POSTMODERN EPISTEMOLOGY AND SCHOOLING

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Thesis submitted for the degree Doctor of Philosophy
at the Potchefstroom Campus of the North-West University

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May 2007

ACKOWLEDGEMENTS

It is almost a miracle for me to complete this doctoral thesis. I am indebted to many people for this study at the North-West University Potchefstroom Campus. I would like to express my sincere thanks and gratitude to all the people who contributed in many ways towards the completion of this study. Especially, I wish to mention the following persons with my great appreciation:

I would like to express my heartfelt gratitude to my promoter, Prof. Dr. J. L. van der Walt for his infinite patience, kindness and encouragement in helping me complete this doctoral programme. He inculcated in me a Reformational worldview which is the foundation of my academic studies, and provided invaluable insights, guidance and radically effective comments whenever I needed. He was a good model of a professional scholar and a capable academic leader.

I wish to thank my co-promoter, Prof. Dr. Sung-Soo Kim for his insightful guidance. He introduced PU for CHE (Now the North-West University Potchefstroom Campus) to me, and made it possible for me to study at this wonderful university. I cannot express my feelings of thanks for his all troubles concerning my studies.

My thanks go to Prof. Dr. P. C. van der Westhuizen for his support as a member of the academic advisory committee for my doctoral programme, and to Prof. Dr. J. L. Monteith for kindly helping to extend my study duration. My thanks also go to Prof. Dr. B. J. van der Walt for his kind encouragement, Dr. Richard Edline, the principal of the National Institute for Christian Education in Australia, for his warm encouragement with the suggestion of articles, and Prof. Dr. Sung-Guk Joh for his useful advices about my studies.

I express my gratitude to the educational authority in Busan, South Korea, especially, all decision-makers at Bukbu Provincial Office of Education in Busan. They generously granted me leave of absence and monthly subsidies during my study period.

I want to thank my dear colleagues, Mr Jea-Shin Ryu for his kind and infinite encouragement, Dr. Young-Soon Shin for her kind advice and the suggestion of many good academic resources, Rev. Kyung-Ho Kwon for his role model, Dr. Hye-Sook Kang for her cheerful words and Dr. Yeon-Jung Kang for her good wishes.

I express my gratitude to all brothers and sisters in the "Gereformeerde Kerke in Suid Afrika" Potchefstroom-Noord congregation and all members of the English service group for their hospitality and fellowship. Especially, I want to thank the following: Mr Renato Coletto and his wife Melina for their friendship, many fruitful conversations and the introduction to good academic resources, Mr Jaap and Mrs Annatjie Verhoef for their encouragement, and Prof. Ray and Mrs Ina Everson for their kind concern of my family.

My gratitude goes to all members of TEM (Teachers Evangelical Mission) in Busan, South Korea, for their sincere prayers and financial support.

I would like to thank to my lifelong teachers, Rev. Joo-Sub Kwak for his guidance in my thinking and Prof. Dr. Duk-Yul Shin for his good academic example.

For his kind concern about my studies, I want to thank to Mr Gi-Hyun Yun, and Mr Yeon-Han Lee for his memorable support.

A word of my gratitude goes to my wife, In-Hee and my two children, Seung-Hee and Hwan-Hee, for their love, patience and their prayer for my studies.

Above all, I would like to thank God for His love and grace following me at all times of my life, and during the time of writing this thesis. May it serve to glorify Him, the Creator and the Saviour of all creation.

Soli Deo Gloria

Title: Postmodern[1] epistemology and schooling.

Keywords: postmodernism, postmodern epistemology, postmodern knowledge, education, postmodern education, schooling, Richard Rorty.

SUMMARY

One of the core and primary functions of the school is to transmit knowledge from one generation to the next. The theory and practice of schooling (teaching and learning) should be founded on a sound concept of knowledge. A change in epistemology entails a change in approach to schooling. This study investigates how the postmodern idea of knowledge may affect schooling both in theory and practice.

The author traces how the concept of knowledge has changed from modern to the postmodern era, in order to find the general features of the recent view of knowledge. The postmodern idea of knowledge is characterised by doubt about objective knowledge, the shift from universal reason to plural reason, criticism of foundationalism and awareness of the peculiar role of language.

This study focuses on Richard Rorty's theory to analyse the postmodern idea of knowledge and its educational implication. In order to figure out the problems of postmodern epistemology, the author criticises Rorty's idea of knowledge immanently and transcendentally. Not only self-contradictions but also hidden foundations (or beliefs) in Rorty's idea of knowledge are revealed. This study comes to conclude that although the postmodern idea of knowledge reveals the shortcomings of the modern idea of knowledge, it also has many flaws in achieving a sound concept of knowledge.

This study indicates an alternative view of knowledge from a Reformational perspective in order to overcome the shortcomings of postmodern epistemology. The author suggests a new possibility of objective knowledge based on the notion of creational law, and also various kinds of legitimate knowledge based on the multi-dimensional modality of reality. As a final point, this study suggests the notion of stewardship in education. Schooling should open up the multidimensional reality for students to become responsible stewards who care for the world and their fellow human beings.

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[1] Some authors reserve the term 'postmodern' referring to late 20th century and 21st century cultural and evironmental conditions, whereas the term 'postmodernist(ic)' is taken to refer to life-view and philosophical aspects. In this thesis, the term 'postmodern' will be used for both meanings unless the context demands the use of 'postmodernist' or 'postmodernistic' (cf. footnote 2 and 3 on page 1).

Titel: Postmodernistiese epistemologie en onderwys

Sleutelterme: postmodernisme, postmodernistiese epistemologie, postmodernistiese kennis, onderwys en opvoeding, postmodernistiese onderwys en opvoeding, skool (onderwys), Richard Rorty.

OPSOMMING

Een van die kern- of basiese funksies van die skool is die oordrag van kennis van die een geslag na die volgende. Die teorie en praktyk van skoolgaan (onderwys; onderrig en leer) behoort dus op 'n verantwoordbare kennisopvatting te berus. 'n Verandering in epistemologie bring altyd 'n verandering mee in die benadering tot die taak en funksie van die skool. In hierdie studie word nagegaan hoe postmodernistiese kennisopvattinge die aard van die skoolonderwys in sowel teorie as praktyk (kan) beïnvloed.

Daar word nagegaan hoe kennisopvattinge verander het vanaf die moderne na die postmoderne era. Dit is gedoen met die oog daarop om vas te stel wat die algemene eienskappe is van die meer onlangse sieninge van kennis. Postmodernistiese opvattinge oor kennis word gekenmerk deur twyfel oor die bestaan of verkryging van objektiewe kennis, die skuif vanaf universele rede na plurale redes, kritiek op 'foundationalism' en 'n sterk bewustheid van die besondere rol van taal.

Om postmodernistiese opvattinge oor kennis en die opvoedkundige implikasies daarvan na te gaan word daar gefokus op die beskouinge van Richard Rorty. Om die probleme verbonde aan die postmodernistiese epistemologie uit te rafel beoordeel die outeur Rorty se kennisopvattinge sowel immanent as transendentaal. Nie slegs die inherente kontradiksies nie maar ook die verskuilde grondslae (oortuiginge) in Rorty se kennisopvatting word in die proses blootgelê. Die outeur kom tot die gevolgtrekking dat, hoewel die postmodernistiese kennisopvatting baie van die tekortkominge van die moderne kennisopvatting blootgelê het, dit ook self heelwat tekortkominge openbaar in die soeke na 'n verantwoordbare kennisopvatting.

Om die probleme van die postmodernistiese epistemologie die hoof te bied word 'n alternatiewe kennisopvatting vanuit 'n reformatoriese perspektief aan die hand gedoen. Nuwe moontlikhede word aangedui met die oog op die verkryging van objektiewe kennis gefundeer in die gedagte van die skeppingwet, asook op die verkryging van allerlei vorme van geldige kennis gefundeer in die modale multi-dimensionaliteit van die skepping. Die studie word afgerond met 'n besinning oor die gedagte van opvoedingsrentmeesterskap. Skoolonderwys behoort die multidimensionaliteit van die werklikheid vir die leerders oop te maak sodat hulle verantwoordelike rentmeesters kan word wat omgee en sorg vir die wêreld en ook vir hulle medemense.

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1. INTRODUCTION, OUTLINE AND METHOD OF RESEARCH, AND RESEARCH PROCEDURES

1.1 Introduction

In this chapter, in order to introduce this study, attention will be given to the motivation or background of this research, the statement of the research problem, aims of this study, the topicality of the research, the methodologies of this research, research procedures and the structure of this study.

1.2 Background of the research problem

The change that was designated postmodernism is still continuing. It means nobody grasps yet the whole picture of postmodernism[2] (or postmodernity[3]). Most scholars have difficulty capturing its significance in a precise definition (Van der Walt, 1997:115) or defining and describing postmodernism (Henning, 1997:100; Malpas, 2005:3-5; Marshall, 2000:117-118). However, it has been agreed, as a common feature of postmodernism, that the latter is a rejection (or runs counter to) the core commitments of the modernist theory (Grenz, 1996:13; Veith, 1994:35). During the period of domination by modernist-rationalist views of science (such as positivism, scientism and pragmatism), philosophers and educationists entertained fairly clear-cut conceptions and definitions of knowledge (Cooper, 1994:23; Shin, 1994:15-16). Virtually all of the modern(ist) thinkers tended to stress the ultimate importance of absolute clarity and value-free reasoning in approaching questions of knowledge and reality. The late twentieth century efforts to

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[2] Postmodernism refers to a theoretical-philosophical standpoint or view that relates to postmodernity as its socio-cultural context (see footnote 1 on page iii. Newton, 2004:177-178; Smith, 2006:20 n.8; Van der Walt, 1997:115-116).

[3] Postmodernity refers to a socio-cultural framework of the era since the 1960s. It is a form of reaction against modernity (see footnote 1 on page iii. Newton, 2004:177-178; Smith, 2006:20 n.8; Van der Walt, 1997:115).

question and even overthrow modern philosophy were focused on attempts to refashion the concept of knowledge. The arrival of postmodernism and its tendencies towards relativism changed the modern view of knowledge: there are no more final and ultimate conceptions about what knowledge is, and how it should be mastered by learners (Shin, 1999:238-239). Postmodernism has relinquished the project of striving to know rationally and to describe reality in terms of universal statements and essentials (Van der Walt, 1997:118).

One of the core and primary functions of the school as a societal institution or relationship is to transmit knowledge from one generation to the following (Taljaard, 1976:244; Van der Walt & Dekker, 1982:96; Fowler, 1996:86-87). The theory and practice of schooling, especially teaching and learning should therefore be founded on an effective and sound concept of knowledge. A change in epistemology, therefore, entails a change in approach to schooling. Actually, the change has already occurred in education and school as a result of postmodern thinking (Green, 1998:40). A curriculum that is built on constructivism already prevails in present schools, according to Doll (1997:212-221), Van der Walt and Fowler (2006), Van Niekerk (1997:78-96), and Veith (1994:59).

Reformational philosophy has tried to reveal the role of presuppositions, pre-scientific assumptions and/or religious commitment in science (Van der Walt, 2002a:27). Likewise, it will be able to examine a hidden religious belief in postmodern theories, especially educational theories. For establishing sound schooling, it is necessary firstly to find a balanced view of knowledge. Based on this, we may be able to criticise an educational theory founded on postmodernism and to construct a more sound and appropriate educational theory.

This research will be a part of the task mentioned above.

1.3 Statement of the research problem

The problem of this study can be summarized in the form of the following questions:

- What is postmodern knowledge?
- What are the educational implications of postmodern epistemology, especially as they are expressed in the work of Richard Rorty?
- What is a sound philosophical base to cope with the challenges of postmodern epistemology in educational situations?

1.4 Aims of the research

This research attempts to reach the following aims:

1.4.1 It attempts to analyse how the concept of knowledge has changed from the modern era to the postmodern epoch and to describe the general characteristics of the postmodern idea of knowledge.

1.4.2 It attempts to describe the influence and impact of postmodern epistemology on education (including the teaching-learning situation in the school) based on Richard Rorty's idea of knowledge and education.

1.4.3 It attempts to evaluate postmodern epistemology and its educational implications from a Reformational philosophical point of view.

1.4.4 It attempts to discover and establish a sound philosophical base, perspective and strategy with regards to the challenges of postmodern epistemology for education.

1.5 Topicality of the research

The survey of the literature on the postmodern education (or schooling) reveals the following topical problems:

1.5.1 In the first place, although many researchers or philosophers present their explanation of what postmodern knowledge is, it is difficult to find a neatly rounded explanation about the general features of the postmodern idea of knowledge as well as its historical development. Therefore, it is necessary to trace this development from the modern to the postmodern era, and to outline the general characteristics of the postmodern idea of knowledge.

1.5.2 In the second place, in educational research there is an increasing interest in "postmodern education" or "postmodern schooling," yet the discussion of how the postmodern idea of knowledge impacts on educational theory and practice is rare and sporadic. The concept of knowledge is one of the main bases of educational theory and practice, and therefore, for authentic schooling and education, there is an urgent need to explore how education and schooling may be influenced by the postmodern idea of knowledge.

1.5.3 In the third place, since postmodernism is a reactive tendency or movement to the modernist monarchial thinking in which human reason is absolute, it can be understood as a remedial endeavour to balance modernistic extremities in the philosophical idea of knowledge. Postmodern theorists point out the shortcomings of the modern idea of knowledge, but their ideas also imply imbalanced understandings about knowledge and overlook many aspects of it. It is necessary, therefore, to analyse the foundations of the postmodern epistemological idea and to evaluate critically its shortcomings for educational discourses.

1.5.4 In the fourth place, although many recent academic researchers deal with the issue

on the postmodern idea of knowledge and strive to establish a new way of schooling according to it, a comprehensive research to devise an alternative view of knowledge and its educational implication can hardly be found. It is a great challenge for Christian educationists to provide an alternative way of schooling based on a balanced view of knowledge which can avoid the shortcomings of the postmodern idea of knowledge.

These topical problems of the postmodern epistemology and its educational implication underline the necessity for undertaking this study. This study project is not only relevant to the field of philosophy of education (in the sense that it will contribute to a better understanding of the concept of knowledge, and how to achieve a fundamentally balanced and sound view of knowledge), but it is also relevant to the research focus area of the Faculty of Education Sciences of North-West University, as a sound concept of knowledge leads to improved (more effective and efficient) schooling.

1.6 Method of the research

The methodology that is used in this research is characteristic of philosophical educational inquiry. The following methods are applied:

1.6.1 A documentary analysis of both primary and secondary works concerning the theme of the study was applied. The literature survey focused on the concept of postmodern knowledge, postmodernism, knowledge and education, and postmodern education. Richard Rorty's works also were analysed to draw out his idea of knowledge and education. This analysis is complemented by secondary sources. A computer search based on the following keywords was performed repeatedly in order to ensure that relevant sources have been consulted: postmodernism, postmodern epistemology, postmodern knowledge, education and epistemology, postmodern education, knowledge, knowing, rationalism,

irrationalism, and Richard Rorty. Recent articles concerning the above keywords were consulted and electronically accessed by means of the EBSCO-host service on the Internet.

1.6.2 The problem-historical method (Van der Walt, 1982:39) was adopted to reveal how the concept of knowledge has changed from the modern to the postmodern era. The difference in approach to knowledge between modernism and postmodernism was made clear through this method. The general features of the postmodern idea of knowledge have been drawn by this method.

1.6.3 The methods of transcendental criticism (Dooyeweerd, 1984:37-38; Van der Walt, 1980:65-67; Van der Walt, 1982:41-43) and transformational appropriation (Klapwijk, 1986:*passim*; 1987:105 ff; 1995:184 ff) were applied in order to identify the religious belief of postmodern epistemology, especially in Rorty's idea. These methods were also used for examining the foundations and life-conceptual directions of postmodern education.

1.6.4 The method of philosophical reflection (Van der Walt, 1982:37-38) was applied to evaluate critically the postmodern notion of knowledge and its educational implication. A Reformational perspective and strategy on postmodern epistemology and its impact on education were devised by these methods.

1.7 Conceptual framework

In this study, main key concepts are defined as follows.

1.7.1 "Modern" and "postmodern"

The term "modern" is used to designate various post-medieval historical periods. In this study, it refers to the new philosophy that emerged early in the modern era, and

which had as major representatives Descartes, Locke and Kant. The term "postmodern" is also used to designate various new types of philosophical ideas which deny or doubt modern philosophical ideas.

1.7.2 Epistemology

The term "epistemology" means the theory of knowledge, and is a branch of philosophy that inquires into the nature and the possibility of knowledge. It is closely related to other fields of philosophy, such as ontology (the theory of existence) and anthropology (the theory of the human being). Therefore, in this study, the term is used in awareness of its relatedness to ontology and anthropology.

1.7.3 Schooling

The term "schooling" means the organised action of teaching which takes place under the support of the school as a social institution for the sake of learning. In this study, it is used comprehensively to refer to any kind of teaching and learning in school, and is used exchangeably with the term "education" depending on the context.

1.7.4 Education

In this study, the term "education" is used to mean not only a concrete activity in which one person leads another person to a certain goal according to certain norms, but also an ongoing process which leads and equips an "immature" person with knowledge and skills enabling him or her to fulfill his or her calling and task on earth.

1.7.5 Teaching and learning

The term "teaching" is used to mean the transmission of knowledge and skills regarded as worthwhile to the pupils by teachers. The term "learning" designates the learners' activity to attain knowledge or skills which will benefit them.

1.8 Research procedure

The research was accomplished by the following procedure:

1.8.1 In the first place, all the references – books, journal articles, dictionaries, and bibliographical functions – to the theme of this study were consulted.

1.8.2 In the second place, in order to abstract (draw) the general characteristics of postmodern epistemological ideas, the historical review of how the concept of knowledge has changed from modern to postmodern era was done. This historical review started from the Renaissance, the whole range of this was divided into 3 periods: from the Renaissance to the 18th century, from the 19th century to the early 20th century, and the 20th century to the present.

1.8.3 In the third place, the research tried to investigate the postmodern idea of knowledge in detail by using Rorty's idea of knowledge. Rorty's idea of knowledge was collated with the general features of postmodern epistemological idea. After discussing Rorty's idea of knowledge, the research tried to discover the educational implications of his epistemological idea.

1.8.4 In the fourth place, the research tried to criticise Rorty's idea of knowledge both immanently and transcendentally in order to find out flaws of incoherence and implicit presuppositions in his idea.

1.8.5 In the fifth place, the research tried to describe an alternative view of knowledge according to a Reformational philosophy and also to devise its educational implication for a sound idea and practice of schooling.

1.9 Structure of this research report

This report contains the following chapters:

Chapter 1: Introduction, outline and method of research, and research procedures

This chapter introduces this study and states the problem, the aims of the study, the methodologies of the research, the conceptual framework of the study, and the structure of the study.

Chapter 2: Historical review of the concept of knowledge in Western philosophy from the 16th century onwards

This chapter presents a brief historical review of the development of the concept of knowledge from the modern era to the postmodern epoch in an attempt to sketch the general features of the postmodern idea of knowledge.

The discussion of this chapter is undertaken in 3 subdivisions:

In the first part, the scope of the historical survey will cover the Renaissance to the modern period. The discussion starts with the Renaissance and focuses on the ideas of three prominent modern philosophers: Descartes, Locke and Kant.

In the second part, the focus is confined on the interim period between the modern and the postmodern era, and deals with Nietzsche, Heidegger, Kuhn and Popper.

In the third part, the discussion focuses on the four representative thinkers of the postmodern era, i.e. Habermas, Lyotard, Foucault and Rorty.

Chapter 3: Education influenced by postmodern epistemology

This chapter sets out how the postmodern idea of knowledge may affect schooling or education by using Richard Rorty's idea of knowledge and his idea of education.

This chapter is divided into 3 subdivisions:

In the first part the postmodern concept of knowledge is examined in detail by referring to Rorty's idea.

In the second part Rorty's own idea of knowledge is discussed before examining how the postmodern idea of knowledge may affect schooling and education.

In the third part the discussion attempts to sketch a new view of schooling in accordance with Rorty's epistemology.

Chapter 4: Critical Evaluation of Postmodern Epistemology and Education

This chapter is devoted to evaluate postmodern epistemology and education critically and to find an alternative idea of knowledge and schooling from Reformational philosophy perspective.

For this purpose the chapter is subdivided into 4 parts.

In the first part the discussion evaluates critically Rorty's idea of schooling.

In the second part Rorty's idea of knowledge is criticised.

In the third part an alternative to the postmodern idea of knowledge is examined from the angle of a Reformational philosophy.

In the fourth part the discussion attempts to draw an alternative view of schooling in accordance with the Reformational idea of knowledge.

Chapter 5: Findings, conclusions and recommendations

This final chapter contains the findings of the research, the conclusion of the study, the recommendations on the findings of the study, and the recommendations for further research.

1.10 Conclusion

In this chapter, some introductory remarks for this research have been mentioned. The

next chapter will trace how the concept of knowledge has changed from the modern to postmodern era, for the purpose of sketching the general characteristics of the postmodern idea of knowledge.

2. HISTORICAL REVIEW OF DEVELOPMENTS REGARDING THE CONCEPT OF KNOWLEDGE IN WESTERN PHILOSOPHY FROM THE 16TH CENTURY ONWARDS

2.1 Introduction

All schooling practices are in some way based on concepts of knowledge. Epistemology is, therefore, one of the most fundamental aspects of schooling. The school is a societal institution the purpose of which is 'transmitting' knowledge from one generation to the following, or to help the next generation to master the knowledge required for their later lives. The concept of knowledge has, however, been changing throughout history. This chapter aims at describing how the concept of knowledge has been changing from the modern (post 17th century) epoch to the postmodern (post-20th century) era in Western history. Some of the differences between modern(ist) and postmodernist epistemology will emerge in the course of the discussion. For this purpose, the overview will be divided into 3 sections:

(1) The roots of modern epistemology: from the 17th century to the 18th;
(2) The shift from modern to postmodern epistemology: from the 19th century to the 20th;
(3) Recent epistemology: 20th century up to the present.

2.2 The roots of modern epistemology

The Renaissance was a transitional period between the mediaeval and the modern. It put an end to mediaeval modes of thought and laid the basis for the Enlightenment (Brinton, 1963:204). Although historians disagree about the date of the beginning of the Renaissance, it is broadly accepted that it started in Italy around the 14th century, then spread to Northern Europe and flourished in the 16th century (Gutek, 2001:71). In this section, the ideas about knowledge from the Renaissance period to the modern era are discussed with reference to prominent modern philosophers such as Desiderius Erasmus,

René Descartes, John Locke and Immanuel Kant.

2.2.1 Renaissance

The term "renaissance" is used to designate a revival, a rebirth of interest in the humanist dimension of life and culture, especially in the classics of ancient Greece and Rome. However, the Renaissance period was not merely a return to the humanistic literature of Greece and Rome; it also was a reaction to the errors and limitations of mediaevalism. Renaissance humanists adopted the classics of Greece and Rome as a new authority to replace an older authority in the form of the degenerate Scholasticism of the Middle Age (Brinton, 1963:212-214; Bronowski, 1979:62-63; Gutek, 1995:114-115).

The humanists were convinced that the ancient classics contain almost everything worth knowing and are the source of ethics, history, morals and all other kinds of wisdom. They tried to find in the classics a new ideal for perfect and universal man, in contrast with the mediaeval view of man as a sinful and fallen being. They returned to the classic notion of the ideal man, the well-rounded and liberally educated person as portrayed in the classics (the *paideia* ideal), and they believed that this could be achieved through exposure to the classics. The ancient classics, therefore, were regarded as the most important source of knowledge during this period. Humanists insisted on reading them. The Greek and Latin languages became important subjects because of the humanists' desire to return to the original sources (Gutek, 1995:118; Nash, Kazamias, & Perkinson, 1967:141-149). They thought that realities of life could be approached through language, and that a new language would provide them with a new perception of the world. To learn a new language was, thus, to learn (living in) a new world. For the Renaissance humanists, language was not only a way of communication, but also a way of understanding the world.

The nature of the knowledge that Renaissance humanists pursued is well represented in the words of Desiderius Erasmus, a Renaissance scholar. He said at the beginning of *De Ratione Studii* (1511), a short treatise on educational guidance: "There are two kinds of

knowledge: the knowledge of truths and the knowledge of words." He considered languages, especially Latin and Greek, the most important subjects to be studied, because "their literature contains all the knowledge which we recognize of vital importance to mankind" (Curtis & Boultwood, 1977:127). Although the humanists became interested in a kind of natural science, ancient classics and languages received more attention from them (Gutek, 1995:130-131). Their concerns were mainly toward the past.

The mainstream of academic philosophy up to the end of the 16th century was scholastic Aristotelianism. Aristotle explained that humans can attain knowledge through sensory activity, provided that the sense organs functioned properly, in their proper medium, for their proper object. The form of the object known is abstracted by the intellect, and is known conceptually. This explanation was accepted broadly without question, and Aristotelianism became the basic structure of thought in the Middle Ages (Popkin, 1988:669).

In the Renaissance period, Aristotle's view of knowledge was criticised; the humanists offered radically different proposals about knowing and knowledge on the basis of various Platonic views. They attempted to show that Aristotelian logic was an abstruse, artificial and abstract way of manipulating ideas that led to neither concrete nor genuine knowledge (Popkin, 1988:665, 672). For example, John Francis Pico della Mirandola, an Italian Platonist, attacked the Aristotelian theory of knowledge by arguing that the Aristotelian epistemology was based on the idea of sense-experience, which was to be the source of general principles. However, sense-experience only informs one about objects themselves; Aristotelians can, therefore, never proceed from empiricism to knowledge of substances or to essences (Copleston, 1994a:215).

Renaissance scientists began to observe natural phenomena, instead of speculating on the basis of Aristotelianism. The result of their empirical investigations can be seen in the advance of anatomy and physiology in this period. Leonardo da Vinci discovered the

circulation of blood through observation. This discovery was powerful in undermining people's trust in the traditional theories and in directing their minds to empirical investigation (Copleston, 1994a:279-280).

Another feature of Renaissance science was the prominent role of mathematics. Galileo's notion that the universe was written in mathematical language represents quite well the mathematical worldview in the Renaissance period. In the Renaissance period the most fruitful science field was astronomy. Nicholas Copernicus substituted the heliocentric theory for the geocentric, and John Kepler advanced Copernicus' theory. In the 16th and 17th centuries, mathematics made considerable progress. The advance in astronomy during the Renaissance was possible with the aid of the new developments in mathematics (Copleston, 1994a:286).

Two kinds of scientific method were devised in the time of the Renaissance, namely the observational and inductive, and the mathematical and deductive. These two scientific methods became the mainstream in the discussion of epistemology in modern philosophy. The use of observation in science would tend to stimulate and confirm the theory that all our knowledge is based on perception. The mathematical method would develop into the theory that certain knowledge is obtained by an 'a priori' law for reasoning. This theory of knowledge became a central part of philosophical discussions in the Post-Renaissance period (Popkin, 1988:684).

As will be shown in the discussions of the epistemological ideas of Descartes, Locke and Kant, it was a relatively small step from the epistemology of the Renaissance to full-blown Rationalism.

2.2.2 René Descartes

Descartes wished to establish a completely certain philosophy, or more precisely, a system of knowledge (Marias, 1967:213). While he went through his school period, he began to distrust traditional learning, because it was not based on any solid foundation.

In Descartes' time, the academic situation was quite confused. Mediaeval scholasticism, Renaissance naturalism, and a new natural science were mixed together and in several respects conflicted with each other. Many ambiguous opinions prevailed, but a method to solve this problem could not be found. Many people fell into scepticism (Copleston, 1994b:69). Descartes, however, believed that absolute truth existed in the world, and that a sure foundation to arrive at clear knowledge could be found. He did not attribute the intellectual crisis to reason itself, but to the misuse or abuse of reason. Therefore, he wanted to devise a new method of reasoning to acquire indubitable knowledge. He was determined to start his philosophy from the very beginning, without trusting to the authority of any previous philosophy (Copleston, 1994b:67).

Descartes sought to build his approach to knowledge on the same ground as does mathematics, especially geometry. He agreed that the only sure foundation for totally reliable knowledge would be self-evident axioms that are taken as intuitively true. He sought to find such axioms by systematically doubting every form of knowledge that conceivably could be doubted. He thought that if he could find one thing that is indubitably certain, he would be able to base all the rest of knowledge on it. In Descartes' mind, such an indubitable foundation was absolutely necessary for knowledge, because knowledge had to be equated with rational certainty in the same way that it is in geometry (Gill, 2000:14-15).

For his ambitious purpose, as mentioned above, to attain indubitable 'clear and distinct' knowledge, Descartes adopted "the method of doubt" (Copleston, 1994b:85-89). He prepared himself to think that everything was false, but he found that there was one thing which could not be false: his own existence. Everything can be doubted, but my existence cannot be doubted while I am thinking. So, the primary existential proposition *Cogito, ergo sum* (I think, therefore I am) came about. Descartes concluded that he had found the ultimate intuitive foundation of all knowledge (Coplestone, 1994b:91). From this proposition, he moved ahead to see if it was possible to know anything more than his own existence. He found that he had an idea of a perfect being even though he was not

perfect. He reasoned that this idea of a perfect being originated from God. God, as a perfect Being, can be a guarantor of the physical world that can be known by human reason, because God will never deceive us (Copleston, 1994b:99-105). Thus, the existence of everything that Descartes had to doubt could now be cognitively ratified.

