach of the contract by defendant, the plaintiff made an application in England for leave of service against the defendant out of jurisdiction. Service out of jurisdiction was duly ordered by the court of first instance. The defendant appealed against the order of the court of first instance on the ground that the contract was not concluded in England; consequently, that England was not the proper forum for the dispute. While the parties were agreed that the contract was concluded by telephone, they did not agree as to which party during the telephone conversation made an offer, and which an acceptance.[448]

In light of the aforesaid uncertainty, the court noted that what was required from the plaintiff was "a good arguable case" that the contract was concluded in England.[449] The judge found that a good arguable case that the contract was concluded in England had indeed been made.[450] The decision was based on the fact that:

> …the evidence as such does not directly address the question of the order of events in the conversation … presumably the minds of the parties were not focused on that fact.[451]

On the alternative, the judge found that the contract was concluded in both England and the USA at the same time,[452] which equally entitled the claimant to institute its

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448 *Apple Corps Ltd v Apple Computer Inc* para 9, stating that "The process of drafting ended up with drafts of the agreement being in place, signed by each party, and countersigned by one but not the other, in the offices of Frere Cholmeley, solicitors for Apple, and with Mr Lagod, counsel for Computer in California. On 9th October 1991 there was a conversation to arrange completion. Computer says that the telephone call ended with (in effect) Mr Lagod in California proposing completion and Mr Zeffman (of Frere Cholmeley) agreeing that. If correct, that would amount to an offer from Mr Lagod, accepted by Mr Zeffman. Since Mr Zeffman's acceptance was received in California, on an application of the principle in *Entoresv Miles Far East Corporation* [1955] 2 QB 327 at 334, approved in *Brinkibon v Stahag Stahl* [1983] 2 AC 34 a 41-2 (in the case of instantaneous communications the contract is made where the acceptance is received the contract was made in California). Corps puts the final events the other way round – Mr Zeffman offered, and Mr Lagod accepted, so the acceptance was received in London and the contract was made there on the same legal basis."

449 *Apple Corps Ltd v Apple Computer Inc* para 9

450 *Apple Corps Ltd v Apple Computer Inc* para 35.

451 *Apple Corps Ltd v Apple Computer Inc* para 35.

452 *Apple Corps Ltd v Apple Computer Inc* para 35.

case in England. On this issue, Mann J referred to the *dictum* of Lord Wilberforce in *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*,[453] and was of the view that:[454]

> While that does not suggest that he was supporting the notion that in some cases it might be possible to find that a contract is made in two places at once, he is certainly pointing against any general rule applicable to all circumstances, and I think it is fair to say that it recognises the need to be appropriately flexible in reflecting the needs and practices of commerce. Both Lord Fraser and Lord Brandon (at pages 44 and 50 respectively) expressed the view that the general rule would have to give way to particular circumstances. In the circumstances, and while *Brinkibon* clearly lays down a general rule which is very helpful and desirable in terms of creating certainty, I do not take it as inevitably standing in the way of the concept that a contract can be made in two places at once in the sense that it forces a court always to find a single jurisdiction in which the contract should be taken to have been made.

The judge noted that the main problem with the receipt rule is that it assumes that all contracts can be analysed into offer and acceptance.[455] He criticised this approach on the ground that:[456]

> …in the post-*Brinkibon* world, where oral telephone communications are even more common, and where such communications can involve three or more participants in three or more different jurisdictions, and where parties might even conclude a written contract by each signing, and observing each other signing, over a video link, the law may have to move on and to recognise that there is nothing inherently wrong or heretical in allowing the notion of a contract made in two (or more) jurisdictions at the same time. This is not merely a way of avoiding an unfortunate, and perhaps difficult, evidential enquiry. It may well reflect the reality of the situation. Take the case of three parties who each agree to complete a written agreement by signing simultaneously over a three way video link – where is that contract made? The natural answer is that it is made in all three jurisdictions. Such a conclusion does not necessarily create practical difficulties. If one of those jurisdictions is England, then one of the foundations for the English courts to assume jurisdiction is present, but it does not necessarily follow that jurisdiction will be assumed, because a Claimant who seeks to sue here would still have to establish that it is the most appropriate jurisdiction in which to sue. Jurisdiction would then dealt with on the basis of a mature forum convenience doctrine rather than what might otherwise be a very forced and artificial analysis of trying to establish in which single jurisdiction the contract was made.

The view that it is possible to have a contract without offer and acceptance is not entirely novel in UK law, and was first advanced by Lord Denning in the matter of

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453 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* [1983] 2 AC 34.
454 *Apple Corps Ltd v Apple Computer Inc* para 41.
455 *Apple Corps Ltd v Apple Computer Inc* para 35.
456 *Apple Corps Ltd v Apple Computer Inc* para 37.

Gibson v Manchester.[457] The view that a contract can be formed without offer and acceptance is, with little surprise at that, not free form controversy. Trietel rejects that approach on the basis that it:[458]

> …is open to the objection that it provides too little guidance for the courts (or their parties or their legal advisers) in determining whether an agreement has been reached.

As shall be illustrated later on in this work, courts of law in the UK have in later years reiterated with greater passion and emphasis the view that the analysis of a contract in any given setting depends exclusively on the traditional offer and acceptance analysis. It should therefore remain a course for concern that the decision in *Apple Corps Ltd v Apple Computer Inc*[459] was primarily based on a departure from the traditional offer and acceptance analysis. On the other hand, it would be unjustifiable for one to dismiss that decision in light of the factual circumstances under which it was made. The facts were such that no evidence was adduced by either party to establish the sequence of the telephonic conversation through which the contract was concluded, yet they both were certain that a contract had been concluded between them. Moreover, one must also bear in mind that what was required was "a good arguable case" that a contract was concluded at an alleged place. It is submitted that in light of the facts of the case, there were equal chances that the contract might have been concluded in England or the USA. The facts of the case were such that either of the parties could convincingly make out a good arguable case that the contract was concluded at its location.

6.10.5.3 The time and place of conclusion of automated transactions

To determine the time and place of contract formation in automated transactions, courts of law in the UK will have to choose between the postal rule and the receipt rule. As in all other instances where the issue of time or place of contract formation becomes relevant, a determination of the most appropriate rule for automated

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457 *Gibson v Manchester* [1979] 1 WLR 294 297, stating that "[m]y Lords, there may be certain types of contract, although I think they are exceptional, which do not fit easily into the normal analysis of a contract as being constituted by offer and acceptance… "For a discussion of this concept, see generally Stone 2012 http://webjcli.ncl.ac.uk/2012/issue4/stone4.html.

458 Trietel "Formation of Contract" 111.

459 *Apple Corps Ltd v Apple Computer Inc* [2004] EWHC 768 (Ch).

transactions will depend on whether the mode of communication in issue is classified as instantaneous or non-instantaneous. If it is found that automated transactions are concluded through an instantaneous mode of communication, the receipt rule shall apply. If it is found on the contrary that automated transactions are concluded through a non-instantaneous mode of communication, the postal rule will apply.

To simplify the discussion, the issue of time and place of conclusion of automated transactions shall be considered under two separate scenarios common to automated transactions. It shall be recalled that an automated transaction has been defined as a transaction concluded between a human being and an electronic agent, or between electronic agents on both sides.[460] Consequently, two scenarios under which the question of time and place of contract formation in automated transactions may arise are first where a contract is between a human being and an electronic agent, and second where the contract is between electronic agents on both sides. The question of time and place of conclusion of an automated transaction in each scenario shall be discussed in full below.

6.10.5.3.1 The time and place of formation of an automated transaction concluded between a human being and an electronic agent

Under the first scenario, *i.e.* where a contract is concluded between a human being and an electronic agent, it is possible that a message of acceptance may be sent by an electronic agent to a human being, or by a human being to an electronic agent. Where acceptance is sent by an electronic agent to a human being, that acceptance will usually be communicated by e-mail or any other equivalent means. It is therefore imperative to determine the appropriate theory for e-mails in UK law. There is currently no consensus amongst commentators in the UK on the issue whether the postal or receipt rule should apply to e-mails.[461] However, in the matter

460 See para 2.2 above.

461 See McDonalds and Atkins *Koffman and McDonald's Law* 33; Werner 2000-2001 *International Journal of Communications Law and Policy* 5-7; Mulcahy *Contract Law* 64-65; Christensen 2001 *Queensland University of Technology Law and Justice Journal* 32-35; Chissick *Electronic Commerce* 87-89.

of *Bernuth Lines Ltd v High Seas Shipping Ltd*,[462] Mr Justice Clarke took the view that communications by e-mail become effective upon receipt by the addressee, and this is so regardless of whether the addressee is aware of their existence or their content.[463] The judge mentioned in that regard that:

> That is not to say that clicking on the 'send' icon automatically amounts to good service. The e-mail must, of course, be despatched to what is, in fact, the e-mail address of the intended recipient. It must not be rejected by the system. If the sender does not require confirmation of receipt he may not be able to show that receipt has occurred. There may be circumstances where, for instance, there are several e-mail addresses for a number of different divisions of the same company, possibly in different countries, where despatch to a particular e-mail address is not effective service.
>
> But in the present case none of those difficulties arise. The e-mail of 5th May 2005 and, so it would appear, all subsequent e-mails, were received at an e-mail address that was held out to the world as the, and so far as the evidence shows, the only email address of Bernuth. Someone looked at the e-mails on receipt and, apparently, decided that they could be ignored, without making any contact with the sender. The position is, to my mind, no different to the receipt at a company's office of a letter or telex which, for whatever reason, someone at the company decides to discard. In both cases service has effectively been made, and the document received will, in the first instance, be dealt with by a clerical officer.
>
> I am confirmed in that conclusion by the case of *The Pendrecht* [1980] 2 Lloyd's Rep 56. In that case a telex was received by charterers at their head office in Japan outside office hours on Friday 7th January. At that time the office would not have had in it employees of the charterers responsible for its commercial affairs. The telex did not come to the notice of a responsible employee until the office re-opened on Monday 10th January. Time expired on either the 8th or the 9th January. Parker J, as he then was, held that – for the purposes of section 27 (4) of the Limitation Act 1939 – the telex was served, both in the case of an English and a foreign company, when it was received, irrespective of whether this happened within business hours and whether or not the office was closed. It was not necessary that it should come to the attention of the company or to any particular individual at the company at the time it was served. I do not regard the decision in that case as being dependent on the fact that the telex did in fact come to the attention of the responsible personnel on the Monday. On the contrary, passages at page 65 of Parker J's judgment indicate that service would be valid even if the document served may not come to the attention of the party to be served for some time.[464]

For purposes of present considerations, it may be concluded based on the foregoing decision that an acceptance communicated by an electronic agent to a person's e-

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462 *Bernuth Lines Ltd v High Seas ShippingLtd* [2005] EWHC 3020 (Comm) (hereinafter referred to as *Bernuth Lines Ltd v High Seas ShippingLtd*).

463 *Bernuth Lines Ltd v High Seas ShippingLtd* para 29-31.

464 *Bernuth Lines Ltd v High Seas Shipping Ltd* para 29-31.

mail address becomes effective at the time and place where that person receives it. As in South African and the US law, it is not necessary that the addressee of such an e-mail must be aware of the fact that it has entered his or her electronic mailbox, nor that he or she must be aware of the content of that e-mail. It suffices merely that the e-mail of acceptance has entered the addressee's electronic mailbox. As illustrated above, the same approach is endorsed by the *Directive on Electronic Commerce*, which provides that acknowledgements of receipt, which are normally generated by automated message systems in response to customers' purchase orders, will be regarded to have been received by those customers once they are accessible to them.

The decision of *Bernuth Lines Ltd v High Seas Shipping Ltd* does not directly address the issue whether an e-mail must be capable of being processed by the addressee's system for it to be regarded as having been received. For purposes of present considerations, the question is whether an automated e-mail of acceptance which the offeror is unable to open or review will suffice to conclude a contract? It is submitted that the answer to that question is in the negative. In the matter of *Entores Ltd v Miles Far East Corp*,[465] Lord Denning laid down a general rule that a person who experiences technical problems in capturing a message of acceptance will nevertheless be bound by that acceptance if he or she does not ask the offeree to repeat or re-sent the message. The offeror is bound by such an acceptance because he or she will be "… estopped from saying that he did not receive the message of acceptance."[466]It is common cause in a typical click-wrap transaction, however, that a customer will not succeed in asking an electronic agent to re-send or repeat an automated message.[467] Since such a request will trigger no response from the electronic agent, we may conclude with the words of Lord Denning that " [i]f he does not repeat it [*i.e.* the message of acceptance], there is no contract."[468]

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465 *Entores Ltd v Miles Far East Corp* [1955] 2 QB 327 333-334.

466 *Entores Ltd v Miles Far East Corp* 334.

467 This is so because automated messages will usually state that "[t]his is an automated response, acknowledging receipt of your message. Please do not reply to this message…," see Ramokanate *The Legal Framework* 21.

468 *Entores Ltd v Miles Far East Corp* 334.

A turn shall be made at this juncture to determine the time and place of formation of an automated transaction where acceptance is sent by a human being to an electronic agent. To simplify the issue, we may consider here the typical example of a click-wrap contract, in which a customer clicks on a "send" button to conclude a contract with an electronic agent or automated message system of an online vendor. Most commentators in the UK adopt the view that such a transaction is instantaneous,[469] consequently that a contract in that instance is concluded according to the receipt rule. Chissick mentions for instance that:[470]

> Unlike e-mail contracts, which fall somewhere in between the postal rule and the receipt rule and thus cause confusion, determining an acceptance rule for contracts made on-line is more straightforward .The World Wide Web exhibits the features of a method of instantaneous communication (interactive and real time), the sender has almost immediate feed, and errors or faults are readily apparent. As a result the receipt rule will probably apply to web contracts.

What this means is that an acceptance by a customer will become effective when it is received by the electronic agent or automated message system of the vendor. The customer will often be able to establish actual receipt of his or her acceptance from an automated acknowledgement of receipt communicated to his or her e-mail address by that electronic agent.

Concerning the place of formation of an automated transaction where acceptance is sent by a human being to an electronic agent; it is common cause as illustrated by the decision of *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*,[471] that a contract under the receipt rule is concluded where the message or communication of acceptance is actually received. For purposes of present considerations, it follows logically that a contract will be concluded where acceptance is received by the offeror's electronic agent. In instances of click-wrap contracts, a contract will therefore be concluded where the vendor's electronic agent or automated message system is located. This may be the place of business of the online vendor if the

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469 See Chissick *Electronic Commerce* 89; Mulcahy *Contract Law* 65-66; Werner 2000-2001 *International Journal of Communications Law and Policy* 7-8.

470 Chissick *Electronic Commerce* 89; Werner 2000-2001 *International Journal of Communications Law and Policy* 7-8; Trietel "Formation of Contract" 172; Mulcahy *Contract Law* 66, similarly stating that "[a]ccordingly, the sender of a message in a click-wrap contract is in a position to know whether the message has been transmitted successfully almost as soon as it has been sent. This would seem to make the receipt rule more relevant than the postal rule."

471 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* [1983] 2 AC 34.

electronic agent is installed and operated there, or the place of business of a third party if the electronic agent is installed and operated at that place. It is conceivable that UK law may encounter some difficulties in determining the place of contract formation where an electronic agent is admittedly mobile, *i.e.* capable of jumping or migrating from one network to another, or from one computer to another, within a network. Provided it is possible to know, it is submitted in that instance that a contract will be concluded at the place of business of the company, entity or institution hosting the network in which acceptance was received by a mobile electronic agent.

6.10.5.3.2 The time and place of formation of automated transactions concluded between electronic agents on both sides

A turn shall be made at this juncture to discuss the time and place of formation of automated transactions under the second scenario, *i.e.* where an automated transaction is concluded by electronic agents *inter se*. There is a general *consensus* in electronic commerce law that transactions of this sort are instantaneous.[472] Christensen mentions for instance that "…EDI is a virtually instantaneous form of communication."[473] The view that automated transactions concluded between electronic agents are instantaneous leads logically to the conclusion that the receipt rule will apply to determine the time and place of contract formation. An automated acceptance will therefore become effective when it is received by the offeror's electronic agent.

As mentioned above, albeit with reference to e-mails, the receipt rule requires that a message of acceptance must be capable of being processed by the offeror's system. This means for purposes of present considerations that a message of acceptance must be capable of being processed by the offerer's electronic agent. As illustrated in chapter four,[474] this will only be possible if the message of acceptance is generated and communicated by the offeree's electronic agent in a format that the

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472 See *United Nations Convention on the Use of Electronic Communications* para 12; Gabriel 2006 *Uniform Law Review of Nova Scotia* 302.

473 Christensen 2001 *Queensland University of Technology Law and Justice Journal* 33.

474 See para 4.5.2.3.4.3 above.

offerer's electronic agent is able to process. In the absence of prior agreement between users concerning the format in which data messages are to be exchanged by their electronic agents, it is conceivable that messages will often be incapable of being processed by receiving electronic agents. It would seem that such messages of acceptance may or may not conclude a contract in UK law. To illustrate, if the offeror has expressly stated a format in which a message of acceptance must be generated, it is common cause that a message which is generated in a different format will not suffice to conclude a contract because the offeree would have failed to comply with the offeror's instructions concerning the mode of acceptance.[475] If no format has been prescribed by the offeror, however, it is advisable in such a case to follow the advice of Lord Wilberforce that an appropriate legal solution will depend *inter alia* on the intentions of the parties and "…sound business practice and … a judgment where the risk should lie."[476] The legal consequences of that advice in any given scenario will understandably depend on the individual facts and surrounding circumstances of a case.

Concerning the place of contract formation, it is obvious that an automated transaction will be concluded at the place where a message of acceptance was actually received by the offeror's electronic agent. As illustrated by Mr Justice Mann in the matter of *Apple Corps Ltd v Apple Computer Inc*,[477] the main difficulty with the rule that acceptance becomes effective at the place that it is received by the offeror is the assumption that it is always possible for a court to analyse a transaction into offer and acceptance, which might not always be so. As illustrated in chapter four,[478] it may be very difficult in automated transactions to determine with accuracy which electronic agent made an offer, and which an acceptance. This will be so especially where none of the electronic agents is programmed to keep a log or record of the sequence in which messages leading to contract formation were exchanged. To overcome this difficulty, one may adopt the view of Mr Justice Mann

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475 Trietel "Formation of Contract" 178, states that "An offer which requires the acceptance to be expressed or communicated in a specified way can generally be accepted only in that way."

476 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* 42.

477 *Apple Corps Ltd v Apple Computer Inc* para 37.

478 See para 4.6.2.3.2 above.

in the matter of *Apple Corps Ltd v Apple Computer Inc*[479] that a contract in that instance is concluded at two different places at the same time. This approach appeals to one as the only reasonable option out of the conundrum.

6.11 The incorporation of terms in internet contracts

6.11.1 The incorporation of standard terms and conditions in click-wrap contracts

Prior to the enactment of the ECA, it remained a matter of debate in the UK whether or not the act of clicking on assent buttons, in acceptance of terms and conditions displayed on a website, constituted a signature. The aforesaid debate arose specifically in light of the definition of a signature and its utility at common law. In the matter of *Goodman v J Eban Ltd*,[480] Evershed M.R. was of the view that a signature is constituted by affixing with "…a pen or pencil or by otherwise impressing on the document one's name…."[481] It is in light of such opinions that it became a bone of contention amongst commentators in the UK whether or not the clicking of assent buttons in acceptance of terms and conditions displayed on a website constituted a signature. There were those who felt that:

> Web-based click-wrap contracts…may have difficulties fulfilling signature requirements. Unlike e-mails, where acceptance is usually accompanied by the signing of a name, with web contracts, the customer accepts by clicking a button. While actions like clicking a button can signify acceptance, they clearly do not satisfy a signature's definition of being a name or identifying mark.[482]

Other commentators have argued on the same issue that:

> …clicking on a website button to confirm an order demonstrates the intent to enter into that contract. That will satisfy the principal function of a signature: namely, demonstrating an authenticating intention. We suggest that the click can reasonably be regarded as the technological equivalent of a manuscript 'X' signature. In our view, clicking is therefore capable of satisfying a statutory signature requirement (in those rare cases in which such a requirement is imposed in the contract formation context).[483]

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479 *Apple Corps Ltd v Apple Computer Inc* [2004] EWHC 768 (Ch).

480 *Goodman v J Eban Ltd* [1954] 1 All E.R. 763.

481 It is common cause, however, that apart from a name or surname of the signatory, a signature at common law can also be constituted by a mark or stamp on a document, see generally *Jenkins v Gaisford, ReJenkins (decd)'s goods* (1863) 3 Sw. & Tr. 93.

482 Chissick and Kelman *Electronic Commerce* 97.

483 Law Commission *Electronic Commerce* 15.

The determination of this issue was particularly important for purposes of establishing whether click-wrap agreements should be governed by the rules of signed documents or the ticket cases. If the clicking of an "I Agree" or "I Accept" button on a website is construed as a signature, the actor would be taken to have assented to the terms and conditions displayed thereon by way of a signature. Consequently, the agreement would be governed by the rules of signed documents. On the other hand, if the click of assent buttons is not equivalent to a signature, it follows logically that click-wrap agreements would be governed by rules of the ticket cases.

The issue was finally settled by the ECA which provides in section 7 (2) that:

> (2)For the purposes of this section an electronic signature is so much of anything in electronic form as—
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> (a) is incorporated into or otherwise logically associated with any electronic communication or electronic data; and
>
> (b) purports to be so incorporated or associated for the purpose of being used in establishing the authenticity of the communication or data, the integrity of the communication or data, or both.

This definition is very similar to the definition of a signature in the ECT Act,[484] and the UETA.[485] As illustrated above,[486] commentary on the definition of a signature under the UETA expressly states that the definition is wide enough to include the act of clicking assent buttons to terms and conditions on trading websites. The same argument was also made in this work in relation to the definition of a signature under the ECT Act in South Africa.[487]In conclusion, it is submitted that the definition of a signature under section 7 (2) of the ECA is likewise broad enough to cover the clicking of assent buttons in relation to terms and conditions displayed on a website.[488]

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484 s 1.

485 § 2 (8).

486 Para 6.5 above.

487 Para 4.6.2.1.1 above.

488 That notwithstanding, it must be noted that for an electronic signature to be admissible in evidence under the ECA, it must be certified, see s 7 (1). In terms of s 7 (3) (a) (c), an electronic signature is certified if the signatory demonstrates that the signature, the means of producing it, and a procedure applied to it "is (either alone or in combination with other factors) a valid means

A general rule in relation to signed documents in UK law is that, absent fraud or misrepresentation,[489] a party who signs a contractual document is bound by its terms even if he or she did not read the document.[490] A leading decision to that effect is *L'Estrange v F Graucob Ltd*.[491]The case was concerned with the validity of a clause in a document, entitled "Sales Agreement," which was signed by the claimant in relation to a vending machine that she was purchasing from the defendants. The clause provided that:

> [A]ny express or implied condition, statement, or warranty, statutory or otherwise not stated herein is hereby excluded.

After the machine was delivered and installed in her café, the claimant discovered that it did not work properly. She therefore sued the defendants for damages based on breach of an implied condition or warranty that the machine was fit for its intended purpose. In their defence, the defendants relied on the aforesaid clause to escape liability. The claimant argued that she did not read the document in which the clause was contained, *i.e.* the Sales Agreement, therefore that she was not bound by its contents. The issue for decision was whether or not the claimant was bound by the clause in light of her having signed the document without reading it? The court held in favour of the defendants that as a general rule a party who signs a contractual document is bound by its contents notwithstanding that he or she might not have read it.[492]In contrast to unsigned documents, it makes very little difference in instances of signed documents that the signatory was or was not given adequate notice of the terms and conditions contained in the document.[493]

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of establishing the authenticity of the communication or data, the integrity of the communication or data, or both." Although this provision *prima facie* raises concerns over the admissibility of electronic signatures effected by clicking on assent buttons in relation to terms and conditions displayed on a website, Smith *Internet Law* 840 argues that "…there is nothing in the Act that purports to restrict the admissibility of other electronic signatures…."

489 For a case of a signature induced by misrepresentation, see *Curtis v Chemical Cleaning and Dyeing Co* [1951] 1 K.B. 805.

490 Guest *Anson's Law* 139; Smith *Atiyah's Introduction to the Law* 136; Trietel "Formation of Contract" 815-816; *Levison v Patent Steam Carpet Cleaning Co Ltd* [1979] Q.B. 69.

491 *L'Estrange v F Graucob Ltd* [1934] 2 K.B. 394 (hereinafter referred to as *L'Estrange v F Graucob Ltd*).

492 *L'Estrange v F Graucob Ltd* 403.

493 Furmston *Cheshire and Fifoot's Law* 151-152.

Applying the decision in context, it follows that a person who clicks assent buttons on a website without reading the terms and conditions on that website will be bound thereby, notwithstanding that he or she might not have read them.

6.11.2 The incorporation of terms and conditions in web-wrap contracts

Web-wrap contracts will be governed by rules of the ticket cases, because customers in web-wrap contracts are usually not required to click on any buttons to indicate their assent to terms and conditions displayed on a website. There are in the main three requirements in UK law for the proper inclusion of terms and conditions in tickets and other unsigned documents.[494] The first requirement is that terms must be incorporated before conclusion of the contract. The second requirement is that the terms sought to be included must be brought to the attention of the other party. The third requirement is that the document through which terms and conditions are sought to be included must be contractual in nature. Each of these requirements shall be explored in full and considered in the context of web-wrap contracts below.

The first requirement mentioned above was considered in the decision of *Olley v Marlborough Court Ltd*.[495] The defendant in that case operated a hotel in which the plaintiff and her husband were accepted as guests for a period of six months. Behind their bedroom door was placed a notice reading that:

> The proprietor's will not hold themselves responsible for articles lost or stolen, unless handed to the manageress for safe custody.

During their stay at the hotel, the plaintiff's jewellery and other valuable belongings were stolen, wherefore she sued the defendant for damages. The defendant denied liability on the basis of the aforesaid clause. It was argued for the plaintiff that the notice containing that clause did not form part of the contract because guests at the hotel only saw it after they had already paid for a room, *i.e.* after the contract had already been concluded. Therefore, the issue for decision by the court was whether or not the notice formed part of the contract? It was held for the plaintiff that the

494 Guest *Anson's Law* 139-144.
495 *Olley v Marlborough Court Ltd* [1949] 1 K.B. 532 (CA).

notice did not form part of the contract because she did not see it until she had been accepted as a guest.

Application of the foregoing rule to web-wrap agreements will require a court to determine the moment at which a web-wrap contract was concluded. Some commentators in UK law believe that the rule will not pose any real challenge for internet contracts because online traders can easily display their standard terms and conditions before customers submit their purchase orders.[496] The foregoing reasoning *prima facie* suggests that terms and conditions in internet contracts should be displayed before a customer submits his or her purchase order. It must be noted, however, that not all internet contracts involve submission of purchase orders through a website. In fact, in many instances of web-wrap contracts, customers will be allowed to download an item or information from a website without any purchase order being involved. In such instances, it is submitted that terms and conditions should be displayed before a customer is permitted to download software or access information to which the terms and conditions of a trader are applicable.

The second rule in ticket cases requires that the terms and conditions of a trader must be brought to the attention or notice of the customer. This rule was developed in the decision of *Parker v South Eastern Railway Company*.[497] In that case, the plaintiff deposited his bag in a cloakroom at the defendant's railway station, and was given a ticket. On the face of it, the ticket contained some writing, including a statement reading "see back." On the back of the ticket was printed the terms and conditions of the defendant, one of which was a clause providing that "The company will not be responsible for any package exceeding the value of £10." The plaintiff's bag was lost, wherefore he claimed damages exceeding £10 from the defendant. In defence, the defendant denied liability based on the aforesaid clause. The plaintiff admitted that he was aware of the writing on the ticket, but had not read it and did not believe that the writing contained terms and conditions. In the court *a quo*, the trial judge directed the jury to decide whether the plaintiff was aware of and read

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[496] See Chissick and Kelman *Electronic Commerce* 99; Edwards and Waelde *Law and the Internet* 29.

[497] *Parker v South Eastern Railway Company* (1877) 2 C.P.D. 416 (hereinafter referred to as *Parker v South Eastern Railway Company*).

the conditions on the ticket? The jury answered in the negative, wherefore judgement was entered for the plaintiff. On appeal, the court directed the matter for retrial because the jury had been misdirected by the trial judge in the formulation of the issue. The decisive question, in the opinion of the court, was whether the defendant had done what was reasonably sufficient to bring the condition in issue to the notice of the plaintiff.[498] Per Mellish LJ, the court of appeal stated:

> I am of the opinion…that the proper direction to leave to the jury in these cases is that, if the person receiving the ticket did not see or know that there was any writing on the ticket, he is not bound by the conditions;…if he knew there was writing, and knew or believed that the writing contained conditions, then he is bound by the conditions;…if he knew there was writing on the ticket, but did not know or believe that the writing contained conditions, nevertheless he would be bound, if the delivering of the ticket to him in such a manner that he could see there was writing upon it, was, in the opinion of the jury, reasonable notice that the writing contained conditions.[499]

The principle stated above is at times referred to as the "reasonable sufficiency of notice test."[500] A notice of terms and conditions in a ticket is sufficiently reasonable if the party issuing that ticket took all reasonable steps to bring the terms to the attention of the recipient of the ticket.[501] Reasonable notice has been held to have been given where a ticket stated on its face that "For terms and conditions see back."[502] Notice has also been held to be sufficiently reasonable where a ticket stated on its face that the transaction was "subject to the conditions as exhibited on the premises,"[503] and there were notices in prominent places in the premises containing terms and conditions. The reasonableness of steps taken to bring terms and conditions to the attention of a recipient of a ticket will also depend on the gravity of those terms.[504] For instance, if a term is wide and destructive of the rights of the recipient, it has been suggested that such a term should be printed in "…red

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498 *Parker v South Eastern Railway Company* 425.

499 *Parker v South Eastern Railway Company* 425-426.

500 Guest *Anson's Law* 141.

501 The question whether sufficient notice was given is usually a matter of fact, and is determined by a court with reference to the circumstances of a case and the situation of the parties, see *Hood v Anchor Line (Henderson Bros) Ltd* [1918] A.C. 837 844.

502 *Thrompson v LM & S Railways* [1930] 1 K.B. 41 (hereinafter referred to as *Thrompson v LM & S Railways*).

503 *Watkins v Rymill* (1883) 10 Q.B.D. 178.

504 Trietel "Formation of Contract" 823.

ink with a red hand pointing to it—or something equally startling."[505] Once it is established that sufficient notice of the terms was given, the recipient of the ticket will be bound, notwithstanding that he did not read it, could not read it because he or she is illiterate,[506] or because he or she could not read the language in which the terms and conditions are written.[507]

In the context of web-wrap contracts, the reasonableness of a notice of terms and conditions will depend on the place at which terms and conditions are displayed on a website. Terms should be made available in a part of a website where visitors can easily see and read them. It has been suggested in UK law that a hyperlink might not be sufficient as it seemingly hides terms and conditions from customers.[508]

The third rule of the ticket cases is that the document through which terms and conditions are sought to be introduced into a contract must be contractual in nature. The basis of the rule is that a customer would not expect to find terms and conditions of a contract in a document which is not contractual in nature.[509] In *Chapelton v Barry Urban District Council*,[510] the plaintiff hired two deckchairs from the defendant. On paying for the chairs, he was issued with a ticket containing a term to the effect that the defendant "…will not be liable for any accident or damage arising from hire of chairs." While on the beach, the chair which the plaintiff had hired and sat on gave away, and injured him in the process. He therefore sued the defendant for damages. The issue before court was whether the defendant was protected from liability by the clause mentioned above? Per Slesser LJ, the ticket in which the clause was contained was held to be a mere receipt evidencing that the recipient had hired the chair, therefore that the clause did not form part of the contract.[511]

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505 *Thornton v Shoe Lane Parking Ltd* 170D.See also *Spurling (J) Ltd v Bradshaw* [1956] 1 W.L.R. 461 466.

506 Guest *Anson's Law* 141.

507 Guest *Anson's Law* 141.

508 Chissick and Kelman *Electronic Commerce* 101.

509 *Thornton v Shoe Lane Parking Ltd* 165D, stating that "A condition cannot be annexed by reference if no reasonable person would regard it as part of the contract."

510 *Chapelton v Barry Urban District Council* [1940] 1 All E.R. 356 (CA) (hereinafter referred to as *Chapelton v Barry Urban District Council*).

511 *Chapelton v Barry Urban District Council* 360C-D.

Doubt has been expressed by some commentators in the UK on whether or not a website is a contractual document on which a customer can expect to find the terms and conditions of a contract.[512] Edwards and Waelde have argued that:[513]

> …webvertisements are *prima facie* advertisements, not contractual documents, customers will not expect to find contractual terms and conditions contained therein.

There are several difficulties with the sentiments expressed in the foregoing quote. First of all, it is *prima facie* misleading to suggest as a general matter that an advertisement cannot contain terms and conditions on which the advertiser is willing to be bound. In *Carlill v Carbolic Smoke Ball Company*,[514] an advertisement for reward was construed as a firm offer, *i.e.* as a proposal containing definite terms and conditions, the acceptance of which resulted in a valid agreement between the advertiser and offeree. Secondly, it is not true that customers will not expect to find terms and conditions to web-wrap contracts on trading websites. The prevailing commercial practice is such that online traders introduce their terms and conditions through websites, and online customers today expect to find terms and conditions displayed thereon. To hold otherwise would be to disturb what has become customary in internet contracts. In the matter of *Parker v South Eastern Railway Company*,[515] Mellish LJ was willing to accept *obiter* that a document may become contractual by reason of the customs of the industry in which it is employed. Referring to the bill of lading for example, the judge mentioned that:

> …the reason why the person receiving the bill of lading would be bound seems to me to be that in the great majority of cases persons shipping goods do know that the bill of lading contains the terms of the contract of carriage; and the shipowner, or the master delivering the bill of lading, is entitled to assume that the person shipping goods has that knowledge. It is, however, quite possible to assume that the person who is neither a man of business nor a lawyer might on some particular occasion ship goods without the least knowledge of what a bill of lading was, but in my opinion such a person must bear the consequences of his own exceptional ignorance….

It is submitted that the same line of reasoning is equally relevant to the introduction of terms and conditions by trading websites. While it may be true as Edwards and

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512 Chissick and Kelman *Electronic Commerce* 100-101.
513 Edwards and Waelde *Law and the Internet* 30.
514 *Carlill v Carbolic Smoke Ball Company* [1893] 1 QB 256.
515 *Parker v South Eastern Railway Company* 423-424.

Waelde suggest, that trading websites usually contain advertisements, and purchase order forms, it has become customary, however, in electronic commerce to find terms and conditions on such websites.

In relation to both click-wrap and web-wrap contracts it must be noted that according to Regulation 9 (3) of the *Electronic Commerce Directives*:

> Where the service provider provides terms and conditions applicable to the contract to the recipient, the service provider shall make them available to him in a way that allows him to store and reproduce them.

The aim of this provision is to ensure that online customers are able to retain a copy of the terms and conditions applicable to their contracts. This provision must be interpreted differently from the common law requirements for the effective incorporation of terms discussed in the preceding paragraphs. Consequently, terms and conditions incorporated in line with the common law requirements will not be invalidated simply because a customer was not able to store or reproduce them. As mentioned in the *Guide for Business to the Electronic Commerce Regulations*,[516] in framing Regulation 9 (3):

> …the Government envisages that this requirement should be capable of being met if the terms and conditions are provided in a form other than was the case during the original transaction (e.g. via a printed receipt sent with goods rather than downloaded or copied from a website).

If an online trader fails to comply with this requirement, the customer may seek a court order "…requiring that service provider to comply with that requirement."[517]

6.11.3 The battle of forms

A turn shall be made at this juncture to discuss the battle of forms in automated transactions involving electronic agents on both sides. As noted by Dyson LJ in the matter of *Tekdata Interconnections Ltd v Amphenol Ltd*,[518] it is impossible to state "…a general rule that will apply in all cases where there is a battle of the forms." This is so because:

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516 Part 5.23.
517 Regulation 14 of the *E-Commerce Directive*.
518 *Tekdata Interconnections Ltd v Amphenol Ltd* [2009] EWCA Civ 1209 para 25.

> …it may be possible to analyse the legal situation that results as being that there is (i) a contract on A's conditions; (ii) a contract on B's conditions; (iii) a contract on the terms that would be implied by law, but incorporating neither A's nor B's conditions; (iv) a contract incorporating some blend of both parties' conditions; or (v) no contract at all.

These results can be reached through various legal approaches recognised in UK law. These approaches where summarised as follows by Lord Denning in the matter of *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd*:[519]

> …in most cases when there is a "battle of forms", there is a contract as soon as the last of the forms is sent and received without objection being taken to it. That is well observed in Benjamin on Sale 9th Edition (1974) page 84. The difficulty is to decide which form, or which part of which form, is a term or condition of the contract. In some cases the battle is won by the man who fires the last shot. He is the man who puts forward the latest terms and conditions: and, if they are not objected to by the other party, he may be taken to have agreed to them. Such was *B. R. S. v. Crutchley* (1968)' Lloyd at pages 281 -2 by Lord Pearson; and the illustration given by Professor Guest in Anson on Contract (24th Edition) at pages 37 and 38. In other cases, however, the battle is won by the man who gets the blow in first. If he offers to sell at a named price on the terms and conditions stated on the back: and the buyer orders the goods purporting to accept the offer on an order form with his own different terms and conditions of the back - then if the difference is so material that it would affect the price, the buyer ought not to be allowed to take advantage of the difference unless he draws it specifically to the attention of the seller. There are yet other cases where the battle depends on the shots fired on both sides. The terms and conditions of both parties are to be construed together. If they can be reconciled so as to give a harmonious result, all well and good. If differences are irreconcilable - so that they are mutually contradictory - then the conflicting terms may have to be scrapped and replaced by a reasonable implication.

Application of any of these approaches to the battle of forms will depend primarily on the facts of each case. Each of these approaches shall be discussed in full below with reference to relevant case law and academic commentary.

6.11.3.1 The mirror-image rule and the traditional offer and acceptance analysis

The mirror-image rule in English law is frequently applied in those cases where the issue is simply whether or not the parties have reached agreement in light of their conflicting terms. Such cases usually raise basic questions about offer and acceptance in contract law. In the matter *Pickfords Ltd v Celestica Ltd*,[520] Dyson LJ

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519 *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd*[1979] 1 WLR 401 404 (hereinafter referred to as *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd*).

520 *Pickfords Ltd v Celestica Ltd* [2003] EWCA Civ 1741 para 2.

referred to one such case as raising an issue so simple that it appeared to have been devised for "…an examination question on the law of contract for first year law students." This can be contrasted with those cases where it is not in dispute that the parties have reached agreement, the pressing issue being whether that agreement is governed by the terms and conditions of party A or those of B. With few exceptions,[521] the application of the mirror-image rule to the battle of forms has always led to the conclusion that there is no contract between the parties.[522] As Trietel puts it,[523] a communication which varies or introduces new terms over and above those stated in an offer is not an acceptance but a counter-offer. A counter-offer will not result in a contract until it has been accepted by the original offeree. Apart from the case of *Hyde v Wrench* discussed above,[524] this was also demonstrated in the matter of *Jones v Daniel*.[525] In that case, the defendant made an oral offer to purchase a piece of land belonging to the plaintiff for £1450. The plaintiff replied with a "letter of acceptance" enclosing a contract for signature by the defendant. The contract contained a number of onerous terms which were not part of the offer. The defendant wrote to the plaintiff declining to purchase, and returned the contract unsigned, wherefore the defendant instituted an action for specific performance. The issue for decision by the court was whether the letter of acceptance enclosing a contract for signature by the defendant constituted an acceptance? Finding for the defendant, Romer J held that the said dossier was in fact not an acceptance but rather a counter-offer, which the defendant never accepted, consequently that the parties never reached an agreement.[526]

Where it is clear that the parties have reached agreement, the only dispute being in relation to the terms and conditions governing that agreement, courts in the UK

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521 See *Global Tankers Inc v Amercoat Europa N.V.* [1975] 1 Lloyd's Rep. 666 at 671.

522 See *Brogden v Metropolitan Railway Co* (1877) 2 App. Cas. 666; *Port Sudan Cotton Co v Govindaswamy Chettiar & Sons* [1977] 2 Lloyd's Rep. 5; *Tinn v Hoffman & Co* (1873) 29 L.T. 271; *North West Leicestershire DC v East Midlands Housing Association* [1981] 1 W.L.R. 401; *Jackson v Turquand* (1869) L.R. 4 H.L. 305; *Lark v Outhwaite* [1991] 2 Lloyd's Rep. 132; *Von Hatzfeldt Wildenburg v Alexander* [1912] 1 Ch. 284; *Northland Airlines v Dennis Ferranti Meters Ltd* (1970) 114 S.J. 845; *Bircham & Co Nominees (No.2) v Worrell Holdings Ltd* [2001] EWCA Civ 775; *Love & Stewart Ltd v Instone & Co Ltd* (1971) 33 T.L.R. 475.

523 Trietel "Formation of Contract" 161.

524 See para 6.7.2 above.

525 *Jones v Daniel* [1894] 2 Ch. 332 (hereinafter referred to as *Jones v Daniel*).

526 *Jones v Daniel* 334-335.

apply what has been referred to as the "traditional offer and acceptance analysis" by Longmore LJ in the matter of *Tekdata Interconnections Ltd v Amphenol Ltd*.[527] In resolving the battle of forms via the traditional offer and acceptance analysis, courts "…still look for a mirror image of offer and acceptance objectively assessed."[528] This means in effect that the documents exchanged between the parties are analysed into "…offer, counter-offer, rejection, acceptance and so forth…."[529] Under this analysis, the enquiry stops at the point where it is determined objectively that party A accepted the terms and conditions proposed in the document of party B.