Descartes distinguished all realities in the world in terms of two fundamental categories, *res extensa* (extensional substance) and *res cogitans* (thinking substance). These two spheres of reality are completely different and do not have any contact with each other. The latter, reason, does not exist in space and it cannot be explained in physical terms (Marias, 1967:221). Although man consists of body and soul (mind or reason), according to Descartes' dualistic ontological scheme, the human being's very essence is "reason" (Marias, 1967:215). Descartes insisted that "good sense", i.e. "reason" is the most equally distributed thing in the world, so everyone can reach the truth. Material substance, on the other hand, exists in extension (space), and it can be explained in a certain way. He gave the example of a lump of wax to explain his view of matter. A lump of wax has certain sensible features such as shape, size, colour, and smell. These qualities can be perceived through the senses. Man thus easily believes that his senses reveal the nature of this lump of wax. However, if the piece of wax is brought to the fire, all sensible qualities disappear, although the melted wax remains the same (Scruton, 2002:36-37). On the basis of this example, Descartes came to the conclusion that sensible qualities are only accidental, and cannot be the essence of the matter. He believed that the physical world could be explained in a mathematical way, because all material substances consist of a quantitative nature and the structure of the universe is mathematical and logical.

Descartes thought that man has the ability to attain "clear and distinct knowledge" through two fundamental operations of the mind, namely intuition and deduction. He said that these are "two mental operations by which we are able, entirely without any fear of illusion, to arrive at the knowledge of things" (Descartes, 1955: 4). "Intuition" is the concept of an unclouded and attentive mind, which springs from the light of reason alone.

"Deduction" is described as "all necessary inference from other facts which are known with certainty" (Copleston, 1994b:73-74). However, these two operations, intuition and deduction, are not methods or rules. The method consists rather in rules for employing aright these mental operations. Descartes formulated the following four epistemological principles:

(1) Never accept anything as true which is not known clearly and distinctly to be true. (2) Subdivide complex problems into as many simple parts as necessary in order to arrive at a satisfactory solution. (3) Arrange ideas in an orderly sequence from the simplest to the more complex, with due regard, however, for the natural sequence of events. (4) Take into account the most detailed points or facts and make certain that nothing is omitted (Sahakian, 1968:134).

He thought that all sciences are ultimately one science in which only one universal method can/should be applied (Scruton, 2002:30; cf. Copleston, 1994b:70). In his view, all scientific knowledge had to be accurate and certain as a mathematical truth and had to be deductive and systematic. He felt vindicated in supporting these ideas on the grounds of his success in showing that geometrical propositions can be proved by arithmetical means. According to him, human knowledge is like a tree, the branches of which are medical science, mechanics and ethics, the trunk of which is physics, and the root of which is metaphysics. Although the objects of these sciences are different, all of them should be explained by one academic method.

According to what has been mentioned above, we can summarise the theory of knowledge of Descartes as follows:

(1) The physical world exists independently of man's perceptions or thoughts. The principal attribute of physical substance is extension that can be perceived in geometry.

(2) Humans can know the world through the use of the mind (reason) on the basis of innate ideas and by following certain methods.

(3) Knowledge is a set of clear ideas constructed inductively from the first intuitive

proposition, the existence of 'myself'.

2.2.3 John Locke

Locke provided the foundation for the school of thought known as British Empiricism. Concerning human knowledge, Locke's main purpose was to inquire about its nature, its certainty, and its limits (Shand, 1994:117-118; Scott-Kakures, Castagnetto, Benson, Tascheck & Hurley, 1993:166; cf. Copleston, 1994c:72). Through this inquiry, he hoped "to search out the bounds between opinion and knowledge", and the "measures [by which]…we ought to regulate our assent" when we lack certainty (Locke, 1825:2).

Locke, as a founder of modern empiricism, thought that human knowledge was ultimately derived from sense experience. There are two forms of experience: sensation, which provides ideas of the external world and reflection, and which provides ideas of the workings of our own minds.

> Let us then suppose the mind to be, as we say, white paper, voide of all characters, without any ideas; how comes it to be furnished? (…) To this I answer in one word, from experience; In that all our knowledge is founded and from that it ultimately derives itself. Our observation employed either, about external sensible objects, or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring. (Locke, 1825:51)

The key concept in Locke's theory of knowledge is "idea". For Locke, the ideas that we get through experience are the materials for all of our thinking. The ideas can be classified into simple and complex ones. The simple idea is directly provided into the mind through the experience. It is "the clear and distinct perception", "one uniform appearance or conception" and "is not distinguishable into different ideas" (Locke, 1825:62). Locke divided simple ideas into three different kinds: (1) from sensation, such as colour, sound, taste, extent, and shape, (2) from reflection, such as remembering, judging, and willing, (3) from both sensation and reflection, such as pleasure, pain, power,

and unity. Simple ideas could be viewed as atoms of all knowledge. Complex ideas are made by the mind out of simple ideas. They can be divided into three classes: (1) modes, by combining several simple ideas into a compound one; (2) relations, by setting simple ideas side by side and comparing them, thus perceiving a relation between them; (3) substances, by abstracting from simple ideas something they have in common (Copleston, 1994c:79-81; Kolenda, 1974:106).

Locke insisted that before having experience, the human mind is a *tabula rasa*, a blank tablet on which nothing has been written yet. Therefore, he rejected any "innate ideas or principles" which the rationalists Descartes, Spinoza, and Leibniz had insisted upon. He did not reject, however, the notion that there are innate faculties, such as the power to perceive, believe, recognise truth or falsity, and judge. He thought that by using these faculties man can acquire knowledge. He tried to show in his book *Essay on human understanding*, how man acquires knowledge through experience, using the faculties he possesses (Shand, 1994:119; Kolenda, 1973:167). Thus, according to Locke, man can be defined as a being that acquires knowledge through experience.

Locke was deeply influenced in his theory of knowledge by the mechanistic corpuscular view that was held by many thinkers of his day. According to that view, material objects consist of tiny atoms, or corpuscles. Corpuscles are colourless, odourless, tasteless, soundless bits of matter moving about in space. The only properties that corpuscles really have are size, shape, mass, and motion or rest. All of their actions can be explained by knowing these properties. The only way that corpuscles can affect each other is by impulse. Hence, all events in the material world could be explained mechanically (Bolton, 2001:109-110; Shand, 1994:123). According to Locke, an external object has certain qualities, and these qualities are "powers" to produce ideas in our mind. So, ideas are in the mind and qualities are in the external object. Locke (1825:74-75) divided the qualities of an external object into two sorts, primary and secondary.

> ··· the ideas of primary qualities of bodies are resemblances of them, and their patterns do really exist in the bodies themselves, but the ideas

> produced in us by these secondary qualities have no resemblance of them at all. There is nothing like our ideas, existing in the bodies themselves. They are, in the bodies we denominate from them, only a power to produce those sensations in us (Locke, 1825:76).

(1) Primary qualities are the measurable, quantitative properties of things, such as extension, motion, figure, size, position and number. These stable characteristics are the same for every observer and their measurement leads to scientific laws that faithfully describe the physical universe. (2) Secondary qualities are "nothing in objects themselves, but powers to produce various sensation in us" (Locke, 1825:75), such as colour, sound, odour, warmth and cold. These characteristics vary widely among individual observers (Bolton, 2001:111). Through this distinction of two kinds of qualities in the external object, Locke tried to explain that man's perception of the external object and the object itself might be different, and that these do not exist correspondingly.

Locke thought that "ideas of sensation" are caused in the mind by the actions of material objects on sense organs. The sensations that result from those actions form a complex idea (or image) of the object. What man perceives is that image, and the image represents the object to man. Thus, there is a two-way relationship between the material object and the image of it that man perceives: The material object causes the image in mind, and the image, in turn, represents the object that caused it. Nature, in other words, or the external object operates according to mechanical laws. Perception thus is a mechanical process. It is the result of actions of the corpuscles of an object on sense organs: "…bodies produce ideas in us…manifestly by impulse, the only way in which we conceive bodies to operate" (Locke, 1825:75).

Locke defined knowledge as "nothing but the perception of the connection and agreement, or disagreement and repugnancy of any of our ideas" (1825:385). He thought that there are three kinds of knowledge: (1) intuitive, (2) demonstrative, and (3) sensitive.

The first one of these was explained by Locke as follows, "If we reflect on our own ways

of thinking, we shall find that sometimes the mind perceives the agreement or disagreement of two ideas immediately by themselves, without the intervention of any other: and this, ··· we may call intuitive knowledge" (Locke, 1825:392). Thus the mind perceives immediately by intuition that white is not black. This is the clearest and most certain kind of knowledge which the human mind can attain. There is no room for doubt, and "it is on this intuition that depends all the certainty and evidence of all our knowledge."(Locke, 1825:392)

The second form of knowledge is demonstrative knowledge, where the mind does not immediately perceive the agreement or disagreement of ideas but needs intervening ideas to do so. For example, the proposition that the three angles of a triangle are equal to two right angles needs the 'intervening of some ideas' to be proved. This demonstrative knowledge lacks the facility and clarity of intuition.

Whatever comes short of intuition and demonstration is not knowledge, but merely "faith" or "opinion" in all general truths. However, there is sensitive knowledge of particular existence. The object of sensitive knowledge is "the existent things corresponding to our ideas," not the relationship of ideas like intuition or demonstration (Locke, 1825:396-397).

Locke insisted that when we cannot gain certain knowledge because of the limited extent of knowledge, we deal with the problems of life by using faith or opinion. The only criterion to decide about the probability of the proposition by faith or opinion is "reason". So, he strongly proclaimed that "Reason must be our last judge and guide in everything." (Locke, 1825:538). Here, Locke showed a decidedly rationalistic turn of mind. He started as an empiricist at the beginning, but finished as a rationalist in his reasoning about human knowledge (Copleston, 1994c:109, 118-122; cf. Van der Walt, J.L. 2002a:5).

Based on the above survey, we can summarise Locke's theory of knowledge as follows:

(1) The external object has qualities which stimulate sense organs and form ideas in the human mind.

(2) The human can know the world through experience; the experience provides the

object of knowledge, ideas.

(3) Knowledge is a "perception of the connection and agreement, or disagreement and repugnancy of any of our ideas." The extent of knowledge is limited.

Two main streams of modern epistemology, rationalism and empiricism, were established respectively by Descartes and Locke. Rationalists, like Descartes, Spinoza and Leibniz, believed that the understanding contains in itself certain innate principles, which it knows intuitively to be true, and which form the axioms from which a complete description of the world can be derived. These principles are necessarily true, and do not depend on experience for their confirmation. On the contrary, empiricists like Locke and Hume denied the possibility of knowledge through reason, since reason cannot operate without ideas, and ideas are acquired only through the senses. The content of every thought must be given in terms of experiences which warrant it, and no belief can be established as true except by reference to the sensory "impressions" (Scruton, 1982:14-17).

Rationalism can be seen as correct in stressing the role played by the mind as the source and test of knowledge. Therefore, the knowledge of rationalism is consistent. However, the knowledge of rationalism is "empty" since rational thinking itself cannot provide the contents of knowledge. Likewise, empiricism is on the right track in emphasising the part played by sensation. So empirical knowledge, driven by sensation, is objective and substantial. However, this empirical knowledge cannot ensure necessity and universality. It just gives us various degrees of probability.

In the 18th century, the two main streams of Western epistemology, rationalism and empiricism, were dealt with thoroughly and their shortcomings exposed.

2.2.4. Immanuel Kant

Kant wanted to solve the philosophical dilemmas brought to the surface by both rationalism and empiricism, through establishing a new standpoint in terms of which he strove to synthesise the strong points of both rationalism and empiricism. Kant criticised the famous dispute between Leibniz and Locke in the following way:

> Leibniz intellectualized phenomena, just as Locke, ··· sensualized the conceptions of the understanding, that is to say, declared them to be nothing more than empirical or abstract conceptions of reflection. Instead of seeking in the understanding and sensibility two different sources of representations, which, however, can present us with objective judgments of things only in conjunction, each of these great men recognized but one of these faculties, which, in their opinion, applied immediately to things in themselves, the other having no duty but that of confusing or arranging the representations of the former (Kant, 1910:196).

Judgment requires, then, the joint operation of sensibility and understanding. Kant maintained that while the content of knowledge is supplied by sensation, the structure of knowledge is provided by the formal character of the mind (Scruton, 2002:137-139; Scott-Kakures *et al.*, 1993:249-250; Collinson, 1992:90).

Kant differentiated between "phenomena" which are represented realities of sensation in concrete experiences and "noumena" which are exterior realities as "things-in-themselves." He insisted that what we know are only phenomena, the things as they appear to us in virtue of our mode of experiencing them.

> ··· all our intuition is nothing but the representation of appearance ··· the things we intuit are not in themselves what we intuit them as being, nor are their relations so constituted in themselves as they appear to us (···) As appearances they cannot exist in themselves, but only in us. What objects may be in themselves and apart from all this receptivity of our sensibility, remains completely unknown to us (Kant, 1910:21).

In his view, even though the "exterior world" brings about realities in the human mind, it cannot be known in itself, because we only perceive realities in a certain innate condition. Kant thought it important to be aware of this distinction, saying that we can "think" the "things-in-themselves", but we cannot "know" them. Phenomena, being produced by the exterior world, fall within experience, i.e. the human mind, but "things-in-themselves" fall

outside experience (Raju, 1992:51). Thus the object of human knowledge should be confined to the phenomenal world; we can never know the true nature of reality in itself. In this sense, Kant claimed that indeed "perception is reality" (Coplestone, 1994d:236-237, 266-272; Kolenda, 1974:139).

Kant examined the structure of human experience. He wanted to illuminate the conditions required for knowledge (Collinson, 1992:90). He thought that true knowledge must be not only substantial and factual, which could be achieved through sense experience, but also necessary and universal, which could be attained through a priori forms in the human mind. In his view, the human mind is constituted of two factors (or functions), sensibility and understanding. All human knowledge springs from this double origin. Sensibility 'gives' us the object, while understanding enables us 'to think' of this object (Coplestone, 1994d:229-232). Kant described the operations belonging to each factor and their interdependence as follows:

> If the receptivity of our mind ··· is to be entitled sensibility, then the mind's power of producing representation from itself, the spontaneity of knowledge, should be called the understanding. Our nature is so constituted that our intuition can never be other than sensible; that is, it contains only the mode in which we are affected by objects. The faculty, on the other hand, which enables us to think the object of sensible intuition, is the understanding. ··· Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind. ··· These two powers or capacities cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing. Only through their union can knowledge arise (Kant, 1910:45-46).

Kant explained how knowledge is yielded through the operations of these two capacities of mind. These can be discussed separately.

A. Sensibility

Sensibility means the capacity for receiving representations of objects by being sensibly

affected by the external entities. The receiving representation, what is given itself from the external world, becomes a matter of sensibility. It is manifold and un-ordered. Even though sensibility passively receives its matter from the outer world, it arrays the manifold matter in order through its 'a priori' form. Kant insists that the a priori form of sensibility is time and space. Thus time and space are not objective reality, but the subjective form in the mind. An 'a priori' is independent of any sense experience (Scruton, 2002:143; Scott-Kakures *et al.*, 1993:258-259):

> That in the appearance of which corresponds to sensation I term its matter; but that which so determines the manifold of appearance that it allows of being ordered in certain relations, I term the form of appearance···; while the matter of all appearances is given to us a posteriori only, its form must lie ready for the sensations a priori in the mind (Kant, 1910:21).

Through applying the a priori form to the a posteriori, empirical matter, sensibility generates a kind of empirical knowledge, which Kant called 'intuition'. Intuition is substantial because it is given a content from experience, but it has no universal validity because it is confined by time and space. Intuition, it can be said, is an empirical reality that is characterised by spatial and temporal relations (Coplestone, 1994d:235-242). Intuition becomes a matter of "understanding," another faculty of mind to yield true knowledge.

B. Understanding

As mentioned in the above section, the matter of understanding is intuition, which is ordered in both spatial and temporal relations by sensibility. However, it is still manifold, because it cannot attain necessity and universality yet. Understanding is a "power of thinking," in other words, a "power of judgments" (Kant, 1910:57-58). To judge, which is the same as to think, is to unify different representations to form one cognition by means of concepts. Therefore, in judgment intuitions are synthesized through concepts. The number of possible judgments can be determined according to their forms and these forms are determined by a priori concepts of understanding. Kant calls these a priori

concepts "categories" (Coplestone, 1994d:249). The list of categories is to be found in the first chapter of the *Analytic of Concepts* (Kant, 1910:58, 64; Coplestone, 1994d:250-251).

I. Quality

(i) Unity, (ii) Plurality, (iii) Totality

2. Quantity

(iv) Reality, (v) Negation, (vi) Limitation

3. Relation

(vii) Inherence and subsistence, (viii) Causality and dependence, (ix) Community

4. Modality

(x) Possibility--impossibility, (xi) Existence--non-existence,

(xii) Necessity--contingency

The categories are forms of understanding, and human thinking can be done through the categories in order to yield knowledge. The categories of understanding are a priori conditions for knowledge. Therefore, to become knowledge, our concepts of experience must be judged in accordance with the forms of judgment produced by the pure concepts of understanding. By this means, subjective experiences may be transformed into objective knowledge (Collinson, 1992:91; Coplestone, 1994d:250).

In Kant's view, scientific knowledge must be substantial and factual, at the same time it must possess universal validity. Scientific knowledge can be attained through a synthesis of concept and experience. He called this kind of knowledge "synthetic a priori" knowledge. He regards mathematics and natural science as true, synthetic a priori knowledge (Scott-Kakures *et al.*, 1993:249-250). However, metaphysics cannot be certain knowledge, because we cannot have theoretical knowledge of realities which are not given in sense experience (Collinson, 1992:92; Coplestone, 1994d:232). If human reason thinks without sense experience, the thinking must inevitably fall into illusion or error. Thus, scientific knowledge is limited by the a priori forms of sensibility and

understanding (Coplestone, 1994d:233).

Based on the above examination, Kant's theory of knowledge can be summarised as follows:

(1) The object of knowledge is phenomena, which represents appearance in the mind from external realities.

(2) Reason is infallible insofar as it depends upon sensation, for the given is an essential component of the object.

(3) Knowledge can be achieved when a priori forms of the mind subsume sense experience.

(4) Knowledge is 'synthetic a priori', thus it is factual as well as universal.

2.3 The shift from modern to postmodern epistemology: from the 19th century to the 20th

The modern world was not established in a day, and neither was the postmodern rejection of modernity. Postmodernism was preceded by certain intellectual developments that challenged the underpinnings of the modern mentality. These earlier challenges prepared the way for the full-scale frontal assault against the fortress of modernity launched in the late 20th century (Grenz, 1996:84).

In this section, four philosophers, namely Friedrich Nietzsche, Martin Heidegger, Karl Popper, and Thomas Kuhn will be discussed as thinkers who paved the way for postmodern epistemology.

2.3.1. Friedrich Nietzsche

For Nietzsche, the world is a kind of text which can be interpreted variously. He says: 'Facts are precisely what they are not, only interpretations.' Everything is in a constant state of change and nothing is fixed, even in the phenomenal world. There is no second (e.g. Platonic) world as the source of fixed standard. Nietzsche aimed to show how the

world that is taken for granted is merely the result of one possible interpretation amongst many (Trigg, 1990:118). He says:

> We have arranged for ourselves a world in which we can live – by positing bodies, lines, planes, causes and effects, motion and rest, form and content; Without these articles of faith nobody now could endure life. But that does not prove them. Life is no argument. The conditions of life, might include error (Nietzsche, 1974:177).

Nietzsche denies the possibility of fixed categories applied to a static reality. All judgments have to be made from different perspectives about a world that is constantly changing. Any attempt to impart a belief in order or purpose is misguided. We find in "things" what we bring to them. Everything is linked to everything else, and nothing is determinate.

Because of his opposition to any constantly underlying change, Nietzsche could not accept the idea of self as an entity or substance. We have no fixed self to know, thus we must will a self (Nietzsche, 1966:36). Therefore, everything can be possible to us. We create our own law and, in real sense, we make ourselves (Trigg, 1990:125). For Nietzsche, the essence of the human is not reason, but the will. According to him, the best type of human is the exceptional one, beholden to no one. He extols the idea of the "sovereign individual, liberated again from morality of custom, autonomous and supra moral" (Nietzsche, 1966:684; Trigg, 1990:126). He calls this kind of human "the overman" (*Übermensch*). The overman is precisely the individual who recognises that the world is pure flux, essentially "becoming". He understands that values are not found or given, they are created. Consequently, he understands that he himself is not given, but that he too must be made, affirmed in a creative process (Scott-Kakures *et al.*, 1993:350).

Nietzsche rejects the idea of a pure knowing subject able to become aware of "things in themselves." Knowers can never completely evade their biological, individual, social, linguistic, and historical position. He says,

> There is *only* a perspective seeing, there is *only* a perspective "knowing"; the *more* affects we allow to speak about one thing, the *more* eyes, different eyes, we can use to observe one thing, the more complete will our concept of this thing, our "objectivity" be (Nietzsche, 1989:119).

The only way to better understanding is through the comparison, contrast, and assessment of different perspectives.

For Nietzsche, logical thinking is a desire to see the sameness among various situations or arbitrary phenomena. If there is not any underlying, fixed, and firm reality, then the rationality does not represent the reality as it is, but just fabricates it for a certain purpose. There is, thus, inherently irrational intention on the very foundation (or ground) of human rationality. Nietzsche claims that what we view as "knowledge" is a purely human creation, on the grounds that the process of fabricating reality is an arbitrary and individual matter. There is no disinterested point of view which would fulfill the condition for describing reality. All knowledge is inherently a matter of perspective and thus not exhaustive. We live in a constructed world that comes from our own perspective (Shand, 1994:192; Grenz, 1996:91).

He argues that our understanding of truth and value derives not from our ability to pierce the veil into the transcendent realm but from the immediacy of the will to power (Grenz, 1996:92). All views of the world are attempts to schematise and organise experience for the sake of control and power over our environment. Nietzsche insists, "knowledge works as an instrument of power. It is therefore obvious that it grows with every increase of power…." The desire of knowledge, the will to know, depends on the will to power, that is, on a given kind of being's impulse to master a certain field of reality and to enlist it in its service. The aim of knowledge is not to know, in the sense of grasping absolute truth for its own sake, but to master. We desire to schematise, to impose order and form on the multiplicity of impressions and sensations to the extent required by our practical needs. Reality is becoming: it is we who turn it into Being, imposing stable patterns on the flux of

Becoming. And this activity is an expression of the will to power. Science can thus be defined or described as the "transformation of Nature into concepts for the purpose of governing Nature" (Copleston, 1994e:408-409).

Knowledge is a process of interpretation. However, this process is grounded on vital needs and expresses the will to master the otherwise unintelligible flux of Becoming. There is no absolute truth. The concept of absolute truth is an invention of philosophers who are dissatisfied with the world of Becoming and seek an abiding world of being. Nietzsche says that, "Truth is that sort of error without which a particular type of living being could not live. The value for life is ultimately decisive" (1966:493; cf. Copleston, 1994e:408-409).

Nietzsche is aware of the crucial role of language in the knowing process. We may be misled by language and imagine that our way of speaking about the world necessarily mirrors reality.

> We are still being constantly led astray by words and concepts into thinking things are simpler than they are, as separate from one another, indivisible and existing each on its own. A philosophical mythology lies hidden in language, and it breaks out again at every moment, however careful one may be (Copleston, 1994e:410).

The structure of the language we use to speak about the world implicitly involves a metaphysics. Nietzsche views 'truth' as a function of the internal workings of language itself. He contends that our beliefs are congruent with the language we employ because our language is simply a system of interpretation, and that thus truth exists only within specific linguistic contexts (Shand, 1994:198; Grenz, 1996:90, 97).

Although Nietzsche condemns, in typical irrationalist fashion (cf. Vollenhoven, 1956:39-40), a conceptual knowledge which insists on certainty, objectivity or universality, he does not deny human reason and rationality itself. He rather tries to suggest a new rationality and a different kind of knowledge which is more imaginative and aesthetic (Sleinis,

2003:266). Nietzsche says,

> Between subject and object...there is at most an *aesthetic* relation: I mean, a suggestive transference, a stammering translation into a completely foreign tongue - for which there is required, in any case, a freely inventive intermediate sphere and mediating force (1994:86).

It is not merely that we know objects through the effects they produce in us, but also that our notions of objects are imaginative, artistic interpretations of those effects (Gregory, 2001:23). The world is aesthetically self-creating and we are called to become the artists of our own existence, inventing knowledge suited to our being (Grenz, 1996:95).

It is notable that Nietzsche departed from the modern rationalist's idea of a fixed world that can be known — to the notion of a ceaselessly organising and reorganising world which can be interpreted in a certain specific perspective.

As an existentialist, Nietzsche formulated most of the themes that would be essential to the development of the postmodern intellectual climate. Above all, he established the course of philosophy toward postmodernism with his thorough rejection of Enlightenment principles (Grenz, 1996:89). Nietzsche's current influence derives not only from his celebration of the will, but more deeply from his scepticism about the rationalistic notions of truth and fact, as well as the downgrading of reason and the politicisation of discourse. All of this awaited discovery in the late 20th century (Blackburn, 1996:262).

Based on the above survey, Nietzsche's concept of knowledge can be summarised as follows:

(1) The world continually changes without any inherent structure or final end, and the knower can only interpret the world, not penetrate its nature.
(2) All interpretations on the world represent 'the will to power' in a certain perspective. These are more aesthetic than scientific in modern thinking.

(3) Knowledge is merely a perspective on the changing world as well as a tool to survive in the world and to rule over the world.

2.3.2. Martin Heidegger

Heidegger's main interest was to raise the issue of "Being." He claims that the Western philosophical tradition is based on a mistaken quest. From the ancient Greeks to his own day, philosophers sought judgements about things-in-being or things "out there". Heidegger sought to discover "Being" by beginning with authentic human existence. He devised the concept of *Dasein* which means "being-in" or "being there." *Dasein* is that reality which is concerned with the nature of its own being. According to Heidegger, we have to "work out" rather than simply "find out" who we are, and we do this through living in the world. Therefore, *Dasein* is not a static thing, rather it is an activity – our working out of living in the world. *Dasein* is fundamentally "being-in," or "being-in-the-world'" (Grenz, 1996:104; Heidegger, 1978:78; Korab-Karpowicz, 2001; Richardson, 1996:233-234).

Through the concept of *Dasein*, Heidegger rejects boldly the Cartesian-Kantian concept of the self, the knowing subject that encounters the world as an object. He declares that the starting point for philosophy is not a self-aware thinking being but simply a "being there." Replacing the "thinking self," confronting its object with "being-in," opens the way for more holistic understanding of reality. It provides a way to avoid the subject-object dualism and the two-part experience of "self" and "world" in favour of a unitary phenomenon, the "being-present-at-hand-together" of subject and object (Heidegger, 1978:221). This view of being-in-the-world as an undivided whole allows Heidegger to attack the dualism that has beset philosophy since Descartes. His goal is to remove such traditional dichotomies as mind and body, self and world, subject and object, self and other. He also wants to dispose of the notion of the subject as an independent substance, existing above time and human society or inhabiting some eternal, transcendent realm, detached from life (Collinson, 1992:152; Korab-Karpowicz, 2001).

Heidegger claims that philosophers since Plato have confused "Being" with "presence." In keeping with the Western philosophical tradition, we tend to view existence from the perspective of a single temporal mode, "the present." Things exist in that they present themselves to us in the here-and-now (Heidegger, 1978:47, 101). Heidegger objects to this focus on the present on the grounds that it reinforces the fatal Cartesian dichotomy between subject and object. It maintains the distinction between ourselves as conscious, thinking selves and the physical world, which we see as the object of our knowing (Grenz, 1996:105-106).

He insists on understanding "Being" in connection with all three dimensions of temporality—past, present, and future. In this way the fact that Being includes absence as well as presence will be discovered. An existing thing is not merely what presents itself to us in the present; it is also what is not now present to us, because it is either past or future. Heidegger's thesis stimulates postmodern thinkers to raise a crucial question: What connects the present and the absent involved in "Being"? What lies between any pair of opposites, whether presence and absence, identity and difference, or being and nonbeing? Jacques Derrida grapples with this question and formulates his concept of *différénce* on the basis of Heidegger's discussion of "difference" (Grenz, 1996:106).

Heidegger is critical of the transformation of truth into the certainty of representational thinking, that is, in his view, characteristic of Western tradition (Heidegger, 1973:19-26). He rejects the common assumption that truth consists in a correspondence between our statements and a fully formed reality that exists outside of the human being. In his view, the demand for certainty connected with the correspondence theory leads us in the wrong direction. He insists that truth is not absolute and autonomous, but relational. We can get only the world of experience in which we are embedded as participants. Therefore, we can speak about truth only insofar as we are 'in' it, not searching for it outside of experience (Collinson, 1992:152; Marias, 1967:430).

For Heidegger, truth is not a result in a search for the certainty of propositions. Truth has

to do with "revelation," with the "disclosure of Being" (Guignon, 1983:92). To gain this truth requires an "openness to the mystery" that occurs only when we move away from our modern fixation with calculative thinking and engage in "meditative thinking." He insists that modern conceptual categories are insufficient to help us come to grips with the truth of "Being." We need a new, more rigorous type of thinking that is neither merely theoretical nor practical but that precedes such distinction. For this new thinking, Heidegger returns to the aestheticism pioneered by Nietzsche. He looks beyond conceptual discourse to artistic expression. He asserts that art is not a vehicle for the revelation of truth but that it can actually become the means for the creation of truth. In fact, Heidegger suggests that a work of art creates its own world (Grenz, 1996:106-107).