The traditional offer and acceptance analysis has been upheld in a number of decisions,[530] the most cited in recent years being *Tekdata Interconnections Ltd v Amphenol Ltd*.[531] In that case, the parties had been trading partners for a period of 20 years, during which period Tekdata purchased certain mechanical equipment from Amphenol.[532] All purchases throughout that period commenced with a standard purchase order generated by Tekdata and send to Amphenol. Amongst its various contents, each purchase order contained a provision stating that a purchase would be governed by the terms and conditions of Tekdata.[533] Amphenol would reply with a standard acknowledgement of a purchase order. Each acknowledgement contained a provision stating that the purchase would be governed by the terms and conditions of Amphenol. A dispute broke out when Tekdata rejected part of the equipment because of late delivery and unfitness for intended purpose. Before the court, each party contended that the transaction was governed by its terms and conditions. Longmore LJ, with who the other Lord Justices were in full agreement, held that the

527 *Tekdata Interconnections Ltd v Amphenol Ltd* para 1.
528 Ogilvie 2011 *Canadian Business Law Journal* 313.
529 Per Lord Denning in *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd* 404.
530 See *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd*; *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* [2010] EWHC 2567 (Comm) paras 49-50 (hereinafter referred to as *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT*); *Gibson v Manchester City Council* 297.
531 See case as discussed by Ogilvie 2011 *Canadian Business Law Journal* 307-318; Stone 2012 http://webjcli.ncl.ac.uk/2012/issue4/stone4.html; Morgan 2010 *Cambridge Law Journal* 230-232.
532 *Tekdata Interconnections Ltd v Amphenol Ltd* para 3.
533 *Tekdata Interconnections Ltd v Amphenol Ltd* para 4.

contract was governed by the terms and conditions of Amphenol.[534] The basis of his finding was that:

> The acknowledgment…stated that Amphenol's terms and conditions were to apply and the traditional view would be that, if no further documentation passed between the parties and if Tekdata took delivery of the connectors, the contract would be on the terms of Amphenol's acknowledgement.[535]

The court in that case also took an opportunity to assert the predominance of the traditional offer and acceptance analysis over all other approaches to the battle of forms in UK law.[536] To that effect, Dyson LJ mentioned that:[537]

> …the rules which govern the formation of contracts have been long established and they are grounded in the concepts of offer and acceptance. So long as that continues to be the case, it seems to me that the general rule should be that the traditional offer and acceptance analysis is to be applied in battle of the forms cases. That has the great merit of providing a degree of certainty which is both desirable and necessary in order to promote effective commercial relationships.

In light of the foregoing decision, it is said today that all other approaches are exceptions to the general rule that a battle of forms must be resolved by the traditional offer and acceptance analysis in UK law.[538]

6.11.3.2 The first and last shot rule

Unlike the traditional offer and acceptance rule, the first and last shot approaches do not analyse a battle of forms into offer, counter-offer and acceptance. On the contrary, the first and last shot approach proceeds on a presumption that "…either the last shot or the first blow will, *ipso facto,* seal an agreement."[539] This approach was suggested by Lord Denning in *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd* on the basis that in many of the cases raising a battle of forms, the traditional analysis of "…offer, counter-offer, rejection, acceptance and so forth is out of date."[540] Instead of searching for offer and acceptance in the documents

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534 *Tekdata Interconnections Ltd v Amphenol Ltd* para 7.
535 *Tekdata Interconnections Ltd v Amphenol Ltd* para 7.
536 *Tekdata Interconnections Ltd v Amphenol Ltd* para 21, at which Longmore LJ stated that "…I think it will always be difficult to displace the traditional analysis, in a battle of forms case…."
537 *Tekdata Interconnections Ltd v Amphenol Ltd* para 25.
538 Morgan 2010 *Cambridge Law Journal* 231-232.
539 Ogilvie 2011 *Canadian Business Law Journal* 313.
540 *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd* 404.

exchanged between the parties, the courts simply hold that a contract is governed by the first or last standard document to be introduced. There is currently no authority for the last shot rule in UK law. Lord Denning however mentions as an example that the first shot rule would apply:[541]

> If … [the seller] offers to sell at a named price on the terms and conditions stated on the back: and the buyer orders the goods purporting to accept the offer on an order form with his own different terms and conditions of the back - then if the difference is so material that it would affect the price, the buyer ought not to be allowed to take advantage of the difference unless he draws it specifically to the attention of the seller.

It is deducible from this quotation that the first shot rule would operate if a party introduces a material term affecting the terms of an offer, and fails to draw the offeree's attention to that term.

The last shot approach has been explained to mean that:

> …where communications are exchanged, each is a counter-offer, so that if a contract results at all (e.g. from an acceptance by conduct) it must be on the terms of the final document in the series leading to the conclusion of the contract.[542]

The most quoted case in support of the last shot rule is *British Road Services Ltd v Crutchley & Co Ltd*.[543] In that case the plaintiff delivered a consignment of whisky for storage by the defendant. Upon arrival of the consignment at the storage facilities of the defendant, the plaintiff's driver handed the defendant a delivery note incorporating the terms and conditions of the plaintiff. The defendant's employees stamped the delivery note "Received under [the defendant's] conditions," and handed it back to the driver, who in turn handed over the goods. The issue for decision by the court was whether the contract was governed by the terms and conditions of the plaintiff or the defendant? It was held that the contract is governed by the terms and conditions of the defendant because they were introduced last. In reaching the decision, the court found that the stamp constituted a counter-offer for seeking to incorporate the terms and conditions of the defendant. The counter-offer was accepted when the plaintiff's driver handed over the goods.

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541 *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd* 404.

542 Trietel "Formation of Contract" 163.

543 *British Road Services Ltd v Crutchley & Co Ltd* [1968] 1 All E.R. 881 (hereinafter referred to as *British Road Services Ltd v Crutchley & Co Ltd*).

In practical effect, the last shot rule and the traditional offer and acceptance analysis will often, but not always, lead to the same conclusion.[544] Both approaches place much emphasis on silence and conduct as indicative of acceptance of the last terms to be introduced. It is presumably for this reason that one author has argued that in actual effect the court in *Tekdata Interconnections Ltd v Amphenol Ltd* applied the last-shot rule to reach its decision.[545]

6.11.3.3 Terms implied by law

It other instances it has been held that neither the terms and conditions of party A or B govern the contract. For instance, in *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT*,[546] the issue was whether or not the parties had agreed to submit their disputes for resolution by arbitration as provided for in the terms and conditions of the defendant? The terms and conditions of the defendant provided that any dispute between the parties would be submitted for resolution by a Court of Arbitration attached to the Hungarian Chamber of Commerce and Industry.[547] Having received and reviewed the terms and conditions of the defendant, the claimant proposed several modifications to those terms. One of the suggested modifications in relation to the aforesaid arbitral clause was: "Delete this Section in its entirety."[548] It was held that the parties never agreed to arbitrate their disputes.[549] The same decision was reached in the matter of *LIDL UK GmbH v Hertford Foods Ltd*,[550] where the parties concluded a contract alive to a conflict in their terms and conditions. Chadwick LJ,[551] with who the other Lord Justices were in full agreement, found that:

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544 See *GHSP Inc v AB Electronic Ltd* [2010] EWHC 1828 (Comm) para 11 (hereinafter referred to as *GHSP Inc v AB Electronic Ltd*), stating that "[w]hat was called by Longmore LJ in Tekdata Interconnections Ltd v Amphenol Ltd [2010] 1 Lloyd's Rep 357 'the traditional offer and acceptance analysis' would, at least in what Dyson LJ in Tekdata describes as an uncomplicated case, be likely to lead to the last shot being adopted."

545 Andrews *Contract* 62.

546 *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* [2010] EWHC 2567 (Comm) (hereinafter referred to as *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT*).

547 *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* para 32.

548 *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* para 35.

549 *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* paras 56-57.

550 *LIDL UK GmbH v Hertford Foods Ltd* [2001] EWCA Civ 938 (hereinafter referred to as *LIDL UK GmbH v Hertford Foods Ltd*).

551 *UK GmbH v Hertford Foods Ltd* para 21.

> …each [party] knew – or may be taken to have known – that it was impossible to contract on the basis that both sets of standard conditions were applicable (because they were mutually inconsistent); so that if they were to contract at all, it had to be on the basis either (i) that they had reached agreement as to which set of standard conditions was applicable or (ii) that they had reached agreement that neither set of standard conditions was applicable.

Where it is held that neither the terms of party A nor those of party B govern the contract, the parties can rely on implied terms. This was suggested to be so by Burton J in the matter of *GHSP Inc v AB Electronic Ltd*.[552] The judge in that case mentioned on the facts of the case that:

> …if I find that neither the Claimant's nor the Defendant's Conditions are incorporated into the contract, then, since there was plainly a contract, which was indeed performed, for the manufacture and supply of the sensors, in the absence of such express terms the contract would be governed by, and incorporate, the implied terms of the Sale of Goods Act 1979.[553]

This means in short that the contract between the parties will be governed by relevant provisions of the *Sale of Goods Act* 1979 as amended (hereinafter referred to as the SGA).[554] The SGA states a number of terms to be implied into contracts for the sale of goods.[555] These terms amongst others relate to the title in the goods,[556] and the quality and fitness of the goods for their intended purpose.[557]

6.11.3.4 The knock-out rule

Apart from the *dictum* of Lord Denning quoted above in the matter of *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd*, there does not appear to be a case in which the knock-out rule has been endorsed in UK law. There is, nevertheless, sufficient guidance in the aforesaid *dictum* to ascertain what the judge contemplated in proposing that approach. The relevant portion of the quote states that:

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552 *GHSP Inc v AB Electronic Ltd* [2010] EWHC 1828 (Comm) para 3.

553 *GHSP Inc v AB Electronic Ltd* para 3.

554 Amended by the *Sales and Supply of Goods Act* 1994.

555 The SGA in s 61 (1) defines the word "goods" to mean "all personal chattels other than things in action and money, and in Scotland all corporeal moveables except money; and in particular 'goods' includes emblements, industrial growing crops, and things attached to or forming part of the land which are agreed to be severed before sale or under the contract of sale." Chissick and Kelman *Electronic Contracts* 70 are of the view that this definition excludes virtual goods. If this is true, it means that the approach which implies terms from the SGA to solve the battle of forms will be irrelevant to automated transactions involving virtual goods.

556 s 13.

557 s 14.

> There are…other cases where the battle depends on the shots fired on both sides. The terms and conditions of both parties are to be construed together. If they can be reconciled so as to give a harmonious result, all well and good. If differences are irreconcilable - so that they are mutually contradictory - then the conflicting terms may have to be scrapped and replaced by a reasonable implication.[558]

The first point deducible is that under this approach the battle of forms can be resolved by reconciling the conflicting terms. It is submitted that whether or not the conflicting terms are reconcilable will depend primarily on the interpretation of the words used and the objective intention of the parties. Where possible, a reconciliation of conflicting terms can be achieved by holding, as did Lord Pearson in *British Road Services Ltd v Crutchley & Co Ltd*,[559] that the contract is governed by the terms "…of the offer subject to modifications contained in the acceptance."

The second point deducible is that if the terms are irreconcilable, they should be knocked out of the contract and replaced by a reasonable implication. This is in great contrast to the "traditional" knock-out rule. Under the traditional knock-out rule, a court will not replace conflicting terms by a reasonable implication. On the contrary, a court will "…treat the areas of disagreement as simple gaps in the contract."[560] The benefit of the approach suggested by Lord Denning over the traditional knock-out rule is that it does not a leave a *lacuna* in the terms of a contract. The suggestion of Lord Denning that conflicting terms must be replaced by a reasonable implication appears to be part of a general scheme in English law that where appropriate, the law "…has to step in and fill the gaps in a way which is sensible and reasonable."[561] The gap can be filled *inter alia* by implying relevant provisions of the SGA in to the contract.

6.11.3.5 A critical analysis of the approaches for the resolution of the battle of forms in the context of automated transactions

As illustrated above, especially with reference to the decision of the England and Wales Court of Appeal in *Tekdata Interconnections Ltd v Amphenol Ltd*, the rule of thumb in the UK is that the traditional "…offer and acceptance analysis is to be

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558 *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd* 404.
559 *British Road Services Ltd v Crutchley & Co Ltd* 281-282.
560 Smith *Atiyah's Introduction to the Law* 56.
561 Per Nicholls LJ in *Javad v Aquil* [1991] 1 All E.R. 243 at 247.

applied in battle of the forms cases."[562] As with US law, however, it is common cause that the resolution of the battle of forms in the UK does not depend exclusively on the application of the mirror-image rule and the traditional offer and acceptance analysis. A couple of alternative approaches are recognised as acceptable exceptions to the traditional offer and acceptance analysis in that jurisdiction. As shall be illustrated below, some of these alternative approaches are more suited than the traditional offer and acceptance analysis to resolve the battle of forms in automated transactions.

The difficulties inherent in the application of the traditional offer and acceptance analysis to the battle of forms arising in transactions conducted by electronic agents on both sides have already been discussed elsewhere in this work.[563] To reiterate, the first difficulty with the traditional offer and acceptance analysis is that it will require evidence of the sequence in which standard form documents were introduced by electronic agents. The production of such evidence is inevitable if a court is to translate the interaction between electronic agents into offer, counter-offer and acceptance. It may be very difficult to acquire this evidence unless one of the electronic agents is programmed to keep a logbook or register of its activities. The second difficulty with the traditional offer and acceptance analysis is that it is most likely to lead to the conclusion that no contract has been concluded between the parties whenever there is a battle of forms. This may be the case even where both electronic agents have reported back to their users that an automated transaction has been concluded. The third difficulty with the traditional offer and acceptance analysis is that it is always quick to interpret the non-rejection of conflicting terms by one party as acceptance thereof by conduct. This was illustrated with reference to the decision of *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd*[564] in South Africa, and *Tekdata Interconnections Ltd v Amphenol Ltd*[565]in the UK. This is problematic for automated transactions because electronic agents may mechanically proceed to conclude or perform a contract in the face of a battle of forms without necessarily accepting the terms and conditions introduced by

562 *Tekdata Interconnections Ltd v Amphenol Ltd* para 25.
563 See para 4.6.2.3.2 above.
564 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 1996 2 SA 682 (N).
565 *Tekdata Interconnections Ltd v Amphenol Ltd* [2009] EWCA Civ 1209.

others. This may be the case, for instance, where the terms and conditions in issue were not presented in a format or manner compatible with the electronic agent which is said to have accepted the conflicting terms.

The battle of forms notwithstanding, if both electronic agents report back to their users that an automated transaction has been concluded, a better approach instead of the traditional offer and acceptance analysis would be to invoke the knock-out rule as proposed by Lord Denning in *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd* above. As shall be recalled, Lord Denning in that case suggested that the knock-out approach can be applied to the battle of forms with two legal consequences. The first consequence would be to hold that the contract is not governed by the terms of one party exclusively, but rather by the terms of the offeror as modified by those of the offeree. The second consequence would be to hold that neither the terms of the offeror, nor of the offeree govern the contract. In this instance, a court will have to fill the *lacuna* created by the knocking out of terms by implying sensible and reasonable terms into the contract. Alternatively, the court can fill the *lacuna* by implying the provisions of the SGA into the contract as suggested by Burton J in the matter of *GHSP Inc v AB Electronic Ltd*[566] discussed above. This approach avoids the difficulties associated with the traditional offer and acceptance analysis.

6.12 The treatment of electronic mistake

6.12.1 Input errors

As shall be recalled, Regulation 9 (1) (c) of the *Electronic Commerce Regulations* obliges online traders to provide customers with information about:

> [t]he technical means for identifying and correcting input errors prior to the placing of the order.

This provision was interpreted above to mean that online traders should provide customers with "information," as opposed to actual means for identifying and correcting input errors. The purpose of this provision is to ensure that customers are

[566] *GHSP Inc v AB Electronic Ltd* [2010] EWHC 1828 (Comm).

notified at the earliest stage possible about the availability of "technical means for identifying and correcting input errors" on trading websites.[567] Another objective of this provision is to ensure that customers are provided with sufficient information or guidance on how to use the means provided on trading websites for the correction of input errors.[568]

Apart from the obligation to provide customers with "information" about technical means for correcting input errors, online traders are also obliged under the *Electronic Commerce Regulations* to provide customers with "actual" means for identifying and correcting input errors. In terms of Regulation 11 (1) (b), online traders are required to:

> [M]ake available to the recipient of the service appropriate, effective and accessible technical means allowing him to identify and correct input errors prior to the placing of the order.

This provision is drafted differently from provisions for the treatment of input errors in the UNECIC, ECT Act, UETA and UCITA. The first difference is that, Regulation 11 (1) (b) makes it clear that the means for correcting input errors must be provided in an "appropriate, effective and accessible" manner. It is unfortunate; however, that the *Electronic Commerce Regulations* provide no guidance as to what shall constitute "appropriate, effective and accessible technical means." The *Guide for Business to the Electronic Commerce Regulations* state that courts should place the onus on online traders to demonstrate that they have complied with Regulation 11 (a) (b),[569] *i.e.* the means provided are "appropriate, effective and accessible." It is clear, therefore, that a trader who has provided customers with means for correcting input errors may still be held to have violated Regulation 11 (1) (b) if those means are not "appropriate, effective and accessible." The second difference between Regulation 11 (1) (b) and relevant provisions in the UNECIC, ECT Act, UETA and UCITA, is that Regulation 11 (1) (b) makes it clear that the means for correcting input errors should be provided "…prior to the placing of the order." Although the *Electronic Commerce Regulations* do not clarify what the "placing of an order" entails, one can

567 Para 6.8.1.1 above.
568 Para 6.8.1.1 above.
569 Part 5.27.

safely assume that an order is placed when a customer clicks the "send" button so that his or her purchase order is dispatched to the information system of the trader for processing.

In terms of Regulation 15:

> Where a person—
>
> (a) has entered into a contract to which this Regulations apply, and
>
> (b) the service provider has not made available means of allowing him to identify and correct input errors in compliance with regulation 11 (1) (b),
>
> he shall be entitled to rescind the contract unless any court having jurisdiction in relation to the contract in question orders otherwise on the application of the service provider.

The remedy for a customer who has not been provided with appropriate, effective and accessible means for identifying and correcting input errors is, therefore, rescission of the contract. The effect of rescission is that a contract is reversed and the parties put back to "…the position they were in before the contract was concluded."[570] This means in effect that upon rescission of a contract on the basis of Regulation 11 (1) (b), a customer will be entitled to reimbursement or refund of the purchase price already paid, and the trader to a return of any performance already rendered to the customer. However, there may be instances in which rescission of a contract will not be allowed, for instance if the innocent party, being the one entitled to rescind the contract, takes an unreasonably long time to seek the remedy, or if restitution is impossible.[571] Although Regulation 11 (1) (b) does not list the usual conditions found in many electronic commerce law instruments under which automated transactions may be avoided on the basis of input errors,[572] those conditions will still have to be met in the UK under the guise of conditions for granting of the remedy of rescission.

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570 Wood *et al* "Great Britain" 255.

571 Cartwright Co*ntract Law* 173-174.

572 As shall be recalled, under art. 14 of UNECIC, s 20 (e) of the ECT Act, § 10 (2) of the UETA and § 213 (b) of the UCITA, an automated transaction can only be avoided if (a) the party who committed an input error promptly gives notice of that error to the user of the electronic agent; (b) takes reasonable steps to return any performance already rendered by the user of the electronic agent, and (c) has not derived any material benefit or advantage from the performance already rendered.

6.12.1.1 Criticism of Regulation 11 (1) (b)

The main difficulty with Regulation 11 (1) (b) is that it is not limited to automated transactions. As shall be recalled, under the UNECIC, ECT Act, UETA and UCITA, the law of input errors is *expressis verbis* limited to automated transactions. Under Regulation 11 (1) (b), however, the obligation to provide customers with means for correcting input errors extends to all contracts formed through the placing of purchase orders, excluding of course, contracts concluded by "electronic mail or by equivalent individual communications." This approach is out of the ordinary, and appears to have no justification. As shall be recalled, the treatment of input errors in electronic commerce law is limited exclusively to automated transactions because of two main reasons. The first reason is the higher than usual risk of mistake in instances where one party contracts through an electronic agent.[573] While mistakes can easily be identified and corrected when a contract is negotiated between two human beings, similar mistakes will often pass unnoticed in automated transactions. The second reason is the instantaneous nature of automated transactions, which means that such contracts are concluded "in the blink of an eye." Unlike in traditional contracts, customers in automated transactions, therefore, quickly lose any opportunity to identify and correct mistakes and errors upon a simple click of a "send" button. These considerations are unique to automated transactions. Therefore, it is unjustifiable for the *Electronic Commerce Regulations* to extend legal remedies for input errors beyond the confines of automated transactions.

6.12.2 Machine errors

There is currently no consensus amongst commentators in English law on the legal effect of machine errors on automated transactions. As shall be recalled from chapter four,[574] machine errors occur when an electronic agent generates and sends out an offer or acceptance stating different terms from those that it has been

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573 Gabriel 2006 *Uniform Law Review of Nova Scotia* 303.
574 Para 4.7.3.

programmed to, frequently as a result of a malfunction. According to Wood and co-authors:[575]

> In the [*sic*] circumstance that a hardware and software problem generates the wrong statements, the problem generated by the hardware or software would be deemed to negate the consensus needed for a contract to be binding under English law.

Commenting on garbled, distorted or falsified electronic communications in general, Chissick and Kelman on the other hand argue that:[576]

> The offeror [meaning the originator] will probably not be held liable for the error if the recipient had reason to suspect a…problem [in the communication he receives]. However, in certain circumstances (*e.g.* if the error is undetectable), the offeror could be held liable for inaccuracies if the offeree subsequently accepts the offer and forms a contract.

In simple words, the authors of the first quote believe that there will be no meeting of minds or *consensus ad idem* between the parties in the instance that an electronic agent sends out an offer or acceptance in terms which it was not programmed to. This is only true, however, when one adopts a subjective theory of contract. In that instance, the divergence between the subjective or programmed intention of a user and the intention declared by his electronic agent would be enough to vitiate a contract. It is common cause, however, that UK law embraces an objective as opposed to a subjective approach to contract formation. As explained by Blackburn J in the matter of *Smith v Hughes*:[577]

> …if the parties are not ad idem, there is no contract, unless the circumstances agree to the terms are such as to preclude one of the parties from denying that he has agreed to the terms of the other.

Circumstances will preclude a contract-denier from avoiding a contract *inter alia* if the contract-assertor has been led to believe reasonably that the contract-denier has agreed to be bound. Trietel explains to the same effect that under the objective theory of contract:[578]

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575 Wood *et al* "Great Britain" 256.
576 Chissick and Kelman *Electronic Commerce* 83.
577 *Smith v Hughes* 1871 LR 6 QB 597 607.
578 Trietel "Formation of Contract" 145.

> Whether A is actually bound by an acceptance of his apparent offer depends on the state of mind of the alleged offeree (B)...With regard to B's state of mind, there are three possibilities. First, B actually and reasonably believes that A has the requisite intention: here the objective test is satisfied so that B can hold A to his apparent offer even through A did not, subjectively, have the requisite intention. The general view is that there is no further requirement A must be aware of B's state of mind….

Therefore, if despite a divergence between the programmed intention of a user and the expressed intention of his electronic agent, a third party is led "actually and reasonably" to believe that a contract has been concluded, UK law will enforce that belief. It follows, therefore, that the authors of the first quotation cannot be correct.

The authors of the second quotation, on the other hand, consider the issue in light of the general law of unilateral mistake. In the event that a malfunction causes an electronic agent to generate and send out an offer or acceptance in terms different from those which it has been programmed to, there is *prima facie* a mistake in the sense of a divergence between the subjective and declared intention of the user. The mistake in issue may be categorised as a unilateral mistake. An operative unilateral mistake arises in those instances where one of the parties labours in error about a term or terms of a contract.[579] The general rule in UK law is that such a mistake will vitiate a contract if the non-mistaken party knew or ought to have known of a mistake in the offer or acceptance of the other.[580] In the context of machine errors, it follows therefore, as suggested by the authors of the second quotation, that a malfunction will not negate a contract if the error is undetectable and the other party accepts the offer. Such as mistake will only vitiate the contract if the other party knew or reasonably ought to have known of the mistake. The discussion of unilateral mistake is continued below in relation to online pricing errors.

6.12.3 Online pricing errors

It is common cause that a pricing error on a trading website will constitute a unilateral mistake on the part of an online trader.[581] As mentioned above, a unilateral mistake will vitiate a contract if the non-mistaken party knew or ought to

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579 Trietel "Formation of Contract" 472. This means, in effect, that a mistake which does not affect a term of the contract, *e.g.* an error in motive, will have no effect on a contract.

580 See Andrews *Contract* 292-293.

581 Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 20.

have known of that mistake. A leading decision in English law on the issue is *Hartog v Colin & Shields*.[582] In that case, the parties had been involved in lengthy negotiations over the sale of 30 000 Argentine hare skins. Throughout the negotiations, the defendants had always made it clear that they were willing to sell the items at "price per piece" as opposed to "price per pound." In making the final offer, however, the defendants mistakenly quoted the price per pound in their letter. The plaintiff immediately accepted the offer. The effect of the mistake was that the purchase price was a third of what the defendants intended to receive from the sale, wherefore the defendants refused to deliver the goods. In a claim by the plaintiff for damages grounded on breach of contract, the court held in favour of the defendant that there was no contract between the parties. In reaching the decision, the court found that from previous negotiations, the plaintiff "…could not reasonably have supposed that the offer represented the offerors' real intention."[583]

In *Hartog v Colin & Shields*, it was clear that the contract-assertor, being the plaintiff, had actual knowledge of the mistake. It is inconceivable, however, in online contracts that the contract-assertor, being the customer, can be found to have had actual knowledge of a pricing error on a website. On the alternative, an online trader can avoid the contract if he or she can demonstrate that the customer ought to have known of the pricing error.[584] It will be held that a customer ought to have known of a mistake in the event of what has been described as "snapping up" by James LJ in the matter if *Tamplin v James*.[585] "Snapping up" occurs when the non-mistaken party has a real reason to suspect that there is a mistake in an offer, but fails to or refrains from making enquiries with the offeror to ascertain whether or not the stated offer represents his or her true intention.[586] In the context of internet contracts, snapping up will occur when the price is so low that the customer should have suspected that it does not represent the true intention of the online trader. In

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582 *Hartog v Colin & Shields* [1939] 3 All E.R. 566 (hereinafter referred to as *Hartog v Colin & Shields*). See case discussed in Burrows *A Casebook* 635-636.

583 *Hartog v Colin & Shields* as quoted by Burrows *A Casebook* 635.

584 Authorities are agreed in UK law that the requirement of "knowledge" of mistake on the part of the contract-assertor extends also to imputed or constrictive knowledge, see Andrews *Contract* 292-293; Trietel "Formation of Contract" 471; *O.T. Africa Line Ltd v Vickers Plc* [1996] 1 Lloyd's Rep. 700 (hereinafter referred at as *O.T. Africa Line Ltd v Vickers Plc*).

585 *Tamplin v James* (1880) L.R. 15 Ch. D. 215.

586 *O.T. Africa Line Ltd v Vickers Plc* 703.

such instances, the customer must enquire with the online trader before placing a purchase order for the wrongly priced item. In the event that the non-mistaken party snaps up an offer, the appropriate remedy for the mistaken party is rescission of the contract.

The issue of online pricing errors becomes interesting in automated transactions when the mistake is such that it was not known, and could not reasonably have been known, but the electronic agent accepts so many purchase orders that it is *prima facie* unreasonable to order specific performance. The issue is whether UK law has any other remedy which may operate to relieve the online trader under such circumstances? One possibility would be for the court to rectify the contract.[587] As explained by court in *Chartbrook Ltd v Persimmon Homes Ltd*:[588]

> The effect of a successful rectification claim based in unilateral mistake is always that it imposes a contract upon the defendant which he did not intend to make. It is the unconscionable conduct involved in staying silent when aware of the claimant's mistake that makes it just to impose a different contract upon him from that by which he intended to be bound.

The effect of rectifying a contract affected by an online pricing error would be to enforce the true price against the customer(s) who placed purchase orders for a wrongly priced item. Trietel argues, however, that rectification of a contract would be improper where the non-mistaken party did not have actual knowledge of a mistake,[589] which is most likely to be the case in internet contracts. He feels that it would be oppressive to enforce the true intention of the mistaken party on the non-mistaken party under such circumstance. He submits, on the contrary, that a proper finding for a court would be to hold that there is no contract. Whether a court orders rectification of the contract to reflect the true price, or finds that there is no contract between the parties, it suffices for purposes of present considerations that an online

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587 There are those, however, who argue that the remedy of rectification is not available in cases of unilateral mistake. For instance, Kaniadaki *Impact of Pricing Errors on the Validity andEnforcement of Electronic Contracts* 24 argues that "English law is not flexible with this regard, as rescission of a contract cannot be partial, for instance as to the price. The English judge will grant either rescission from the contract or damages. It cannot impose a new term or adjust a pre-existing term." As shall be demonstrated hereinafter, however, there is ample authority to the effect that rectification of a contract can be ordered in instances of unilateral mistake.

588 *Chartbrook Ltd v Persimmon Homes Ltd* [2007] EWHC 409 (Ch) para 137.

589 Trietel "Formation of Contract" 476.

trader in both instances would be protected from losses which he would otherwise incur if the wrong price was enforced.

Another possible remedy which would serve to protect an online trader where his mistake was unknown, and could not have reasonably been known by the other party would be to refuse specific performance on the grounds of equity.[590] It is common cause in English law that:

> …courts of equity have at all times relieved against honest mistakes in contracts, where the literal effect and the specific performance of them would be to impose a burden not contemplated, and which it would be against all reason and justice to fix, upon the person who, without the imputation of fault, has inadvertently committed an accidental mistake; and also whether not to correct the mistake would be to give an unconscionable advantage to the other party.[591]

This equitable remedy is available, amongst others, where specific performance would "be against all reason and justice,"[592] "[cause] a hardship amounting to injustice,"[593] or cause considerable harshness or hardship.[594] Although enforcement of a single purchase order placed by a customer for a wrongly priced item would not under normal circumstances have any of the effects described above[595] - it is submitted that when an electronic agent has accepted a multitude of purchase orders for that item, the cumulative effect of the enforcement of all those purchase orders would cause injustice, hardship or considerable harshness to the online trader. Hardship would arise because if the number of purchase orders placed by customers exceeds the supply of stock available with an online trader, he would be forced to acquire additional stock to satisfy those orders. Injustice and considerable harshness would occur if enforcement of all the purchase orders accepted by an electronic agent would result in loss as opposed to mere diminished profits for its user.

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590 If specific performance is refused on the basis of equity, the party seeking to avoid the contract on the basis of mistake may still be ordered to pay damages, see *Webster v Cecil* (1861) 30 Beav. 62 64.

591 Per Bacon VC in the matter of *Barrows v Scammell* (1884) 19 Ch D 175 182 (hereinafter referred to as *Barrows v Scammell*).

592 *Barrows v Scammell* 182.

593 *Barrows v Scammell* 182.

594 *Manser v Back* (1848) 6 Hare 443; *Van Praagh v Everidge* [1903] 1 Ch. 434; *Malins v Freeman* (1870) L.R. 6 Ch. App. 1.

595 It is, however, possible that a single purchase order may cause hardship where a customer has placed a large order of the wrongly priced item.

6.13 Analysis and conclusions

The aim in this part of the chapter was to discuss the validity and enforceability of automated transactions in the UK. In line with the overall objective of this research, the main focus of the aforesaid discussion was to determine the extent to which the current legal framework in the UK is able to accommodate the validity of automated transactions within the common law theory of contract formation in that jurisdiction. In going about the task, the discussion interpreted relevant provisions of the *Electronic Commerce Regulations* with a view to determining the extent to which they modify or amend common law rules on contract formation. For those aspects of automated transactions which are not covered by legislation, the discussion analysed applicable common law rules to determine the extent to which they are able to provide satisfactory legal responses to the challenges of automated transactions. What follows immediately below is a critical analysis of the findings of this research in relation to UK law, primarily with a view to drawing valuable lessons for the development of South African law.

What has been demonstrated in this work is that, in contrast to the position in South Africa and the US, the validity and enforceability of automated transactions in the UK is not based on any statutory enactment. On the contrary, the validity of automated transactions in the UK is based on the common law of contract as expounded by Lord Denning in the matter of *Thornton v Shoe Lane Parking Ltd*. It is a given fact that Lord Denning in that decision did not explain the validity of the automated transaction before him in common electronic commerce law terminology such as "attribution," "programmed intention" or "mere tool of the user." It is common cause nonetheless that commentators in and out of the UK have liberally implied these legal notions into that decision. This is interesting because as illustrated elsewhere in this work, the same legal notions have been used to explain the statutory validity of automated transactions under the ECT Act,[596] and the UETA.[597] One can draw a number of conclusions from this state of affairs. The first conclusion is that the provisions validating automated transactions in the ECT Act and the UETA *prima*

[596] See para 4.5.1.1 above.
[597] See para 6.4.1 above.

facie codify an age-old rule at common law that a valid contract can be concluded by a machine. Part of this rule is that all such contracts are "attributed" to the user the machine.[598] Seeing that the concept of "attribution of the actions of a machine to a user" at common law was developed with specific reference to passive electronic agents, the second conclusion drawn from this state of affairs is that the ECT Act and the UETA evidently lag behind technological developments, in as far as electronic agents today can operate autonomously. That these statutes lag behind technological developments is made clear by the official commentary to the UETA, which states that:

> While this Act proceeds on the paradigm that an electronic agent is capable of performing only within the technical strictures of its preset programming, it is conceivable that, within the useful life of this Act, electronic agents may be created with the ability to act autonomously, and not just automatically…If such developments occur, courts may construe the definition of electronic agent accordingly, in order to recognize such new capabilities.[599]

These observations are equally relevant to the ECT Act, as much as its provisions on automated transactions were motivated by similar provisions in the UETA.[600] This goes a long way to support an argument made in this work that the attribution rule in section 25 (c) of the ECT Act is specific to automated transactions concluded by passive, as opposed to autonomous, electronic agents.

Although the validity of automated transactions is not covered in any statutory enactment in the UK, it is common cause, however, as illustrated in this work that the provisions of the *Electronic Commerce Regulations* and the ECA are applicable to certain aspects of such transactions. The *Electronic Commerce Regulations* obliges online traders to provide customers with certain pre-contractual information before they place purchase orders. This obligation has a bearing on automated transactions

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598 Pistorius 2002 *South African Mercantile Law* 740, cites the decision of *Thornton v Shoe Lane Parking Ltd* to demonstrate that at common law "[t]he actions of a machine is normally attributed to the person who instructed or programmed it to perform a specific function...." She ably demonstrates further that s 25 (c) of the ECT Act is in line with the common law for providing that the actions of a machine are attributed to the person who programmed it to function automatically, or the one for whose cause it was programmed to so function. This goes at length to illustrate that the ECT Act merely codifies the common law.

599 National Conference of Commissioners on Uniform State Laws "Uniform Electronic Transactions" 9.

600 See para 6.1 above.

since many online traders nowadays use electronic agents to conclude contracts with customers on their websites.[601] Most relevant to automated transactions are Regulation 9 (1) (a), which obliges online traders to provide customers with information about "the different technical steps to follow to conclude the contract," and Regulation 9 (1) (c) which requires online traders to provide customers with information about "the technical means for identifying and correcting input errors…." The benefits of imposing these obligations in the context of automated transactions have already been highlighted above,[602] and shall not be reiterated here. Because of their benefits, as expounded in this work, it is highly recommendable for any legal framework for automated transactions to impose those obligations on users of electronic agents in an effort to protect parties who deal with electronic agents in their capacity of natural persons.

As far as it concerns the requirement of "intention to be bound," which is one of the most problematic in relation to automated transactions, the legal framework in the UK suffers from similar defects to the legal framework for automated transactions under the ECT Act and the UETA. As illustrated above,[603] the authority of *Thornton v Shoe Lane Parking Ltd* propagates the idea that the intention to be bound by an automated transaction is fulfilled in the form of "programmed intention," consequently that all the actions of an electronic agent are attributable to and binding on the user of that electronic agent. As illustrated in chapter four,[604] the idea of "programmed intention" as justification of the attribution of all the actions of an electronic agent is well suited to automated transactions concluded by passive as opposed to autonomous electronic agents. The authority of *Thornton v Shoe Lane Parking Ltd* aside, it has also been demonstrated in this work that the objective theory of contract as laid down by Lord Blackburn in *Smith v Hughes* is also insufficient or inadequate to explain the requirement of *animus contrahendi* in

601 See Pistorius 2008 *JILT* 2, stating that "[a] transaction for the supply of goods or services on a web site will also of necessity qualify as an automated transaction…[because] [m]ost on-line transactional interfaces involve an electronic agent."
602 See para 6.10.1.1.
603 Para 6.9 above.
604 Para 4.5.1.1.1.1 above.

contracts formed by autonomous electronic agents.[605] Recognising this fact, it has been illustrated in this work that some commentators in the UK have suggested the adoption of an agency law principle of "authority" as the basis of the binding effect of automated transactions.[606]

An important finding of this study in relation to UK law is that, unlike the ECT Act and the UETA, the *Electronic Commerce Regulations* lays down hard and strict rules for the formation of electronic contracts, particularly those involving the placement of purchase orders by customers. These rules are equally relevant to automated transactions as far as online traders may use electronic agents to conclude contracts with customers on their websites. The first of these rules is Regulation 12 which provides that except in instances of contracts concluded exclusively by "electronic mail or by equivalent individual communications," a purchase order placed by a customer on a trading website will have the effect of a contractual offer. This provision was interpreted to mean that advertisements of goods on trading websites in the UK shall always be construed as invitations to treat.[607] This approach has been demonstrated to go counter to common law rule in UK law that it is the intention of the advertiser as gathered from the words used in the advertisement and other surrounding circumstances which will determine whether that advertisement is an offer or invitation to treat. Moreover, this approach is counter to a common law rule in the UK that an advertisement or display of goods to the public through an automated machine is not an invitation to treat but rather an offer which expires once the machine runs out of supplies.[608] Another controversial provision bearing on contract formation in the *Electronic Commerce Regulations* is Regulation 11 (1) (a) which imposes an obligation on online traders to acknowledge receipt of purchase orders. As illustrated in this work,[609] this provision is problematic because an "acknowledgement of receipt" serves no useful purpose as far as it concerns the process of contract formation. This provision is also onerous and costly because it requires users to program their electronic agents to generate and sent two

605 Para 7.7 above.
606 Para 7.7 above.
607 Para 6.8.3.1 above.
608 Para 6.8.3.1 above.
609 Para 6.8.4.1 above.

messages, being an acknowledgement of receipt and an acceptance, in order to conclude a single automated transaction. It is the conclusion of this research that the amendment or modification of the common law of contract in this manner is unjustifiable, seeing that it serves no valid purpose.

There is nothing out of the ordinary in the manner in which UK law deals with the inclusion or incorporation of terms in click-wrap and web-wrap agreements. As in South African and US law, it has been illustrated in relation to UK law that the rules of signed documents apply to click-wrap contracts, and the rules of the ticket cases to web-wrap contracts. The only amendment or modification of the common law in this regard is in section 7 of the ECA which has been interpreted in this work to mean that the clicking of assent buttons to terms and conditions displayed on a trading website constitutes a signature. This development has also been adopted in the ECT Act in South Africa,[610] and the UETA in the US.[611]

As far as it relates to the resolution of the battle of forms, UK law adopts the view that the mirror image rule or traditional offer and acceptance analysis shall be determinative of the matter. However, it is common cause, as illustrated in this work that, as with US law, UK law recognises several alternative approaches as exceptions to the traditional offer and acceptance analysis. Amongst this alternative approaches, it has been suggested in this work that the most suitable to automated transactions are the knock-out approach as expounded by Lord Denning in the matter of *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd*.[612] Another suitable approach is that which holds that, in the event of the battle of forms, the contract is not governed by the terms of the offeree or offeror, but rather by implied terms.[613] In conclusion, it is the view of this research that unlike South African law, which exclusively relies on the mirror image rule to resolve the battle of forms, US and UK law promise to deal with a battle of forms more satisfactorily as and when it arises in the context of automated transactions.

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610 Para 4.6.2.1 above.
611 Para 6.4.3 above.
612 See paras 6.8.6.4 and 6.8.6.5 above.
613 See paras 6.8.6.3 and 6.8.6.5 above.

Regarding the issue of mistakes and errors in automated transactions, it has been demonstrated that UK law deals with the issue differently from the ECT Act and the UETA. The first difference is that the *Electronic Commerce Regulations* do not limit the notion of input error to automated transactions. Under the Regulation 11 (1) (b) of the *Electronic Commerce Regulations*, online traders who allow customers to place purchase orders are obliged to provide those customers with "technical means for identifying input errors." This obligation applies with equal effect to passive and automated websites. This approach has been discredited on the ground that the idea of input error in electronic commerce law is admittedly unique to automated transactions;[614] therefore, that there is no justification whatsoever for extending it to passive trading websites.

Another difference between the *Electronic Commerce Regulations*, and the ECT Act and UETA is that the *Electronic Commerce Regulations* require that techniques for correcting input errors should be provided in an "appropriate, effective and accessible" manner. This is in stark contrast to the ECT Act and UETA which simply require that an electronic agent should provide the other party with an opportunity to correct or prevent an input error. This approach is problematic because the mere provision of an opportunity to correct or prevent an input will suffice under the ECT Act and UETA even if that opportunity is not "appropriate, effective and accessible." As illustrated above,[615] the *Electronic Commerce Regulations* place the onus of an online trader to satisfy the court that the means provided for the correction of input errors were "appropriate, effective and accessible." In effect, this means that the mere provision of an opportunity to correct input errors will not suffice under the *Electronic Commerce Regulations* so long as the means so provided are not "appropriate, effective and accessible." This approach is commendable seeing the high risk of input errors in automated transactions.