However, Heidegger does not consign ultimate world-creating power solely to the realm of art. Like Nietzsche, he attributes this power more broadly to language, especially to poetry as the quintessential linguistic expression. Language takes precedence over art because it is more closely connected with thought. Language and thought are nearly reciprocal in that the experience of language is thought's experience of itself (Richardson, 1996:235). Heidegger believes that through its connection with thought, language plays a crucial role in bringing the human world into existence. He asserts that we do not so much create language as move within it. Our 'being-in' language allows us to discover that language gives itself to us. As we enter into this kind of genuine experience with language, we can be transformed (Grenz, 1996:107).

Heidegger's notion of knowledge can be summarised as follows:

(1) Human beings and the world cannot be understood (known) separately and in isolation; these rather exist interdependently.
(2) Knowledge is an aesthetic interpretation and its validity depends on the existence of a certain person, i.e., the *Dasein* of such a particular person.
(3) Truth cannot be absolute and eternal; it rather is just temporal in a certain time-bound situation.

2.3.3. Karl R. Popper

Even though modern empiricists and rationalists disagree on the method of verifying infallible knowledge, all of them agree that science should aim to produce the absolutely 'clear and distinct' knowledge to which Descartes had referred earlier. This view of science was general up to the early 19th century. However, the ideal of verifiable and infallible knowledge was dismissed in the late 19th century. Most scientists came to think that science can pursue merely a highly probable status of knowledge. In the 20th century, certainty and infallibility disappeared in the central purpose of scientists (Laudan, 1984:135). Because of his theory on the falsifiability of knowledge, Popper can be regarded as one of the prominent figures in the transitional period from the modern to the postmodern era.

One of the central problems in the philosophy of science is to distinguish between science and "non-science." Popper insists that the criterion of 'demarcation' between science and non-science is "falsifiability" which is whether a theory can be falsifiable or not, instead of the verifiability which was maintained by empiricists and positivists. In Popper's view, a theory can be scientific only if it is refutable by a conceivable event. Every genuine test of a scientific theory is logically an attempt to refute or to falsify it, and one genuine counter-instance falsifies the whole theory. Popper's theory of "demarcation" is based upon his perception of the logical asymmetry which holds between verification and falsification. It is logically impossible to verify conclusively a universal proposition by reference to experience, but a single counter-instance falsifies the corresponding universal law. If a theory survives continuous and serious attempts to falsify it, then it can be accepted (Quinton, 1967:398; Thornton, 2005).

Popper maintains that scientific theories are not arrived at by any sort of inductive process. The formation of a hypothesis is a creative exercise of the imagination. It is not a passive reaction to observed regularities. There is no such thing as pure observation, for observation is always selective and takes place under the guidance of some

anticipatory theory. Even if induction is the way in which hypotheses are arrived at, it may still be wholly incapable of justifying them. As Hume showed, no collection of particular observations will verify a general statement. Such a statement is partially justified or rendered probable by particular confirming instances. Scientific progress can be achieved through devising a new hypothesis and comparing it with existing ones. If the new theory can explain some hitherto anomalous phenomenon, or can solve some hitherto unsolvable problems, it will be provisionally adopted instead of the old one. In short, for Popper any theory X is better than a "rival" theory Y if X has greater empirical content, and hence greater predictive power than Y. Therefore, human epistemology, or as he prefers to say, science can be progressed through not to achieve a certainty but to eliminate a fallacy (Thody, 1984:455).

Scientific theories are not inductively inferred from experience, nor are scientific experimentation carried out with a view to verifying or establishing the truth of theories. Rather, all knowledge is provisional, conjectural, and hypothetical. He says:

> Science is not a system of certain, or well-established, statements; (…) Our science is not knowledge (epistēmē): it can never claim to have attained truth, or even a substitute for it, such as probability. (…) *We do not know: we can only guess.* And our guesses are guided by the unscientific, the metaphysical … faith in laws, in regularities which we can uncover—discover (Popper, 1959:278).

We can never finally prove our scientific theories, but can merely confirm or conclusively refute them. Hence at any given time we have to choose among the infinite number of theories which will explain the set of phenomena under investigation. In this choice, we can only eliminate those theories which are demonstrably false, and rationally choose unfalsified theories. Hence the critical spirit to science is very important and for Popper critical thinking is the very essence of rationality. For it is only in critical thought that we can eliminate false theories, and determine which of the remaining theories is the best available one (Thody, 1984:455; Blackburn, 1996:292).

Popper suggested a meta-logical concept of "truthlikeness" or "verisimilitude" concerning the problem of truth. He argued that a 'good' scientific theory has a higher level of verisimilitude than its rivals, and he explicated this concept with reference to the logical consequences of theories. The content of theory is the totality of its logical consequences, which can be divided into two classes, viz. "truth-content" and "falsity-content." Popper defined the concept of verisimilitude as follows:

> Assuming that the truth-content and the falsity-content of two theories t_1 and t_2 are comparable, we can say that t_2 is more closely similar to the truth, or corresponds better to the facts, than t_1, if and only if either:
> (a) the truth-content but not the falsity-content of t_2 exceeds that of t_1, or
> (b) the falsity-content of t_1, but not its truth-content, exceeds that of t_2
> (Popper, 1963:233).

He held that even if a theory t_2 with a higher truth content than t_1 is subsequently falsified, it can still legitimately be regarded as a better theory than t_1, and that t_2 is closer to the truth than t_1. We cannot accept any scientific theories with ultimate certainty, but can only say a current accepted theory is better than the former one (Thornton, 2005).

In the above assertion, it is notable that Popper does not expect to grasp the truth itself, but just to approach the truth more closely. Through this new concept of verisimilitude, the possibility of obtaining the absolute truth or true knowledge must be abandoned, and the notion of ultimately true theory becomes just an idle dream. Popper's attitude on scientific knowledge is humble, in that it tries to eliminate error "piecemeal" without trying to find the truth.

Although his humble stance in scientific enterprise is new and original, Popper still stands in the rationalist/modernist dispensation. He believes that there is objective knowledge and that the knowledge is not in the knowing subject or in the mind of an individual, but it is outside of the subject. Thus Popper tries to exclude the intervention of a knowing subject in knowledge.

> My first thesis involves the existence of two different senses of knowledge or thought: (1) *knowledge or thought in the subjective sense*, consisting of a state of mind or of consciousness or a disposition to behave or to react, and (2) *knowledge or thought in an objective sense*, consisting of problems, theories, and arguments as such. Knowledge in this objective sense is totally independent of anybody's claim to know; it is also independent of anybody's belief, or disposition to assent; or to assert, or to act. Knowledge in the objective sense is *Knowledge without a knower*: It is *knowledge without a knowing subject* (Popper, 1979:108-109).

Popper's "objective knowledge" is the knowledge without a knowing subject. This knowledge pretends not to be private or arbitrary. However, this notion of objective knowledge conceals the fact that it is also a subjective product as it was suggested by an individual person at first. All knowledge is a product which is devised by an individual.

Popper's notion of scientific knowledge can be summarised as follows:

(1) A scientific theory which can survive serious falsification can be adopted provisionally as available knowledge.

(2) Human knowledge cannot reach the ultimate truth, but can only approach towards the truth through the process of establishing verisimilitude.

(3) All human knowledge is thus provisional, conjectural, and hypothetical.

2.3.4 Thomas S. Kuhn

Even though Popper started to dismantle the traditional (modernistic) notion of scientific knowledge, he agreed with many ideas on the nature of scientific knowledge of the 'traditional' scientists, the logical positivists and the logical empiricists[4]. Kuhn, more

[4] James Ladyman (2002:95-96) summarizes the common shared notions on the nature of scientific knowledge among the logical positivist, the logical empiricist and Popper as follows:

(1) Science is cumulative. In other words, scientists build on the achievements of their predecessors, and the progress of science is a steady growth in our knowledge of the world.

caustically than Popper, began to question the rationality and objectivity of scientific knowledge (Hoyningen-Huene, 1996:285; Ladyman, 2002:93-96).

The central concept in Kuhn's view of science is the term "paradigm." According to him, a paradigm is essentially a collection of beliefs shared by scientists, a set of agreements about how problems are to be understood. Kuhn says:

> ··· the term 'paradigm' is used in two different senses. On the one hand, it stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community. On the other, it denotes one sort of element in that constellation, the concrete puzzle-solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of normal science (Kuhn, 1970a:175).

According to Kuhn, paradigms are essential to scientific inquiry, for no natural history can be interpreted in the absence of at least some implicit body of intertwined theoretical and methodological belief that permits selection, evaluation, and criticism. Indeed, a paradigm guides the research efforts of scientific communities, and it is this criterion that most clearly identifies a field as a science. He claims that normal science can succeed in making progress only if there is a strong commitment by the relevant scientific community to their shared theoretical beliefs, values, instruments and techniques, and

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(2) Science is unified in the sense that there is a single set of fundamental methods for all the sciences.

(3) There is an epistemologically crucial distinction between the context of discovery and the context of justification.

(4) There is an underlying logic of confirmation of falsification implicit in all scientific evaluations of the evidence of some hypothesis.

(5) There is a sharp distinction (or demarcation) between scientific theories and other kinds of belief systems.

(6) There is sharp distinction between observational terms and theoretical terms, and also between theoretical statements and those that describe the results of experiments.

(7) Scientific terms have fixed and precise meanings.

even metaphysics (Kuhn, 1970a:182; cf. Blackburn, 1994:276).

Although the concept of paradigm has been accepted by many scientists, it was also problematic. According to Masterman (1970:61-65), Kuhn uses the term paradigm in (maybe, more than) twenty-one different meanings, ranging from "a set of beliefs" to "something which defines a broad sweep of reality," in the first edition of his book, *The Structure of Scientific Revolutions*. His obscure usage of "paradigm" caused much criticism. The critics say that Kuhn makes of science a subjective and irrational enterprise through regarding science as a result of a paradigm. For this reason, Kuhn tries to define more clearly the term "paradigm" in the postscript of his second edition (1970a:174-191). Furthermore, Kuhn suggests a new term "disciplinary matrix" instead of "paradigm," to deal with the criticism of the abstractising and psychologism of science, and to change the term "paradigm" into a more scientific conception (1970a:182).

A fundamental theme of Kuhn's argument is that the typical developmental pattern of a mature science is the successive transition from one paradigm to another through a process of revolution. When paradigms change, "the world itself changes with them. ⋯ scientists see new and different things when looking with familiar instruments in places they have looked before" (Kuhn, 1970a:111). According to Kuhn, scientific change - from one paradigm to another - is a mystical conversion which is not and cannot be governed by the rules of reason (Ladyman, 2002:105). He says, "The transfer of allegiance from paradigm to paradigm is a conversion experience that cannot be forced" (Kuhn, 1970a:151). He likens a paradigm shift to a "Gestalt switch" or the kind one experiences when alternately seeing a particular picture as a duck and then as a rabbit (Kuhn, 1970a:150). The point about Gestalt switches is that they are holistic and that the differences between paradigms at the level of concepts, ontology and so on are global and systematic (Ladyman, 2002:117).

Kuhn also maintained that, contrary to popular conception, typical scientists are not objective and independent thinkers. Rather, they are conservative individuals who accept

what they have been taught and apply their knowledge to solving the problems that their theories dictate.

> "… that enterprise [normal science] seems an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others. Instead, normal-scientific research is directed to the articulation of those phenomena and theories that the paradigm already supplies" (Kuhn, 1970a:24).

According to Kuhn, the paradigm sets the problem to be solved. A scientist who is striving to solve a problem defined by existing knowledge knows what he wants to achieve, and he designs his instruments and directs his thoughts according to the paradigm (Kuhn, 1970a:27; cf. 1970b:21-22).

During periods of normal science, the primary task of scientists is to bring the accepted theory and fact into closer agreement. As a consequence, scientists tend to ignore research findings that might threaten the existing paradigm and trigger the development of a new and competing paradigm. For example, Ptolemy popularised the notion that the sun revolves around the earth, and this view was defended for centuries even in the face of conflicting evidence (Kuhn, 1970a:79). In the pursuit of science, Kuhn observed, "novelty emerges only with difficulty, manifested by resistance, against a background provided by expectation."

And yet, young scientists who are not so deeply indoctrinated into accepted theories - a Newton, Lavoisier, or Einstein - can manage to sweep an old paradigm away (Kuhn, 1970a:90). Such scientific revolutions come only after long periods of tradition-bound normal science, for "frameworks must be lived with and explored before they can be broken." However, crisis is always implicit in research because every problem that normal science sees as a puzzle can be seen, from another perspective, as a

counterinstance and thus as a source of crisis. This is the "essential tension" in scientific research (Kuhn, 1970a:79).

Kuhn emphasizes "incommensurability," the radical differences between different paradigms. Successive scientific theories are often incommensurable with each other in the sense that there is no neutral way of comparing their merits. Kuhn argues that there is no higher standard for comparing theories than the assent of the relevant community, and that "[the choice] between competing paradigms proves to be a choice between incompatible modes of community life" (Kuhn, 1970a:94; Tiles, 1993:220; Ladyman, 2002:115-116).

As to whether progress consists in science discovering ultimate truths, Kuhn observed that "we may ··· have to relinquish the notion, explicit or implicit, that changes of paradigm carry scientists and those who learn from them closer and closer to the truth" (Kuhn, 1970a:170). Instead, the developmental process of science is one of evolution from primitive beginnings through successive stages that are characterized by an increasingly detailed and refined understanding of nature. Kuhn argued that this is not a process of evolution toward anything, and he questioned whether it really helps to imagine that there is one, full, objective, true account of nature. He likened his conception of the evolution of scientific ideas to Darwin's conception of the evolution of organisms (Bird, 2004; Kuhn, 1970a:171, 172).

Kuhn denies that any sense can be made of the notion of nearness to the truth (1970a:206). Rather, as mentioned above, he favours an evolutionary view of scientific progress (1970a:170-173). Science improves by allowing its theories to evolve in response to puzzles, and progress is measured by its success in solving those puzzles; it is not measured by its progress towards an ideal true theory (Bird, 2004).

For Kuhn, a paradigm not only gives the direction of scientific research, but also plays a

role as a worldview through which people can see the world. Observation, thus, is not neutral but theory-laden since its contents are determined by the paradigm. Even though we observe the same natural objects or phenomena, we see different things if we have a different paradigm. Different paradigms cannot be compared by the same criteria, because if the paradigm is changed, the language is also changed. Therefore, in Kuhn's theory, the objectivity of science cannot be upheld since a paradigm contains metaphysical principles and values. When two paradigms compete with each other, the final consequence is not determined by observation but by the approval of the scientists' group. To adopt a new paradigm is like a conversion, influenced by psychological factors.

Kuhn threatened to undermine the traditional view of science. Sience is not cumulative because paradigm shifts involve the abandonment of old theories rather than the steady accumulation of knowledge; science is not unified because everything within a sub-branch of science is relative to the dominant paradigm which is not shared between different sciences. There is no neutral standpoint from which to appraise theories, so the context of justification is an illusion since all judgments worth of a theory are made from within a paradigm. Science is not value-free because social and psychological factors play an ineliminable role in theory choice and therefore there can be no sharp distinction between scientific theories and other belief-systems (Ladyman, 2002:121-122).

Kuhn's concept of scientific knowledge can be summarised as follows:

(1) Knowledge is a result of a problem (puzzle) solving process according to a certain paradigm.
(2) Knowledge cannot be neutral and rational, it is rather driven by pre-rational factors (e.g., value, perspective and so on) which can also be expressed as "worldview."
(3) Science cannot attain the truth or objective knowledge, even more it cannot approach the truth. Science just evolves according to social interest and need.
(4) Kuhn made, according to Fuller, a definite contribution to the move towards postmodernist views of knowledge (construction).

2.4 Recent Epistemology

At the heart of postmodern philosophy is a sustained attack on the premise and presuppositions of modernism. Thus, postmodernists doubt the modern confidence in human knowledge too. Many voices have joined the ongoing postmodern debates on human knowledge. Among them, in this section, four philosophers, viz. Jürgen Habermas, Jean-François Lyotard, Michel Foucault, and Richard Rorty will be discussed to get a clearer idea of recent epistemology, which is still in the process of being shaped.

2.4.1 Jürgen Habermas

One of the most notable aspects of Habermas' thinking is his ideas on modernity. Modernity and the Enlightenment are for Habermas closely related. In the Enlightenment, substantive reason, which had been expressed in religious and metaphysical worldview terms before the Enlightenment, was separated into three moments, i.e., the cognitive-instrumental, the moral-practical, and the aesthetic-expressive knowledge (Habermas, 1992:162). This is the characteristic feature of modernity, according to Habermas. He explains the project of modernity as follows:

> The project of modernity, formulated in the eighteenth century by the Enlightenment philosophers, consists of a relentless development of the objectivating sciences, the universalistic bases of morality and law, and autonomous art in accordance with their internal logic but at the same time a release of the cognitive potentials thus accumulated from their esoteric high forms and their utilization in praxis; that is, in rational organization of living conditions and social relations (1992:162-163).

Through this project, people expected that "the arts and sciences would further not only the control of the forces of nature but also the understanding of self and world, moral progress, justice in social institutions, and even human happiness" (Habermas, 1992:163). After the Enlightenment, this project was fragmented because philosophers placed their trust in only one of the moments into which reason had become

differentiated. For Habermas, modernity is "an unfinished project" which has not failed, but has just been delayed or interrupted by some tragic events, e.g. world wars and Nazism. He says:

> I believe we would do better to learn from the aberrations that have accompanied the project of modernity and the mistakes of these extravagant programmes of sublation than to abandon modernity and its project (1992:166).

Modernity must be an ongoing process in which new connections among the autonomous sphere of science, morality, and art are negotiated continuously. Habermas calls all those who would not keep the project of modern "conservatives," because if one does not aim at the enlightenment which exalts autonomous human reason in the highest place, one must be dependent on tradition. He therefore identifies postmodernism as a branch of neo-conservativism. For Habermas, postmodernism is conservative because of its anti-emancipatory and therefore anti-progressive intentions.

Central to Habermas' argument is the doctrine that human knowledge is never a mere mirroring of reality, but is always constituted by specific interests. These knowledge-constitutive human interests guide the selection of "truths" and govern the form in which they are presented as knowledge (Lessnoff, 1993:799). These interests are given to us universally and a priori in our relation to the world (Pusey, 1987:24). In accordance with this notion of "knowledge-constitutive interests," or "cognitive interests," Habermas distinguishes three different types of sciences, i.e. empirical-analytic, historical-hermeneutic, and critical sciences (Lessnoff, 1993:799-802; Pusey, 1987:25-26). In the case of the "empirical-analytic" or natural sciences, the basic thrust is "the technical control of nature." The aim is to formulate general laws, which can lead to reliable predictions, through the investigation of reality for the sake of controlling it for one's own practical purposes. The historical-hermeneutic sciences reflect on the meaning of the interaction among human beings. In these sciences the interest is, as Habermas sees it, "practical control" to interpret human interaction in its historical, community context.

These two groups of sciences are not capable by themselves of being emancipatory because they fail to be aware of and to criticise their own knowledge-constitutive interests.

The critical sciences aim at a critical self-reflection that uncovers the personal and social origins of one's attitude and unmasks the interest of one's present action within the context of societal action. These sciences are guided by the interest in emancipation which enables people to penetrate illusions that veil arbitrary power in society. This emancipatory interest is the vehicle through which "emancipatory knowledge" is reinstated in the other two domains (Pusey, 1987:25-26; Groome, 1980:172).

Habermas does not regard our knowing ever to be free of "interest." When interest is emancipatory, then "the mind can always reflect back upon the interest structure that joins subject and object a priori: this is reserved self-reflection. If the latter cannot cancel out interest, it can to a certain extent make up for it." (Habermas, 1971:313-314)

Habermas is very critical of what the empirical and positivistic concept of reason has done to science and the humanities. He never denies the validity of science, but he is against modern positivism. In his book *Knowledge and Human Interest* he says that positivism has a mistaken concept of science that reduces all knowledge to a belief in itself.

> "Scientism" means science's belief in itself: that is, the conviction that we can no longer understand science as one form of possible knowledge, but rather must identify knowledge with science. The positivism that enters on the scene with Comte makes use of elements of both the empiricist and rationalist traditions in order to strengthen science's belief in its exclusive validity after the fact, instead of to reflect on it, and to account for the structure of the sciences on the basis of this belief (Habermas, 1971:4-5)

For Habermas, science is only one form of possible knowledge. It is something epistemological, and cannot be reduced to a set of methodological principles. A methodology of philosophical thought mutilates human reason, and by strengthening "science's belief in its exclusive validity after the fact," the ability to "reflect" upon our

actions by reason is lost. Reliable knowledge is only possible when science assumes its proper, subordinate place as one of the accomplishments of reason. Habermas wants to rescue the more "comprehensive rationality of reason that has not yet shrunk to a set of methodological principles" (Pusey, 1987:19-20; Habermas, 1971:4).

For reason to take a reflective role upon human affairs, it has to belong to the knowing subject. In other words, the knowing subject is the self that reasons. Habermas believes that the self is not an atom isolated from social life but rather is formed through work and interaction with others in society. As a faculty of mind, reason plays an important role in this formation process of self. He thinks that reason is inherently related to the critical thinking of self that is self-reflection. The goal of self-reflection is to emancipate oneself from irrationally deceived knowledge. Self-reflection is, therefore, intellectually a self-formative process. Habermas says, "The experience of reflection articulates itself substantially in the concept of self-formative process" (Habermas, 1971:197). Socially, the self-formative process means, according to him, for the self to become an autonomous and responsible person. Habermas elaborates the concept of self-reflection as follows:

> In self-reflection, knowledge for the sake of knowledge comes to coincide with the interest in autonomy and responsibility. For the pursuit of reflection knows itself as a movement of emancipation. Reason is at the same time subject to the interest in reason. We can say that it obeys an *emancipatory cognitive interest*, which aims at the pursuit of reflection (Habermas, 1971:197-198).

In order for self to be autonomous and responsible, one has to be free from one's dependence on false consciousness which leads one's self to have irrationally deceived knowledge. One can detect false consciousness through reason and self-reflection.

Habermas thinks that the reasoning subject is able to achieve its autonomy. Human autonomy requires transcendence from its embeddnedness in nature. Reason is, therefore, an emancipating act or a transcending act from natural conditions. Based on this concept of reason, Habermas creates and develops the concept of a rational society

as an ideal one. Onto this society, reason constantly transcends not just natural conditions but also whatever the enforced conditions that hold, delay, confine, and embed it. In this process, reasoning subjects constantly try to understand the knowledge of others in their relationships with them. In human societies there is no inter-subjective understanding without communication. Through communication with others, the reasoning subject constantly acquires new knowledge from them (Shin, 1994:20-23). Habermas, as a philosopher of the social sciences, aims to anticipate a society in which the consensus of all participants is achieved through free communication without any external constraints and coercion. This is an ideal society that is highly achievable with rational desire. Reason is a critical means for the achievement of an ideal society in Habermas.

According to what has been mentioned above, we can summarise Habermas' ideas of knowledge as follows:

(1) The knowing subject is not a solitary individual confronted with the puzzle of the universe; he or she rather is always in the context of dynamic society.

(2) The knowing process is grounded in the pattern of ordinary language usage that we share in everyday communicative interaction.

(3) Knowledge is constituted in the contexts of three universally given "knowledge-constitutive interests," thus it cannot be objective and value-neutral.

(4) Human reason makes us able to uncover, through critical thinking, the repression and distortion in social life, and to become emancipated from irrationally deceiving knowledge; therefore, fully rational knowledge is "emancipatory knowledge."

2.4.2 Jean-François Lyotard

Lyotard sparked academic debate and contributed to the dissemination of the term "postmodernism" through his book *The Postmodern Condition*, which originally was published in 1979. He offers a major working hypothesis regarding knowledge, viz.: "that the status of knowledge is altered as societies enter what is known as the postindustrial age and cultures enter what is known as the postmodern age" (1984:3). Lyotard argues

that as our society comes into the postindustrial (or postmodern) phase, the power and stability of grand narratives which legitimated modern science, are becoming weakened, even unnecessary. Thus, he defines postmodern as "incredulity toward metanarratives" (1984:xxiv).

Lyotard calls the sets of rules that determine the legitimacy of particular forms of narrative as "metanarratives," and argues that these metanarratives provide criteria that allow one to judge which ideas and statements are legitimate, true and ethical for each different form of narrative. Alongside metanarratives he introduces the term "grand narratives" which are the governing principles of modernity, and identifies two main forms of grand narrative in the modern era: speculation and emancipation (Malpas, 2005:36-37). These metanarratives and grand narratives are the transcendent and universal truths that underpin Western civilization; the function of these is to give the civilization objective legitimation (Bertens, 1995:124).

The demise of grand narratives brings about a "legitimation crisis" of the modern ways of the production of knowledge. Lyotard explains the term "modern",

> … to designate any science that legitimates itself with reference to a metadiscourse of this kind making an explicit appeal to some grand narrative, such as the dialectics of Spirit, the hermeneutics of meaning, the emancipation of the rational or working subject, or creation of wealth (1984:xxiii).

Such modern legitimations, however, have lost their power: "speculative or humanistic philosophy is forced to relinquish its legitimation duties" (1984:41). Instead of grand narratives, a different kind of criterion to legitimate knowledge emerged in postmodern society. It is "performativity," which Lyotard calls the "technological criterion" (Woodward, 2005).

Lyotard predicts or depicts, in a sense, how scientific knowledge is changed in "most

highly developed societies." In postmodernity, knowledge has become primarily a saleable commodity. Knowledge is not pursued for the training of minds, or of individuals anymore. Knowledge is already ceasing to be an end in itself; rather it is produced to be sold, and is consumed in order to stimulate a new production (Lyotard, 1984:4-5). Lyotard says:

> Knowledge in the form of an informational commodity indispensable to productive power is already, and will continue to be, a major – perhaps *the* major – stake in the worldwide competition for power. It is conceivable that the nation-states will one day fight for control of information, just as they battled in the past for control over territory, and afterwards for control of access to and exploitation of raw materials and cheap labor (1984:5).

Today students no longer ask questions like, "Is it true?" but rather "What use is it?" (Lyotard, 1984:51). With the mercantilisation of knowledge, science is forced to abandon its original integrity (Bertens, 1995:123-124). While the grand narratives in the modern era seek to draw all knowledge into a single system, contemporary capitalism is more than happy with fragmentation, if those fragments of knowledge continue to make a profit. Knowledge has, even, itself become a commodity. Thus, the postmodern condition is one in which the demands of capitalist economics rule supreme, and all developments of knowledge are determined by the pragmatic logic of markets rather than the overarching dream of a universal human good (Malpas, 2005:39; Sarup, 1993:133).

Lyotard insists that only if knowledge is translated into quantities of information, it can become operational in computerised society. Anything in the constituted body of knowledge that is not translatable into computer language will be abandoned. The direction of new research will be dictated by the translatability into computer information (1984:4). Therefore, "Society exists and progresses only if the messages circulating within it are rich in information and easy to decode" (Lyotard, 1984:5).

The commercialisation of knowledge and its new forms of circulation will raise the problem of power, in other words, hegemony. Power and knowledge, according to

Lyotard, are simply two aspects of the same question: Who decides what knowledge is? Who knows what needs to be decided? (Sarup, 1993:134). The sole criterion for judging the worth of narratives is their efficacy in making the capitalist system work more quickly and more efficiently (Malpas, 2005:39, Zembylas, 2000:167). "The application of this criterion", says Lyotard, "to all of our games necessarily entails a certain level of terror …" (1984: xxiv).

For Lyotard, the capitalistic legitimation by way of performativity is wholly unacceptable. He turns, then, to Wittgenstein for "a kind of legitimation not based on performativity." What the postmodern world seeks is non-performative and immanent legitimation. Fraser and Nicholson express this in the following terms: "in the postmodern era legitimation becomes plural, local, and immanent…. Instead of hovering above, legitimation descends to the level of practice and becomes immanent in it" (Fraser & Nicholson, 1988:87). For Lyotard, "a localised narrative" is the inevitable source of all legitimation, all value and all truth (Zembylas, 2000:163; Bertens, 1995:126).

Lyotard distinguishes between two types of knowledge: "narrative" knowledge and "scientific" knowledge. Scientific knowledge has historically been privileged over and distinguished from narrative knowledge (non-scientific knowledge) by virtue of the fact that it gave priority to its own legitimation and certified itself through argumentation and proof. These two kinds of knowledge are really two different discourses, and their unequal relationship is "an intrinsic effect of the rules specific to each game" (Lyotard, 1984:27).

Narrative knowledge has no recourse to legitimation – its legitimation is immediate within the narrative itself, in the "timelessness" of the narrative as an enduring tradition. It is told by people who once heard it, to listeners who will one day tell it themselves. In scientific knowledge, however, the question of legitimation always arises. Lyotard insists that one of the most striking features of scientific knowledge is that it includes only denotative statements, to the exclusion of all other kinds. According to the "narrative" of science,

however, only knowledge which is a form of legitimation is legitimate. Scientific knowledge is legitimated by certain criteria, such as the repeatability of experiments. If the entire project of science needs a metalegitimation, then science has no recourse but to narrative knowledge. Scientific knowledge does not allow the recognition of narrative knowledge as legitimate, since it is not restricted to denotative statements. It is dangerous, because in Lyotard's view reality cannot be captured within one genre of discourse or representation of events, so that science will miss aspects of events which narrative knowledge will capture (Woodward, 2005).