It is interesting to note that in contrast to the ECT Act and the UETA, the *Electronic Commerce Regulations* impose an "obligation" on users of electronic agents to provide contracting partners with technical means for correcting input errors. As

614 Para 6.8.7.1.1 above.
615 Para 6.8.7.1 above.

illustrated in chapter four,[616] the ECT Act does not impose an obligation on users of electronic agents to provide contracting parties with an opportunity to correct or prevent input errors. On the contrary, the ECT Act only provides an incentive for users of electronic agents to provide contracting parties with an opportunity to correct their input errors. The approach adopted by the *Electronic Commerce Regulations* is commendable for putting legal response in line with the prevailing commercial practice.[617]

Regarding machine errors, it has been demonstrated in this work that as in US law, UK law applies the law of unilateral mistake in deciding whether or not a contract can be avoided on that basis. This approach can be contrasted to section 25 (c) of the ECT Act which holds as a general matter that communications resulting from a malfunction of an electronic agent cannot result in a valid contract. The main benefit of applying the common law of mistake to machine errors is that it protects the reasonable reliance of third parties who may be misled into concluding a contract by undetectable machine errors. This does not necessarily mean that the users of electronic agents are left with no shield against contracts influenced by machine errors. It is common cause that the law will not enforce a contract induced by a machine error if a third party knew, or ought reasonably to have known of a mistake in an automated communication.

In relation to online pricing errors, UK law similarly applies the law of unilateral mistake to the matter. This means in effect that a pricing error will vitiate a contract if the non-mistaken party knew or should reasonably have known of an error in the advertised price. A particularly problematic aspect of online pricing errors in automated transactions arises where the error is such that it was not known, and could not reasonably have been known by customers—but the electronic agent automatically accepted purchase orders exceeding the total supply or stock of the trader for the wrongly priced item. Online traders under such scenarios are instantly exposed to inundation by purchase orders, and may therefore be caused undue hardship or prejudice if they are forced to perform all purchase orders accepted by

616 Para 4.7.1.1 above.
617 Polanski "Common Practices in the Electronic Commerce" 7.

their electronic agents. In such instances, courts in the UK have power in equity to order rectification of the contract to reflect the true price in an effort to relieve the mistaken party from hardship. This equitable remedy can be likened to the defence of unconscionability in the US. Both approaches are commendable in the event that the law of unilateral mistake does not produce a just result in pricing errors occurring within automated transactions.

CHAPTER 7

7 Conclusion and recommendations

7.1 Introduction

The aim of this work was to discuss how the principles of contract law can be developed or modified in order to accommodate, within the common law theory of contract formation, the statutory validity of automated transactions in South Africa. The first chapter covered the problem statement, research question, research methodology and an outline of the thesis.

The second chapter entailed an introduction to the concept of automated contracting. The discussion of that chapter focused on the legal definition of an automated transaction and an electronic agent. Drawing from the definition of an automated transaction under the ECT Act, the first part of that chapter discussed the distinguishing features of an automated transaction, and the various ways in which an automated transaction may be concluded. The second part of that chapter discussed the legal definition of an electronic agent. Automatic vending machines, EDI systems and autonomous electronic agents were listed as real-life examples of electronic agents commonly used by modern traders to form agreements. The historical development, the manner of operation, and the role of each of the aforementioned electronic agents were discussed in detail in that part of the chapter. That discussion highlighted the fact that automatic vending machines and EDI systems assume a passive role in the conclusion of contracts, meaning that they merely transmit or convey the will of their users without exercising any influence on the final terms and conditions of those agreements. Therefore, those electronic agents were properly classified in this work as passive transactional electronic agents, and the process of concluding agreements through them as conduit automation. The discussion in issue went further to illustrate that, in comparison to passive transactional electronic agents, autonomous electronic agents actually influence the final terms and conditions of the contracts that they conclude.

The third chapter involved an enquiry into the rationale or theoretical basis of the concept of agency. The discussion of that chapter was commenced with a brief narration of the historical development of the law of agency in South Africa. That narration was followed by the definition of an agent, and a detailed description of the role of an agent. It was demonstrated in that regard that an agent is a person who represents or stands-in for another in the creation of contractual rights and obligations. It was demonstrated, furthermore, that although the agent concludes agreements by the expression of his or her will, those contracts do not bind him or her but the principal. The discussion went further to describe the various ways in which the relationship of agency arises. A point was made in that regard that, at common law, the relationship of agency does not depend on the consent of the agent to represent the principal, or on a contract of mandate between the agent and the principal. It was demonstrated, on the contrary, that the relationship of agency depends on the authority granted to the agent by the principal. The concept of authority was discussed in detail together with the different forms of authority that a principal may grant to the agent, namely actual authority, implied authority and apparent authority. The discussion of that chapter also covered the rights and obligations of the parties to the relationship of agency, the personal liability of an agent to third parties, and the various ways in which the relationship of agency terminates. A turn was then made to discuss the rationale or theoretical basis of the concept of agency. The objective of that discussion was to discover the legal and philosophical basis on which principals are made to bear liability for agreements concluded between their agents and third parties. As a starting point, it was demonstrated that contract formation is by its very nature a personal, individualistic or private venture, meaning that contractual rights and obligations accrue exclusively to those who expressed consent to their creation. On that basis, it was argued that agency is an elaborate anomaly to the extent that it permits or allows for contracts concluded through the expression of the will of the agent to bind the principal. To rationalise this anomaly, it was illustrated that agency is a risk based commercial process, which means that the use of agents for purposes of contract formation creates particular risks for the parties involved. For the principal, the risk of agency was demonstrated to be the possibility that the agent may exceed his or her

authority, consequently binding the principal in contracts that he or she did not authorise. For third parties, the risk of agency was demonstrated to be the possibility that the principal may reject contracts because he or she did not authorise the agent to conclude them. Proceeding from that analysis, it was argued that the rationale of agency is to allocate the aforesaid risk in a fair, just, and equitable manner between principals and third parties. Relevant legal sources were cited and discussed at length to support that conclusion.

The forth chapter discussed the extension of the South African law of contract, particularly the rules and principles thereof pertaining to the formation of agreements, to automated transactions. The main aim in that chapter was to determine the extent to which common law rules and principles pertaining to the formation of agreements can be applied to automated transactions in the same manner or fashion that they are usually applied by courts of law to traditional or non-automated transactions. To the extent that those rules and principles cannot be applied to automated transactions in the same manner that they apply to non-automated transactions, the aim of that chapter was to recommend for their development or modification, and to illustrate how they can be modified or developed. In relation to the development or modification of the common law already effected by the ECT Act, the aim of that chapter was to critically analyse the reasons behind, and the utility of those developments or modifications. The chapter in issue was commenced with a detailed discussion of the validity and enforceability of automated transactions in South Africa, which entailed a construal of the relevant provisions of the ECT Act. The discussion went further to analyse the relationship between the statutory validity of automated transactions and the common law of contract in South Africa. It was demonstrated in that regard that while the ECT Act grants legal validity and enforceability to automated transactions, that statute does not in any manner create new rules for the formation of those transactions, meaning that common law rules and principles pertaining to the formation of contracts continue to prevail in automated transactions. That having been established, a turn was made to outline and discuss the common law theory of contract formation in South Africa. That discussion entailed a definition of a contract, and an analysis of

the individual elements of a contract, namely offer, acceptance and *animus contrahendi*. The discussion also covered an analysis of the theories of contractual liability in South Africa, being the will theory, the declaration theory and the reliance theory (the doctrine of quasi-mutual assent). It was demonstrated in that regard that the will theory (*i.e. consensus ad idem*), as tempered by the reliance theory where necessary, is the true basis of contractual liability in South Africa. Proceeding from that conclusion, an enquiry was conducted to determine whether automated transactions fulfil or satisfy the individual requirements of *consensus ad idem* at common law. The discussion also covered a critical analysis of offer, acceptance, the time and place of contract formation, the enforceability of terms and conditions, and the legal effect of mistakes and errors in the context of automated transactions.

The fifth chapter discussed the extension of the South African common law of agency to automated transactions, particularly transactions concluded by autonomous electronic agents, as opposed to passive electronic agents. The discussion of that chapter was commenced with the justification of a recommendation made in the previous chapter that, with relevant modifications, the rules and principles of the common law of agency must be applied to rationalise the contractual liability of the users of autonomous electronic agents. In going about that task, it was demonstrated that while passive electronic agents resemble human messengers in the formation of agreements, autonomous electronic agents find close analogy with human agents to the extent that they can influence the final terms and conditions of agreements. It was demonstrated, furthermore, that due to their autonomy, autonomous electronic agents also create for their users and third parties the same risks created by human agents for principals and third parties, consequently that the common law of agency should apply. The benefits and advantages of extending the common law of agency to automated transactions were outlined and discussed in detail. The discussion of that chapter went further to outline, analyse and counter a number of objections that have been advanced by the opponents of the proposition that the common law of agency must be extended to automated transactions. Lastly, the fifth chapter discussed a proposition that has been made by some commentators that autonomous electronic agents must be

granted legal personality. The benefits and advantages of granting autonomous electronic agents legal personality were considered in that discussion, together with the difficulties confronting the law in that regard.

The sixth chapter involved a comparative study of US and UK law *vis-à-vis* the matter of this research. The first part of that chapter focussed exclusively on US law. The discussion was commenced with a detailed outline of the legal landscape for electronic commerce in the US. It was demonstrated in that regard that the legal landscape for electronic commerce in the US is primarily constituted by the UETA and the UCITA. Thereafter, the validity and enforceability of automated transactions in the US was discussed through a meticulous interpretation of the relevant provisions of the UETA and the UCITA. That discussion was followed by a detailed analysis of the legal framework for the formation of agreements in the US, which focussed on the legal definition of a contract, the individual elements of a contracts, and the basis of contractual liability in that jurisdiction. Proceeding from that analysis, a turn was made to discuss the formation of automated transactions in US law. The objective of that discussion was to determine or discover how the rules and principles pertaining to the formation of agreements in US law address the challenges of automated transactions. The response of US law to the challenges of automated transactions was assessed through a careful analysis of the developments that have been introduced by the aforementioned statutes, and through a careful analysis of the strengths and weaknesses of relevant common law rules and principles where no statutory modifications have been made. As in the fourth chapter, that discussion covered an analysis of offer, acceptance, the time and place of contract formation, the enforceability of standard terms and conditions, and the legal effect of mistakes and errors on automated transactions. The analysis of findings, accompanied by conclusions, followed.

The second part of the sixth chapter focused on UK law. The discussion of that chapter was commenced with a detailed outline of the legislative framework for electronic contracts in the UK, followed by an outline of the legal framework for the formation of valid agreements at common law. In discussing the common law, specific focus was paid to the legal definition of a contract, the constituent elements

of a valid contract, and the legal basis of contractual liability in UK law. Thereafter, the discussion proceeded to analyse the validity and enforceability of automated transactions in UK law, which in contrast to South Africa and the US, is not based on any legislation. With a view to ascertaining how UK law addresses or responds to the challenges of automated transactions, a turn was made to discuss the formation of agreements by electronic agents in that jurisdiction. As with US law, the response of UK law to the challenges of automated transactions was assessed through a careful analysis of the developments or modifications introduced by legislation, and by a careful analysis of the strengths and weaknesses of relevant common law rules where no legislative developments have been introduced. As in the fourth chapter, that discussion covered an analysis of offer, acceptance, the time and place of contract formation, the enforceability of standard terms and conditions, and the legal effect of mistakes and errors on automated transactions. The findings of that discussion were analysed and conclusions made.

7.2 Final analysis and recommendations

7.2.1 The basis of contractual liability in automated transactions

At common law, an action performed by a machine is attributed to the person who programmed or instructed it to execute that function. This rule has been extended to automated transactions by section 25 (c) of the ECT Act. Section 25 (c) of the ECT Act provides that, unless it is proved that an information system did not properly execute its programming, a data message sent thereby is attributed to the person who programmed it, or the one for whose cause it was programmed to operate automatically. Therefore, so long as an electronic agent is not operating under a programming malfunction, the programmer or user thereof is responsible for all the data messages generated thereby, because he or she is the originator or author of those data messages. The programmer or user of an electronic agent is considered to be the originator or author of its data messages because he or she consciously programmed, configured or instructed it to generate those data messages. Section 25 (c) operates in conjunction with section 20 (c), which provides that a person who uses an electronic agent to form an agreement is presumed to be bound by the

terms of that agreement irrespective of whether he or she reviewed the actions of the electronic agent or the terms of the agreement. As interpreted in this work,[1] section 20 (c) is properly premised on a paradigm that an electronic agent is a tool of communications, meaning that it is only capable of performing functions within the parameters of its original programming. Therefore, because the user is the one who voluntarily programmed or instructed the electronic agent to conclude an agreement on certain terms, or through the performance of certain actions, he or she is presumed to be bound by the terms of that agreement, notwithstanding that he or she might not have reviewed the actions of the electronic agent or the terms of that agreement. As demonstrated herein,[2] the intention of the user of an electronic agent to be bound by agreements concluded thereby is known as "programmed intention," meaning that the user programs his or her *animus contrahendi* into the electronic agent. That intention is manifested to third parties by the use or the holding out of the electronic agent as ready to conclude agreements.

It has been demonstrated in this work that the combined legal effect of the mere-tool theory and the attribution rule coincide with the general rule at common law that the true basis of contractual liability is *consensus ad idem*.[3] Because an electronic agent is a conduit-pipe for the manifestation of the will of its user to third parties, a meeting of minds will arise between the user of an electronic agent and third parties (whether acting in their natural persons or through electronic agents) who interact with that electronic agent to form agreements. This will be the case notwithstanding that the user of an electronic agent did not review its operations or the terms of agreements concluded thereby with third parties. This is so because the operations of an electronic agent and the terms of an automated transaction are a result of the programmed will of the user.

As demonstrated herein,[4] the legal framework discussed above is inadequate to rationalise, meaning to explain in a convincing and legally acceptable manner, the basis on which the users of "autonomous electronic agents" are held liable for

1 See para 4.5.1.1 above.
2 See para 4.5.1.1 above.
3 See para 4.5.1.1 above.
4 See para 4.5.1.1.1 above.

agreements concluded thereby. This is so because, in contrast to passive electronic agents, autonomous electronic agents do not strictly perform actions within the parameters of their original programming. Autonomous electronic agents can effectively modify their programmers' instructions, and even devise new instructions altogether. Therefore, autonomous electronic agents will often make decisions based on self-modified or self-created instructions. Unless one adopts an overly fictional stance, electronic agents that operated in this manner cannot reasonably be classified or categorised under the genre of tools of communication. Consequently, operations performed, and data messages generated, by autonomous electronic agents cannot reasonably be attributed to their users on the basis that they are the originators or authors thereof. As a result, a meeting of minds cannot, under any pretence, arise between the user of an autonomous electronic agent and third parties who interact with that electronic agent to form agreements.[5]

As demonstrated herein,[6] apart from the will theory, South African courts have also applied the declaration theory and reliance theory to determine whether or not contracting parties have reached agreement. According to the declaration theory, contracting parties will be taken to have reached agreement whenever there is an appearance of a meeting of minds from their declared or expressed intentions, *i.e.* their statements or conduct.[7] If the declarations of contracting parties create an appearance of a meeting of minds, they will be taken to have reached agreement even if, from a purely philosophical point of view, their minds have not actually met. Consequently, in the context of automated transactions, the declaration theory operates to the effect that contracting parties have reached agreement if the operations and/or data messages of an autonomous electronic agent create a meeting of minds between its user and a third party.[8] Because the declaration theory is not concerned with the workings of the minds, but with the external manifestation thereof, it consequently does not matter that the operations or data messages in issue were not those that the electronic agent was originally programmed or instructed to execute.

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5 See para 4.5.1.1.1 above.
6 See para 4.4 above.
7 See para 4.4.2 above.
8 See para 4.5.1.2 above.

According to the reliance theory,[9] a person who did not subjectively intend to form a contract will, nevertheless, be taken to have consented to its formation if he or she led the other party to reasonably believe that he or she was agreeing to be bound. As demonstrated herein with reference to the decision of *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis*,[10] the decisive question under the reliance theory is whether the party whose actual intention did not conform to the common intention expressed, lead the other party, as a reasonable man, to believe that his declared intention represented his actual intention? If the answer is in the affirmative, a valid and enforceable agreement will be held to have been concluded, and *vice-versa*. Therefore, in the context of automated transactions, if the operations and/or data messages of an autonomous electronic agent lead the other party to reasonably believe that a contract has been formed, that contract will be upheld, notwithstanding that the operations or data messages in issue did not represent the true intention of the user of that electronic agent.

The analysis of this research has revealed that,[11] in the context of automated transactions, the main weakness of the objective theories of contract, *i.e.* the declaration theory and the reliance theory, is that they do not acknowledge the gap of accountability created by the autonomy of electronic agents. Argument has been made in this work that the objective theory of contract properly refers to the relationship between the actions and the intentions of a single actor,[12] meaning that the conduct or statements of a third party or entity cannot be used to imply consent on the part of another person. The operations and data messages of an autonomous electronic agent properly originate from its will or volition, and cannot, on that basis, be used to imply consent on the part of the user.[13] The analysis of this research revealed furthermore that it is unlikely for a reasonable man to believe that the user of an autonomous electronic agent is agreeing to be bound by operations indiscriminately.[14] Consequently, the conclusion of this research is that neither the

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9 See para 4.4.3 above.
10 *Sonap Petroleum (SA) (Pty) Ltd v Pappadogianis* 1992 3 SA 234 (A).
11 See para 4.5.1.2 above.
12 See para 4.5.1.2 above.
13 See para 4.5.1.2 above.
14 See para 4.5.1.2 above.

declaration theory nor the reliance theory provides a satisfactory solution to the problem of the basis of contractual liability in automated transactions.

In light of the inadequacy of the objective theories of contract to rationalise the basis of contractual liability in automated transactions concluded by autonomous electronic agents, this work considered the possibility of applying the risk theory as an alternative.[15] According to that theory, a person who selects or uses a tool to conclude a contract bears all the risks that go along with the use of that tool, including the risk of a miscommunication of his or her true intention to third parties. Therefore, in the context of automated transactions, it logically follows that a person who uses an autonomous electronic agent to form an agreement will bear the risk of that device binding him or her in contract with third parties on terms that he or she did not program or instruct it to. As demonstrated herein,[16] the main difficulty with the risk theory is that it has never been recognised as an alternative basis of contractual liability in South African law. As a result, the risk theory is so poorly developed in South African law that it cannot conceivably provide a sufficient solution to the challenges of automated transactions.

Seeing that common law theories for the formation of contracts do not offer adequate solutions to the problem of the basis of contractual liability in agreements concluded by autonomous electronic agents, it has been recommended herein that, subject to relevant modifications, the South African common law of agency should be applied in determining whether or not the users of autonomous electronic agents are bound by agreements concluded thereby.[17] This recommendation is primarily based on the view that, to the extent that they influence the final terms of agreements, autonomous electronic agents find a close analogy with human agents or conventional representatives at common law.[18] The overall picture that emerges from the operations of an autonomous electronic agent is that such a machine functions as a representative of its user, correctly so because it literally "stands-in"

15 See para 4.5.1.3 above.
16 See para 4.5.1.3 above.
17 See para 4.5.1.4 above.
18 See para 5.2 above.

for the user in the negotiation and conclusion of agreements.[19] Therefore, as a starting point, the contractual liability of the user of an autonomous electronic agent should be based on the fact that he or she has "authorised" it to conclude agreements on his or her behalf with third parties. As illustrated in chapter five,[20] the scope of authority of an autonomous electronic agent to bind its user in contract with third parties will depend, amongst others, on the interpretation of the words or symbols used by him or her in instructing the electronic agent to conclude a transaction.[21] An autonomous electronic agent must also be taken to have acted within the scope of its authority if it forms agreements with third parties through the performance of operations that are reasonably incidental to its actual authority, or if such operations are usual or customary in the line of business that the electronic agent is deployed.[22] Furthermore, the user of an autonomous electronic agent should also be bound by agreements concluded thereby with third parties if he or she creates a general impression, in the eyes of third parties, that the electronic agent has an authority to bind him or her.[23] In other cases, the contractual liability of the user of an autonomous electronic agent may be based on agency by estoppel or implied ratification.[24]

As demonstrated herein,[25] the common law of agency will have to be modified in at least two respects in order to enable a smooth application thereof to automated transactions. The first modification must be to abandon or discard the internal aspect of agency, *i.e.* the rules and principles regulating the relationship between the principal and the agent. Therefore, in extending the common law of agency to automated transactions, the portions of the law of agency dealing with the rights and dues of principals and agents must be discarded. This modification is supported in this work on the basis that, on proper analysis, there is no justification whatsoever for granting electronic agents legally enforceable rights against their users.[26]

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19 See para 5.2 above.
20 See para 5.4 above.
21 See para 5.4.1.1 above.
22 See para 5.4.1.2 above.
23 See para 5.4.2 above.
24 See para 5.4.3 above and para 5.4.4 above.
25 See para 5.3 above.
26 See para 5.3 above.

Likewise, it is inconceivable that the programmer or user of an electronic agent may reasonably want to enforce the common law rights of a principal against it. Therefore, in extending the common law of agency to automated transactions, the main focus must be to address contractual disputes arising between the users of autonomous electronic agents and the third parties who interacted with those electronic agents to form agreements.

The second modification must be to discard the rules and principles allowing the agent to be held personally liable, whether in contract or damages, to third parties.[27] Consequently, third parties must be denied the right to recover damages or enforce agreements against electronic agents. Although admittedly controversial, this modification of the law of agency is supported in this work on the basis that, as a general matter, the machinery of common law agency is not rendered inoperative by the fact that an agent cannot be made liable in damages or on contract to third parties.[28]

As in South African law, the actions of a machine in UK law are attributed to the person who programmed or instructed it to execute a particular function. This rule has been directly implied by legal commentators from the decision of Lord Denning in *Thornton v Shoe Lane Parking Ltd*. As demonstrated herein,[29] another rule which has been implied by legal commentators from that decision is that the user programs his or her intention into the machine, and expresses it to third parties by holding out the machine as being ready to conclude agreements. Therefore, as in South African law, the user of an electronic agent in the UK is held liable for an agreement concluded thereby on the basis that he or she willingly programmed or instructed it to conclude that agreement. In cases of agreements concluded by autonomous electronic agents, the weight of legal opinion in the UK supports the application of the reliance theory of contract to the facts.[30] In deciding whether or not an agreement has been formed, the reliance theory of contract in the UK places much emphasis on the interpretation that a reasonable man would have given to the

27 See para 5.3 above.
28 See para 5.3 above.
29 See para 6.9 above.
30 See para 6.9 above.

words used by the contract-denier. If the words of the contract-denier would have led a reasonable man to believe that he or she, meaning the contract-denier, was agreeing to be bound by a contract, the resultant contract will be upheld, not withstanding that the words in issue did not represent his or her true intention. Consequently, in the context of automated transactions, if the data messages generated by an electronic agent would have led a reasonable man to believe that the user thereof was agreeing to be bound by a transaction, the transaction in issue will be upheld notwithstanding that those data messages did not reflect the true intention(s) of the user. There is evidently no difference between South African and UK law on this issue, meaning that legal theory in the UK will sooner or later have to be developed so as to match the realities of contract formation through autonomous electronic agents.

As with the ECT Act, the UETA proceeds on a general presumption that an electronic agent is a tool for the manifestation of the assent of the user to third parties,[31] meaning that it is considered to be capable of operating only within the technical parameters of its original programming. Consequently, under the UETA, all the actions and data messages of an electronic agent are attributed to the user thereof notwithstanding that he did not review them. Concerning the intention to be bound, the official commentary to the UETA explains that the user's intention to be bound by an automated transaction flows from the programming and use of the electronic agent. [32] Therefore, a manifestation of mutual assent, which is the basis of contractual liability in US law, will arise when third parties interact with an electronic agent to form a contract. To this extent, the legal framework for automated transactions in the US is similar to the legal framework in South Africa and the UK. However, as demonstrated herein,[33] the drafters of the UETA openly acknowledge that through developments in artificial intelligence, it is conceivable that electronic agents capable of autonomous action will emerge within the useful life of that statute. When such developments occur, the official commentary goes on to advise that courts of law may construe the definition of an electronic agent in a manner

31 See para 6.4.1.1 above.
32 See para 6.4.1.1 above.
33 See para 6.4.1.1 above.

that recognises the new capabilities, *i.e.* in a manner that recognises the fact that an electronic agent is no longer a simple tool. Unfortunately, the official commentary to the UETA does not mention how these new capabilities of electronic agents, namely their ability to operate autonomously, will impact on legal theory.

The UCITA adopts a fairly different approach from both the ECT Act and the UETA. In terms of § 107 (d), the UCITA provides that a person who uses an electronic agent to form an agreement is bound by the operations of that electronic agent even if he or she did not review those operations or their results. However, under the UCITA, the user of an electronic agent is not bound by its operations indiscriminately. As demonstrated herein,[34] the official commentary to the UCITA explains that, in determining the extent to which the user of an electronic agent is bound by its operations, specific attention must be paid to the purpose for which he or she selected and used that electronic agent. The official commentary goes on to explain that this concept, referring to the idea of the "purpose for which an electronic agent was selected and used," embodies principles akin to those of the common law of agency, especially the concept of authority. Consequently, an electronic agent can only bind its user in contract with third parties so long as it was operating within the scope of its intended purpose. To clarify the relevance of the common law of agency to the matter, the official commentary mentions that the legal relationship between an electronic agent and its user is not fully equivalent to common law agency, but takes into account that the "agent" is not human.[35] This comment has been interpreted herein to mean that, to the extent that they may be applied by the courts of law to automated transactions, the principles of the common law of agency will have to be modified in order to suit the fact that the agent is not human.

In conclusion, it is recommended in the alternative for South Africa to adopt the same approach as the UCITA, particularly when dealing with transactions concluded by autonomous electronic agents. Therefore, in deciding whether or not the user of an autonomous electronic agent is bound by an agreement concluded thereby,

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34 See para 6.4.1.2 above.
35 See para 6.4.1.2 above.

South African courts must pay attention to the purpose for which an electronic agent was used. If the agreement concluded by an autonomous electronic agent falls within the scope of its intended purpose, that agreement must be upheld, notwithstanding that it does not reflect the true intention of the user. On the other hand, if the agreement concluded by an autonomous electronic agent does not fall within the scope of the purpose for which it was selected and employed by the user, the resultant agreement must be declared void on that basis. As explained above, courts of law may be guided by the general principles of the common law of agency, particularly the concept of "scope of authority," in applying this approach to automated transactions.

7.2.2 Offer and acceptance in automated transactions

7.2.2.1 Offer and invitation to treat

In South African law, the most plausible conclusion is that a vendor who advertises goods for sale to the public through an electronic agent, an interactive or automated website to be specific, makes a firm offer. This is so because at common law, the display of goods for sale through an automatic vending machine is generally considered a firm offer, rather than an invitation to treat.[36] The basis of this conclusion is that, by automating the process of contract formation, the owner of an automatic vending machine must be taken to have made a firm offer because he or she has effectively put it out of his or her power to exercise any choice in the conclusion of contracts. Therefore, a contract of sale through an automatic vending machine is instantly concluded when a customer makes an acceptance by inserting money into the machine. What has been demonstrated herein is that the foregoing conclusion is directly applicable to automated websites, because, by automating the process of contract formation, online traders also effectively put it beyond their power to exercise any choice in the conclusion of agreements.[37] Therefore, a contract of sale on an automated website is concluded when a customer makes an acceptance by successfully placing his or her purchase order over that website.

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[36] See para 4.5.2.1.1 above.
[37] See para 4.5.2.1.2.3 above.

It has been demonstrated herein that,[38] although correct in theory, the conclusion that website advertisements are firm offers is, nevertheless, difficult to sustain in practice. If every customer who successfully places a purchase order on an automated website concludes a contract, it is easily conceivable that an online trader will be inundated by purchase orders because of the limitations of his or her stocks. As demonstrated herein with reference to the decision of *Crawley v Rex*,[39] policy considerations dictate that public traders must be legally protected against such risks. At common law, public traders are protected by the doctrine of invitation to treat, which holds that a trader who advertises goods for sale does not make a firm offer, but rather an invitation to members of the public to make offers to him or her for the purchase of the advertised items.[40] Being the offeree, a trader retains a full right to accept or reject, for whatever reason may occur to him, the offers made by members of the public. Therefore, unless he or she wants to do so, the trader is not obliged, and cannot be compelled by law, to sell an advertised item to anyone who purports to purchase it.

As with the operators of brick-and-mortar stores, online traders too may be protected from inundation by purchase orders through the doctrine of invitation to treat. At the international level, article 11 of the UNECIC proceeds on a general presumption that advertisements of goods for sale through interactive applications are invitations to treat.[41] In South Africa, the South African Consumer Goods and Services Ombudsman has also suggested *obiter* in the matter of *Price on Webstore* that advertisements of goods for sale on commercial websites are invitations to treat.[42] However, as demonstrated herein[43], the doctrine of invitation to treat is difficult to sustain because it fails to protect the reasonable reliance of online customers on the automation of sales as a sure sign of a firm offer. This is so because, under the doctrine of invitation to treat, an online trader would be entitled to reject purchase orders at will; irrespective of the fact that, by automating the

38 See para 4.5.2.1.2.4 above.
39 See para 4.3.1.1 above.
40 See para 4.3.1.1 above.
41 See para 4.5.2.1.2.1 above.
42 See para 4.5.2.1.2.2 above.
43 See para 4.5.2.1.2.4 above.

process of contract formation, he or she would have led customers to reasonably believe that he or she was making a firm offer. As a result, it has been suggested in this work that South African law on the issue must be developed or modified in a manner that protects the conflicting interests of the parties, *i.e.* the interests of online traders and their customers. Online customers believe that they will always conclude valid and enforceable contracts by successfully placing purchase orders on automated commercial websites. Although ever ready and willing to perform all purchase orders placed by customers on their websites, online traders expect that they will not be legally enjoined to do so if they run out of stock, or if such performance would cause them undue hardship or financial loses.

As a better solution, it has been recommended in this study that South African law on the issue must be developed or modified to the effect that website advertisements are firm offers made subject to the availability of stock.[44] Therefore, while stocks last, an online trader who advertises an item for sale on an automated website must be taken to have made a firm offer to sell that item to anyone who successfully manages to place a purchase order on his or her website. As explained herein,[45] this approach trumps the doctrine of invitation to treat, to the extent that it strikes a fair balance between the conflicting interests of online traders and their customers. It does not permit online traders to arbitrarily reject purchase orders without due regard to the reasonable reliance of customers. At the same time, the recommended approach does not expose online traders to contractual liability beyond their ability to perform.

In the US, both the UETA and the UCITA do not address the issue whether advertisements of goods for sale on automated websites are offers or invitations to treat. There is also no authority at common law whether displays of goods for sale in automatic vending machines are offers or invitations to treat. However, as demonstrated herein,[46] the general rule at common law is that advertisements of goods for sale to the public are not offers, but rather invitations to treat. Proceeding from that analysis, it has been demonstrated that contemporary scholars in the US

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44 See para 4.5.2.1.2.4 above.
45 See para 4.5.2.1.2.4 above.
46 See para 6.4.2.1 above.

hold, as a general matter, that website advertisements too are invitations to treat, meaning that the making of an offer remains with the customer ordering goods per mouse click or per e-mail.[47] The foregoing conclusion is, however, rebuttable. As demonstrated with reference to the decision of *Je Ho Lim v The TV Corporation International*,[48] depending on the overall circumstances of a case, an advertisement may be a firm offer.[49] Whether or not an advertisement is an offer depends primarily on the objective reasonableness of the offeree's believe that the advertiser intended to make a firm offer. The analysis of this research has revealed that,[50] based on several factors, a reasonable online buyer may be justified in construing an advertisement of goods for sale on an automated website as an offer. For instance, an advertisement of downloadable material can reasonably be construed as a firm offer. This is so because the stock or supply of digital goods cannot be depleted, meaning that a trader who advertises such goods for sale cannot be inundated by purchase orders. A reasonable online buyer understands furthermore that, by automating a shopping website, a trader has impliedly waived the right to exercise his personal discretion on whether or not to accept purchase orders. This is so because, when a trader uses an automated website to conclude agreements, the website will automatically accept a purchase order if and when the purchase order form is correctly completed and payment successfully processed.

In UK law, it has been demonstrated herein that there are at least three possible solutions to the issue whether advertisements of goods on automated websites are offers or invitations to treat.[51] The first solution is that contemplated by Regulation 12 of the *Electronic Commerce Regulations*, which provides in general terms that a purchase order placed by a customer on a commercial website is a "contractual offer." This provision has been interpreted to mean that a customer who places a purchase order on a website makes an offer, meaning that a website advertisement is an invitation to treat.[52] As demonstrated herein,[53] Regulation 12 has been

47 See para 6.4.2.1 above.
48 *Je Ho Lim v The TV Corporation International* Super Ct No BC 236227.
49 See para 6.4.2.1 above.
50 See para 6.4.2.1 above.
51 See para 6.10.3 above.
52 See para 6.10.3 above.
53 See para 6.10.3.1 above.

accepted with mixed emotions by legal scholars in the UK. At common law, advertisements of goods for sale to the public are considered invitations to treat. To that extent, Regulation 12 is admittedly in line with the common law of contract in that jurisdiction. However, the law of contract in the UK recognises an exception to the general rule that advertisements are invitations to treat. As demonstrated with reference to the case of *Carlill v Carbolic Smoke Ball Co*,[54] depending on the words used by the advertiser, an advertisement may qualify as an offer in UK law.[55] To the extent that Regulation 12 does not acknowledge this exception, it is arbitrarily out of step with the common law, and may be said to be a bad development of the common law because it overlooks the reasonable reliance of customers on the words and actions of online advertisers.

The second solution is that adopted by Lord Denning in the matter of *Thornton v Shoe Lane Parking Ltd*,[56] namely the rule that in automated transactions, a firm offer is made when the owner or user of a machine holds it out to the public as being ready to receive money. As demonstrated herein,[57] this solution has found support amongst those scholars in the UK who draw an analogy between automatic vending machines and automated commercial websites. That notwithstanding, this approach has been criticised by some scholars in the UK on the ground that it exposes online traders to the risk of inundation by purchase orders.[58]

The third solution, which admittedly strikes a fair balance between Regulation 12 of the *Electronic Commerce Regulations* and the decision of *Thornton v Shoe Lane Parking Ltd*, is that adopted by article 2.201 (3) of the PECL. As demonstrated herein,[59] the PECL provides as a general matter that:

> A proposal to supply goods or services at stated prices made by a professional supplier in a public advertisement or a catalogue or by a display of goods, is presumed to be an offer to sell or supply at that price until the stock of goods, or the supplier's capacity to supply the service, is exhausted.

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54 *Carlill v Carbolic Smoke Ball Co* [1892] 1 Q.B. 256 (CA).
55 See para 6.10.3.1 above.
56 *Thornton v Shoe Lane Parking* [1971] 2 Q.B. 163.
57 See para 6.10.3.1 above.
58 See para 6.10.3.1 above.
59 See para 6.10.3.1 above.

Although the PECL is relegated to the status of a mere soft law in the UK, it has been demonstrated that legal commentators in that jurisdiction,[60] particularly the authors of *Chitty on Contracts*, have recommended that advertisements of goods for sale should be construed as offers made subject to the availability of stock.

As an alternative to the first recommendation, it is recommended that South African law on the issue must be developed or modified in a manner similar to article 2.201 (3) of the PECL. Although both recommendations lead to the same conclusion, *i.e.* article 2.201 (3) of the PECL and the recommendation made above that South African contract law must be developed to the effect that website advertisements are offers made subject to the availability of stock, the approach adopted by article 2.201 (3) of the PECL is, nevertheless, distinguished by the fact that it emphasises two points that lead to the conclusion that an advertisement is an offer made subject to the availability of stock. The first point is that an advertisement must undertake to supply goods or services "at stated prices." The second point is that the advertiser must be a "professional supplier." It is only when these two conditions have been met that an advertisement may be held to be an offer made subject to the availability of stock. Therefore, if the advertiser of goods for sale on an automated website does not state the price at which he or she is prepared to sell, or is not a professional supplier, *e.g.* if he or she is a private individual, the advertisements on that website should be construed as invitations to treat.

7.2.2.2 Automated replies— acceptance and acknowledgement of receipt

As suggested herein,[61] the issue whether automated replies are valid acceptances for purposes of contract formation will primarily depend on the proper classification of website advertisements. If one adopts the view advanced in this work that website advertisements are firm offers, or offers made subject to the availability of stock, it logically follows that acceptances will be made by the customers who place purchase orders on those websites. Therefore, the question whether or not an automated reply to a purchase order is a valid acceptance does not arise. In that instance, an automated reply may be construed as a mere acknowledgement of

60 See para 6.10.3.1 above.
61 See para 4.5.2.2 above.

receipt, meaning an acknowledgement on the part of the trader's electronic agent that it has actually received the customer's acceptance.

It is only when one adopts the view that website advertisements are invitations to treat that the issue whether an automated reply is a valid acceptance becomes relevant. The ECT Act does not directly address the issue whether or not an automated reply is a valid acceptance or a mere acknowledgement of receipt. However, the ECT Act makes it clear in section 20 (a) that a valid agreement will be formed where an electronic agent performs an action required by law for agreement formation, which has been interpreted herein to mean that a valid offer or acceptance may be made through an electronic agent.[62] Therefore, an automated reply may be a valid acceptance for purposes of contract formation, meaning that the mere fact that an acceptance was generated by an electronic agent does not of itself render the purported acceptance devoid of legal force and effect. Whether or not an electronic agent has made a valid acceptance will depend on the words used in the automated reply. If the words are clear and unequivocal, an automated reply will qualify as a valid acceptance. If not, an automated reply may be construed as an acknowledgement of receipt.

Since both the UETA and the UCITA recognise the validity of automated transactions, it logically follows that, in the US, electronic agents can make valid acceptances for purposes of contract formation. Under the UETA, so long as the words used by an electronic agent indicate a clear intention to accept an offer, an automated reply will bind the user of that electronic agent because those words are directly attributed to him or her.[63] The UCITA approaches the issue somewhat differently from the ECT Act and the UETA. In terms of § 206 (a), the UCITA provides that a contract will be concluded where an electronic agent engages in operations that under the circumstances indicate the acceptance of an offer.[64] Although § 206 (a) gives the impression that the operations of an electronic agent will be decisive of the issue whether an automated reply is a valid acceptance, that is not entirely true. In terms of § 107 (d) of the UCITA, the user of an electronic

62 See para 4.2 above and para 4.5.2.2 above.
63 See para 6.4.2.2 above.
64 See para 6.2.2 above.

agent is only bound by its operations if they are executed within the scope of the purpose for which that electronic agent was selected or used. Therefore, if an electronic agent is not intended by its user to make acceptances, it cannot bind him or her in contract with third parties through operations that indicate the acceptance of an offer.[65] This approach is commendable for the reason that it does not permit the operations of the electronic agent to bind its user indiscriminately, and for the reason that it pays attention to the true intentions of the user in deciding whether or not he or she is bound by the operations of the electronic agent.

It is recommended that South African law on the issue must be developed or modified to the same effect. Consequently, in determining whether or not an electronic agent has made a valid acceptance for purposes of contract formation, South African courts must first of all determine whether the electronic agent was intended, amongst others, to make acceptances. If not, an automated reply that purports to be an acceptance must be invalidated subject to the reasonable reliance of third parties thereon.

In the UK, the issue at hand becomes irrelevant when one adopts the analysis of Lord Denning in *Thornton v Shoe Lane Parking Ltd* that an advertisement of goods through an electronic agent is a firm offer. Proceeding from that analysis, it logically follows that it is the customer who makes an acceptance by placing a purchase order on the automated website of an online trader. The issue will only become relevant in the UK when one adopts the view of Regulation 12 of the *Electronic Commerce Regulations* that a purchase order is a contractual offer. Because it does not explicitly deal with automated transactions, the *Electronic Commerce Regulations* do not address the issue whether an automated reply is a valid acceptance for purposes of contract formation. However, seeing from the decision of Lord Denning in *Thornton v Shoe Lane Parking Ltd* that a valid offer can be made through an electronic agent, there is no reason to doubt that a valid acceptance can also be made through the same medium in the UK.

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65 See para 6.4.2.2 above.

Unlike the ECT Act, the UETA and the UCITA, the *Electronic Commerce Regulations* provide in Regulation 11 (1) (a) that online traders must acknowledge receipt of purchase orders. This provision has been interpreted to mean that under the *Electronic Commerce Regulations*, a valid contract will be formed at the instance of an offer, an acknowledgement of receipt and an acceptance.[66] As argued herein,[67] this is an unnecessarily development or modification of the common law because an acknowledgement of receipt serves no good purpose in the process of contract formation. Regulation 11 (1) (a) is also a bad development of the common law because, by obliging online traders to generate an acknowledgement of receipt and an acceptance in order to concluded a single transaction, it unjustifiably bloats transactional costs in automated contracting.

7.2.2.3 The time and place of contract formation in automated transactions

Concerning the time and place of contract formation in automated transactions, it is common cause that the law of contract in South Africa has been developed by the ECT Act. As demonstrated herein,[68] the time and place of contract formation at common law is usually dependent on the tool or mode of communication used by the offeree to transmit his or her acceptance. If the offeree uses an instantaneous mode of communication, *e.g.* telephone, telex or telefacsimile, he or she and the offeror are taken for all intents and purposes to be *inter praesentes*. In accord with the information theory, the contract in that instance is concluded when and where the offeror learns or becomes aware of the acceptance.[69] If the offeree uses a non-instantaneous mode of communication, *e.g.* post or telegram, the parties are taken to be *inter absentes*. Therefore, in accord with the expedition theory, a contract is concluded when and where the offeree initiates a message of acceptance, *e.g.* by posting the letter of acceptance, or handing over the telegram of acceptance to the post office.[70]

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66 See para 6.10.4 above.
67 See para 6.10.4.1 above.
68 See para 4.5.2.3 above.
69 See para 4.5.2.3.1 above.
70 See para 4.5.2.3.2 above.