One of the implications of Lyotard's view on delegitimating modernity's tradition is the rejection of overarching narratives in which legitimation can reside in favour of smaller narratives. Lyotard argues that legitimacy is relative to pragmatic context in which knowledge is produced. In other words, there are multiple narratives or "language games" and multiple criteria. There are no contextual prescriptions, because of the heterogeneity of the various language games. Language games refer to the various types of utterances. Lyotard says that:

> What he [Wittgenstein] means by this term [language games], is that each of the various categories of utterance can be defined in terms of rules specifying their properties and the uses to which they can be put – in exactly the same way as the game of chess is determined by set of rules determining the properties of each of the pieces, in other words, the proper way to move them (1984:10).

An important characteristic of Wittgenstein's language games is that their rules are contextual, in other words, there are no universal rules for all language games. Lyotard, following Wittgenstein, argues that the rules are contextual, that is they do not carry with them their own legitimation or their own context (Zembylas, 2000:166).

In Lyotard's view, legitimation comes from plurality, dissensus, innovation, imagination, and creativity, or what he terms "the quest for paralogy" (1984:66). Lyotard maintains that "consensus is only a particular state of discussion, not its end. Its end, on the

contrary is paralogy" (1984:65-66). He theorises the legitimation of localised narratives in terms of paralogy, where "the little narrative remains the quintessential form of imaginative invention" (1984:60). The goals of science are no longer discovering what was previously unknown and communicating to reach consensus. Scientists are no longer producers of the known, but "the unknown." Lyotard describes science as now concerned with paradox, the undecidable, catastrophe, and the limits of control and prediction. Language is heteronymous and paralogous which means that there is no model for determining the limits of what is tolerable as a move in any particular game. Therefore, the goal of scientific dialogue is not consensus, for that would violate language (Zembylas, 2000:168).

According to what has been mentioned above, we can summarise Lyotard's ideas of knowledge as follows:

(1) There are no metanarratives which can possibly be used to legitimate an objective or universal knowledge; rather there are just so many small (localized) narratives which legitimate themselves.

(2) Consensus can be achieved only by the application of a certain metanarrative which must violate different narratives. Therefore postmodern science and knowledge must pursue not consensus, but difference.

(3) Narrative knowledge is a more suitable form of knowledge in the postmodern era. It allows various language games, and always works in a certain context.

(4) Knowledge is not objective truth, which can be discovered, but is tentative and local, which is constructed through social discourses. The most important matter regarding knowledge is not whether it is false or true, but whether it is inefficient or efficient, in other words, its level of performativity should be measured.

2.4.3 Michel Foucault

Foucault's prime concern was to analyse the present. Through a number of concrete and local histories, he wanted to map the emergence and specific nature of modern forms of rationality. He tried to discover the historical condition of reason in Western society. For

this purpose, he drew a powerful weapon, i.e. genealogy, from Nietzsche's arsenal (Foucault, 1977:152). He broke off the past from the present, and relativised or undercut the legitimacy of the present by demonstrating the foreignness of the past (Sarup, 1993:63). Foucault has been called "Nietzsche's truest twentieth century successor" or the "greatest of Nietzsche's modern disciples." Following Nietzsche, Foucault argues that reason and rational discourse are problematic, because they require that we squeeze the variety of reality into the homogeneity that accommodates our concepts. In this way, rational discourse lifts up sameness and universals at the expense of difference or "otherness." He gives preference to the specific and special, elevating them above the general and universal (Grenz, 1996:124, 127).

The most crucial notion that Foucault operates with is "human nature." Foucault maintains that the human sciences construct particular conceptions of human nature, which are used as a basis for theories about how individuals and society should operate. He refuses the idea of a pre-given self or human nature; rather he asserts the self always to be in a historical context, thus our subjective experience is socially and historically constituted by factors that we unconsciously internalise. According to Foucault, humanity is a relatively recent phenomenon. Our present focus on the human person as an object of knowledge is the result of a historical shift that began in the seventeenth century. He says,

> ··· man is neither the oldest nor the most constant problem that has been posed for human knowledge.··· As the archeology of our thought easily shows, man is an invention of recent date. And one perhaps nearing its end.
>
> If those arrangements were to disappear as they appeared, if some event of which we can at the moment do no more than sense the possibility – without knowing either what its form will be or what it promises – were to cause them to crumble, as the ground of Classical thought did, at the end of the eighteenth century, then one can certainly wager that man would be erased, like a face drawn in sand at the edge of the sea (1970:386-387)

There is no human nature displayed in the social structures that we study in the human sciences. Humanity is nothing more than a fiction composed by the modern human sciences and, thus, it can no longer be the central concern of human knowledge. Foucault insists, against the notion of structuralism, that the self cannot be the ultimate ground for language; rather it is constituted in and through language. The individual subject, therefore, is an empty entity and an intersection of discourses (Grenz, 1996:128-130; Sarup, 1993:81).

Foucault investigates how the modern system of disciplinary power has emerged along with the human sciences. Discipline is a set of techniques for governing human beings which both enhance their capacities and ensure their controllability. Such control requires detailed knowledge of individual behaviour, and human sciences such as psychology or modern medicine are now understood to have been made possible by the spread of disciplinary power. To discipline people is to turn them into certain kinds of subjects, in the sense of bringing them to act in accordance with disciplinary norms and standards, behavioural ideals which the human sciences define as normal, natural or essentially human.

Foucault denies the modern idea of the objective knowledge on the grounds of his historical approach, "archeology." The point of Foucault's historical analysis is to show that a given system of thought is the result of contingent turns of history, not the outcome of rationally inevitable trends (Gutting, 2003). In his book *The Order of Things* (1970), Foucault charts how the constitution of "truth" has changed throughout history, in the process employing the concept of "episteme." The "episteme" is a system of rules which determines whether a statement can qualify for the holding of a truth-value in a specific epoch. It enables an utterance to become a "fact" (Foucault, 1970:xxi-xxii). Each epistemological age was dominated by a different "episteme" which is very distinct from its preceding and subsequent age. The "episteme" sets out Foucault's conviction that systems of knowledge do not progress in relation to a stable, universal object; rather, it characterizes a situated knowledge that produces objects to satisfy its practical needs

and sense of order (Bouchard, 1984:174). What Foucault wants to insist on is that there is no bridge to connect one episteme with another. The change from one episteme to another one is totally haphazard, accidental and contingent. "Progress" is simply the swapping of one episteme for an equally untrue and arbitrary one (Wuthnow, Davison, Bergesen & Kurzweil, 1984:159; cf. Sarup, 1993:70). The truth or knowledge, therefore, is not founded on an objective foundation, but is merely a product of social discourse.

For Foucault, any attempt to formulate truth or knowledge can inherently result in domination and oppression. The "will to truth" which is so evident in the Enlightenment project can be nothing but a "will to power." Foucault says, "Truth is a thing of this world, it is produced only by virtue of multiple forms of constraint, and it induces regular effects of power" (1980:131). Because knowledge is embedded in the world, it is involved in the power struggles that constitute our world. Knowledge is the result of what Foucault calls a "will to knowledge" that arbitrarily establishes its own "truth." This will to knowledge (or power) is evident in the way historical narratives invariably exclude certain objects while privileging others. Foucault's point is that the goals of power and the goals of knowledge cannot be separated: in knowing, we control and in controlling, we know (Gutting, 2003; Grenz, 1996:132-133). Foucault says,

> Power produces knowledge ··· Power and knowledge directly imply one another ··· There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. These "power-knowledge relations" are to be analyzed ··· not on the basis of a subject of knowledge who is or is not free in relation to the power system, but, on the contrary, the subject who knows, the objects to be known and modalities of knowledge must be regarded as so many effects of these fundamental implications of power-knowledge and their historical transformations (1977:27).

Foucault remarks that power "produces reality"; it "produces domains of objects and rituals of truth." The exercise of power itself creates and causes new objects of

knowledge to emerge. Conversely, knowledge induces effects of power. It is not possible for power to be exercised without knowledge; it is impossible for knowledge not to engender power (Sarup, 1993:82).

Based on the above survey, Foucault's notion of knowledge can be summarised as follows.

(1) The knowing self is not autonomous and rational, but is constituted by social discourse.

(2) Knowledge cannot be objective but is always contingent because it is always determined by social condition. Knowledge is a product of power and of a perspective.

(3) Knowledge does not develop progressively in history; it is changed arbitrarily when the age changes.

2.4.4 Richard Rorty

Rorty's principal target is the philosophical idea of knowledge as representation, as a mental mirroring of a "mind-external" world. He announces the end of epistemology in *Philosophy and the Mirror of Nature* (1979), in a chapter entitled "From Epistemology to Hermeneutics." For Rorty, "epistemology" can be called "modernity", to be more precise, "the Enlightenment project" or, to be still more precise, "foundationalism." Westphal (1999:416) summarises what Rorty identifies as the most important notions of modern epistemology:

> 1) The notion of knowledge as accurate representation, as correspondence. It is here that the "mirror of nature" image plays its role.
> 2) The demand for certainty in knowledge.
> 3) The notion of epistemology as a neutral, a priori tribunal whose task is to show how to achieve the desired apodicticity of accurate representation.
> 4) The special role of privileged representations as providing the foundations of knowledge so construed.

Rorty rejects the foundationalist epistemologies of modernity, and instead suggests a paradigm shift to an understanding of knowledge. In his opinion, knowledge must be

holistic, historicist, and pragmatic. In his view truth is regarded as a conversational agreement, rationality as practical, self-corrective capacity, and intuition as linguistic capacity (Westphal, 1999:415-416).

The modern epistemological project is grounded in the correspondence theory of truth. Rorty characterises the goal of this theory as penetrating the veil of appearances in order to glimpse things as they are in themselves. Rorty refers to the correspondence theory as the "spectator theory of knowledge," and he dismisses it as unworkable. It assumes that we can attain a perspective outside the world like a "God's-eye point of view" of things (Grenz, 1996:152-153; cf. Putnam, 1981:49-50). Rorty says,

> Truth cannot be out there – cannot exist independently of the human mind – because sentences cannot so exist, or be out there. The world is out there, but descriptions of the world are not. Only descriptions of the world can be true or false. The world on its own – unaided by the describing activities of human beings – cannot (1989a:5).

Instead of correspondence, Rorty elevates coherence to express his idea on truth. He asserts that statements are "true" insofar as they cohere with the entire system of beliefs. The aim of inquiry is to make our beliefs and desires coherent (Rorty, 1991b:106). For him, therefore, truth is not what is theoretically true, but what works more efficiently (Rorty, 1989a:4; Grenz, 1996:153-154).

Rorty thinks that a word has no intrinsic meaning, that it is just a convention. Language is a tool that we use to satisfy a variety of wants: food, sex, an understanding of the origin of the universe, an enhanced sense of human solidarity, and even a personal identity attained by developing one's own private, autonomous philosophical language (Rorty, 1991a:126). A single vocabulary could serve several of varied aims, but he does not believe the existence of "any great big meta vocabulary" under which we could subsume all the various types of discourse (Rorty, 1991a:126-127; Grenz, 1996:155-156). In Rorty's view, scientific enterprise is merely a discourse among many vocabularies.

Therefore, the only meaningful question is "which vocabulary works better than the others for the purpose we have in view" (Rorty, 1982:193). There is no epistemological difference between truth about what ought to be and about what is. Rorty does not admit any metaphysical difference between morality and science. He sees ethics and physics as equally objective and denies the modern tendency to elevate scientists as more objective, logical, methodological to truth than anyone else.

Rorty rejects Descartes' view of the self as an autonomous thinking substance, characterising it as a centreless and ever-changing web of beliefs and desires that produces action. He rejects the Kantian notion of the universal human self as well, which often takes the form of a search for a coherent image that will fit the entire species to which we belong. Instead, he encourages us to tailor a coherent identity for ourselves that can serve as the foundation for our own behavior (Rorty, 1991a:162). Rorty places the individual and truth squarely in a social context. He insists that the way we think and act is thoroughly embedded in our temporal and cultural context. Thus, the justification of truth claims must be "ethnocentric." Rorty argues that one cannot go beyond one's own society's procedures of justification. Everything one can say about truth or rationality is embedded in the understanding and concepts unique to the society in which one lives (Rorty, 1991b:11, 23; Grenz, 1996:156).

It is impossible to discover a starting point for our discourse that lies beyond the contingency of our own temporal context. Rorty thinks that if we acknowledge the contingency of a starting point, we can realise that our conversation with our fellow human beings is our only source of guidance (1982:165). He asserts that an awareness of this fact can help us to move from confrontation to conversation in our ongoing inquiries (Rorty, 1980:163). We should not seek an objective or external foundation for the human inquiry into truth. We need only conform to the constraints that arise through our conversations with our fellow inquirers. The only valid guidelines we will ever be able to find are those of the community in which we participate. The only foundation we will be able to assemble is the conversation among competing interpretations. The proper goal

of philosophy is not to uncover objective truth, but to maintain the discussion among these differing interpretations. Rorty insists the goal of our inquiry must be "the attainment of an appropriate mixture of unforced agreement with tolerant disagreement" (Rorty, 1991b:16-17; Grenz, 1996:156-159).

Rorty's pragmatic theory of knowledge is expressed in terms of anti-foundationalism, of anti-representationalism, and of anti-essentialism. His thinking is an example of postmodern knowledge. Because of the relevance of his epistemology for education, his views will be investigated and discussed more thoroughly in the next chapter.

Rorty's idea of knowledge can be summarised as follows:

(1) Knowledge cannot be a mirror of nature, because we cannot transcend from our specific temporal-spatial situation to the vantage point of objective knowledge. Therefore, knowledge is not for what it is in itself, but for its use in coping with reality.

(2) The knowing subject is not an autonomous thinking self who can attain a certain knowledge as the modern philosophers presumed; rather the subject is always part of a social context and its understanding and concept are shaped in the specific social context.

(3) If a statement is coherent with the entire system of belief in a certain situation, then the statement can be regarded as a "truth".

(4) The ultimate purpose of scientific enterprise is to maintain "solidarity" for the purpose of attaining an appropriate mixture of unforced agreement with tolerant disagreement. Ongoing conversation can be the foundation to inquire into truth and the most important thing is "solidarity", not "objectivity" in scientific discourse.

2.5 The transition to postmodern knowledge

In the previous sections of this chapter, some representative philosophers' notions of knowledge, from modern(ist) to the recent theorists who may be called postmodernist, have been described. How the modern(ist) idea of knowledge has been "transformed" to

the postmodern can now be discussed. Generally, postmodernism[5] (postmodernity[6]) is an umbrella term used to express every kind of repudiatory reaction to modern ideas. The notion of postmodern knowledge can, therefore, be made clear by comparing it with modern(ist) knowledge. In this section, an attempt will be made to abstract what postmodern epistemology is, by means of discussion about what the characteristic features of postmodern knowledge are in comparison with the modern(ist) concept of knowledge that was discussed in this chapter. Postmodern approaches to knowledge and knowledge production (epistemology) differ, generally speaking, from modern(ist) approaches in the following ways:

2.5.1 Criticism of the ideal of objective knowledge

Modern philosophy began with the restoration of confidence in the reason and experience of the human individual, who began searching for more experience and greater rationality in the external world. Epistemological self-confidence is paralleled in this anthropological self-assuredness (Middleton & Walsh, 1995:19-20).

Descartes devised "methodical doubt" to find the absolutely true axiom with which to attain a starting point for his scientific method, the deductive mathematical system. The first axiom through the doubt, for Descartes, is his being or his existence which is formulated as: *cogito, ergo sum* (I think, therefore I am). When someone doubts, his doubting and thus his existence cannot be doubted while every other proposition can be doubted.

Although Locke insists that knowledge is derived from experience, not mind, the experience and therefore knowledge belongs to the self. Kant also insists that the thinking mind yields knowledge because the phenomena of the world are organised by means of a complex logical structure which is inherent in the self (Kolenda, 1974:178).

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[5] See footnote 2 on page 1.

[6] See footnote 3 on page 1.

Knowledge, therefore, could start from the self that is totally separated and free from the reality, or from the external world. In modern(ist) thinking, knowledge is a possession of the subject about the object, the external world, which stands opposite to the subject, the self in a subject-object relationship. Thus, the self is an absolutely unchangeable substance and it is rational and autonomous. This clear view of the self serves as a firm foundation for a certain knowledge in modern(ist) thinking. Modern thinkers share the project of constructing valid arguments which will start from premises concerning human nature about a certain, self-evident and infallible knowledge.

The transition to postmodern epistemology began, in a sense, with Nietzsche who questioned the modern notion of self. He asserts that the self, the subject is a fiction and the modern self cannot be the centre of the world and knowledge. The self is not a cause of other things, including knowledge, but just an effect of them. Lyotard (1984:15) says in the same vein: "A self does not amount to much, but no self is an island; each exists in a fabric of relations that is now more complex and mobile than ever before. ··· a person is always located at "nodal points" of specific communication circuits, however tiny these may be." Thus, the self is seen as not stable enough to become a sure foundation for knowledge. Foucault also denies the notion of pre-given self or human nature. He insists the self should always be located in a historical context, and the subjective experience is socially or historically constructed by factors that we unconsciously internalise.

In the postmodern theory of knowledge, the human being is regarded as no more the rational, autonomous self that can be a foundation of knowledge, but as merely an individual who can be affected by various discourses, social relationships, power and language. There is no universal self, thus the notions of human beings or the self have become contingent. Knowledge becomes a temporal strategy for an arbitrarily changeable self to survive in a certain specific situation.

2.5.2 A shift from universal reason to plural reasons

One of the most common features among modern(ist) philosophers is the idea of the

unversal authority of scientific reason which can provide a foundation of certainty. In the modern(ist) era, the self was regarded as a thinking substance and a rational being. The "I," the ego or the self, in its highest aspects, was identified with reason (Raju, 1992:47-48). The capacity to think, to apprehend truth is lodged in the mind, in the rational aspect of man. Descartes thinks that reason which is an ability to judge truth and falsehood rightly is distributed equally to all human persons, and thus the way of truth is open to all people. He also insists that there is only one scientific method to exert reason in all branches of science. Therefore, we can reach the universal truth or a certain knowledge by using this universal reason. Although Locke emphasises "sensory experience" as a fundamental source of knowledge, his basic premise is essentially Cartesian. Locke undertakes, like Descartes, to discover what is going on when a person thinks, or what is present to his understanding at any given time. He insists that human life is governed by the "law of Nature" which is nothing more than "reason", and that the obligation of this "law" of reasoning, residing in all rational persons, is "an eternal rule to all men" (Locke, 1825:89, 135). Kant asserts that the material of experience (sense impressions) is chaotic, but the natural order is formally made possible through categories as forms of thought. All human beings have the same principal "forms" and therefore all knowledge, for all people, must be shaped by these forms. The forms are universally valid and necessary (Skirbekk & Gilje, 2001:276).

Nietzsche began to destruct this modern(ist) notion of universal reason. Although he never neglects reason, he does not regard it as a universal principle. To him, reason is always an individual's reason which cannot be separated from other features of a living being (Kolenda, 1974:239). Kuhn in turn argues that there are many different paradigms of scientific knowledge and that different standards of rationality are shaped when a new paradigm emerges. Foucault also insists on the historical contingency of reason through the concept of the "episteme" which has its own specific structure of cognition and form of discourse in a certain time period. Postmodern theorists "acknowledge the existence of a multiplicity of historically specific forms of reason, and therefore favour case-studies and discourse analysis, language games, narratives and deconstruction as scientific

methods. They inaugurate new forms of pluralism in which no single method or form of science can form a paradigmatic hegemony" (Van der Walt, J.L., 2002a:37).

2.5.3 Criticism of foundationalism

Even though modern(ist) philosophers devise their own scientific methods and insist on different foundations of knowledge, they share with each other a common conviction that there is a unmovable foundation for all genuinely cognitive activity and that a certain knowledge can be established on this sure foundation, which must be a form of noninferential knowledge or noninferentially justified belief. Modern(ist) theorists think if we start to structure our knowledge from a sure foundation by applying correctly a scientific method in all scientific domains, we can attain an objective infallible knowledge and this knowledge can be verified and justified through this firm foundation. This modern(ist) epistemological disposition has been called "foundationalism."

For Descartes, it is "the self" or "I" that he uses as a certain foundation for structuring further knowledge of the world. In Locke's theory, "sensory experience" about reality is the foundation of knowledge. Objective knowledge can only be attained through sensory evidence. Kant also stands for this foundationalism. The foundation of knowledge, for Kant, is "transcendental categories" which are inherently in the self.

Postmodern theorists, on the other hand, deny that the philosopher can set forth "first principles" or canons of rationality that provide the foundation for discovering truth and certain knowledge. It is impossible to derive a foundation for human discourse by appeal to the nature of the objects of our inquiry, the mind, or the rule of language. There is no set of transcendent rules that will help us determine how to resolve conflicting assertions. Therefore, we should not seek an objective or external foundation for the human inquiry into truth. Rorty insists that we need only conform ourselves to the constraints that arise through our conversations with our fellow-inquirers (Rorty, 1982:165). The only valid guidelines we will ever be able to find are those of the community in which we participate. The only possible foundation is the give-and-take of the conversation among competing

interpretations. For this reason, postmodern theorists try to turn their interests concerning knowledge from epistemology to hermeneutics. Knowledge can be understood as a provisional interpretation to cope with a certain reality. Knowledge need not be justified, based on the sure foundation, but it is enough if one proposition is coherent with others. Rorty (1980:159) says, "… we can think of knowledge as a relation between the propositions, and thus of justification as a relation between the propositions in question and other propositions from which the former may be inferred. Or we may think of both knowledge and justification as privileged relations to the objects those propositions are about. If we think in the first way, we will see no need to end the potentially infinite regress of propositions-brought-forward-in-defense-of-other-propositions."

2.5.4 Awareness of the peculiar role of language in knowledge (construction)

Western philosophers assume that there is at the foundation of our language a "presence" of being or an essence that we can come to know. They are convinced that language is able to represent or "signify" the given reality in its essential nature. Therefore, language is a transparent arbiter for human beings to attain knowledge of the external world. Our abstract thinking about reality can be transformed into a form of objective knowledge through language.

Postmodern philosophers point out that the significance of a sentence derives from its place in a web of other sentences. The signs and thoughts are not "things" with intrinsic properties but nodes on a web of relations. Nietzsche began to doubt the modern(ist) notion of language by insisting that truth is a function of language we employ and thus it exists only within specific linguistic contexts. Wittgenstein has contributed tremendously toward postmodern understanding on language through his concept of "language games." He thinks that no proposition can be limited to a single meaning, because its meaning is necessarily dependent on its context. Thus any sentence has as many meanings as the contexts in which it is used. Foucault insists that there is no original or transcendental "signified" to which all "signifiers" can ultimately refer (Grenz, 1996:90, 114, 128). Derrida also insists that language is merely "self-referential." A sign will always

lead to another sign. Thus, a language is a chain of signifiers referring to other signifiers, in which each signifier in turn becomes what is signified by another signifier. Since the textual location in which a signifier is embedded constantly changes, its meaning cannot be fully determined. Meaning is never static, never given once-for-all, rather it changes over time and with changing contexts. For Rorty, a word has no intrinsic meaning; to think so, is merely a convention, the regular use of mark or noise. Language is a tool which human beings use to get what they want (Grenz, 1996:144, 154).

For postmodern philosophers, therefore, the goal of science is not to produce models that correspond perfectly with reality. Scientific discourse is merely one vocabulary among many others, and thus the only meaningful question in scientific discourse is: "Which vocabulary works better than the others for the purpose we have in view?" (Rorty, 1982:193).

2.6 Conclusion

In this chapter, a brief historical survey of the concept of knowledge in Western philosophy has been given and discussed. It has become evident, through this survey, that the concept of knowledge has slowly but surely been changed throughout the history of Western philosophy. Especially, the recent idea of knowledge shows us a radical break with the traditional notion of knowledge, as Lyotard (1984:3) says, "the status of knowledge is altered as societies enter what is known as the postindustrial age and cultures enter what is known as the postmodern age."

In the modern(ist) era, the discourse strives toward a rational explanation of the world, assuming that rationality has a universal validity which enables us to develop a grand theory about reality and a grand narrative of human progress. The core elements in most modern(ist) epistemologies are human reason and universality (or unity). In the modern(ist) era, there should be only one truth which can be reached for by human beings through their capacity of reason(ing) and therefore, the most profound character

of modern knowledge is universality and unity.

Although among the postmodern theorists there is no explicit unanimity about what an acceptable theory of knowledge should be, a certain concurrence can easily be found. The basic thesis in postmodern epistemology is the repudiation of "Grand narratives" of knowledge. Modern epistemological projects to totalise all knowledges into a unity have been frustrated and cannot be upheld any more. In postmodern theory of knowledge, the particular has replaced the universal, fragmentation has replaced unity, and difference has replaced similarity.

The theory and practice of schooling, especially teaching and learning, are always deeply influenced by the notion of knowledge, since one of the main tasks of schooling (education, teaching and learning) is to "transmit" a set of knowledge to the next generation, or to help the next generation to master knowledge that is regarded important for life in their particular community. If the concept of knowledge has been or is being changed and this change is radical, it is necessary to reconsider schooling (etc.) in its relationship to the concept of knowledge.

For this purpose, the following chapter will investigate the theory of schooling or education, teaching and learning in view of a postmodern notion of knowledge.

3. EDUCATION INFLUENCED BY POSTMODERN EPISTEMOLOGY

3.1 Introduction

This chapter will focus on the relationship of education (schooling, teaching and learning) and postmodern epistemology, in other words, the problem of how education has been (will be) affected by the ideas of postmodern knowledge. Even though attempts were made to extract the common features of postmodern knowledge in the previous chapter, it is still difficult to capture general characteristics of postmodern knowledge and to reflect their implications in educational discourse. Postmodernism does not represent a single point of view, rather it shows us its vast complexity and diversity. As the term postmodernism is ambiguous, it is more preferable to deal with a particular philosopher, or with a specific articulated position, instead of talking of postmodernism in general (Marshall, 2000:117). In this chapter, the work of Richard Rorty, a prominent postmodern philosopher, will be used in the discussion.

Rorty is commonly associated with postmodernism. He describes himself as a "postmodern bourgeois liberal" (cf. Rorty, 1991b:197-202). He has become a spokesperson for postmodernism since the publication of his book *Philosophy and the Mirror of Nature* in 1979, and is regarded as a representative of postmodernism like Lyotard, Derrida and Foucault (Rosenow, 1998:255). Furthermore, Rorty's writing was perceived to provide a new hope for education in the crisis of modernity. René Arcilla claims that Rorty's work helps teachers "to turn the tide of epistemological despair into educational hope" (Arcilla, 1990:35). The motifs of Rorty's work "articulate a strong program for philosophy of education" (Arcilla, 1990:38-39).

According to Rosenow (1998:255), many theorists of education have become interested in Rorty's book and his idea and have attempted to elaborate an innovative "Rortyan philosophy of education." Moreover, he himself addresses educational issues directly. Thus Rorty should be a most suitable figure among postmodern thinkers to accomplish

the aim of this chapter. The key issue of this chapter, therefore, can be rephrased more precisely as how schooling (or education) will be done according to Rorty's idea of knowledge. Even though Rorty shows us his idea on education in a few articles, he does not write about education as a whole, and his insistence on education (schooling) is not sufficient to paint the whole picture of schooling. The main concern of this chapter is to extract the theory of schooling from Rorty's epistemology. For this purpose, the educational implications will be drawn from his epistemology.

The discussion of this chapter will be divided into 3 sections.

(1) Rorty's idea of knowledge.

(2) Rorty's idea of education.

(3) A new view of schooling (education) in accordance with Rorty's epistemology.

3.2 Rorty's idea of knowledge

Rorty's view of knowledge shows that he is opposed to the modernist notions of knowledge and that he belongs to the postmodern circle because of his keen criticism of the modern project of knowledge. Although Rorty's notions of knowledge were mentioned briefly in the previous chapter (2.4.4), his ideas relating to knowledge will be discussed in this section in more detail in order to infer from it the educational implications.

3.2.1 Language

Rorty's idea of language is the framework for his other notions, i.e. on the self, on community, and on knowledge. It is not too much to say that Rorty's theory of knowledge is founded mainly on his idea of language (cf. Stone, 1993:819).

Rorty denies strongly the modern notion of language, which regards it "as a medium, something standing between the self and the nonhuman reality" (1989a:10-11) or as "a unity, a third thing which stands in some determinate relation with two other unities – the self and reality" (1989a:13). To assume language as a mirror representing us the world in

itself, we need to transcend language and compare it with something else to which the language refers. However, this attempt to say "how language relates to the world" is impossible, because "there is no way to think about either the world or our purposes except by using our language." Rorty claims that "It is the impossible attempt to step outside our skins – the traditions, linguistic and other, within which we do our thinking and self-criticism – and compare ourselves with something absolute" (Rorty, 1982:xix).

Therefore, "all awareness is a linguistic affair" (Rorty, 1982:xxxvi). Nothing exists before language; there is no so called "pre-linguistic awareness." We cannot say anything about a non-linguistic truth which is "out-there" from language. According to Rorty (1989a:4-5),

> We need to make a distinction between the claim that the world is out there and the claim that truth is out there. To say that the world is out there, that it is not our creation, is to say, with common sense, that most things in space and time are the effects of causes which do not include human mental states. To say that truth is not out there is simply to say that where there are no sentences there is no truth, that sentences are elements of human languages, and that human languages are human creations.
>
> Truth cannot be out there - cannot exist independently of the human mind - because sentences cannot so exist, or be out there. The world is out there, but descriptions of the world are not. Only descriptions of the world can be true or false. The world on its own - unaided by the describing activities of human beings - cannot.