Neither the information theory nor the expedition theory is applicable to electronic contracts. In terms of section 22 (2) of the ECT Act, an electronic contract is concluded at the time when, and place where, the acceptance of the offer was received by the offeror. In terms of section 23 (b) of the same statute, a data message will be regarded to have been received by the addressee when it enters his or her information system, and is capable of being retrieved and processed by him or her. As interpreted herein,[71] this provision propagates the reception theory, which holds as a general matter that a message of acceptance concludes a contract once it is effectively placed under the control of the offeror. It does not matter for purposes of contract formation that the offeror has not seen or read the message of acceptance. Therefore, in the context of automated transactions, a message of acceptance will conclude a contract when it reaches the electronic agent of the offeror. Concerning the place of contract formation, section 23 (c) of the ECT Act provides that a data message will be regarded to have been received at the addressee's usual place of business or residence. Therefore, irrespective of the actual location of an electronic agent in the vastness of the cyberspace, especially if it is mobile, a message of acceptance sent thereto will be regarded to have been received thereby at the user's usual place of business or residence.[72]

For purposes of this research, a concern was raised that section 23 (b) does not directly address the issue whether or not a message of acceptance generated in a format that the offeror's electronic agent is incapable of processing will conclude a contract.[73] This is so, because that provision merely states that a data message must be "…capable of being retrieved and processed by the 'addressee'," which clearly does not cover an electronic agent. To bring that provision in line with automated transactions, it has been recommended that the word "addressee" must be interpreted to include the electronic agent of the addressee.[74] Therefore, a data message of acceptance sent to an electronic agent must be capable of being retrieved and processed thereby. That notwithstanding, it has been demonstrated herein that it will be unfair to hold without exception that a message of acceptance

71 See para 4.5.2.3.4.1 above.
72 See para 4.5.2.3.4.2 above.
73 See para 4.5.2.3.4.3 above.
74 See para 4.5.2.3.4.3 above.

generated in an incompatible format will not conclude a contract.[75] This is so, because, unless the parties agree beforehand about the format(s) to be used, the offeree will never know for sure the specific format(s) that the offeror's electronic agent is programmed or configured to process. Consequently, the risk of incompatible formats must be allocated between the parties in a fair manner. It has been recommended herein that South African law on the issue must be developed to the effect that a message of acceptance generated in a format that the offeror's electronic agent is incapable of processing will nevertheless conclude a contract if the format used by the offeree was reasonable to use under the circumstances of a case.[76] For instance, if a format is commonly used by businessmen to transmit and receive messages in the ordinary course of business within a given industry, the use of that format by the offeree will be reasonable.

In the US, both the UETA and the UCITA have developed the common law of contract to the same effect as the ECT Act in South Africa. In terms of § 15 (b) (1) of the UETA, a data message will be considered to have been received by the addressee when it enters his or her information system in a form which he or she is able to receive. Unlike the ECT Act, however, the UETA specifically mentions in § 15 (b) (2) that a data message must also be in a form capable of being processed by the addressee's information system. This provision has been interpreted herein to mean that, where the addressee uses an electronic agent to receive messages, the originator must structure his or her message in a form or format that the addressee's electronic agent is able to process. Therefore, an incompatible format may render a message of acceptance ineffective. Concerning the place of contract formation, the UETA provides in § 15 (d) that a data message will be deemed to have been received by the recipient at his or her place of business, or at his or her place of residence if the recipient does not have a place of business. Therefore, an electronic agent will be taken to have received a message of acceptance at its user's place of business or residence.

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75 See para 4.5.2.3.4.3 above.
76 See para 4.5.2.3.4.3 above.

The UCITA provides in § 214 (a) that a data message will be deemed to have been received even if no individual is aware of it. The word "receipt" is interpreted in § 102 (53) (B) (II) to mean that a data message must come into existence in the recipient's information system, in a form capable of being processed or perceived by the recipient from that information system. As demonstrated herein,[77] the official commentary to the UCITA holds that, to be deemed to have been received, a data message must also be capable of being processed by the recipient's information system.[78] Therefore, a data message of acceptance sent to an electronic agent must be a format capable of being processed by the offeror's electronic agent. Concerning the allocation of risk for incompatible formats, the official commentary explains that the addressee does not have to use the specific format that the recipient's information system is programmed or configured to process.[79] On the contrary, in terms of § 102 (53) (B) (II), the data message in issue will suffice if it is in a format capable of being processed by an ordinary system of the type involved by the addressee. Therefore, in the context of automated transactions, if the recipient programs or configures his electronic agent to process atypical formats, he or she will bear the risk of incompatible formats if those formats are capable of being processed by ordinary electronic agents of the type that he or she is using. As a result, a data message of acceptance generated in a format that the offeror's electronic agent is incapable of processing will nevertheless produce a contract if it was reasonable to expect that the electronic agent would be able to process that format. In addition to the recommendation made above, it is recommended that South African law on the issue must be developed or modified to the same effect as the UCITA. Therefore, South African courts must enforce acceptances generated in incompatible formats if those formats are reasonable to use under the circumstances of a case, or if those formats are capable of being processed by ordinary electronic agents of the type used by the offeror.

In the UK, the *Electronic Commerce Regulations* provide in Regulation 11 (2) (a) that acknowledgements of receipt sent by a trader to his or her customers will be

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77 See para 6.4.3.3 above.
78 See para 6.4.3.3 above.
79 See para 6.4.3.3 above.

deemed to have been received by those customers when they able to "access" them. As interpreted herein,[80] this provision contemplates that the reception theory shall be applicable in determining whether or not a customer has received an acknowledgement of receipt. Therefore, notwithstanding that a customer may not have seen or read an acknowledgement of receipt, he will nevertheless be taken to have received it if he is able to access it. Regulation 11 (2) is *expressis verbis* limited to acknowledgements of receipt, meaning that the common law of contract prevails to determine the time and place of receipt of all other electronic communications, acceptances included.

At common law, the time and place of contract formation in the UK depends on the mode of communication used by the offeree to transmit his or her acceptance. As demonstrated with reference to the decision of *Entores Ltd v Miles Far East Corp*,[81] contracting parties are considered to be *inter praesentes* where the offeree uses an instantaneous mode of communication to transmit the acceptance.[82] In that instance, the contract is concluded at the time when, and the place where, acceptance is actually received by the offeror. As demonstrated herein with reference to the decision of *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*,[83] where the offeror uses an intermediary to receive messages, a contract will be concluded at the time when, and the place where, the message of acceptance was received by that intermediary.[84] This is known as the receipt rule. As demonstrated herein,[85] the receipt rule has been applied in a flexible manner in the UK. For instance, as demonstrated with reference to the decision of *Bernuth Lines Ltd v High Seas Shipping Ltd*,[86] the addressee will be taken to have receivedan e-mail that has entered his or her inbox even if he or she was not aware that it has entered the inbox.[87] Where the offeree uses a non-instantaneous mode of communication to transmit his or her acceptance, *e.g.* post, the parties are

80 See para 6.10.4 above.
81 *Entores Ltd v Miles Far East Corp* [1955] 2 QB 327.
82 See para 6.10.5.2 above.
83 *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH* [1983] 2 AC 34.
84 See para 6.10.5.2 above.
85 See para 6.10.5.2 above.
86 *Bernuth Lines Ltd v High Seas Shipping Ltd* [2005] EWHC 3020 (Comm).
87 See para 6.10.5.3.1 above.

considered to be *inter absentes*. In that event, the contract is concluded at the time when, and the place where, the offeree initiates a message of acceptance, *e.g.* by posting the letter of acceptance.[88]

Concerning automated transactions, it has been demonstrated herein that legal opinion in the UK is in favour of the view that electronic agents such as EDI systems are instantaneous modes of communication.[89] Consequently, a data message of acceptance sent to an electronic agent will conclude an automated transaction at the time when, and the place where, it is received by that electronic agent. Concerning the issue whether a message of acceptance generated in an incompatible format will conclude a contract, UK law does not provide a clear answer. However, it has been suggested herein that, in accordance with the advice of Lord Wilberforce in *Brinkibon Ltd v Stahag Stahl und Stahlwarengesellschaft mbH*, the solution will depend *inter alia* on the apparent intentions of the parties, sound business practices and considerations of where the risk should lie.[90] Therefore, depending on the circumstances of a case, a message of acceptance generated in an incompatible format may, or may not, conclude a contract in the UK.

7.2.3 The enforceability of standard terms and conditions in automated transactions

7.2.3.1 The enforceability of click-wrap agreements

It has been demonstrated herein that, in terms of section 20 (d) of the ECT Act, a party interacting with an electronic agent to form an agreement will not bound by the terms of that agreement if they were not capable of being reviewed by a natural person prior to agreement formation.[91] This provision was interpreted in this work to mean that the user of an electronic agent must ensure that a human being who is interacting with his or her electronic agent to form a contract is able to review the terms of that contract before expressing his or her assent thereto.[92] Therefore, if the terms of an automated transaction are not capable of being reviewed by an

88 See para 6.10.5.1 above.
89 See para 6.10.5.3.2 above.
90 See para 6.10.5.3.2 above.
91 See para 4.6.1 above.
92 See para 4.6.1 above.

individual prior to contract formation, he or she will not be bound by those terms. Section 20 (d) was also interpreted herein to mean that the entire automated transaction is not automatically vitiated by the fact that the intended terms were not capable of being reviewed by a natural person prior to agreement formation.[93] On the contrary, section 20 (d) is clear that such a party "…is not bound by the terms…," meaning that he or she can only avoid the terms.

Concerning the issue whether or not the click of an assent button is a valid manner for expressing consent to the standard terms and conditions of an online trader, it has been demonstrated herein that the ECT Act does not generally equate the clicking of an assent button to a signature.[94] This is so, because in terms of section 1 of that statute, data that is attached, incorporated or logically associated with other data will only serve as a signature if it "…is intended by the user to serve as a signature." Therefore, unless a customer clicks an assent button with the intention of signing a contractual agreement, his or her conduct will admittedly not qualify as a signature in South African law. Unless it is intended by the customer to serve as a signature, the clicking of an assent button in South Africa will simply be construed as another manner of expressing assent to the standard terms and conditions of the online trader. The legal force and effect of that conduct is effectively guaranteed by section 24 (b) of the ECT Act, which as shall be recalled, provides that the expression of intent is not without legal force and effect simply because it is not in the form of a signature, but other "…means from which…[a] person's intent…can be inferred."[95]

In stark contrast to the ECT Act, the UETA adopts a general view that the clicking of an assent button wields the legal force and effect of a signature. Therefore, provided the customer has been given adequate notice of the applicable standard terms and conditions, he or she will be taken to have signed a contract by clicking the "I Accept" or "I Agree" button. As illustrate in this work with reference to the decision of *Fteja v Facebook Inc*, a customer who clicks an assent button will still be bound

93 See para 4.6.1 above.
94 See para 4.6.2.1.1 above.
95 See para 4.6.2.1.1 above.

by terms and conditions even if he or she did not read or understand them.[96] In the UK, the Law Commission has similarly endorsed the view that the click of an assent button is capable of satisfying the requirements of a signature.[97]

It is not readily clear why the ECT Act has chosen to adopt a different view from the US and the UK. Seeing that the ECT Act defines a signature in more or less the same way as the UETA and the ECA, it is recommended in this work that the click of an assent button in South Africa must be construed as a signature. If the clicking of an assent button is considered to be a signature, the *caveat subscriptor* rule will logically apply to click-wrap agreements, meaning that the assent of a customer to the terms and conditions of a click-wrap agreement will be determined objectively. There are at least three advantages to the application of the *caveat subscriptor* rule to click-wrap agreements. The first advantage is that the *caveat subscriptor* rule can greatly simplify the enquiry into the issue whether a customer who clicked an assent button truly agreed to be bound by the terms and conditions of an online trader.[98] Following the general rule at common law, online traders would reasonably be entitled to rely on the clicking of assent buttons by customers as sufficient proof that they are agreeing to be bound by the terms and conditions of click-wrap agreements. The second advantage is that by considering the click of assent buttons to constitute a signature, the law will provide customers with an incentive to proceed with care in clicking buttons on trading websites.[99] The third advantage of considering the clicking of assent buttons to constitute a signature is that it would harmonise South African law with major legal systems such as the US and the UK, which is very desirable to do in view of the fact that these legal systems also constitute the biggest markets for electronic commerce in the world.

Another concern with South African law is that it does not sufficiently guarantee genuine or real consent on the part of the customer who is required to click on assent buttons. As pointed out in this work, one of the greatest challenges to the enforceability of click-wrap agreements is that the clicking of assent buttons is a

96 See para 6.5.1 above.
97 See para 6.11.1 above.
98 See para 4.6.2.1.1 above.
99 See para 4.6.2.1.1 above.

process so easy and simple that many customers, particularly inexperienced online shoppers, do not even appreciate its legal significance.[100] When click-wrap agreements are concluded over automated commercial websites, these customers stand a high risk of being ambushed into contractual liability by electronic agents. In order to minimise this risk, § 14 (2) of the UETA and §102 (b) of the UCITA expressly require that a person who concludes a transaction with an electronic agent must first of all know or have reason to know that his or her action(s) will cause the electronic agent to complete a transaction or performance.[101] To a similar effect, in the UK, Regulation 9 (1) (a) of the *Electronic Commerce Regulation* expressly oblige online traders to provide customers with information about the different steps to follow to conclude a contract. As interpreted in this work,[102] the main aim behind this provision is to ensure that online customers are not ambushed into contractual liability by electronic agents. In line with US and UK law, it is recommended that South African law on the issue must be developed or modified to the effect that, in order to form an enforceable click-wrap agreement, a person who interacts with an automated website must *prima facie* have actual or constructive knowledge of the fact that his or her action(s) will cause the website to complete a transaction. Therefore, the absence of such knowledge on the part of the customer must entitle him or her to rescind a click-wrap agreement.

7.2.3.2 The enforceability of web-wrap agreements

As demonstrated herein,[103] the enforceability of web-wrap agreements in South Africa will be determined with reference to the jurisprudence of the ticket cases. According to the ticket cases, despite the fact that a customer was not required to affix his or her signature on a contractual document, he or she will be bound by the terms printed thereon if the proferens took all reasonable steps to bring those terms to his or her attention. Reasonable steps may include the printing of the terms in a different colour, font or size. Where the terms in issue are contained in a notice, as opposed to a ticket proper, it has been demonstrated with reference to the decision

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100 See para 4.6.2.1.1 above.
101 See para 6.5 above.
102 See para 6.10.1.1 above.
103 See para 4.6.2.2 above.

of *Durban's Water Wonderland (Pty) Ltd v Botha* that the proferens will be taken to have brought those terms to the attention of the patron if the notice was placed at a prominent place.[104] Therefore, in the context of web-wrap agreements, if ever the trader took reasonable steps to bring his or her terms and conditions to the attention of the customer, the customer will be bound, notwithstanding that he or she was not required to click on an "I Agree" or "I Accept" button.

As in South Africa, all that is required for enforcement of web-wrap agreements in the US is that a customer must be given adequate notice of the terms and conditions.[105] The fact that the customer was not required to click on assent buttons to demonstrate his or her consent does not affect the validity and enforceability of the agreement. Whether or not a customer has been given adequate notice of the applicable standard terms and conditions depends on the facts and circumstances of a case. As demonstrated with reference to relevant case law in the US, a vendor will be held to have not given a customer inadequate notice where reference to the existence of terms is made on a submerged screen, where a hyperlink leading to terms and conditions is placed at the bottom of a webpage amongst numerous other hyperlinks, and where a hyperlink is presented in small gray text on a gray background.[106]

As in South Africa and the US, what is required for enforcement of web-wrap agreements in the UK is that the customer must be given adequate or reasonable notice of the terms and conditions.[107] Therefore, an online trader must take all reasonable steps to bring the terms and conditions of a web-wrap agreement to the attention of the customer. So long as that has been done, the customer will be bound to the contract, notwithstanding that he or she was not required to click on an assent button to manifest his or her consent. As demonstrated with reference to the decision of *Thornton v Shoe Lane Parking Ltd*, the reasonableness of the steps taken by the vendor will depend, amongst others, on the gravity of his or her terms

104 See para 4.6.2.2 above.
105 See para 6.5.2 above.
106 See para 6.5.2 above.
107 See para 6.11.2 above.

and conditions.[108] Consequently, a vendor must do more to bring a term or condition to the attention of a customer if a reasonable man would not expect to find that term or condition in the concerned document.

There is admittedly no difference between the legal framework for web-wrap agreements in South Africa, the US and the UK. In all these jurisdictions, the common law of contract provides an adequate solution to the issue of the enforceability of web-wrap agreements. Therefore, there is understandably no need for the development or modification of the common law framework.

7.2.3.3 The assent of an electronic agent to standard terms and conditions

It has been found in this work that the ECT Act does not address the issue whether or not standard terms and conditions must be incorporated into an agreement in a manner capable of being reviewed by an electronic agent.[109] The same is true in relation to the UETA in the US, and the *Electronic Commerce Regulations* in the UK. That notwithstanding, it has been demonstrated that a majority of scholars who have considered the issue agree that standard terms and conditions incorporated into an automated transaction must be capable of being reviewed by an electronic agent.[110] The main challenge in that regard is to determine what it means that terms and conditions must be capable of being reviewed by an electronic agent, particularly in light of the high risk that those terms and conditions may be structured in a format that the electronic agent in issue is not programmed or configured to process, *i.e.* incapable of reviewing.

Seeing that the proferens may never know for sure the format(s) that the other party's electronic agent is programmed or configured to process, it has been recommended in this work that South African law should be developed to the effect that terms and conditions introduced in an incompatible format are enforceable so long as that format was reasonable to use under the circumstances of a case.[111] For instance, if a format is commonly used by businessmen to generate and receive

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108 See para 6.11.2 above.
109 See para 4.6.2.3.1 above.
110 See para 4.6.2.3.1 above.
111 See para 4.6.2.3.1 above.

automated messages in the ordinary course of business within a specific industry, it has been submitted in this work that the use of that format to incorporate standard terms and conditions to an electronic agent will be reasonable.[112] Consequently, those terms and conditions must be considered to have been incorporated in a manner capable of being reviewed by an electronic agent, even though the electronic agent in issue was actually incapable of reviewing or processing them.

In the alternative, it is recommended that South African law on the issue must be developed or modified to follow the UCITA. As shall be recalled, the UCITA provides in § 113 (b) that an electronic agent will be considered to have been given an opportunity to review the terms and conditions of an agreement if they are made available to it in "…a manner that would enable a reasonably configured electronic agent…" to react to them.[113] As interpreted in this work,[114] this provision does not require the proferens to use a format that is unique to the electronic agent of the other party. On the contrary, it suffices that the format used was capable of being processed or reviewed by a "reasonably configured electronic agent." Therefore, the user of an electronic agent must bear the risk of incompatible formats if his or her electronic agent has been programmed or configured to process formats that a reasonably configured electronic agent of its type cannot.

7.2.3.4 The battle of forms in automated transactions

As illustrated with reference to the decision of *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd*,[115] South African law adopts the mirror-image rule to analyse the formation of a contract in the face of a battle of forms.[116] The mirror-image rule operates to the effect that, in order to conclude a contract, an acceptance must strictly correspond with an offer. In other words, an acceptance must be unconditional, meaning that the offeree must not add to, or qualify the terms of an offer. A conditional acceptance is construed as a counter-offer, and does not result in a contract until it is accepted by the original offeror. Consequently, if A makes an

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112 See para 4.6.2.3.1 above.
113 See para 6.5.3 above.
114 See para 6.5.3 above.
115 *Guncrete (PTY) Ltd v Scharrighuisen Construction (PTY) Ltd* 1996 2 SA 682 (N).
116 See para 4.6.2.3.2 above.

offer subject to his or her own standard terms and conditions, no contract is concluded if B purportedly accepts that offer subject to his or her own standard terms and conditions that are in conflict with those of A. In that instance, a valid contract will only arise if A subsequently accepts the standard terms and conditions of B.

What has been demonstrated in this research is that, unless one of the electronic agents has been programmed to keep a register or log file of the sequence in which data messages leading to the formation of an automated transaction are exchanged, the application of the mirror-image rule will encounter difficulties.[117] Without clear evidence of the sequence in which data messages were exchanged between electronic agents, it will surely be impossible to know precisely which electronic agent made an offer, a counter-offer, or an acceptance. Consequently, it will be impossible in that event to determine the terms and conditions of an automated transaction, which will automatically lead to the annulment of that agreement. \

In order to avoid the aforementioned technical barriers to the application of the mirror-image rule, it has been recommended in this work that South African contract law on the issue must be developed to adopt the knock-out rule.[118] As defined in this work, the knock-out rule operates to the effect that, in the face of a battle of forms, the standard terms and conditions of the parties are enforceable to the extent that they concur.[119] Put otherwise; while all the conflicting terms and conditions of the parties automatically knock each other out of the contract, the coinciding terms and conditions remain to govern the contract. As pointed out in this research,[120] the knock-out rule is commendable for automated transactions because it avoids the challenge of having to determine the sequence in which data messages were exchanged between electronic agents. All that is required is for the judge to compare the standard terms and conditions of the parties; and to enforce those terms and conditions to the extent that, by reason of their concurrence, they do not automatically knock each other out of the contract.

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117 See para 4.6.2.3.2 above.
118 See para 4.6.2.3.3 above.
119 See para 4.6.2.3.3 above.
120 See para 4.6.2.3.3 above.

As with South African law, US law proceeds on a general view that a conditional acceptance does not conclude a contract.[121] This rule is reflected amongst others in § 205 of the UCITA, which as shall be recalled, holds that a conditional acceptance does not conclude a contract unless the original offeror agrees to its conditions.[122] This approach has been criticised in this work on the same grounds as the mirror-image rule in South Africa. Therefore, it is the view of this research that the UCITA contributes nothing meaningful to the issue at hand.

Unlike the UCITA, the UETA is silent on the issue of the legal effect of a conditional acceptance, meaning that traditional contract law continues to apply. As captured in § 61 of the *Restatement of Contracts*, and in § 2-207 of the UCC, the general rule in US contract law is that, unless the offeree expressly requires the offeror to agree to the conditions of his or her acceptance, a conditional acceptance does not automatically preclude the formation of a valid agreement between the parties. As illustrated with reference to the decision of *Uniroyal Inc V Chambers Gasket & MFG Co*,[123] the provisions mentioned above are primarily intended to alter the common law position, *i.e.* the mirror-image rule, or the ribbon-matching rule as is known in the US.[124] According to the UCC, the terms and conditions proposed by the offeree are construed as additional terms of the agreement, and are on that basis enforceable. Where those additional terms conflict with the terms proposes in the offer, the UCC provides in § 2-207 (3) that the final agreement will be governed by the terms and conditions of both parties to the extent that they coincide.[125] Therefore, the conflicting terms and conditions will knock each other out of the agreement. This provision clearly contemplates the knock-out rule, which has already been recommended for adoption in South Africa, and will admittedly play a very important part in resolving a battle of forms in automated transactions concluded under the UETA.

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121 See para 6.5.4 above.
122 See para 6.5.4 above.
123 *Uniroyal Inc V Chambers Gasket & MFG Co* 380 N.E.2d 571 (1978) 575.
124 See para 6.5.4 above.
125 See para 6.5.4 above.

As with South African and US law, UK law similarly proceeds on a general rule that a conditional acceptance does not conclude a contract.[126] As illustrated herein, the rule that a battle of forms effectively precludes the formation of a contract has been reiterated with much emphasis by the England and Wales Court of Appeal in *Pickfords Ltd v Celestica Ltd* and *Tekdata Interconnections Ltd v Amphenol Ltd*.[127] That notwithstanding, it has been demonstrated in this work that the courts of law in the UK recognise a number of theories which, depending on the facts of a case, may be applied in lieu of the mirror-image rule. Most of these theories were first suggested by Lord Denning in the matter of *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd*.[128] These theories include the first shot rule and the last shot rule. The first shot rule means that a contract will be governed by the terms and conditions of the party that fired the first shot, meaning the party that first incorporated its terms and conditions into the contract. On the other hand, the last shot rule means that the contract will be governed by the terms and conditions of the party that fired the last shot, meaning the party that was the last to incorporate its terms and conditions into the contract. In the context of automated transactions, to the extent that it may not be possible for a court to determine the sequence in which data messages were exchanged between electronic agents, it will be impossible to know precisely which electronic agent fired the first or the last shot.

Apart from the first and the last shot rule, another theory employed in UK law to resolve a battle of forms is the knock-out rule, which has already been recommended for adoption in South African law in this work. As illustrated herein, the knock-out rule in the UK is understood and applied slightly different from the traditional knock-out rule.[129] Under the traditional knock-out rule, the terms and conditions knocked out of the agreement effectively leave a void or *lacuna*. In UK law, as suggested by the *dicta* of Lord Denning in *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd*, the knocked-out terms must be replaced by a reasonable implication.[130] Therefore, a court will have to imply terms into the agreement in

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126 See para 6.11.3.1 above.
127 See para 6.11.3.1 above.
128 *Butler Machine Tool Co Ltd. v Ex-Cell-O Corp (England) Ltd* [1979] 1 WLR 401.
129 See para 6.11.3.4 above.
130 See para 6.11.3.4 above.

order to fill the gap left by the knocked-out terms and conditions. The approach suggested by Lord Denning is much more preferable than the traditional knock-out rule in that it permits the law to step in and fill the the gap in a sensible and reasonable manner. On that basis, it is recommended in this work that the knock-out rule must be adopted in South Africa and applied to automated transactions in the manner suggested by Lord Denning; meaning that, where it is possible or necessary, South African courts must readily imply sensible and reasonable terms to fill the *lacuna* created by the knocking out of conflicting terms.

Another theory that has been applied to resolve the battle of forms in UK law is that adopted by the England and Wales High Court in *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* and *GHSP Inc v AB Electronic Ltd*,[131] and by the English and Wales Court of Appeal in *LIDL UK GmbH v Hertford Foods Ltd*.[132] As shall be recalled, the authority of those cases is that, where parties form a contract on conflicting standard terms and conditions, they are taken to have agreed that neither set of standard terms and conditions shall apply.[133] Therefore, the resultant contract is not governed by the standard terms and conditions of any of the parties. On the contrary, that contract will be governed by the terms that are usually implied by the law into agreements of that nature. The main advantage of this approach over the mirror-image rule is that it strives for the preservation of contracts, meaning that a contract is not automatically vitiated by the fact of a battle of forms.

Over and above the knock-out rule, it is recommended in the alternative that South African law on the issue be developed or modified to follow the UK position discussed immediately above. Consequently, if there is no evidence that one of the electronic agents involved in the formation of a transaction actually accepted the standard terms and conditions proposed by the other, South African courts may hold as a general matter that the resultant transaction was not concluded subject to the standard terms and conditions of any of the parties. In that event, the final terms of that transaction will be those that are usually implied by the law into contracts or transactions of that nature. As with the knock-out rule, the approach in issue

131 *Claxton Engineering Services Ltd v TXM Olaj-Es Gazkutato KFT* [2010] EWHC 2567 (Comm).
132 *LIDL UK GmbH v Hertford Foods Ltd* [2001] EWCA Civ 938.
133 See para 6.11.3.3 above.

appeals to one as practical enough to provide a simple and effective solution for automated transactions.

7.2.4 The treatment of mistakes and errors in automated transaction

7.2.4.1 Input errors

Concerning input errors, it is common cause that the development or modification of the law of contract in South Africa has been done by the ECT Act, meaning that the common law of unilateral mistake is not applicable when determining the legal effect of input errors on automated transactions. The legal framework for input errors is contained in section 20 (e) of the ECT Act. According to that provision, a material input error will always vitiate an automated transaction subject to a number of conditions. As explained in this work, an input error will be material if it relates to a fundamental term of a transaction, *e.g.* the purchase price or description of the *res vendita*. The first condition which must be met in order for a material input error to vitiate an automated transaction is that the electronic agent in issue must not have provided the customer with an opportunity to prevent or correct the error. The second condition is that the customer must notify the user of the electronic agent about the error as soon as he or she learns of it. The third condition is that the customer must take reasonable steps to return any performance received from the user of the electronic agent, or to destroy that performance if instructed to do so by the user of the electronic agent. The fourth condition is that the customer must not have obtained any material benefit or value from any performance received from the user of the electronic agent.

For purposes of this work, the first concern with the legal framework for input errors in South Africa is the general rule that a material input error will vitiate an automated transaction. As demonstrated herein,[134] the rule that an input error vitiates a contract is in direct conflict with the international legal framework for input errors, namely article 14 of the UNECIC. According to that provision, a person who alleges to have committed an input error can only withdraw the portion of the data message affected by the error, meaning that he or she is not automatically entitled

[134] See para 4.7.1.2 above.

to avoid a transaction on the basis of an input error. Argument was made in this work that, by allowing a party to withdraw the erroneous part of a data message, article 14 of the UNECIC strives for the preservation of automated transactions.[135] This is so, because, once an erroneous portion of a data messages has been withdrawn, an automated transaction will remain valid and enforceable despite the fact that it was initially concluded subject to an input error. In order to put the ECT Act in line with the prevailing international legal framework for input errors, it is submitted that section 20 (e) must be amended to the effect that a person who alleges to have committed an input error is only entitled to withdraw the erroneous portion of his or her data message.[136]

The second concern with the legal framework for input errors in South Africa is that it does not require or oblige the party alleging to have committed an input error to prove the reasonableness of that error. As demonstrated in this work,[137] it is a rule of thumb at common law that a mistake will only vitiate a contract if it is a *justus* or *iustus error*, meaning a mistake that is both material and reasonable. A mistake is reasonable if it is caused by the misrepresentation of the other party, or if that other party knew, or reasonably ought to have known thereof. If the other party did not know of the alleged mistake, and could not reasonably have known thereof, it is said that his or her reliance on that mistake was reasonable, consequently that the resultant agreement is valid and enforceable. If, despite actual or constructive knowledge of the alleged mistake, the other party continues to conclude a contract, the resultant contract is void *ab initio* because reliance on such a mistake is not reasonable.

Argument has been made in this work that, by allowing the party alleging to have committed an input error to avoid the contract without proving the reasonableness of that error, the ECT Act fails to protect the reasonable reliance of the users of electronic agents on input errors.[138] To explain this state of the law, UNCITRAL points out that where a person uses an electronic agent to conclude a contract, it

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135 See para 4.7.1.2 above.
136 See para 4.7.1.2 above.
137 See para 4.7.1.2 above.
138 See para 4.7.1.2 above.

will be impossible to demonstrate that he or she knew of the mistake of the other party, or that he or she reasonably ought to have known thereof. In light of this obstacle, it has been recommended in this work that, instead of supplanting the common law of unilateral mistake altogether, the common law framework can be developed or modified by asking whether the user of the electronic agent would have been aware of the input error had he or she been participating in his or her natural person to conclude a contract?[139] If he or she would not have been aware of the input error, the other party must not be permitted to avoid the contract on that basis, and *vice-versa*.

In the US, both the UETA and the UCITA adopt the same legal framework for input errors as the ECT Act, meaning that an input error is permitted to vitiate a contract subject to the conditions listed above.[140] In contrast to South Africa and the US, the UK adopts a very different legal framework for input errors. In terms of Regulation 9 (1) (c) of the *Electronic Commerce Regulations*, the user of an electronic agent is obliged to provide customers with "information" about the technical means for identifying and correcting input errors prior to the placing of purchase orders. As interpreted in this work, the first goal of that provision is to ensure that customers are informed beforehand about the presence of error prevention and correction techniques on a commercial website.[141] The second goal of that provision is to ensure that customers are given sufficient information or guidance about how those techniques can be used to prevent or correct input errors, understandably so, because some of those techniques may be too complicated for an average customer to use without prior guidance.[142] In light of the aforementioned benefits of Regulation 9 (1) (a), it is recommended that South Africa must adopt the same approach. Therefore, the ECT Act must be amended to the effect that, prior to agreement formation, the users of electronic agents must give third parties information about error correction and prevention techniques.

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139 See para 4.7.1.2 above.
140 See para 6.6.1 above.
141 See para 6.10.1.1 above.
142 See para 6.10.1.1 above.

Apart from the information requirement, the *Electronic Commerce Regulations* provide in Regulation 11 (1) (b) that a trader must provide customers with appropriate, effective and accessible technical means for identifying and correcting input errors. The main emphasis is on the fact that the technical means provided must be "appropriate, effective and accessible." As pointed out in this work, the onus is on the user of the electronic agent to prove that the technical means provided on his or her website were appropriate, effective and accessible, failing which a customer will be entitled to rescind the contract on the strength of Regulation 15.[143] It is recommended that South Africa must adopt the same approach as the UK in as far as it relates to the rules regulating the provision of error prevention and correction techniques. As shall be recalled, the ECT Act does not oblige the users of electronic agents to provide their customers with error correction and prevention techniques, it only provides them with an incentive to do so. It is recommended that the ECT Act must be amended to oblige or require the users of electronic agents to provide their customers with error correction and prevention techniques, furthermore to provide that those techniques must be effective and accessible by customers.

7.2.4.2 Machine errors

Concerning machine errors, it has been established herein that the development of the law of contract in South Africa has been done by the ECT Act, by section 25 (c) of that statute to be precise.[144] Section 25 (c) provides, as a general matter, that a data message generated by an electronic agent is attributed to the user thereof. However, the same section goes further to provide that a data message generated by an electronic agent will not be attributed to the user thereof if it is demonstrated that the electronic agent did not properly execute its programming in generating that message. This proviso has been interpreted to mean that a contract concluded by an electronic agent as a result of a machine error or programming malfunction is

143 See para 6.12.1 above.
144 See para 4.7.3.1 above.

void *ab initio*, meaning that a machine error automatically vitiates an automated transaction.[145]

A concern was raised in this work that, by providing as a general matter that a machine error vitiates an automated transaction, section 25 (c) of the ECT Act fails to protect the reasonable reliance of third parties on such errors.[146] This is so, because that provision does not require or oblige the user of an electronic agent to prove that the alleged machine error is reasonable, meaning that a machine error will vitiate a contract even if the other party did not know, and could not reasonably have known of that error. In light of this drawback, it has been recommended in this work that section 25 (c) must be interpreted in line with the reliance theory of contract, consequently that a machine error should not be permitted to vitiate a contract if the other party reasonably relied thereon to form an automated transaction.[147] In the alternative, it has been recommended that South Africa law on the issue must be developed or modified to follow German law.[148] As shall be recalled, as with section 25 (c) of the ECT Act, the BGB provides in section 120 that an error caused by a tool of communication vitiates a contract. However, in terms of section 122 (1) of the BGB, the user of the tool that caused the error must compensate the other party to the extent that he or she reasonably relied on that error, *i.e.* reliance damages.[149]

In US law, the UETA provides in § 10 (3), and the UCITA in § 213 (c), that apart from input errors, the legal effect of all other forms of mistakes and errors shall be determined by the relevant law, including the law of mistake. These provisions have been interpreted to mean that the common law of unilateral mistake in the US continues to determine the legal effect of machine errors on automated transactions.[150] In terms of § 153 of the *Restatement of Contracts*, a unilateral mistake will vitiate a contract if the enforcement of that contract would be unconscionable, or if the other party knew or had reason to know of that mistake. In

145 See para 4.7.3.1 above.
146 See para 4.7.3.1 above.
147 See para 4.7.3.1 above.
148 See para 4.7.3.1 above.
149 See para 4.7.3.1 above.
150 See para 6.6.2 above.

terms of § 154 of the same statute, a court of law may also attribute or allocate the risk of a mistake to one of the parties where it is reasonable to do so. As demonstrated with reference to the decision of *Ayer v Western Union Telegraph Co*,[151] a general rule for the allocation of risk in the US is that a person who selects or uses a tool of communication must bear the loss caused by the errors of that tool, consequently that third parties are entitled to rely on the messages transmitted by that tool to conclude contracts.[152]

In UK law, the legal effect of machine errors is similarly left for determination by the common law of unilateral mistake. The rule of thumb in UK law is that a unilateral mistake becomes operative, *i.e.* vitiates a contract, if the other party knew or had reason to know of that mistake before deciding to conclude a contract. Consequently, a machine error in that jurisdiction will not vitiate a contract if the other party reasonably relied there to conclude a contract.

In comparison to section 25 (c) of the ECT Act, the main advantage of the legal framework for machine errors in both the US and the UK is that it protects the reasonable reliance of third parties on such errors. It is accordingly recommended in finality on the issue that the proviso to section 25 of the ECT Act, namely the part thereof providing that "…unless it is proved that the information system did not properly execute such programming," must be deleted. The legal effect of that proviso must expressly be replaced by a provision stating that, apart from input errors, the legal effect of all other forms of mistakes and errors in automated transactions shall be determined by the common law of mistake.

7.2.4.3 Online pricing errors

As demonstrated herein, the common law of unilateral mistake in South Africa continues to apply to online pricing errors.[153] Therefore, as demonstrated with reference to the decision of the South African Consumer Goods and Services Ombudsman in *Price on Webstore*, an online pricing error will only vitiate a

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151 *Ayer v Western Union Telegraph Co* 10 Atl. 495 (Me. 1887).
152 See para 4.7.3.1 above.
153 See para 4.7.2 above.

transaction if an online trader can show that a customer knew or ought to have known of that error.[154] The aforementioned decision notwithstanding, a point has been made herein that, glaring errors aside, online traders will often have a hard time convincing courts of law that customers knew or ought to have known of pricing errors.[155] This is so, because, as pointed out by Esselen J in *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd*,[156] market value is fickle, meaning that it varies with time and circumstance, and with the appetites of the seller and the needs of the buyer.[157]Therefore, it is admittedly very difficult for one to be correct in his or her estimate of the true value of an item. In contrast to brick-and-mortar stores, electronic storefronts admittedly specialise in deals that are too good to be true. Therefore, what a reasonable customer would suspect to be a pricing mistake in a brick-and-mortar store might appear a very reasonable price on the internet. Moreover, it has been demonstrated herein that due to the internationality of the internet, a pricing error that could not have been spotted by a reasonable customer will nevertheless cause an online trader undue hardship or financial losses because of the magnitude of purchase orders received and processed by the electronic agent.[158]

In order to protect online traders from the aforementioned difficulties, it has been recommended first of all that South African law must be developed or modified to the effect that website advertisements are offers made subject to the availability of stock.[159] Therefore, if an online trader is unable to avoid liability by reason of the difficultly of proving actual or constructive knowledge of a pricing error on the part of all the customers involved, he or she must only be compelled to perform all the purchase orders received and processed by the electronic agent subject to the availability of stock.[160] It has been recommended, in the second place, that South African law should be developed or modified to the effect that automated replies are not valid acceptances when made in response to purchase orders placed by

154 See para 4.7.2 above.
155 See para 4.7.2 above.
156 *Slavin's Packaging Ltd v Anglo African Shipping Co Ltd* 1989 1 SA 337 (W).
157 See para 4.7.2 above.
158 See para 4.7.2 above.
159 See para 4.7.2.1 above.
160 See para 4.7.2.2.1 above.

customers for wrongly priced items.[161] As demonstrated herein, this approach has been adopted in Germany.[162] In the third place, it has been recommended that South African law must be developed to revive the doctrine of *laesio enormis*.[163] Therefore, despite the inability of an online trader to prove actual or constructive knowledge of a pricing error on the part of a customer, a court must declare the contract null and void if the advertised price is so low that the trader would be seriously prejudiced if he or she was compelled to perform the contract at that price. In the alternative, a court must amend the contract to have it performed on the true value of the concerned item.

In the US, both the UETA and the UCITA provide that, apart from input errors, the legal effect of all other mistakes shall be determined by the law of mistake. Therefore, the common law of unilateral mistake shall apply to online pricing errors. In terms of § 153 of the *Restatement of Contracts*, a unilateral mistake will vitiate a contract if enforcement of the contract would be unconscionable, or if it is demonstrated that the other party knew or had reason to know of the mistake. Therefore, where an online trader is unable to prove actual or constructive knowledge of a pricing error on the part of a customer, the contract will nevertheless be declared null and void if its enforcement would be unconscionable. As demonstrated herein, if a party has made a pricing error, the contract will only be declared null on the basis of unconscionability if that party can show the profit or loss that will result if he is required to perform, as well as the profit he would have made had there been no mistake.[164] Consequently, such a party will only be released from the contract if he or she can show that the enforcement of the contract at the advertised price would cause him or her losses as opposed to mere diminished profits.

Over and above the recommendations above, it is recommended that South African law on the issue must be developed to the same effect as US law, namely the rule in § 153 of the *Restatement of Contracts* that a unilateral mistake will vitiate a contract

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161 See para 4.7.2.2.1 above.
162 See para 4.7.2.2.1 above.
163 See para 4.7.2.2.2 above.
164 See para 6.6.3 above.

if the enforcement of that contract would be unconscionable. Therefore, if an online trader is unable to prove actual or constructive knowledge of a pricing error on the part of a customer, the contract must nevertheless be declared void if enforcement would cause the trader financial loses instead of mere diminished profits.

In the UK, the law of unilateral mistake is applicable to online pricing errors. As in South Africa, a unilateral mistake in the UK will vitiate a contract if the non-mistaken party knew or ought to have known of that mistake. Therefore, an online pricing error in the UK will vitiate a contract if a trader can show that a customer knew or ought to have known thereof. However, where a party alleging to have committed a unilateral mistake is unable to demonstrate actual or constructive knowledge of that mistake on the part of the other party, it has been demonstrated herein that the law of contract in the UK provides him or her with a couple of equitable remedies.[165] Firstly, the alleged mistake can be rectified so that the contract is enforced and performed by the parties on the truly intended terms. Secondly, courts can refuse to order specific performance if enforcement of the contract would be against all reason and justice, cause hardship amounting to injustice, or cause considerable harshness or hardship. As pointed out in this study, because of the perceived difficulty in proving actual or constructive knowledge of an online pricing error on the part of the customer(s), these two remedies may be very helpful in protecting online traders from the financial consequences of pricing errors. It is consequently recommended, in the alternative to all the recommendations already made, for South African law to follow the same approach as the UK. Therefore, where an online trader is unable to prove actual or constructive knowledge of a pricing error on the part of a customer, South African courts must either rectify the contract to reflect the true price, or refused specific performance if an online trader would be caused undue hardship.

[165] See para 6.12.3 above.

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