What we can do is, therefore, only to describe the world, not find the world. We describe our world and ourselves, even re-describe, and re-re-describe them (cf. Rorty, 1989a:80). All human understanding, awareness or knowledge is a certain interpretation of language, in other words, a linguistic description. The interpreted world is open and unlimited, hence we cannot go beyond the boundary of language. He insists that realists' attempt to pursue the truth arise from an obsession, and he calls the world that realists assume, "the world well lost" (Rorty, 1982:3-18). For Rorty, truth is not found but made, because

language is made rather than found and truth is "a property of linguistic entities, of sentences" (1989a:7).

If language does not represent the world, it does not have any intrinsic essence or meaning in itself. Words are not tied to fixed concepts or referents and then depend for their meaning on a whole system of words within which they are embedded (Rorty, 1980:371-372). The system of words is a personal habit or a social convention that changes over time and varies from one speech community or language user to another. Language forms, therefore, are contingent and a certain description of the world is only useful for a time (Linn, 1996:36-37; Stone, 1993:819). When a certain description cannot be efficient anymore, it is used for redescription that becomes more efficient, fresh, and relevant than the former description.

> Davidson lets us think of the history of language, and thus of culture, as Darwin taught us to think of the history of a coral reef. Old metaphors are constantly dying off into literalness, and then serving as a platform and foil for new metaphors. This analogy lets us think of "our language" – that is, of the science and culture of twentieth-century Europe – as something that took shape as a result of a great number of sheer contingencies. Our language and our culture are as much a contingency, as much a result of thousands of small mutations finding niches (and millions of others finding no niches), as are the orchids and the anthropoids (Rorty, 1989a:16).

Scientific revolutions can therefore be understood as "'metaphoric redescriptions' of nature rather than insights into the intrinsic nature of nature" (Rorty, 1989a:16). The aim of scientific inquiry is not to expose a quintessence of the world, but "to invent descriptions of the world which are useful for purposes of predicting and controlling what happens, just as poets and political thinkers invent other descriptions of it for other purposes" (Rorty, 1989a:4).

Scientific discourse is merely one vocabulary among many, and it cannot be distinguished from non-scientific discourse, i.e., poetry or literature. Language is in

Rorty's theory a conversational tool to attain human desire or to cope with reality (Linn, 1996:33; Rorty, 1991b:1).

According to Rorty's idea of language, to devise a new metaphor becomes the most important thing in both scientific inquiry and everyday life.

3.2.2 The self

Rorty does not develop his ideas on the self systematically. However, he expresses his opinion of the self here and there throughout his many writings.

He denies a modern notion of the self, that "there is something common to all human beings", or that there is such a thing as "human nature" or the "deepest level of the self" (Rorty, 1989a:xiii). According to him,

> There is no such thing as human nature ··· Nor is there any such thing as alienation from one's essential humanity due to societal repression ··· There is only the shaping of an animal into a human being by a process of socialization, followed (with luck) by the self-individuation and self-creation of that human being through his or her later revolt against that very process (Rorty, 1999:117-118).

The self, for Rorty, is "a coherent and plausible set of beliefs and desires" (Rorty, 1991:147). He says that "human beings are centerless networks of beliefs and desires and that their vocabularies and opinions are determined by historical circumstance" (Rorty, 1990a:291).

If the human being does not have a "core of essence" or an inherent "nature", the human self is a mere contingent "product of time and chance" (Rorty, 1989a:22). The human self is not something to be found, but something to be shaped in a historical, cultural situation. Rorty says that "the human self is created by the use of vocabulary rather than being adequately or inadequately expressed in a vocabulary," and therefore "changing language and other social practices may produce human beings of a sort that had never

before existed" (Rorty, 1989a:7). Human beings cannot escape from their historical and cultural circumstance; they are shaped through the circumstance. Therefore, the self is not a fixed reality, rather the human being is continually changing as his or her circumstance is changing.

Rorty asserts that if human beings are contingent existences in a contingent world of language, to redescribe ourselves is "the most important thing we can do" (Rorty, 1980:358-359). To become a human being is for Rorty to invent a new language or metaphor.

> The process of coming to know oneself, confronting one's contingency, tracking one's causes home, is identical with the process of inventing a new language – that is, of thinking up some new metaphors. For any literal description of one's individuality, which is to say any use of an inherited language game for this purpose, will necessarily fail. One will not have traced that idiosyncrasy home, but merely have managed to see it as not idiosyncratic after all, as a specimen reiterating a type, a copy or replica of something which has already been identified. To fail as a poet – and thus, for Nietzsche, to fail as a human being – is to accept somebody else's description of oneself, to execute a previously-prepared program, to write, at best, elegant variations on previously written poems. So the only way to trace home the causes of one's being as one is would be to tell a story about one's causes in a new language (Rorty, 1989a:27-28).

Rorty suggests the word "the liberal ironist" for the ideal human person who invents herself by her own idiosyncratic vocabulary. The "ironist" has radical doubts about her present final vocabulary, because her vocabulary has been other vocabularies. [7] Rorty's "ironist" realises that argument phrased in her vocabulary cannot underwrite nor dissolve doubts. The "ironist" also thinks her vocabulary cannot be closer to reality than others

[7] Rorty refers to this ideal person as a woman, and she is contrasted with her masculine counterpart who appears as the metaphysician or the intellectual theorist (Rorty, 1989a:73, cf. Rosenow, 1998:256). Therefore, the "ironist" will be referred to in the feminine gender hereafter.

(Rorty, 1989a:73). [8]

According to Rorty's theory, the self does not have any essence or nature, and the circumstance (or world) where the self is situated is contingent. The self, therefore, has to create herself continually through redescription of herself to cope with the world.

3.2.3 The world

Rorty thinks that the world, including the language and the self, does not have any intrinsic nature which should be found by the self and can be represented by both language and mind. The idea that "the world or the self has an intrinsic nature is," Rorty says, "a remnant of the idea that the world is a divine creation, the work of someone … who Himself spoke some language in which He described His own project" (Rorty,

[8] In his major works, referring to many historical figures as examples, Rorty suggests many different designations to refer to the ideal human being who creates himself/herself continually. These various designations can be arranged as below (cf. Kim, 1994:399). After trying to express the ideal person with such different designations, at last, he seems to prefer the term "ironist" rather than others.

Designation of educational ideal person	Example figures in history	Reference (source)
Edifying philosophers	Dewey, Wittgenstein, Heidegger,	Rorty, 1980:368
	Goethe, Kierkegaard, Santayana, William James	Rorty, 1980:367
The strong misreader	Nietzsche, William James	Rorty, 1982:150
The strong textualist	Foucault, Bloom, Derrida	Rorty, 1982:152, 154
The strong poet	Proust, Nabokov, Newton, Darwin, Hegel, Heidegger	Rorty, 1989a:24n1
Ironists	Hegel, Nietzsche, Heidegger, Derrida, Foucault	Rorty, 1989a:79, 83
	Arnold, Pater, Leavis, Eliot, Edmund Wilson, Lionel Trilling, Frank Kermode, Harold Bloom	Rorty, 1989a:80

1989a:21). Since we cannot step outside the boundary of language, "the world on its own – unaided by the describing activities of human beings – cannot" be true or false (Rorty, 1989a:5). The world is out there, thus we cannot confront it in itself, but all we can do is to describe the world.

> The world does not speak. Only we do. The world can, once we have programmed ourselves with a language, cause us to hold beliefs. But it cannot propose a language for us to speak. Only other human beings can do that (Rorty, 1989a:6).

If the world does not provide us with any criterion to choose a description, in other words, a metaphor, then "we can only compare languages or metaphors with one another, not with something beyond language called 'fact'" (Rorty, 1989a:20). The question about "fact," such like which description (or "theory" for the modern scientist) is more accurate, though is not more meaningful. What pragmatists like Rorty want is "to replace the appearance-reality distinction by that between descriptions of the world and of ourselves which are less useful and those which are more useful" (Rorty, 1999:27).

Even though for Rorty the world does not speak anything about itself and does not provide us with any criterion to choose a proper metaphor among many alternatives, it cannot be overlooked that the world is out there and that it causes us to have beliefs. Rorty agrees that there is such a thing as brute physical resistance. However, he does not think that there is a "way of transferring this nonlinguistic brutality to *facts*, to the truth of sentences" (Rorty, 1991b:81). The pressures which come from the world "will be described in different ways at different times and for different purposes" (Rorty, 1999:33). Consequently, it is impossible to grasp "fact" which represents accurately the world in itself to us. A description serves to accomplish a certain specific purpose and becomes a way "to act so as to realize human hopes of happiness" (Rorty, 1999:33).

3.2.4 Knowledge

3.2.4.1 A critique of modern theories of knowledge

According to Rorty, the project of modern philosophy is to identify certain foundations for knowledge. Modern philosophy tries to do this on the basis of its special understanding of the nature of knowledge or the mind. The Cartesian–Lockean–Kantian tradition has conceived philosophy as foundational, knowledge as representational and the mental as privileged and even incorrigible (Bhaskar, 1991:31). Although modern philosophers insist on their own different theories of knowledge, their epistemologies are based upon common assumptions. These assumptions include the idea of mind as the mirror of nature, of knowledge as "privileged representations," and philosophy as knowledge about knowledge, its "transcendental conditions of possibility" or its "scope and limits" (Allen, 2000:220).

Rorty expresses, in his own words, the modern notions of knowledge which have been tried and established by the "epistemological project" of modern philosophy.

> ··· knowledge as accurate representation, made possible by special mental processes, and intelligible through a general theory of representation ··· (1980:6).

> Locke's idea of "learning more about what we could know and how we might know it better by studying how our mind worked ···" (1980:137).

> The idea that armed with a theory of knowledge, philosophy can define a "permanent neutral framework" for the adjudication of any claim to know (1980:211).

The most fundamental problem, for Rorty, in modern epistemology is the idea that knowledge is an attempt to represent reality and that the mind can reflect the world in itself. He says,

> The picture which holds traditional philosophy captive is that of mind as a great mirror containing various representations – some accurate, some not – and capable of being studied by pure, nonempirical methods. Without the notion of the mind as mirror, the notion of knowledge as accuracy of representation would not have suggested itself (Rorty, 1980:12).

Rorty wants to get rid of the modern epistemological notion that "the office of knowledge is to uncover the antecedently real" (Rorty, 1999:29).

If the world and the self do not have any intrinsic nature, order and essence, the idea of knowledge as an accurate representation of reality cannot be possible. Rorty thinks that the human self or mind is a mere human invention in a specific time, the 17th century, and that the self cannot confront and reflect the world in itself, but through language only (1980:113). Furthermore, he says, "We have not *got* a language which will serve as a permanent neutral matrix for formulating all good explanatory hypotheses, and we have not the foggiest notion of how to get one" (Rorty, 1980:348-349). Therefore,

> ···we should give up the idea that knowledge is an attempt to *represent* reality. Rather, we should view inquiry as a way of using reality. So the relation between our truth claims and the rest of the world is causal rather than representational (Rorty, 1999:33).

Knowledge is not "a matter of getting reality right", but rather "a matter of acquiring habits of action for coping with reality" (1991b:1). There is no "one way the world is," one way to have accurate representation, but "there are lots of ways to act so as to realize human hopes of happiness" (Rorty, 1999:33). Then, knowledge is a certain belief which has been justified to get "what we want" or to deal with reality better.

> ··· there is nothing like Descartes' "natural order of reasons" to be followed when we justify beliefs. There is no activity called "knowing" which has a nature to be discovered, and at which natural scientists are particularly skilled. There is simply the process of justifying beliefs to audiences. None of these audiences is closer to nature, or a better

representative of some ahistorical idea of rationality, than any other (Rorty, 1999:35).

Consequently, Rorty says, "we understand knowledge when we understand the social justification of belief, and thus have no need to view it as accuracy of representations." The social justification of belief is "not a matter of a special relation between ideas (or words) and objects, but of conversation, of social practice" (Rorty, 1980:170; cf. Allen, 2000:223).

In Rorty's theory, knowledge cannot be an objective, absolute, and eternal truth such as modern philosophy assumed. Knowledge is not a reflection of nature or a mental contemplation of substance and essence, but rather it is a shifting, precariously consensual activity within communities in their place and time. Rorty insists that he does not want "to substitute one sort of account of human knowledge for another, but ··· to get away from the notion of "an account of human knowledge" (1980:180). However, he also articulates a number of claims which obviously add up to a substantial account of knowledge (Allen, 2000:220).

3.2.4.2 Rorty's own notions of knowledge

In Rorty's view, knowledge is not a representation of nature, it rather is a linguistic metaphor to cope with reality. The world cannot be found, but can only be described. There is nothing behind the word which could spell it out in a formula. Rorty declares that "there is no way to think about either the world or our purposes except by using our language," (1982:xix) and that "all our knowledge is under descriptions suited to our current social purposes" (1999:48). Then, knowledge is first of all a word, not a thing-in-itself about which we should expect an interesting theory (Allen, 2000:221). In Rorty's words, "*no* linguistic items represent *any* nonlinguistic items" (1991b:2). All knowing activity or awareness is "a linguistic affair." Citing Kuhn and Dewey, Rorty suggests that "we give up the notion of science traveling towards an end called "correspondence with reality"", but instead we should regard scientific discourse as merely one vocabulary among many (Rorty, 1982:193; Grenz, 1996:154). Allen (1991:222) insists that in Rorty's

theory of knowledge, sentences replace experiences and justification is carefully distinguished from causation. The exchange of statement, in other words: conversation, replaces the contemplative monologue of mimesis and the mentalism of transcendental synthesis.

If knowledge is a mere linguistic interpretation, accuracy as a criterion of valid knowledge is no longer important. It is meaningless to judge whether a piece of knowledge represents reality accurately in itself. Rorty asserts that we have to "drop the notion of correspondence for sentences as well as for thoughts, and see that sentences are connected with other sentences rather than the world" (1980:371-372). Subsequently, he supports "the holistic view of meaning" (1980:302-303) such as,

> ··· words take their meaning from other words rather than by virtue of their representative character, and ··· vocabularies acquire their privileges from the men who use them rather than from their transparency to the real (1980:368).

Sentences or statements are true, according to Rorty, insofar as they are coherent with the entire system of beliefs, in other words, the "vocabulary" that we hold. Therefore, the idea that "the aim of inquiry is to represent the object" should be substituted with the idea that "inquiry aims at making beliefs and desires coherent" (1991b:106). Knowledge can be meaningful, according to Rorty, only in a specific context of beliefs or sentences.

Knowledge becomes a useful set of beliefs to deal with a certain reality, and it should not be regarded as a set of propositions to represent the world. Rorty says, "··· the office of knowledge" is not "to uncover the antecedently real", but "to gain the kind of understanding which is necessary to deal with problems as they arise" (1999:29). For this reason, he can say that truth is "what is good for *us* to believe" (1991b:22). The set of beliefs is changeable for dealing with stimuli more efficiently, and then it is always only a provisional and contingent perception. So, it is not necessary to account for the relation between belief and objects called "correspondence" in order to justify the belief. It is a

"rational" attitude to regard a present perception as tentative knowledge which can be substituted by a better one in the future.

> [T]he gap between truth and justification [is seen] ··· as the gap between the actual good and the possible better. From a pragmatist point of view, to say that what is rational for us now to believe may not be *true*, is simply to say that somebody may come up with a better idea. It is to say that there is always room for improved belief, since new evidence, or new hypotheses, or a whole new vocabulary, may come along (1991b:22-23).

In the pragmatic model, one key question about knowledge is, according to McCarthy (1994), "what is a piece of thinking *for*?", and he says, "The success or failure of thinking can only be judged within the context of the problem situation in which it is used. And hence rationality, in this model, is fundamentally instrumental in nature." In the pragmatic view, knowledge is regarded as a human instrument. Knowledge is a strategic description or a useful "metaphor" in Rorty's terms, to cope with reality and to predict and to control a certain environment.

For Rorty, as mentioned above, truth is not "the accurate representation of reality", but "what it is better for us to believe" (1980:10). Accordingly, knowledge is "what we are justified in believing ··· [and] "justification" [is] a social phenomenon rather than a transaction between "the knowing subject" and "reality"" (Rorty, 1980:9). If knowledge is a justified belief, the distinction between knowledge and opinion is blurred. Rorty says to distinguish knowledge and opinion "··· is simply the distinction between topics on which such agreement is relatively easy to get and topics on which agreement is relatively hard to get" (1991b:23). Therefore, knowledge can be regarded as "the ability to get agreement by using persuasion rather than force" (1991b:88).

What is interesting here is that the only condition of knowledge is "justification." Justification comes in two different ways. On the one hand, as discussed above, a certain proposition can be justified through being coherent within the context of entire propositions. Rorty says,

> We can think of knowledge as a relation to propositions, and thus of justification as a relation between the propositions in question and other propositions from which the former may be inferred (1980:159).

On the other hand, justification comes from social agreement, which is especially important in Rorty's view. According to him, the fact that "S knows that p" should be regarded "as a remark about the status of S's reports among his peers" (1980:175). "Justification is not a matter of a special relation between ideas (or words) and objects, but of conversation, or social practice" (1980:170). Conversation is said to be "the ultimate context within which knowledge is to be understood" (1980:389). Therefore, the community is the "source of epistemic authority" (1980:188). Rorty's alternative standard of justification makes knowledge depend on what "a given society, or profession, or other group, takes to be good ground for assertions of a certain sort" (1980:385; cf. Allen, 2000:220-225).

Rationality is fundamentally social in nature, because the ultimate court of appeal in which we test the merit of a belief is the community of inquirers with which we are associated. Grenz (1996:158) explains this notion: "we should not seek an objective, external foundation for the human inquiry into truth, we need only conform ourselves to the constraints that arise through our conversations with our fellow inquirers." The proper goal of philosophy is not "to find objective truth" but "to keep the conversation going" (1980:377). Rorty says,

> there are no constraints on inquiry save conversational ones – no wholesale constraints derived from the nature of the objects, or of the mind, or of language, but only those retail constraints provided by the remarks of our fellow-inquirers (1982:165).

"We can only come under epistemic rules when we have entered the community where the game governed by those rules is played" (Rorty, 1980:187). All matters concerning epistemic status are "a sociological rather than metaphysical concern" (Rorty, 1980:219).

Knowledge is a socially justified belief through gaining agreement from a community and then it is always in the context of conversation. For Rorty, "conversation" in a certain communal situation is the ultimate context within which knowledge is to be understood (Trigg, 1993:79).

If knowledge is based on social agreements and exists in a context of conversation, it cannot be valid universally to all different communities. Rather, the validity of knowledge should be confined to a specific community. Therefore, knowledge is ineluctably "ethnocentric," in Rorty's pragmatic view. We can only judge a person or way of thinking as "rational" or "irrational" by reference to the standards that we share as a community; we simply have no other option" (McCarthy, 1994). As far as knowledge, truth, and rationality are concerned, "there is as Hegel said no "out and out Other" by which they are measured. They are *ours* or *for-us*" (Allen, 2000:224). Rorty declares,

> ··· there is nothing to be said about either truth or rationality apart from descriptions of the familiar procedures of justification which a given society – *ours* – uses in one or another area of inquiry (1991b:23).

Therefore, for Rorty, the word "true" does not mean that "his view corresponds to the nature of things." Rather, he uses the word "to commend his own view" in a society to which he belongs as a member. Rorty explains about being ethnocentric:

> To be ethnocentric is to divide the human race into the people to whom one must justify one's beliefs and the others. The first group – one's *ethnos* – comprises those who share enough of one's beliefs to make fruitful conversation possible. In this sense, everybody is ethnocentric when engaged in actual debate, no matter how much realist rhetoric about objectivity he produces in his study (1991b:30).

Truth or knowledge is, in the pragmatist view, something good for *us* to believe (Rorty, 1991b:22). What we can do is not to "find" an absolute knowledge, but to devise a certain description for us. Then we may commend it to other people and if we get agreements

from our peers, it may become "true" and we can call it "our" knowledge. Therefore, in an epistemological affair, the most important thing is not "objectivity", which can be presupposed based on the concept of "absolute truth", but "solidarity", which can be obtained through "unforced agreement" among peers.

For Rorty, "rationality" is a matter of "solidarity" with the community to which one belongs. One is counted as rational when one's thinking is in accord with the standards accepted by that community, and irrational otherwise. Therefore, it is a fundamentally rational move to attempt to expand the limits of community (McCarthy, 1994). Rorty insists,

> For pragmatists, the desire for objectivity is not the desire to escape the limitations of one's community, but simply the desire for as much intersubjective agreement as possible, the desire to extend the reference of 'us' as far as we can (1991b:23).

and,

> Pragmatists would like to replace the desire for objectivity – the desire to be in touch with a reality which is more than some community with which we identify ourselves – with the desire for solidarity with that community (1991b:39).

For attaining beliefs which we can call "true", the pragmatist does not seek to "transcend", but to expand the limits of his community. It can be done through bringing as many "voices" as possible into conversation, and searching actively for the potential intersubjective agreement among as an ever larger "us" (McCarthy, 1994). Rorty says the reason is that "the best way to find out what to believe is to listen to as many suggestions and arguments as you can" (1991b:39).

Rorty calls for a move from epistemology to hermeneutics. Epistemology presumes a commensurability among all different discourses, but hermeneutics does not need such a kind of supposition. As epistemology presumes, if we attain an agreement among many

different discourses, it is necessary to find common ground among them at first. If there is no common ground, it is not possible to bridge the different discourses and to draw an agreement or consensus among different beliefs.

> Epistemology sees the hope of agreement as a token of the existence of common ground which, perhaps unbeknown to the speakers, unites them in a common rationality. For hermeneutics, to be rational is to be willing to refrain from epistemology—from thinking that there is a special set of terms in which all contributions to the conversation should be put—and to be willing to pick up the jargon of the interlocutor rather than translating it into one's own. (Rorty, 1980:318)

Hermeneutics is a practical discourse to try to improve our understanding of the world without epistemological assumptions of common ground. Rorty continues to compare hermeneutics with epistemology.

> For epistemology, to be rational is to find the proper set of terms into which all the contributions should be translated if agreement is to become possible. For epistemology, conversation is implicit inquiry. For hermeneutics, inquiry is routine conversation. Epistemology views the participants as united in what Oakeshott calls an *universitas* – a group united by mutual interests in achieving a common end. Hermeneutics views them as united in what he calls a *societas* – persons whose paths through life have fallen together, united by civility rather than by a common goal, much less by a common ground (1980:318).

Rorty suggests to replace "systematic philosophy" which is based on modern epistemology, with his so-called "edifying philosophy" which is in accordance with hermeneutics. The edifying philosophy is not interested in "what is out there in the world, or in what happened in history", but in "what we can get out of nature and history for our own uses" (1980:359). The end of thinking and inquiry is, in his new philosophy, not to pursue "objective knowledge" or "absolute truth", rather just to engage in "edification" or ongoing "conversation" (1980:373, 377; 1982:172; Arcilla, 1995:49-78).

For Rorty, there is no epistemological difference between truth about what ought to be and truth about what is. He also denies any metaphysical difference between morality and science. Rorty regards ethics and physics as equally objective, and he refuses to accept the modern tendency to elevate scientists as more objective, logical, methodological than anyone else (Rorty, 1991b:39). All scientific inquiry is a linguistic interpretation, and thus natural science is not different inherently from other sciences, i.e. humanities or social science (Rorty, 1991b:78-92). Scientific knowledge is a certain kind of description among many different descriptions, therefore it does not have any privilege to claim superior status in contrast to other descriptions.

In view of the above discussions, Rorty's idea of knowledge can be summed up as follows:

(1) Human beings can confront or experience the world only through language, therefore, knowledge is a linguistic description or interpretation, and the knowing activity is totally a linguistic affair. Knowledge is a vocabulary or a word.

(2) Knowledge is not justified through its correspondence with the world in itself, but through its coherence within the entire context of sentences to which it belongs.

(3) Knowledge is an instrumental or strategic description to cope with the reality or the world usefully. Knowledge is one kind of tool for the human to handle outer stimuli.

(4) Knowledge is a socially justified belief. Knowledge is a belief which is regarded good to believe, and which is endorsed through getting agreement in a community. Therefore it is impossible to distinguish between knowledge and opinion.

(5) Knowledge can be existent and meaningful only in a specific context of conversation.

(6) The validity/meaning of knowledge is confined to a particular community. All knowledge is a certain particular community's knowledge, and therefore it is inherently "ethnocentric". Knowledge cannot be valid universally to all societies, but can only be "ours".

(7) Rationality is an ability not to reach an "objectivity" of which its main concern is to represent the world accurately, but to expand "solidarity" or "intersubjectivity" of which its main interest is to extend social agreement. In the pragmatist view, "objectivity"

can be attained through extending the limits of community and intersubjective agreement.

(8) To keep a conversation going in order to promote pragmatic knowledge, hermeneutics or a hermeneutical way of thinking becomes more important and proper than epistemology or an epistemological way of thinking in knowledge affairs.

(9) Science or scientific knowledge is one kind of language description, therefore it does not have any privilege among other kinds of linguistic description such as literature or poetry. There is no difference either between natural science, social science and other kinds of scientific disciplines.

3.2.4.3 Postmodern characteristics of Rorty's view of knowledge

At the end of the previous chapter, after the historical survey on the notions of knowledge from the modern era to the very recent time in the Western philosophy, postmodern characteristics of knowledge have been extracted generally. They can be summed up as the idea of postmodern knowledge based on 1) the incredulity on the modern ideal of objective knowledge, 2) the preference of plural reasons over universal reason, 3) criticism of foundationalism, and 4) awareness of the peculiar role of language in knowledge (see section 2.5).

In this paragraph, the discussion will be focused on whether Rorty's notions of knowledge are postmodern or not, through applying the already extracted common characteristics of postmodern knowledge in the previous chapter to Rorty's idea of knowledge.

- *Antagonism to the modern notion of objective knowledge and its self-centredness*

In the first place, Rorty's antagonism to the modern notion of self-centredness is indisputable. The self, or knowing subject does not have any intrinsic essence or nature. Individual identity or knowing self should be seen as relations rather than as essences. Rorty says that "There is nothing which is vital to the self-identity of a being, independent of the descriptions we give of it" (1999:235), and that "the boundaries of the self are

fuzzy and flexible" (1999:80). For Rorty, the self is a "set of beliefs and desires," or "centerless networks of beliefs and desires." Therefore the notion of self is not a matter which can be found, but can be created only in interaction with other individuals or in a community to which he or she belongs (Rorty, 1990a:291; 1991a:147; cf. Sundin & Johnnisson, 2005:38-39). In Rorty's opinion, knowledge cannot be construed from the essence of the self as modern philosophers have tried to do, rather knowledge is always in a changing process like the self. Knowledge and the self are interdependent in shaping each other. The self formulates its own knowledge, and simultaneously knowledge also affects the self in shaping or creating it (cf. 2.4.4 and 3.2.2). For Rorty, knowledge comes from the agreement of intersubjectivity, not the essence of the self. Rorty does not pursue the "modern" objectivity in knowledge together with other postmodern thinkers, such as Lyotard, Foucault and Derrida. Humans do not have any possibility to confront the world in itself, rather they can experience and describe the world only through language. Humans cannot transcend the boundary of language to compare the world in itself with its linguistic description. There is no neutral outside standard or framework to attain objective knowledge. Therefore, all knowledge claims are linguistic interpretations and it cannot be judged which knowledge claims are more accurate or objective than others. In a sense, Rorty wants to use the term "objectivity" in his own way according to the pragmatic view. Knowledge is a socially justified belief, therefore the reliability or validity as certain knowledge depends on how much the knowledge claim gains social agreement in its particular community, not how much it accurately represents the object reality. Rorty substitutes the pragmatic new "objectivity" with "agreement," in other words "solidarity" for the modern ideal of "objectivity as correspondence" in knowing affairs (1980:333-342).

♦ *Preference of plurality over universality in knowledge*

In the second place, Rorty's idea of knowledge coincides with the postmodern preference of plurality over universality. Pragmatism's renunciation of the idea that truth consists of correspondence with reality implies that "there is no need to make all true propositions cohere into one unified vision of how things are" (Rorty, 1999:267).

"Abandoning the correspondence theory of truth means," Rorty (1999:270) says, "no longer insisting that truth, like reality, is one and seamless." If there is no absolute single standard of knowledge, then there is no privileged description or knowledge. All we can do is to dedicate ourselves "to the maximization of opportunities for individual variation, and group variation insofar as the latter facilitates the ability of individuals to recreate themselves" (Rorty, 1999:237). Rorty explains that the term "philosophical pluralism" means "the doctrine that there is a potential infinity of equally valuable ways to lead a human life, and that these ways cannot be ranked in terms of degree of excellence" (1999:268). Rorty makes radical pluralism intellectually viable through arguments against the "correspondence theory of truth."

- *Anti-foundational view of knowledge*

In the third place, Rorty tries to establish an anti-foundational idea of knowledge. In his view, modern philosophers try to reach eternal truth or absolutely true knowledge through finding its foundation. For this purpose, they separate the subject and the object in knowledge and try to find a certain privileged knowledge or perception. However, the modern project of knowledge cannot be possible, because the privileged knowledge that modern philosophy assumes does not exist. It is impossible, for humans, to transcend the world in which they live in order to compare their perception or knowledge with reality in itself. There is no arbitrator as modern philosophers assume to judge whether our knowledge is true or not. Rorty insists that all knowledge should be justified not through a privileged foundation of knowledge, but through the context of social agreement (1980:178). In Rorty's anti-foundational view, knowledge is not inevitable perception based on a foundation, but a contingent belief justified as temporary by a certain society.

- *Awareness of importance of language*

In the last place, it is indubitable that language is the most important concept and plays a prominent role in Rorty's notion of knowledge. Knowledge does not represent nature and humans do not confront the world in itself. Humans cannot transcend the boundary of their language situation, therefore all human experience is lingual. All knowing activity

and awareness are linguistic affairs. Knowledge is a linguistic description for dealing with a certain reality and it can be justified through the coherence of entire sets of linguistic description. In Rorty's notion of knowledge, both the world and the self have no intrinsic essence or nature. They can be only described through language. Furthermore, language is not what is given to us, but is a human invention, therefore language does not have any intrinsic essence like the world and the self. Ultimately, language should be revised or recreated continually to create a new self and to describe the world more effectively for the happiness of humans. This creation of new vocabulary or metaphor is for Rorty what ultimately should concern humans. Rorty's educational notions also are based mainly on this idea.

Based on the above discussion, it can be concluded that Rorty's idea of knowledge conforms with the common characteristics of postmodern knowledge as expounded in the previous chapter. Rorty can be included in the circle of postmodern thinkers, and his theory of knowledge can be regarded as an example of postmodern epistemology.

3.3 Rorty's idea of education

Rorty is doubtful about "the relevance of philosophy to education", and he is not sure that he, as a philosopher, has anything to say about education (Rorty, 1990b:41). He cautions that "We should be careful that our philosophical sophistication does not get in the way of our larger political or educational purpose" (Rorty, 1990b:44). Paradoxically, in spite of his proclamation of the irrelevance of philosophy to education, his philosophical works delineate a distinct philosophy of education. He also deals with educational issues and presents his educational ideas directly in several articles (Rorty, 1982; 1988; 1989b; 1990b; 1999; cf. Reich, 1996; Rosenow, 1998:260; Wain, 1995:397).

In this section, before dealing with the educational implications of his epistemology, Rorty's educational idea which he expresses explicitly or implicitly will be discussed in two main themes:

(1) Edification and literature criticism

(2) Socialization and individuation

3.3.1 Edification and literature criticism

3.3.1.1 Edification as Rorty's educational idea

Rorty's view of the human being can be the best starting point for an explication of his idea of education (Reich, 1996). According to Rorty, human self or the mind does not have any transcendental or intrinsic essence. There is no "pure reason" or "true self" as assumed by essentialists, and there is no intrinsic human nature on which human beings' solidarity is grounded. Human self is a historical outcome which has been shaped through interiorising symbols, beliefs, opinions and vocabularies through linguistic interaction with others in his or her society.

> … the human self is created by the use of a vocabulary rather than being adequately or inadequately expressed in a vocabulary, then we should at last have assimilated what was true in the Romantic idea that truth is made rather than found.
>
> … human beings whose language changed so that they no longer spoke of themselves as responsible to nonhuman powers would thereby become a new kind of human beings (Rorty, 1989a:7).

Language, through which the human self is formed, is a kind of tool that humans devised to use. Language, therefore, does not have any intrinsic essence and is contingent. Consequently, human self, which has been caused by language, is also contingent. Rorty holds the view that "human beings are centerless networks of beliefs and desires and that their vocabularies and opinions are determined by historical circumstance" (1991b:191). While there may be large areas in which our beliefs and desires overlap, in Rorty's view, these commonalities are contingent and not a result of some core essence of *Homo sapiens*.

If the human being is just an agglomeration of beliefs and desires which is continually

shaped and self-moulded, the main interest of education should be in forming those beliefs and desires, and directing that shaping and moulding. The human being, according to Rorty, needs to learn and adapt a certain linguistic system of his or her society since he or she is born into a certain society whether he/she likes or not, and should live in his or her society. It is a kind of educational work called "socialization" to make the human being acquire the language of his or her society, and exchange beliefs and desires with others through the language. This self, which is shaped through socialization, is not his or her own self, because it is shaped by the language of others. For shaping the real self, he or she must get out of his or her socialised self and must create his or her own vocabulary or metaphor. It is another kind of education, according to Rorty, called "individuation" that helps a person to create his or her own self through describing himself or herself with his or her own vocabulary.

Rorty thinks that education has mainly been associated with the acquisition and transmission of knowledge. The quest of knowledge, however, is no longer in point, since humankind cannot be described creatively by the transmission of knowledge. For Rorty, the term "knowledge" implies the grasping of essential, timeless truth and an underlying epistemology that seeks to represent as accurately as possible the world around us (Reich, 1996). He needs to substitute a new word instead of the term 'education' or needs to redefine the term to contain fully his notion of education as self-creation. It is "edification" that he suggests to use instead of "education."

> Since "education" sounds a bit too flat, and *Bildung* a bit too foreign, I shall use "edification" to stand for this project of finding new, better, more interesting, more fruitful ways of speaking. The attempt to edify (ourselves or others) may consist in the hermeneutic activity of making connections between our own culture and some exotic culture or historical period, or between our own discipline and another discipline which seems to pursue incommensurable aims in an incommensurable vocabulary. But it may instead consist in the "poetic" activity of thinking up such new aims, new words, or new disciplines, followed by, so to speak, the inverse of hermeneutics: the attempt to reinterpret our familiar surroundings in the

> unfamiliar terms of our new inventions. In either case, the activity is (despite the etymological relation between the two words) edifying without being constructive – at least if "constructive" means the sort of cooperation in the accomplishment of research programs which takes place in normal discourse. For edifying discourse is *supposed* to be abnormal, to take us out of our old selves by the power of strangeness, to aid us in becoming new beings (Rorty, 1980:360).

In Rorty's view, "edification" is an ideal type of education; it is not only the matter to teach and learn about normal discourse or the result of normal science, rather it is an attempt to create a new self through fostering abnormal inquiry or discourse (Rorty, 1980:363). Rorty's concept of "edification" involves mainly "abnormal discourse" or abnormal science, in Kuhnian terms, not the "normal" one to which the term of education refers. Edification describes the lifelong project of self-formation and re-creation which acknowledges the conception of human beings as contingent, centreless networks of beliefs and desires.

Rorty insists that the most important thing is conversation in edification. Edification or "edifying philosophy," he says, "aims at continuing a conversation, rather than at discovering truth" (Rorty, 1980:373). This conversation has a unique meaning. He suggests the word "conversation" as a new idea to distinguish between his new approach and the traditional concept of "dialogue" for truth. Conversation is an action to renew or to improve our perception or understanding through encountering a completely different idea or opinion. It does not pursue the objective truth or absolutely true knowledge. Traditional dialogue tries to finish off conversation or dialogue itself by means of a metaphysical or epistemological foundation through which universal truth can be found and guaranteed. However, Rorty's conversation is not like dialogue. Rorty (1982:172) says,

> The pragmatists tell us that the conversation which it is our moral duty to continue is merely our project, the European intellectual's form of life. It has no metaphysical nor epistemological guarantee of success. Further

> (and this is the crucial point) *we do not know what "success" would mean except simply "continuance."* We are not conversing because we have a goal, but because Socratic conversation is an activity which is its own end.

Conversation does not have any purpose except conversation itself. In other words, to keep conversing in itself is most important in Rorty's idea of conversation and of what the conversation pursues ultimately.

The continuation of conversation indicates that the participants may gain, through the conversation, a new insight or opinion to realize a shortcoming of their existing belief and perception, and to improve them. Rorty's conversation pursues edifying one's belief and to reformulate one's knowledge from the old belief through encountering a new or an alien set of beliefs. Edification cannot end up in a certain stage of life, rather it should continue through a whole lifetime and therefore conversation also should continue. Rorty denies any attempts to close off the conversation, that is the project of modern systematic philosophy through privileging a certain description among others and through suggesting universal commensuration.

> ··· the point of edifying philosophy is to keep the conversation going rather than to find objective truth. Such truth, in the view I am advocating, is the normal result of normal discourse. Edifying philosophy is not only abnormal but reactive, having sense only as a protest against attempts to close off conversation by proposals for universal commensuration through the hypostatization of some privileged set of descriptions. The danger which edifying discourse tries to avert is that some given vocabulary, some way in which people might come to think of themselves, will deceive them into thinking that from now on all discourse could be, or should be, normal discourse. The resulting freezing-over of culture would be, in the eyes of edifying philosophers, the dehumanization of human beings. The edifying philosophers are thus agreeing with Lessing's choice of the infinite *striving for* truth over "all of Truth" (Rorty, 1980:377).

Edification is always incomplete and always in some state of construction, reconstruction, renovation or development.

In the pragmatist view, if we pursue the only absolute true knowledge, it is not possible to keep continuing the conversation with those who have a different perception, belief or vocabulary. To keep the conversation that edifying philosophy acclaims, it is necessary to accept the pragmatic assumption that the truth or knowledge is not an accurate representation of the world, rather it is justified through social agreement.

> … justification is not a matter of a special relation between ideas (or words) and objects, but of conversation, of social practice. … we understand knowledge when we understand the social justification of belief, and thus have no need to view it as accuracy of representation. Once conversation replaces confrontation, the notion of the mind as Mirror of Nature can be discarded (Rorty, 1980:170).

Rorty's idea of conversation or edification itself does not accept any foundation of knowledge. Conversation does not bring us the absolute truth, instead it can prepare a certain criterion of knowledge through social agreement. Rorty believes in the possibility of learning through conversation between those who have different languages which cannot be even translated into each other's language. He thinks that "untranslatability does not entail unlearnability, and that learnability is all that is required to make discussability possible" (Rorty, 1991b:48; cf. 215). Humans can improve, recreate or edify their own selves through reformulating their old perceptions while they engage in conversation with others who have different vocabularies. Edification, which means a ceaseless recreation of self through conversation, is one of Rorty's ideas of education.

Rorty suggests the use of the term "edification" to express his educational idea, but this term appears only in *Philosophy and the Mirror of Nature* (1980, originally published in 1979). After that book, Rorty uses a new expression, "literary criticism", instead of "edification." Although he uses different terminologies, his main idea about education does not change much and shows a certain coherence throughout his major works.

3.3.1.2 Literary criticism

Rorty proposes a new term, "literary criticism," to refer to his idea of philosophy which is in contrast with the traditional, or according to Rorty, "systematic philosophy." The concept of "literary criticism" does not refer only to a genre of literature, such as a writer's work, nor does it intend to substitute literature for philosophy. Literary criticism means, in Rorty's view, an action to improve one's own perception, belief, and vocabulary through comparison with others'. Rorty insists that "literary criticism" originally meant comparison and evaluation of literatures, i.e. plays, poems, and novels, but it got extended to cover all kind of criticisms or books which seems "to provide candidates for a person's final vocabulary" (1989a:81). Therefore, all kind of works to invent a new vocabulary or to redescribe the world in contrast with the old one can be called "literary criticism."

> The ironist's preferred form of argument is dialectical in the sense that she takes the unit of persuasion to be a vocabulary rather than a proposition. Her method is redescription rather than inference. (…)
> I have defined "dialectic" as the attempt to play off vocabularies against one another, rather than merely to infer propositions from one another, and thus as the partial substitution of redescription for inference. (…)
> A more up-to-date word for what I have been calling "dialectic" would be "literary criticism" (Rorty, 1989a:78-79).

This notion of "literary criticism" as a philosophy in "a post-Philosophical culture" corresponds to the notion of "edification" which is a philosophical activity to re-formulate the self. Literary criticism, in Rorty's view, refers to all encompassing activities to criticise a well-accepted language, vocabulary, or theory for creating a new one and replacing an old one.

Literary criticism, like edification, denies any privileged vocabulary or commensurable foundation which should be followed by all people, but tries to devise an improved vocabulary through comparing the advantages and disadvantages of each vocabulary among many different vocabularies. Through this new revised vocabulary the best self can be created.

> We ironists hope, by this continual redescription, to make the best selves for ourselves that we can.
>
> Such comparison, such playing off of figures against each other, is the principal activity now covered by the term "literary criticism." ··· we revise our own moral identity by revising our own final vocabulary (Rorty, 1989a:80).

There is no objective, ultimate criterion to criticise a certain vocabulary, therefore a criticism of vocabulary can be done only through comparing different vocabularies. Rorty (1989a:80) says that "Since there is nothing beyond vocabularies which serves as a criterion of choice between them, criticism is a matter of looking on this picture and on that, not of comparing both pictures with the original." Therefore, the meaning of "rational" is not "methodical", rather it means a set of moral virtues, such as "tolerance, respect for the opinions of those around one, willingness to listen, reliance on persuasion rather than force" (Rorty, 1991b:37).

Rorty designates all sets of concepts, paradigms, or behaviour patterns, on which our perception, thinking, and behaviour is grounded, as "vocabulary", or "metaphor." In Rorty's view, knowledge or a knowledge claim is a linguistic interpretation of the world or a "discourse" which is constructed by "vocabulary" or "metaphor." Pragmatists distinguish two different kinds of discourse, i.e., "normal" and "abnormal", through generalising Kuhn's distinction between "normal" and "revolutionary" science. "Normal" discourse is "that which is conducted within an agreed-upon set of conventions about what counts as a relevant contribution, what counts as answering a question, what counts as having a good argument for that answer or a good criticism of it" (Rorty, 1980:320). "Abnormal" discourse might be a totally new description which is possible through inventing a new vocabulary or metaphor and it cannot be understood within the set of conventions which makes possible the normal discourse (Rorty, 1980:320-321). "Literary criticism" tries to find shortcomings of normal discourse and to invent "novel metaphors" which can substitute the previous metaphors, and consequently, pursues the promotion of an abnormal discourse.

Literary criticism is, like edification, related to the creation of a new self. Since the human self is created by the use of vocabulary, to invent a new vocabulary means that the self is renewed by discarding an old vocabulary, which formed the previous self, and by adapting a new one (Rorty, 1989a:7, 27). Rorty suggests "a strong poet" as an ideal type of human with relation to literary criticism (1989a:25-26). Strong poets are not merely poets in literature, but all persons who invent new descriptions of the world, including philosophers, scientists, artists and so on. Strong poets see "self-knowledge as self-creation." For them, "the process of coming to know oneself, confronting one's contingency, tracking one's causes home, is identical with the process of inventing a new language, that is, of thinking up some new metaphors" (Rorty, 1989a:27).

> To fail as a poet – and thus, for Nietzsche, to fail as a human being – is to accept somebody else's description of oneself, to execute a previously prepared program, to write, at most, elegant variations on previously written poems. So the only way to trace home the causes of one's being as one is would be to tell a story about one's cause in a new language (Rorty, 1989a:28).

The poet fears that he might end his days in such a world, a world he never made, an inherited world (Rorty, 1989a:29. cf. 41). Therefore, as Nietzsche insists, a human life can be triumphant "just insofar as it escapes from inherited descriptions of the contingencies of its existence and finds new descriptions" (Rorty, 1989a:29).

To invent a new vocabulary or metaphor does not mean that all other vocabularies should be replaced or abolished by the new one. According to Rorty, to create a new vocabulary aims at "expanding the repertoire of alternative descriptions rather than The One Right Description" (1989a:39-40). A metaphor is an unfamiliar use of an old word to reveal something new and works as a clue to acquire a new insight of the world (Rorty, 1989a:41; 1991b:125). Therefore, on the one hand, a new metaphor should be understood only "against the background of other old words being used in old familiar ways." If a language which was "all metaphor" could not be understood, it might be just

babble, not a language (Rorty, 1989a:41). On the other hand, however, new metaphors do not fit into the "old language-game and serve as occasions for modifying those language-games and creating new ones" (Rorty, 1991b:125).

> If 'understanding' or 'interpreting' means 'bringing under an antecedent scheme', then metaphors cannot be understood or interpreted. But if we extend these two notions to mean something like 'making use of' or 'coping with', then we can say that we come to understand metaphors in the same way that we come to understand anomalous natural phenomena. We do so by revising our theories so as to fit them around the new material. We interpret metaphors in the same sense in which we interpret such anomalies – by casting around for possible revision in our theories which may help to handle the surprises (Rorty, 1991b:167).

In this sense, metaphors are like the avant-gardes of abnormal discourse. Metaphors do not carry well-known knowledge nor preserve it, but renovate the prevailing knowledge and make it new. Metaphors are necessary, for Rorty, to gain knowledge, "even though they did not (while alive) express knowledge" (1991b:168).

Rorty (1989a:16) says, "Old metaphors are constantly dying off into literalness, and then serving as a platform and foil for new metaphors." A new insight, discovery, or idea which cannot be expressed in old language-games should be uttered by metaphors. A vital metaphor becomes a dead metaphor and one of the old vocabulary, if the novelty, that the metaphor tries to allude, is revealed and accepted by a community as a well-known vocabulary. The dead metaphor can be used as a launching pad for a new metaphor.

> If it [a sentence without a fixed place in a language game] *is* savored rather than spat out, the sentence may be repeated, caught up, bandied about. Then it will gradually require a habitual use, a familiar place in the language game. It will thereby have ceased to be a metaphor – or, if you like, it will have become what most sentences of our language are, a dead metaphor. It will be just one more, literally true or literally false, sentence of the language (Rorty, 1989a:18).

Through devising new metaphors and replacing them with old ones, society can progress and the self can grow up (Rorty, 1991a:17-18). Therefore, to devise new metaphors, and to renovate language-games should be a never-ending work.

> [Metaphors] have no place in the language-game which has been played prior to their production. But they may, and indeed do, have a crucial role in the language-games which are played afterwards. For, by being literalized, becoming "dead" metaphors, they enlarge logical space. So metaphor is an essential instrument in the process of reweaving our beliefs and desires; without it, there would be no such things as a scientific revolution or cultural breakthrough, but merely the process of altering the truth-values of statements formulated in a forever unchanging vocabulary (Rorty, 1991b:124).

If we do not invent a new language by renewing metaphors, we will become stagnant in an old language and will have sluggish selves. Inventing new vocabularies, devising new metaphors constantly, and replacing old ones with new ones as quickly as possible, these are what Rorty intends to accomplish through literary criticism.

Literary criticism is carried out by those who realise that there is no privileged meta-vocabulary which has a supreme authority to justify their beliefs, and that even their final vocabularies are contingent and not complete. These people, whom Rorty calls "strong poets," "textualists," or "ironists," try to invent new languages, vocabularies, and metaphor, and then try to describe this world differently and better. Literary criticism pursues to create a new self through constantly comparing new vocabularies and old ones, and evaluating advantages and disadvantages of the various ways of talking which humans have invented (Rorty, 1982:xi). Therefore, "literary criticism" and "edification" have the same educational meaning which is pursuing a new self by creating new languages. In a sense, the new vocabularies that Rorty suggests, such as "edification", "literary criticism" are metaphors to express his educational ideas.

3.3.2 Socialization and individuation

Rorty's educational idea, "edification," is by its nature, always parasitic and reactive against normal discourse. Edification, which is to attempt abnormal discourse for creating a new self, should depart from normal discourse and "always employs materials provided by the culture of the day" or "a well-understood norm." We cannot form or create ourselves *ex nihilo,* but must always react against our extant beliefs and desires. Rorty acknowledges, if we attempt abnormal discourse from the beginning, without recognising the abnormality, it is "madness" (Rorty, 1980:365, 361; 1989:41. cf. Neiman, 1991:375; Reich, 1996).

Consequently, Rorty divides education into two different components: "socialization" and "individuation" (1990b:41). This idea of distinguishing two phases in education summarises the whole of Rorty's educational outlook (Rosenow, 1998:260). In this section, these two different educational components, socialization and individuation will be examined.

3.3.2.1 Philosophical background of two different stages in education

Rorty's idea to divide education into two linear phases comes from his philosophical idea about "freedom" and "solidarity" or, in more Rortyan terms, "the private and the public." The problem of the relationship between the private and the public is actually one of the perennial issues in the history of Western philosophy. In Rorty's view, "the attempt to fuse the public and the private lies behind" both Plato's attempt to answer the question about antagonism between injustice and justice, and Christianity's claim to attain self-realisation through service to others (1989a:xiii). Furthermore, in Rousseau's portrayal about the natural man and the citizen, Marx's discussion on the relationship between bourgeois and proletarian, and Dewey's argument about the dualism between individual and society, the main issue is the relationship between the public and the private (Rosenow, 1998:262-264).

Rorty's attitude toward this matter is revolutionary in contrast with other philosophers and

his predecessors who have tried to bridge the gap between the private and the public. He insists that the duality between the private and the public cannot be abolished, but rather accepted and even fostered. Rorty, rather than solving the problem of dualism, perpetuates it (Rosenow, 1998:262-264; Rorty, 1989a:33-34).

> … the old tension between the private and the public remains.… The vocabulary of self-creation is necessarily private, unshared, unsuited to argument. The vocabulary of justice is necessarily public and shared, a medium for argumentative exchange.… Both are right, but there is no way to make both speak a single language.…we drop the demand for a theory which unifies the public and private, and are content to treat the demands of self-creation and of human solidarity as equally valid, yet forever incommensurable (Rorty, 1989a: xiii-xv).

For Rorty (1989a:34), there is no such kind of human nature or essence that can be a foundation to relate between what is good for the individual and what is good for society. Therefore, as he says, "there is no way to bring self-creation together with justice at the level of theory" (Rorty, 1989a:xiv).

In accordance with his idea about the antagonism between the private and the public, Rorty separates education into two different phases, lower and higher education, to accomplish both social solidarity and individual self-creation.

> Education seems to me two quite distinct enterprises: lower education is mostly a matter of socialization, of trying to inculcate a sense of citizenship, and higher education is mostly a matter of individuation, of trying to awaken the individual's imagination in the hope that she will become able to re-create herself. I am not sure that philosophy can do much for any of these enterprises (Rorty, 1990b:41).

According to Rorty, there are two different groups conflicting with each other in educational discourse. The one is the conservatives or the political rights who emphasise truth and think that "at least some of the traditional slogans of our society, [and] some

pieces of its conventional wisdom, are the deliverances of 'reason'" (Rorty, 1999:114-115). They adhere to the notion of education as "socialization." The other one is the political left, or the radicals who stress freedom and think that "the society in which we live is 'mainly unreasonable'" so, "continuing to inculcate the conventional wisdom amounts to betraying the students" (Rorty, 1999:115-116). Education, for leftists, should aim at individuation. In Rorty's view, however, both of the groups do not realise that "education is not a continuous process from age five to age 22" and "fall into the trap of thinking that a single set of ideas will work for both high school and college education" (1999:117). It cannot be possible since "the word 'education' covers two entire distinct, and equally necessary, processes – socialization and individuation" (Rorty, 1999:117).

The two entirely distinct educational tasks should be accomplished in different educational phases, because the tension between these two different attitudes on education cannot be relieved through a single educational phase or enterprise. For this reason, in Rorty's view, education in primary and secondary school level should be "a matter of socialization," but in the higher education from college level its task will be "individuation" which encourages students "to reproduce themselves" (Rorty, 1999:116).

3.3.2.2 Socialization

Socialization means to inculcate the young with a set of certain languages or beliefs which has been already accepted as normal discourse by their society. There is no such thing as human nature, but only "the shaping of an animal into a human being by a process of socialization" (Rorty, 1990b:118). Therefore, in order to re-create ourselves, which is an ultimate goal of education for Rorty, we must first be socialised into the dominant discourse and conventional descriptions of our community. Rorty (1980:365) declares that "education has to start from acculturation. ··· we cannot be educated without finding out a lot about the descriptions of the world offered by our culture." Acculturation may include what Rorty so dislikes, such as epistemological stances about knowledge and essential truths (Reich, 1996). Rorty (1980:365-366) says that "the possibility of hermeneutics is always parasitic upon the possibility (and perhaps upon the

actuality) of epistemology, and that edification always employs materials provided by the culture of the day."

Rorty (1999:116) says that "education up to the age of 18 or 19 is mostly a matter of socialization – of getting the students to take over the moral and political common sense of the society as it is." Education for socialization tries to make the young to live as good citizens in the public realm. For this purpose, "lower education should be aimed primarily at communicating enough of what is *held to be* true by the society to which the children belong, so that they can function as citizens of that society" (Rorty, 1990b:42). It is not the educators' business to examine whether what they teach is true or not. Although if the educator "has doubts about the society in which she lives", the educator is expected to teach what society regards as true (Rorty, 1990b:42).

> Primary and secondary education will always be a matter of familiarizing the young with what their elders take to be true, whether it is true or not. It is not, and never will be, the function of lower-level education to challenge the prevailing consensus about what is true (Rorty, 1999:118).

Therefore, the story which students learn and acquire about their society will overlap sufficiently with their parent's story, "so that those parents do not think of the schools as subversive institutions." If a teacher does not agree on the truth which his society commonly accepts, "then he had better find another profession" (Rorty, 1990b:42).

It is not possible to socialise the youth in a way "to make them continually dubious about their own process of socialization" (Rorty, 1989a:87). Rorty (1999:116) says that "any society has a right to expect that, whatever else happens in the course of adolescence, the schools will inculcate most of what is generally believed." Even though socialization should aim only at making a good citizen in the public realm, and can never be concerned in individuation at all, a lower education can be "the proper preparation for the higher education in which students learn to reinvent themselves" in liberal democratic society, and especially, like America (Neiman, 1993:207-208; Rorty, 1990b:43; 1999:121-

122).

> ··· lower education in America can still be, and often is, a matter of suggesting that the student think of the narrative of his or her own life as of a piece with the narrative of our national life, where that latter narrative is read as one of the successful social criticism. In many parts of America one can still, without being thought subversive, teach American history as the story of increasing freedom (Rorty, 1990b:42).

In liberal society, it is easy to close the gap between two distinct educational tasks: the task of lower education which is socialization and the task of higher education which is individuation. It can be possible, through socialization, to get across to students such narratives about the heroes and heroines "who revolted against the conventional wisdom of their day." In Rorty's view, "a lower education which gets across such a narrative [about successful social criticism] is the proper preparation for the sort of nonvocational higher education in which students learn to reinvent themselves" (Rorty, 1990b:42-43).

Even though Rorty insists that two different educational phases, socialization and individuation, are equally necessary and valuable, individuation seems more important than socialization in his view of "edification." Not everyone can achieve self-individualisation or self-creation. Some are merely socialised, becoming people who unselfconsciously accept the given vocabulary of the day and describe themselves in words that reflect the conventions of the community. Rorty (1989a:74) calls these people "metaphysicians" (cf. Reich, 1996). They do not want to rediscribe themselves, and take for granted that statements formulated in their final vocabulary suffice to describe and to judge the beliefs and lives of those who employ alternative final vocabularies (Rorty, 1989a:74, 89). However, in contrast to the metaphysician, someone worries that "the process of socialization which turned her into a human being by giving her a language, may have given her the wrong language, and so turned her into the wrong kind of human being" (Rorty, 1989a:75). These kinds of people do not want to be stuck in the vocabulary in which they were brought up, and therefore they want to renew, re-create or re-describe themselves by inventing new vocabularies (Rorty, 1989a:80). Education

aiming at this self-creation or individuation should be a totally different enterprise from education for socialization.

3.3.2.3 Individuation

"Individuation", the main task of higher education in Rorty's idea, is for urging individuals to re-create or to re-invent themselves (Rorty, 1990b:41, 43). At this stage academic freedom is necessary, because doubt and social criticism should be given a central place in the educational process (Rorty, 1990b:42). This stage is, in a sense, "a revolt" against the process of socialization. Rorty (1999:118) says that "[T]here is only the shaping of an animal into a human being by a process of socialization, followed (with luck) by the self-individualization and self-creation of that human being through his or her own later revolt against that very process." This self-creation is possible only if based on socialization. A new self can be formulated through doubt and criticism of the old conventional self-image which has been shaped by socialization.

Therefore, schools in the higher education level encourage their students by "Socratic scepticism" (Rorty, 1999:116); that is, to challenge the prevailing social consensus about what is true.

> The point of non-vocational higher education is, instead, to help students realize that they can reshape themselves – that they can rework the self-image foisted on them by their past, the self-image that makes them competent citizens, into a new self-image, one that they themselves have helped to create (Rorty, 1999:118).

For this purpose, Rorty emphasises the need for educational pluralism or academic freedom at the college. He says, that "[T]here, within the sanctuary of a kind of academic freedom which cannot be extended to the secondary schools, doubt about the society may become central rather than marginal to education" (Rorty, 1990b:42). Knowledge can be thought of as a bag of tricks and the range of options available at the university should resemble those of bazaars or flea markets (Rorty, 1988:32). Rorty insists that

university faculties should "exert themselves to take in representatives of every conceivable movement – deconstructionists, Marxists, Habermasians, Catholics, Straussians," and that academic decisions, such as the contents of the university's core curriculum, should be made as a result of free and open debates between professors (Rorty, 1988:32). However, in Rorty's account, those movements which are not conceivable as legitimate views, or those persons expressing unpopular thoughts who are not representatives of any recognised movement will be excluded. They may continue to advance their perspectives until the time that they persuade the faculty members that their positions should be granted recognition. Their ideas cannot be included in the contents of higher education and will be regarded as out of luck until they persuade their fellow faculty members (Fritzman, 1990:380; cf. Rorty, 1989a:37).

If socialization pursues a good citizen in the public realm, individuation pursues a romantic poet who continually re-creates her self-image in the private realm. As mentioned previously (see section 3.2.2), Rorty calls "ironist" or "strong poet" this kind of ideal person who creates herself continually through re-inventing her own language in the private realm.

> I shall define an "ironist" as someone who fulfills three conditions: (1) She has radical and continuing doubts about the final vocabulary she currently uses, because she has been impressed by other vocabularies, vocabularies taken as final by people or books she has encountered; (2) she realizes that argument phrased in her present vocabulary can neither underwrite nor dissolve these doubts; (3) insofar as she philosophizes about her situation, she does not think that her vocabulary is closer to reality than others, that it is in touch with a power not herself. Ironists who are inclined to philosophize see the choice between vocabularies as made neither within a neutral and universal metavocabulary nor by an attempt to fight one's way past appearances to the real, but simply by playing the new off against the old (Rorty, 1989a:73).

All humans, for Rorty (1989a:73), "carry about a set of words which they employ to justify their action, their beliefs, and their lives" and he suggests to call these words a person's

"final vocabulary." Humans take for granted what they conceive and believe through their final vocabulary. It is a self-sufficient vocabulary for a person to be able to regard what she knows and acts as the best. Therefore, it is almost impossible for a person to doubt about the authenticity of her own final vocabulary (Rorty, 1989a:73; 1991a:37-38). Rorty's ironist, however, regards her final vocabulary as a metaphor among many others and pursues a new vocabulary for reinventing her new self (1989a:75). Ironists are "aware that the terms in which they describe themselves are subject to change," and are "aware of the contingency and fragility of their final vocabularies, and thus of their selves" (Rorty, 1989a:73-74). They worry about "the possibility that [they have] been initiated into the wrong tribe, taught to play the wrong language game" (Rorty, 1989a:75). Ironists do not want to be stuck in the vocabulary which they have attained by socialization.

For their purpose, re-creating a new self through re-inventing a new vocabulary, ironists do not take "the paradigm of philosophical inquiry to be logical argument" which concerns the inferential relationship between propositions (Rorty, 1989a:77). Instead of logical inference, ironists use a "dialectic" by which vocabularies can be compared and contrasted against each other (1989a:77-78). Rorty calls the ironist's method "literary criticism" and "dialectic" that is comparing many vocabularies to redescribe one's vocabulary (1989a:78-79; cf. section 3.3.1.2).

> We redescribe ourselves, our situation, our past, in [certain] terms and compare the results with alternative redescriptions which use the vocabularies of alternative figures. We ironists hope, by this continual redescription, to make the best selves for ourselves that we can (Rorty, 1989a:80).

Therefore, for ironists, a final vocabulary can be criticised and revised only through other final vocabularies. Ironists revise their own identity by their own final vocabulary. Rorty (1989a:80) says "there is no answer to a redescription save a re-re-redescription."

"Irony" is "inherently a private matter", pursuing to renew one's own self and to

accomplish one's perfect self. In Rorty's view (1989a:84), self-creation, self-description, or individuation is entirely the private quest, but this private goal requires certain social conditions, such as peace, relative wealth, and the "standard bourgeois freedoms." The justification for those bourgeois freedoms is not grounded on a universal truth, but is "based on nothing more profound than the historical facts which suggest that without the protection of something like the institutions of bourgeois liberal society, people will be less able to work out their private salvations, create their private self-image, reweave their webs of belief and desire in the light of whatever new people or books they happen to encounter" (Rorty, 1989a:84-84, cf. 63). Rorty's utopia is a liberal society in which everybody has a chance at self-creation to the best of his or her abilities. Metaphysical questions and attitudes are, in this society, dropped in favour of the recognition of the historical contingency of each individual's own vocabulary and that of the society they inhabit (Rorty, 1989a:84). In this regard, the public realm should exist in order to guarantee the private ironic quest for edifying self-creation (Reich, 1996).

College education promotes the project of individuation. After age 19, "young people should have finished absorbing the best that has been thought and said and should have started becoming suspicious of it" (Rorty, 1999:124). Rorty insists that "the social function of American colleges is to help the students see that the national narrative around which their socialization has centred is an open-ended one." This function can be done "by helping students realize that the present has made over the past, the good has once again become the enemy of the better." Some of the students will succeed in altering the conventional wisdom, so that the next generation will be socialised in a somewhat different way than they themselves were socialised (Rorty, 1999:124). In higher education, students are encouraged to see their present final vocabularies as a ladder which is to be thrown away someday to re-invent their self-images continually.

In Rorty's idea of education, the most remarkable matter is that his distinction between two different educational phases, lower and higher education or socialization and individuation, is so severe and "unpardonably rigid" (Reich, 1996). This distinction

obscures the theoretical constancy in his idea of knowledge and education.

3.4 Education based on Rorty's epistemology

Generally, educational discourse and its practice are connected closely to the notion of knowledge and truth (Scheffler, 1965:1). Although Rorty denies this idea very strongly, as he says that "we should drop the presupposition that 'the nature and structure of knowledge determines that the nature and structure of education'" (1990b:43), his postmodern notion of knowledge and truth makes an impact on educational thinking and he himself proclaims his educational ideas so strongly in accordance with his idea of knowledge. In this section, the discussion will be focused on the question of how educational thinking and practice will be influenced by Rorty's idea of knowledge, or of how school education will be accomplished based on Rorty's "epistemology." Educational implications will be inferred from Rorty's notion of knowledge without neglecting his educational ideas which have been discussed in section 3.3.

3.4.1 Educational purpose

Knowledge is, for Rorty, no more the accurate representation of nature. There is no foundation to set up sure knowledge, and thus no universally valid knowledge. All knowledge claims are a certain interpretation and a linguistic description of the world. If knowledge is like that, what would happen in the field of education? What should schools pursue for their students?

Truth or absolutely true knowledge cannot be sought as a main purpose in school education, if all knowledge is merely a tentative interpretation of the world in order to serve a certain communal or personal desire. Knowledge also changes easily when its current situation changes. Rorty himself declares openly that education should not be "a matter of either inducing or educing truth" (1999:118). Teachers would no longer encourage their students to think of "knowledge" as a belief which is acquired through a direct confrontation between what is in the mind and what is in nature. Rather, teachers

would say that what we call knowledge is determined by "conversation." Knowledge should be regarded as an assertion which no one around us wants to question. Rorty says "our sense of ··· objectivity is not a matter of corresponding to objects, but of getting together with other subjects – ··· there is nothing to objectivity except intersubjectivity" (1994:56). Therefore, although Rorty denies the modern notion of knowledge, he acknowledges that every society has its own commonly agreed beliefs or what can be called knowledge, or, in Rorty's words, "the prevailing consensus about what is true" (1999:118). Rorty insists that this social consensus about what is true becomes a main matter of lower education. This is a bit contradictory to his notion that education is not a matter of truth.

After mentioning that "education is not a matter of ··· truth," Rorty quickly turns against this insistence when he explains about lower education (1999:118). According to him, there is a certain set of beliefs that is held to be true by the society to which students belong. It can be called "true knowledge," at least in the lower educational phase. The purpose of lower education is to teach students socially agreed beliefs as indisputable knowledge as such that has been assumed and pursued in the modern period. It does not matter whether this knowledge is "true or not." Students cannot be allowed "to challenge" what they are taught (Rorty, 1999:118). Teachers should teach their students what society regards as true, pretending it is absolutely true knowledge, even though they doubt about what they teach. Students have to learn what their teachers teach without any doubts. Therefore what has been taught will be regarded as the only true knowledge for them. Rorty even recommends to those teachers who do not agree on what they teach as the truth to "find another profession" (1990b:42). In lower education, all knowledge dealt with in school should be inculcated and transmitted firmly to students as true and objective knowledge. In his explanation about lower education, or socialization, we find a dogmatic and indoctrinating character that Rorty himself so hates and which cannot be harmonised with his other ideas (Rosenow, 1998:260-262). Therefore, it is problematic because Rorty acknowledges socialization as a worthwhile educational purpose, as much as another educational purpose that is individuation. This

problem will be discussed again later (section 4.2.1.2, cf. 4.2.3.1).

According to Rorty's twofold educational scheme, the tasks of education can be summed up clearly and neatly: socialization in primary and secondary school, and individuation in non-vocational college. Socialization is for making the student live as a good citizen in the public realm of his or her life. Individuation is for making the student create his or her new self in the private realm of his or her life. It can be possible from age 18 or 19 in non-vocational higher education. These two different educational purposes cannot be harmonised through a more comprehensive purpose or "a single set of ideas." Two distinct educational tasks are "equally necessary" and "equally valid," therefore should be accomplished through radically distinguished educational enterprises. However, if we consider Rorty's whole "epistemology," it is difficult to accept his notion that two educational purposes, socialization and individuation, are equally necessary and valid.

Rorty discribes negatively those who are merely socialised, therefore he seems to regard individuation more important than socialization. "To fail as a poet," that is to "accept somebody else's description of oneself," means "to fail as a human being" (1989a:28). That kind of person can be understood exactly as a person who is only socialised. Rorty (1989a:24) says about a person who is confined to socialization, that "One will not have impressed one's mark on the language but, rather, will have spent one's life shoving about already coined pieces. So one will not really have had an I at all." Individuation or self-creation can be brought about from an anxiety about that "process of socialization which turned her into a human being by giving her language may have given her the wrong language, and so turned her into the wrong kind of human being" (Rorty, 1989a:75). For those who "do not want to be redescribed" and thus are satisfied with only socialization, their language is up for grabs by those who achieved to create their new selves (Rorty, 1989a:89). If a human life "escapes from inherited descriptions of the contingencies of its existence and finds new description," this life can be thought "triumphant" (Rorty, 1989a:29). Rorty agrees enthusiastically with the existentialist insistence that "redescribing ourselves is the most important thing we can do" (Rorty,

1980:358-359). Based on Rorty's insistence, therefore, we can say "individuation" or "self-creation" are more valuable than "socialization," even though he insists that both socialization and individuation are equally valid and necessary.

If these two distinct educational tasks are equally valid and necessary, following Rorty's notion of two different educational phases, it is not possible to justify one task through another. However, if we consider these two purposes in Rorty's view of "edification," which means to create a new self through inventing a new metaphor or vocabulary from the old one, socialization should justify its validity by individuation. Socialization is meaningful only when it becomes material for individuation to create a new self. Therefore, in connection with edification, socialization cannot be regarded as an equally valid educational purpose as individuation, rather it must be thought of as a subordinate purpose, or a stepping-stone for individuation. The notion of edification corresponds only to individuation, the purpose of higher education and therefore the ultimate educational purpose can be called individuation or self-creation.

Rorty's ideal type of person recognises the contingency of him/herself and his or her final vocabulary that has been shaped by socialization, and thus tries to redescribe his or her vocabulary and to recreate him/herself. This redescription does not finish at a certain point during his or her whole lifetime, rather it is a never-ending process and a lifelong project. Individuation, as only an ultimate educational purpose, is a continual self-redescription and a ceaseless self-reformulation. A new vocabulary or a novel metaphor to describe a self necessarily becomes old and dead when time passes and then the self should be revised in terms of another new vocabulary or metaphor. This new description of the self in terms of a new vocabulary or metaphor can emerge out of the previous old one. In a sense, if individuation is a continual self-creation or self re-description, we can say in more educational terms it is a continual self-education. This idea of the continual self-creation makes us recall Dewey's idea of self-education. Dewey says that "[education] is ··· reconstruction or reorganization of experience which adds to the meaning of experience, and which increases the ability to direct the course of

subsequent experience" (1916:89-90), and that "Since in reality there is nothing to which growth is relative save more growth, there is nothing to which education is subordinate save more education" (1916:60). In fact, Rorty declares himself as "a fairly faithful follower of John Dewey" (1999:118). Like Dewey, Rorty insists that there is no intrinsic human nature or essence which should be accomplished through education, therefore there is no final (and fixed) destination of education. What we can do is only to create ourselves continually, for the purpose of gaining effectively our present desires. Therefore, continual self-creation is what education should pursue as its purpose. To express this idea of continual self-redescription, Rorty borrows Dewey's notion that "growth itself is the moral end" and that to "protect, sustain and direct growth is the chief *ideal* of education" (1999:120). "Since growth is the characteristic of life" for Dewey, "education is all one with growing; it has no end beyond itself" (Dewey, 1916:62). We can see this same idea in Rorty's insistence about "conversation," which can be regarded as educational practice to create a new self. Rorty says that "the conversation which it is our moral duty to continue is merely our project … *we do not know what "success would mean except simply "continuance*." We are not conversing because we have a goal, but because Socratic conversation is an activity which is its *own* end" (1982:172, cf. 1980:371-379).

If we sum up this argument, the educational purpose grounded on Rorty's "epistemology" is: (1) "individuation" which means to re-describe the self through inventing a personal idiosyncratic vocabulary, and this self-re-description is a continual process, and thus (2) to keep continuing self-creation in itself is what education should pursue ultimately.

Before closing this argument, one thing should be mentioned. There is a problem to regard self-creation as the ultimate educational purpose. Rorty's firm division of education into two phases makes for stark inequities. Apparently, not every person can study at college or university. If it is only at the level of higher education that individuation and provocation to self-creation occur, many people will never have that chance. Rorty acknowledges the fact that individuation is available only to those students "whose

parents are affluent enough to send them to reasonably good colleges" (1999:116). He seems to think that, at best, "50 per cent" of any population enrol at colleges (1999:121). It is quite contradictory to Rorty's vision of a liberal utopia where there are equal opportunities for self-creation. Therefore, if we follow his firm divisions of education, it would become difficult to say individuation is an educational purpose which can be commonly applicable to all school learners.

However, in spite of this contradiction between his idea of edification and his notion of educational divisions, if we concentrate on Rorty's whole idea of knowledge, we can conclude that individuation is the ultimate educational purpose to create a new self and this educational task should continue constantly during the whole lifetime.

3.4.2 The educand

Rorty's view of the educand can be inferred directly from his view of the human being or human self. For him, there is no such things as human nature or essence. Rorty admires Freud's view of humanity that it should not be seen "as a natural kind with an intrinsic nature, an intrinsic set of powers to be developed or left undeveloped" (1989a:35). He claims that "human beings are centerless networks of beliefs and desires and that their vocabularies and opinions are determined by historical circumstance" (1991b:191). If human beings do not have any common essence, then we cannot say anything about learners or educands.

Rorty strongly insists that human beings do not have an intrinsic nature which should be actualised through education, rather that education (or socialization) shapes a certain kind of animal, a "pre-human being" into a human being. However, it does not mean that humans do not have any commonalities. He says that "there is nothing deep inside each of us, no common human nature, no built-in human solidarity …" (Rorty, 1989a:177). Rorty insists incompatibly, however, that there is something that we have, as human beings, in common with each other. This is "their ability to use language," and therefore, humans have a common capacity "to exchange beliefs and desires with other people"

(Rorty, 1989a:177). Rorty says that "To be a person is to speak a *particular* language, one which enables us to discuss particular beliefs and desires with particular sorts of people" (1989a:177). Through this idea he seems to emphasise the particularity of our language and to affirm his idea that humans do not have any intrinsic essence and they are merely socialised. However, the same idea shows that we can see a human being's commonality as well. Although we use different languages according to how we have been socialised, our ability to use language is a commonality of human beings. This ability is a foundation of human socialization, not a result of socialization, since humans cannot be socialised without it.

We can find another commonality of human beings in Rorty's argument concerning solidarity. He insists that there is no "bulit-in human solidarity" and says that "simply by being human" we do not have "a common bond" (1989a:177). What we share with all other fellow humans is "the same thing we share with all other animals" and that is "the ability to feel pain" (1989a:177). If so, the human being is merely one of a species among other animals. However, there is something that distinguishes the human from animal pain. It is "humiliation," "a special kind of pain" which other animals lack (1989a:177). Humans can be humiliated "by the forcible tearing down of the particular structures of language and belief in which they were socialized" (1989a:117). We are humiliated when our language and belief that seemed most important to us become "futile, obsolete, and powerless" (Rorty, 1989a:89). Here we see humiliation can be a matter only to a socialised person, but it is not a result of socialization. This humiliation is only one reason, for a person, to unite with the rest of other fellow human beings (1989a:90-92) and only one cause (motive), for socialised people, to redescribe their selves in new vocabularies as well (1989a:89-90).

We can sum up human commonalities in Rorty's view of the human being. Humans have an ability to use language by which they can be socialised, and also have a special sort of pain, a susceptibility to humiliation through which they can start to redescribe themselves.

If we think about the educand in Rorty's idea of educational division, we see a disputable image of learners. He insists that there is "no such things as human nature" and "essential humanity." He also conclusively declares that "there is only the shaping of an animal into a human being by a process of socialization …" (1999:118). In lower education, the educand is shaped into a human being, and is equipped with an ability to use language, so he can exchange his beliefs and desires with fellow human beings. In this process of socialization, the educand must be a passive agent in his shaping as a human being. "[T]o challenge the prevailing consensus about what is true" cannot be allowed. What the educand can do in the socialization is only to "absorb" what his society regards as the truth, and assimilate a certain society's language, belief and desire (Rorty, 1999:124). However, at the higher educational level, the educand is given freedom to "revolt" against how he has been socialised. He is encouraged to create his new self through doubting conventional knowledge and inventing his own idiosyncratic vocabulary. In this process of individuation, the educand becomes a very active subject in shaping himself.

It is reasonable to ask how the same person can be changed drastically from a passive agent to an active creator in shaping himself. If we do not have any intrinsic human nature, what causes us to create ourselves against our old selves which have been shaped in our own society? Rorty says that after socialization, "self individualization and self-creation" will be "followed with luck …" (1999:118) and "[W]ith luck, the best of them will succeed in altering the conventional wisdom" (1999:124). He mentions "with luck," but "luck" is not sufficient to answer this question. If the human being has no essence and is shaped by socialization, there is no other way to answer this question but grasp at "socialization." Rorty seems to think that if socialization is well achieved by educands, then they will change from passive "absorbers" to active "creators" for inventing their own language and their own selves. In this regard, Rorty says,

> … (the fact that) lower education aims at socialization … in this particular country at this particular time … is still considered all right for teachers to

> suggest that our society is the result of skeptical doubt about the past. Teachers can still teach that ours is a society whose very mainspring is continuous social reform. One can still teach students that the heroes and heroines of the national past are the people who revolted against the conventional wisdom of their day – the Eugene Debes, the Susan B. Anthonies, the Martin Luther Kings (1990b:42).

Now we see more clearly Rorty's thinking about this problem. For Rorty, individuation can start from a revolt against how educands have been socialised, but at the same time, it is possible only through socialization. What will happen to the educands who have been socialised by a national narrative of "successful social critisism" in liberal society (Rorty, 1990b:42)? When they start to revolt against their socialised beliefs and to create new beliefs and new selves, they must deny the idea of individuation as well as the idea of self-creation. If we think about the cause of "individuation" in his idea of educational division and his idea of the educand who has no inner essence, we see that his idea contains a self-contradiction, viz. Rorty's idea that individuation should be justified not on the grounds of intrinsic human nature, but on socialization. This idea is against the very idea of individuation. It seems that in this respect Rorty's theory has a serious flaw in itself.

In Rorty's "epistemology," he maintains firmly ideas of "anti-foundationalism," "anti-essentialism" and "anti-methodology", therefore he cannot suggest a certain method or guidance for creating a new self. At best, he can only describe the result when we achieve a new self-creation through some historical figures as examples. Even though Rorty emphasises that if we create a new metaphor or a new vocabulary, we can achieve a new self and we can deal with the world better, this does not give sufficient grounds for thinking about how an educand can achieve the ultimate educational purpose which is to create a new self.

In spite of some controversial problems in his idea of the human being, we can sum up his view of the educand as follows:

(1) The educand does not have any intrinsic nature and essence which should be

considered in educational practice. Therefore, (2) the educand can be shaped into a human being through socialising, in a certain language that his society uses and according to a belief that his society regards as truth. Since this socialization is totally contingent, (3) the educand should revolt against how he has been socialised and reinvent his vocabulary to create his new self.

3.4.3 Curriculum

What kind of knowledge should be taught to students at school? For Rorty, firstly, it must be conventional knowledge that is regarded as the truth in a certain society. As we already discussed educational purpose and educand in previous sections, in the lower level education, students should learn "the moral and political common sense of the society as it is," that is what their parents "take to be familiar and self-evident truths" (Rorty, 1999:114, 116; cf. 118). Rorty says that "For any society has a right to expect that ··· the schools will inculcate most of what is generally believed" (1999:116). It is, therefore, what Rorty expresses as "normal discourse" which is conducted within an agreed-upon set of conventions (1980:320). This kind of curriculum should be the same as the current school curriculum. Even Rorty thinks that this curriculum will consist of the same knowledge as that which modern philosophers pursued. He says that "Education has to start from acculturation. So the search for objectivity and the self-conscious awareness of the social practices in which objectivity consists are necessary first steps in becoming *gebildet* [educated]" (Rorty, 1980:365). This curriculum consists of "the results of normal discourses" and "the descriptions of the world offered by our culture" (Rorty, 1980:365). In this regard, there is nothing much to say about the curriculum of primary and secondary schools. However, if we attend to Rorty's notion of twofold educational phases, we can find a problematic insistence on curriculum in the lower level of education.

According to Rorty's twofold educational scheme, the lower education becomes a launching pad for the higher education. Socialization should be material for individuation, because any project of self-creation through imposition of one's own idiosyncratic final

vocabulary should be parasitic on what society regards as common sense, or what society wants to socialise students in (Rorty, 1989a:41, 74). As we discussed in a previous section, Rorty insists that socialization should prepare students for their self-creation. For this purpose, primary and secondary school curriculums should contain a certain knowledge about how society has resulted from continual social criticism, or a certain "narrative" about how their national heroes or heroines have "revolted against the conventional wisdom of their day" (Rorty, 1990b:42). Rorty mentions examples of this kind of narrative like "the emancipation of the slaves, the enfranchisement of women, the rise of the trade unions, the development of the welfare state, the woman's movement, the Civil Rights Movement" (Rorty, 1990b:42-43). He continually says that "A lower education which gets across such a narrative is the proper preparation for the sort of nonvocational higher education in which students learn to reinvent themselves" (Rorty, 1990b:43). In Rorty's view, therefore, in the lower educational level, the most important curricular theme will be the story of historical figures who achieved heroically their self-creation and the story of historical events about increasing emancipation.

There is one other thing to mention about school curriculum in Rorty's idea of knowledge. If we followed his idea of knowledge, all school learning subjects will be reduced to a certain kind of literature. Rorty insists that "all our knowledge is under descriptions" and therefore, without using language no knowledge can exist (1999:48). Any kind of knowledge is, for Rorty, a linguistic interpretation and a linguistic description of the world. There is no different nature throughout the different fields of knowledge. No kind of knowledge has its own distinguishable character from other kinds of knowledge. Rorty says that "Ironist theory must be narrative in form because the ironist's nominalism and historicism will not permit him to think of his work as establishing a relation to real essence" (1989a:101), and that "When the notion of knowledge as representation goes, then the notion of inquiry as split into discrete sectors with discrete subject matters goes" (1982:203). In many places throughout his works, Rorty argues about his notion that all knowledge is a certain kind of description and that there are no differences between different fields (or kinds) of knowledge.

Firstly, there is no difference between "what ought to be" and "what is." He says that "there is no epistemological difference between truth about what ought to be and truth about what is, nor any metaphysical difference between facts and values, nor any methodological difference between morality and science" (Rorty, 1982:163).

Secondly, there is no difference between social sciences and literature. He says that "If we get rid of traditional notions of "objectivity" and "scientific method" we shall be able to see the social sciences as continuous with literature – as interpreting other people to us, and thus enlarging and deepening our sense of community" (Rorty, 1982:203). For the same reason, there is no diffence among what anthropologists, historians, sociologists, and psychologists have done (Rorty, 1982:203).

Thirdly, natural science is also a kind of description of the world and it is not different from other sciences, i.e. social science or human science. For Rorty, we must regard "scientific revolutions as "metaphoric redescriptions" of nature rather than insights into the intrinsic nature of nature. Further we must resist the temptation to think that the redescriptions of reality offered by … physical or biological science are somehow closer to "the things themselves,"… than the redescriptions of history…" (Rorty, 1989a:16).

Conclusively, all the above arguments are summed up through his remark that "science and morality, economics and politics are delivered up to a process of language-creating protuberances *in just the same way* as art and philosophy" (Rorty, 1989a:66). All knowledge should be regarded as a linguistic description, and thus the same as literature. Therefore, Rorty (1989a:81) includes different kinds of knowledge, such as theology, philosophy and social theory in the category of "literary criticism."

If all knowledge should be regarded as linguistic description and should be reduced to a type of literature or narrative, it is not necessary to distinguish each subject's specific structure, method, and key concept as compared to other subjects. In this regard, it may

be easy to integrate a certain subject and other different subjects. If so, the school curriculum will probably be similar to what Kieran Egan suggests in his book *Teaching as Storytelling* (1988). Egan insists that all school curriculums should be organised into a "story form" (1988:39-62) and that all kinds of subjects should be taught by way of "storytelling" (1988:63-102). Although Egan does not mention Rorty's name in his book, Rorty may welcome his idea that all knowledge, with no regard to subjects, should be presented in a story and should be taught in the form of a story.

According to Rorty's "epistemology," the curriculum of lower level schools consists of narratives about what a certain society regards as the truth. Especially, a certain narrative about the historical story of emancipation will be regarded as the most important knowledge which will promote learners to revolt against social convention when they start to learn in the higher educational level. If we followed Rorty's idea that all knowledge is a certain linguistic description about a specific aspect or area of the world, then all school subjects and curricular contents are also narratives or certain kinds of linguistic description, and the lines between different school subjects become blurred and cannot be distinguished clearly.

3.4.4 Educational method

If we followed Rorty's insistence that in lower level education, schools must inculcate their students with all the beliefs and knowledge that a society regards as the truth, we may feel unable to find an innovative approach to educational method. In a sense, Rorty seems not to like the notion of a preferable educational method, as he denies the modern idea that we can find true knowledge and metaphysical truth through an infallible method. He does not, actually, suggest any educational method in his works on education. In his pragmatist view, however, any current educational method which is being used in primary or secondary schools is acceptable, as far as it works effectively to achieve a certain educational object. Flexible educational methods can be used in various ways, because there is no single right way to educate (cf. also Ozman & Craver, 2003:148). Although diverse methods can find their proper place in Rorty's idea of

education, a specific method can be noted in his notion of knowledge. In this section, the educational method will be discussed in terms of Rorty's notion of knowledge as a tool for dealing with reality. After this, the methodological implication of his educational goal, i.e. edification, will be discussed (cf. Neiman, 1991:375-383).

According to Rorty, knowledge is a useful set of beliefs to deal with a certain reality, or a kind of understanding "to deal with problems as they arise" (1999:29). Knowledge should be regarded as a tool shaped in order to increase man's adjustment to his physical, biological, and cultural environment. Therefore, the usefulness of knowledge is the most important point to be duly considered in selecting educational contents (curriculum) and adopting educational methods. In this respect, the "problem-solving" method can be most preferable. It is not necessary to teach children by means of school subjects which are clearly distinguished from other subjects. Rather, it is required to encourage children to adopt a problem-solving ability through a single theme in which various traditional disciplines are integrated. Children confront a certain problem and learn how to solve the problem in a single theme; consequently children come to construct useful knowledge to deal with real problems in their real-life situation. This "problem-solving" method can be accomplished through what Kilpatrick suggests, the "project approach." As Ozman and Craver (2003:150) explain about the project approach, "projects should be chosen by students as much as possible through individual and group discussion, with the teacher as moderator and with student cooperation in pursuing the goals of the project. In some cases, the teacher has no definite idea what the outcome will be." This "problem-solving" or "problem-centred learning" starts with a central question or problem, and students are to attack it in diverse ways according to their interests and needs. Information and ideas are drawn from books, journals, videos, field trips, guest experts, and other resources. Students draw conclusions and construct suitable generalisations concerning the problem. Learning and growth are evaluated, and this sets the stage for the next unit of study. Traditional disciplines are used for knowledge background to accompany the problem and to aid student learning and growth (Ozman & Craver, 2003:151).

If Rorty's ultimate educational goal is "edification" or self-creation through reinventing one's final vocabulary, how can this goal be accomplished in school? Rorty does not provide a satisfactory explanation about how edification should be done. Therefore, we have to restructure the method of edification, by inferring it from his fragmentary ideas about it. Firstly, Rorty presupposes an incommensurability between different vocabularies. Although those who have different vocabularies use the same words, they cannot understand each other since their vocabularies do not refer to the same meanings. Both regard their own part as rational and the other part as irrational.

> Those who speak old language and have no wish to change, those who regard it as a hallmark of rationality or morality to speak just that language, will regard as altogether *ir*rationality the appeal of the new metaphors – the new language game which the radicals, the youth or the avant-garde are playing. (…) Conversely, from the point of view of those who are trying to use the new language, to literalize the new metaphors, those who cling to the old language will be viewed as irrational – as victims of passion, prejudice, superstition, the dead hand of past, and so on (Rorty, 1989a:48).

If there is logical discontinuity between incommensurable vocabularies, it is not possible to understand and to reach another vocabulary through logical inference with premises formulated in one vocabulary (Rorty, 1989a:12).

Therefore, those who have different vocabularies cannot communicate with each other through their own vocabularies, and they cannot fit into a new, third, vocabulary with their own vocabularies (1989a:12). For this reason, if we want to persuade our counterpart to use our own vocabulary instead of their own vocabulary, it is necessary to use a revolutionary way, not logical proof or inference. In this case, the ironist, who realises the contingency of her own self and tries to create herself continually, does not try to explain or to prove her own vocabulary; rather she suggests to her counterpart a prescription for creating a new vocabulary.

> The trouble with arguments against the use of a familiar and time-honored

> vocabulary is that they are expected to be phrased in that very vocabulary. (…) Interesting philosophy is rarely an examination of the pros and cons of a thesis. Usually it is, implicitly or explicitly, a contest between an entrenched vocabulary which has become a nuisance and a half-formed new vocabulary which vaguely promises great things.
>
> The latter "method" of philosophy is the same as the "method" of utopian politics or revolutionary science (as opposed to parliamentary politics, or normal science). (…) This sort of philosophy does not work piece by piece, analyzing concept after concept, or testing thesis after thesis. Rather, it works holistically and pragmatically. It says things like "try thinking of it this way" – or more specifically, "try to ignore the apparently futile traditional questions by substituting the following new and possibly interesting questions." It does not pretend to have a better candidate for doing the same old things which we did when we spoke in the old way. Rather, it suggests that we might want to stop doing things and do something else. But it does not argue for this suggestion on the basis of antecedent criteria common to the old and the new language games. For just insofar as the new language really is new, there will be no such criteria (Rorty, 1989a:8-9).

Edification, which is to persuade a counterpart to accept a new vocabulary, should be an activity to change entirely his/her language. It is necessary for self-creation to nullify the counterpart's final vocabulary and to redescribe him with new vocabulary, and therefore this kind of work may humiliate others. Rorty says that "… the best way to cause people long-lasting pain is to humiliate them by making the things that seemed most important to them look futile, obsolete, and powerless. (…) The redescribing ironist, by threatening one's final vocabulary, and thus one's ability to make sense of oneself in one's own terms rather than hers, suggests that one's self and one's world are futile, obsolete, *powerless*. Redescription often humiliates" (1989a:89-90).

This edification is not only for others, it should be also for the person himself or herself. The ironist regards even her own final vocabulary as an incomplete perception, not perfect knowledge. The ironist acknowledges her past faults and other's flaws as well, and tries to expose these faults through her current final vocabulary. However she

regards even her final vocabulary as a ladder which is to be thrown away. The ironist's vocabulary should be like stepping stones to an improved, better vocabulary. How can this be possible? Rorty answers this question:

> ··· the ironist – the person who has doubts about his own final vocabulary, his own moral identity, and perhaps his own sanity – desperately needs to *talk* to other people, needs this with the same urgency as people need to make love. He needs to do so because only conversation enables him to handle these doubts, to keep himself together, to keep his web of beliefs and desires coherent enough to enable him to act. He has these doubts and these needs because, for one reason or another, socialization did not entirely take (1989a:186).

Self-edification can be possible through conversation. Rorty expects that it is possible to edify a person's self through listening to "as many suggestions and arguments" as she can in "a free and open encounter" or in a conversational situation (1991b:39).

The Rortyan notion of conversation is a little problematic. Rorty's conversation is a different activity from "inquiry" which aims at consensus in his early works. Rorty's worry is to "prevent conversation from degenerating into inquiry, into an exchange of views" (1980:372). We converse not because we have a goal but because conversation is its own end (1982:172). If the aim of conversation is not to get consensus about certain subject matter, but to continue conversation, it might seem that conversation does not need to be about any specific subject matter at all. However, in his more recent work Rorty does not seem to speak of inquiry and conversation as separate activities, rather he regards conversation to be a sort of inquiry (Hostetler, 1992:296). Conversation, as inquiry, aims at consensus, but tries to accomplish consensus through dialectic and redescription rather than logical inference (Rorty, 1989a:78). Therefore, it is legitimate to pursue an agreement or consensus through conversation. According to Rorty, "the urge to represent reality accurately" should be replaced by "the urge to come to free agreement with our fellow human beings – to be full participating members of a free community of inquiry" (1999:119). If so, in the educational situation, not only in higher

level but also lower level, all educational activities should be done through the student's participation in a process of inquiry, together with peer students or with the teacher. Therefore, what Rorty calls "conversation," or what we call "the Socratic method" can be regarded as a key educational method.

It can be agreed that proper method of education is experiential, flexible, open-ended, and oriented toward growth of the individual's capacity to think and to participate intelligently in social life (Ozman & Craver, 2003:150). In accordance with the notion of knowledge as an instrument to deal with reality, the problem-solving method is admirable. This problem-centred method may develop a cross-disciplinary approach to the curriculum and project approach as Kilpatrick suggests. In regard to the educational purpose that is edification, conversation would be a key method to renew our final vocabularies.

3.5 Conclusion

In this chapter, the discussion was focused on the relationship between postmodern epistemology and education. For this purpose, one of most prominent postmodern philosophers, Richard Rorty's ideas of knowledge and of education were investigated and then the educational implications of his theory of knowledge were discussed.

Rorty strongly denies the modern notion of knowledge as a mirror of nature. According to him, knowledge cannot be regarded any longer as objective, or absolute truth which has a universal validity. Knowledge is a lingustic description or interpretation. It can be justified not through its correspondence with the world, but through its coherence within the context of sentences to which it belongs. Knowledge is an instrument to cope with the world effectively, and therefore it can/should be changed or evolved into a more effective form. Knowledge is a set of consensual beliefs which a certain society regards as true, therefore it is only meaningful in the context of communal conversation. Rorty's idea of knowledge shows a severe antagonism against the modern notion of knowledge

and conforms with the common characteristics of postmodern knowledge.

Rorty outlines his own idea of education as well. According to his view of the human self as a web of beliefs and desires, Rorty insists that education should not be a matter of truth, rather it should promote re-fomulation/re-creation of the human self through reinventing new vocabulary and metaphor. For his new idea of education as continual self-redescription, he suggests the term "edification" to substitute the old term "education." Edification or self-creation cannot be started from nothing, but can be done through reaction against current beliefs and descriptions. Therefore, in Rorty's view, education should be divided into two different phases, the lower level education and the higher level. The main task of the lower level education is socialization that is to inculcate students with a set of certain languages or beliefs which has been already accepted as normal discourse by their society. The higher level education aims at individuation, that is, to urge individuals to re-create themselves through revolting against all these socialised beliefs. Through these two different educational projects, one can live as a good citizen in his/her public realm, and an ironist in his/her private realm.

Some educational implications can be inferred from Rorty's idea of knowledge. Individuation, or self re-description through inventing a personal idiosyncratic vocabulary can be regarded as the ultimate educational purpose. The educand does not have any intrinsic nature or essence which can be a criterion for educational discourse, rather he is shaped in a certain language. The educand should be formed as a good citizen, at first through socialization, and can then be re-shaped through individuation. Educational contents or school curriculums can be organised in accordance with his twofold educational scheme. In the lower level education, the content must be what a society regards as truth and in higher education, it can be all kinds of narrative for self-recreation. In Rorty's view, all kinds of knowledge and subjects should be regarded as linguistic description or narrative, and thus there is no clear boundary between different kinds of knowledge. Various kinds of educational methods can be accepted, but especially the "problem-solving method" would be admirable in Rorty's view of knowledge as an

instrument to deal with a certain problem. Conversation and constructivism also can be central concepts in educational method.

Rorty's idea of education brings a new perspective to the effort of overcoming modern education based on the Enlightenment belief that the universal laws of nature can be read from the intelligible universe by the objective light of reason. Like other postmodern philosophers, Rorty also emphasises individuality, locality (or ethnocentrism), contingency, diversity and the linguistic aspect in his educational discourse. Although he maintains a strong antagonistic stance against the modernist approach to knowledge and education, he does not rid himself of all modern notions, as he insists that his educational ideal, edification, must be parasitic on what modern epistemology sets up.

In the following chapter, all the aspects of a postmodern epistemology, education (schooling, teaching and learning) will be discussed and assessed from a point of view that can eradicate all the imbalances and reductionisms because of its own inherent balanced approach to reality, the human being, knowledge and education.

4. CRITICAL EVALUATION OF POSTMODERN EPISTEMOLOGY AND EDUCATION

4.1 Introduction

In the previous chapter the problem of how postmodern epistemology may affect schooling, teaching and learning was discussed by using Rorty's idea of knowledge. This chapter will attempt to evaluate postmodern epistemology and its educational implication based on the discussion of the previous chapter.

Since postmodernism is not a monolithic movement, it is hardly possible to evaluate postmodern ideas on a general level. Therefore, the discussion will start from specific problems that are Rorty's idea of education, and then the focus will move on to his idea of knowledge. After that the general characteristics of postmodern epistemology and its implication will be criticised. Every specific problem will be examined in a broad focal context. Rorty's idea of education will be examined in the light of his "epistemology." His epistemology will be discussed in the general view of postmodern epistemology. In this way, Rorty's idea of education will be seen to be rooted in his philosophical ideas, but these two ideas will be proved incompatible with each other (Reich, 1996). Therefore, in this chapter, as the discussion progresses, the focus will become broader and the concern about how each specific problem is related to the general characteristics of postmodern epistemology will be considered.

To evaluate Rorty's idea of education and of knowledge, the discussion will focus, at first, on the self-contradictions in his ideas. In this regard, it is interesting to remember his mention of the coherentist view of knowledge, i.e. "We can think of knowledge as a relation to propositions, and thus of justification as a relation between the propositions in question and other propositions from which the former may be inferred" (Rorty, 1980:159). Therefore, it is a serious criticism of his work to point out the self-contradictions in his ideas.

Secondly, the discussion will try to examine a set of beliefs, in other words, the worldview which supports or justifies all Rorty's specific ideas on education and knowledge. Van der Walt and Fowler (2006:18) point out the importance of worldview in dealing with a certain theory or idea when they discuss "constructivism." They say that "In this new era, where there is no recognised universal authority, the door has been opened to a diversity of ontologies – usually implicit – and consequent epistemologies and pedagogies. It is therefore important to recognise the worldview that supports constructivism if we are to understand and comment on it" (Van der Walt & Fowler, 2006:18). If the deeply rooted beliefs in Rorty's idea can be clarified and revealed, Rorty's idea can be understood, and criticised more thoroughly.

Thirdly, Rorty's ideas of knowledge and education will be evaluated in terms of the researcher's own worldview. Through this "transcendental criticism", the discussion will try to provide an alternative to some of Rorty's ideas of knowledge and education, which will be evaluated, as incompatible with his valid ideas. After dealing with Rorty's idea of knowledge and education, the discussion will examine the general characteristics of the postmodern idea of knowledge from the researcher's own viewpoint.

Finally, the discussion will attempt to draw an alternative view of schooling in accordance with the idea of knowledge held by Reformational philosophy.

Although the discussion will employ these different kinds of criticism, each criticism will not be distinguished clearly, rather all criticism will be used integrally. The discussion will be carried on by dealing with each specific problem.

For these intents and purposes, this chapter will be divided into 4 parts:

(1) Critical evaluation of Rorty's idea of education.

(2) Critical evaluation of Rorty's idea of knowledge.

(3) Critical evaluation of postmodern epistemology and its educational implication.

(4) An alternative view of knowledge and its educational implication according to Reformational philosophy

4.2 Critical evaluation of Rorty's idea of education

In this section, the discussion will try to criticise some arguable problems in Rorty's idea of education. Since every form of pedagogy or pedagogical idea has its foundation in an epistemology (Scheffler, 1965:1-15; Van der Walt & Fowler, 2006:12), the discussion will also focus on Rorty's idea of knowledge and its relatedness to his educational idea.

4.2.1 A criticism of the purpose of education

In the previous chapter, Rorty's idea of the purpose of education was discussed (see, section 3.4.1). It amounted to the following:

(1) Education should not be a matter of truth. The notion of objective knowledge, which is corresponding to reality, should be discarded in the educational discourse. Knowledge rather is just a set of beliefs on which a society agree. However, when this socially agreed consensus is taught to students as a true knowledge in the lower level education, it should be regarded as absolutely true knowledge.

(2) According to Rorty's idea of the twofold educational scheme, the purpose of education can be summed up as socialization, in the lower level education, and individuation in higher education. He insists that these two educational purposes should be accomplished in different educational enterprises, since these are equally necessary and valid. However, in his view, individuation can be regarded as more important than socialization as the human being has to redescribe himself continually.

(3) If self-creation is an ultimate goal of education and cannot be achieved completely in a certain stage of life, to make students continue self-creation is what education pursues as its purpose. Therefore, it can be said that education does not have any other specific goal except self-creation which can be expressed as self-education.

4.2.1.1 Inequity in Rorty's system of schooling

Rorty's idea of educational purpose can be criticised, firstly, by pointing out its self-contradictory features which are contained in the notion of two distinctive educational enterprises. He develops his idea of edification or self-creation based on his philosophical ideas, i.e. his idea of edification's parasitic characteristic and his idea of a liberal utopia, but the fully-fledged idea of edification cannot be compatible with those ideas.

For Rorty, it is necessary to divide educational enterprise into two quite different levels, because edification is parasitic and reactionary, and for edifying self-creation, we must react against our current beliefs and desires. Reich (1996) says properly, "in order to re-create ourselves, we must first be socialised into the dominant discourse and conventional descriptions of our community." Rorty's idea of a dual educational system matches well with his idea of edification which is that edification or self-creation is always parasitic and a reactive movement against normal discourse.

Self-creation will be achieved by criticising these dominant discourses and inventing a new description of ourselves and our world. To criticise old descriptions and invent a new one, certain social conditions are needed, i.e. peace, a relative wealth, and the "standard bourgeois freedom" (Rorty, 1989a:84). Rorty depicts a utopian society in which all conditions for edification are fully met and calls it "bourgeois liberal society" (1989a:84-85). The citizens of the ideal society he calls "liberal ironists." In Rorty's liberal utopia, the liberal ironist pursues a private quest for self-creation, and simultaneously holds the contingent belief that people are publicly bound together in a society by their liberal hope that humiliation and suffering will diminish or cease. In Rorty's ideal society, there is "a consensus that the point of social organization is *to let everybody have a chance at self-creation to the best of his or her abilities*" (Rorty, 1989a:84, italics by author). Every citizen can enjoy equal opportunities for self-creation in Rorty's ideal society. Therefore, it is legitimate to expect that Rorty may support a proper system of schooling that provides equal chances to achieve self-creation for every citizen. However, Rorty's rigidly

separated twofold system of education, which is necessary to achieve the ultimate educational purpose, self-creation, is not compatible with his idea of liberal society.

If self-creation can be achieved only at the level of higher education, many students do not have any opportunity to create their new selves with inventing new vocabulary, because not everybody studies at college or university. Rorty (1990b:42) says that "with luck, a lot of the students will go on to higher education." When Rorty interprets Dewey's dream about a successful America in the future, he says, Dewey may suppose (therefore, Rorty does as well) an ideal situation, that "50 per cent of America's population could enroll" in colleges. If so, could those people who do not study in the higher level of education achieve self-creation? Should those people be excluded from the opportunity of self-creation? If we follow Rorty's idea of two different educational enterprises, he seems to have to accept inequities between those who studied at college level and those who conclude their studies at primary or secondary school only. Actually, Rorty shows a certain kind of elitism, when he says that "in the ideal society, the intellectuals would be ironists although the non-intellectuals would not" (1989a:87). Therefore, if we follow Rorty's idea of the dual educational system, inequity cannot be avoided in his ideal society. This could enable its citizens to be edified by self-creation. However, this is contradictory with his ideal that everybody can have equal chances at self-creation.

As discussed above, Rorty's idea of "entirely distinctive" education meshes well with his idea of educational purpose, edification or self-creation. However, there is a serious conflict between his idea of the dual educational system and of liberal society. In this regard, therefore, the coherence of Rorty's ideas are questionable.

4.2.1.2 Lack of reason for edifying a new self

If human beings are "centreless networks of beliefs and desires" of which the "vocabularies and opinions are determined by historical circumstance" (Rorty, 1990a:291), the reason to create new selves cannot be justified by an intrinsic essence of human self. Rorty insists that it is the only way of triumphant life to create a new self

for the human being, because of the contingence of his or her self (1989a:29). However, if the human self is a contingently woven network of beliefs and desires determined in a certain historico-societal circumstance, our re-woven selves and re-created new vocabularies must be contingent and be confined to a "contingent" historical circumstance. Even these new metaphors and vocabularies will become out of date and should be renewed as time goes by. Then, why should we continually create our selves? It seems meaningless to create another contingent metaphor, vocabulary and the human self in a contingent environment. If everything (language, the self and community) is contingent and nothing remains stable in a changing process, it is meaningless to change our selves continually.

Rorty may answer this question that we can/must invent a "new" metaphor, vocabulary and self "better" to deal with our environment. It is already investigated that Rorty substitutes as the criterion of valid knowledge "usefulness" for "accuracy," when he abandons the modern notion of "correspondence with reality" in knowledge. We cannot transcend our language to compare our knowledge, that is a linguistic description, with reality in itself (see section 3.2). The most important thing is therefore not whether our knowledge represents reality accurately, but whether it works better to cope with our problems. In this regard, Rorty seems to think that a "new" thing is "better" than the "old" one.

> Western philosophical tradition thinks of a human life as a triumph just insofar as it breaks out of the world of time, appearance, and idiosyncratic opinion into another world – into the world of enduring truth. Nietzsche, by contrast, thinks the important boundary to cross is not the one separating time from atemporal truth but rather the one which divides the old from the new. He thinks a human life triumphant just insofar as it escapes from inherited descriptions of the contingencies of its existence and finds new descriptions (1989a:29).

The new is better than the old, therefore it is necessary to invent a new vocabulary and to create a new self, for being triumphant and better in a contingent life. In Rorty, the

term "new" is used as a synonym for good (Erickson, 2001:246).

However, how can this idea, that new is better, be guaranteed? How can we compare the new and the old to judge which one is better? Rorty realises that human beings cannot escape from the situation of linguistic ubiquity, but neglects the fact that human beings cannot transcend time or the time-bound situation (cf. Kalsbeek, 1975:151-159). It cannot be possible to say that "the new" is "better" than "the old." As Rorty says, we cannot stand in a neutral position transcending our language in order to compare our perception with reality in itself. We also cannot stand in a third position transcending the time, to compare the old and the new. Erickson (2001:226) points out the problem of Rorty's chronocentric idea as follows:

> How broad is the measure of workability, and in particular, over how long a period of time must it be measured? Some ideas, methods and devices that work out well over the short term do not do so over a longer term. Jumping from an aircraft without a parachute may be very practical for a period of time. It increases the thrill of the fall. At some point, however, the practicality of a parachute becomes apparent, if not to the person making the leap, certainly at least to others observing the end of the fall.

Actually, Rorty's "chronocentrism" does not give any good reason to invent a new metaphor and to recreate the human self (cf. Erickson, 2001:247). It does not persuade us better than the traditional idea of accuracy to edify the self continually. Rorty emphasises the contingent aspect of the world and the human being following Nietzsche and Freud, but he fails to justify the reason of self-edification, that is the ultimate purpose of education. The purpose of education in Rorty's idea cannot be firmly justified on his ontological, anthropological and thus epistemological ground.

According to the above discussion, we can find that 1) Rorty's idea of edification as the purpose of education has self-contradictory elements in connection with his idea of the twofold educational scheme and of liberal utopia, and that 2) Rorty fails to justify the reason of self-edification in his philosophical perspective.

4.2.2 A criticism of the educand

Rorty's idea of the educand has been discussed in the previous chapter (see section 3.4.2):

(1) Human beings do not have any intrinsic nature and essence which have to be actualised through education. They are shaped into human beings from pre-human beings (a certain kind of animal) through socialization. Rorty seems to think of this as a kind of education. After socialization, human beings can create their own selves through revolting against their socialised vocabularies and inventing their own idiosyncratic vocabularies. This individuation is another kind of education.

(2) Rorty denies any idea of inherent human nature, but he acknowledges some commonality in human beings which can be called an intrinsic nature, i.e. the ability to use language, the ability to feel a special kind of pain – humiliation. He uses these commonalities to justify his idea of education.

4.2.2.1 Neglected or hidden human natures in Rorty's idea of the educand

Any educational idea depends mainly on a certain ontology and anthropology. It is difficult or nearly impossible to construct an educational assertion without the idea of human nature, as we discussed in section 4.2.1.2. If there is no human essence, we cannot find a firm ground of educational theory and practice, and also cannot offer a driving force for educational enterprise. Rorty denies any idea of intrinsic human nature. Attention should be given as to how he devises the thrust for his idea of education and how he justifies his educational ideas with his non-essential view of the human being.

It is interesting to see the fact that when Rorty insists on his anti-essential view of the human being, he also advocates, at the same time, certain kinds of human essence. He strongly proclaims that "there is nothing deep inside each of us, no common human nature, no built-in human solidarity" (Rorty, 1989a:177). However, one thing should be excepted from this idea. He continues to say that "There is nothing to people except what has been socialized into them – their ability to use language" (1989a:177). A certain

language can be socialised, but the "ability to use language" is a necessary condition to socialise the language into human beings. If human beings do not have their ability to use language inherently, they cannot be socialised. Therefore, although Rorty regards the "ability to use language" as "what has been socialized," this linguistic ability should be regarded as intrinsic human nature.

Rorty suggests another form of human nature as well. He (1989a:177) says that "simply by being human we do not have a common bond. For all we share with all other humans is the same thing we share with all other animals – the ability to feel pain." However only human beings can have a special kind of pain, "humiliation" which other animals lack (1989a:177). Actually Rorty insists only socialised humans can have this susceptibility of humiliation. However, being human means for him being socialised, and without socialization the human cannot exist. Therefore it can be said that "they [humans] can *all* be humiliated by the forcible tearing down of the particular structures of language and belief in which they were socialized" (1989a:177, italics by author). Not only special humans have the susceptibility of humiliation, but all humans have it. The susceptibility to humiliation should be regarded as another feature of human nature.

Therefore, there are at least two inherent human natures or commonalities in Rorty's idea of the educand: the ability to use language and the ability to feel humiliation. Interestingly these two human qualities match exactly with his idea of two distinctive educational tasks, socialization and individuation. Human beings can be socialised basically on the ability to use language, and they are stimulated or motivated to create a new self, viz. individuation based on the ability to feel humiliation. Rorty does not acknowledge openly any human nature, but devises implicitly certain essential human natures and uses them as an anthropological ground for his idea of education.

4.2.2.2 Reductionism in Rorty's idea of the educand

According to the discussion in the previous section, for Rorty, to be human is to use a language and to feel a certain inner emotional pain – humiliation. He emphasises only a

few aspects of the human being. These are the human's linguistic aspect and emotional or affective aspect. However, he neglects other aspects in the human being as a whole person, such as the physical, logical, ethical and confessional/religious aspects (Heyns, 2004:121-123; Van der Walt, B.J., 2002:142-152, 170). In this section, a reductive feature of Rorty's anthropological idea will be examined on the basis of the "modal theory" which Herman Dooyeweerd originally set up as a part of his cosmology (Fowler, 1991:222-223).

According to Dooyeweerd, every reality in the world has a set of modalities, aspects, dimensions or law-spheres (Kalsbeek, 1975:38). These modalities can be enumerated as follows, (1) the numerical mode (2) the spatial (3) the kinematic (4) the physical (5) the biotic (6) the percipient (7) the affective (8) the aesthetic (9) the logical (10) the technico-cultural (11) the lingual (12) the social (13) the economic (14) the jural (15) the ethical (16) and the pistical. All modalities together form one unbreakable coherence (sphere universality) and are intimately interwoven in a specific concrete reality. Each modality has a core meaning and peculiar laws, therefore each modality is unique and cannot be reduced to another (sphere sovereignty). There is a specific order in the modalities, and every aspect (modality) exists in coherence with others and points beyond itself toward the latter. Every reality in the world functions in each of these modalities, either as a subject or as an object. However, only the human being can function in all modalities as subject (Fowler, 1991:210-225; Joh, 1997:175-176; Kalsbeek, 1975:72-125; Van der Walt, B.J., 2002:142-150).

If we apply this modal theory to the human being, it is obvious that every human person engages in all sixteen modes of existence and has a complex structure. Joh (1997:176) neatly summarises the structural complexity of the human being.

> The whole personality (or existence) of man consists of four structures of human functioning:
> 1) The physico-chemical body structure: this structure includes the first four modes of human existence (the numerical, the spatial, the kinematic,

the physical modalities).

2) The biotic body structure: this structure encompasses the organic life of man and belongs to the biotic aspect of reality. It is based on (and interlocked with) the physico-chemical body structure.

3) The psychical body structure: this structure refers to the percipient and the affective aspects of human life. It is based on (and interlocked with) the physico-chemical and the biotic body structure.

4) The normative (or act) structure: this structure includes nine normative modes of existence (the logical, aesthetic, cultural, lingual, social, economic, jural, ethical and pistical modalities). It is based on (and interlocked with) the foregoing three body structures (the physico-chemical, the biotic and the psychical). Man is unique, in the sense that he is characterized by this normative structure.

One of the peculiar notions in this modal theory is that all aspects of the human being are equally important and that each modality must be distinguished as an irreducible mode with its own law (Fowler, 1991:218, 223). None of them should be overestimated or reduced into other modalities. Van der Walt (J.L., 2002b:103) warns about the theoretical tendency to the fragmental understanding of the human being through overemphasising only one or two modal aspects.

> Scholars tend to analyse, or 'theoretically dissect' man into her different 'parts', structual dimensions and temporal modalities. In many cases, this tendency has led to the theoretical fragmentation of man, leading (inter alia) to dichotomist or trichotomist views of man, and also to mechanical, rationalist, moralist, naturalist-materialist, evolutionalist, behaviourist, structuralist, technologist views of man, to mention only a few. These views can all be ascribed to the philosophical tendency to absolutise one aspect or feature of man, or to reduce the totality of man to only one of his attributes or forms of existence (reductionism).

In the view of modal theory, it is apparent that Rorty overemphasises the lingual aspect and the affective aspect in the existence of the human being and he neglects other aspects. Rorty's reduced view of the human being results in failure to provide a firm normative ground for his idea of education. Incoherent features in his educational idea

also originate from this one-dimensional view of the educand.

4.2.3 A criticism of curriculum

In the previous chapter, Rorty's idea of curriculum has been discussed as follows (see section 3.4.3):

(1) Although Rorty does not acknowledge the modernist notion of objective knowledge or absolutely true knowledge, he insists that all school curriculums should be taught as "self-evident truths" in the lower level of education.

(2) For Rorty, all school subjects must be regarded as a certain kind of narrative, story or literature and taught as a form of narrative, because of his idea that all knowledge is under linguistic description (or narrative).

4.2.3.1 Self-contradiction between the lower level curriculum and the higher level one

As we discussed in previous sections (3.4.2, 3.4.3), Rorty insists on his anti-essential view of the human being and suggests, based on this view, his idea of edification or self-creation. He insists that we must realise the contingency of ourselves, and must reshape ourselves by inventing a new vocabulary for our triumphant or successful lives as human beings. However, his anti-essential idea of the human being cannot provide a good reason why the human person should create him/herself in his/her own idiosyncratic vocabulary after being shaped as a human being by accepting a set of beliefs which is regarded as truth in a certain society. If human beings do not have any intrinsic nature, but are shaped as humans by acculturation, the reason to justify self-creation cannot be found in essential human nature, but must be found from another source outside the human being.

Rorty tries to devise a reasonable ground for self-creation in the process of socialization. Human beings must be shaped to realise their contingency and be motivated to create themselves by socialization. Therefore, for him, an advisable curriculum in primary and secondary schools should consist of narratives about continual social criticism, i.e. the story of increasing freedom and the story about heroes or heroines who revolted against

the conventional wisdom of their day (Rorty, 1990b:42-43). If so, there is no difference between curriculums in the lower level education and in the higher level education. This idea of curriculum in the lower education to facilitate self-creation is inconsistent with Rorty's idea of socialization. It is notable to see that he mentions two different types of socialization. Rorty's first type of socialization can be traced as follows:

(1) Freedom, that is the ideal of the private realm in human life, and justice that is the ideal of the public realm, cannot be unified into a single language or a single theory. Both are equally right and valid but should be distinct to each other (see section 3.3.2.1).

(2) Education must be separated into two entirely different phases, i.e. lower level and higher level education, to accomplish these two equally valid yet distinct ideals (see section 3.3.2.1).

(3) The main task of socialization is to inculcate the young with a certain language or beliefs which have been accepted as normal discourse by their society. To create a new self, it is necessary for a person to become a human being by socialization, that is making a student to live as a good citizen through inculcating conventional wisdom (see section 3.3.2.2).

(4) Edification or self-creation is by its nature parasitic and reactive against normal discourse. Individuation is urging individual students to re-create or to re-invent themselves. It can be accomplished by "revolt against" the process of socialization (see section 3.3.2.3).

According to the above summary, Rorty's idea of socialization is to inculcate students with normal discourse and "conventional wisdom." Individuation or self-creation is achieved by revolt against the socialised conventional wisdom. This is Rorty's first type of socialization and can be called "conventional socialization."

However, it is difficult to answer the following questions, if the human being is only shaped by socialization and there is no human intrinsic nature: "why/how should/can the human being revolt against his or her own self?" In other words, "how can socialised humans change drastically from a passive absorber in the lower education to an active

creator in the higher education?" Rorty seems to answer these questions by saying that it is possible to motivate the human being to revolt against his or her conventional belief through socialization. Here, he suggests another type of socialization which can be called "emancipatory socialization" in which the story about continual social criticism, the saga about the emancipation of the slaves and the narrative about revolt against conventional beliefs are the main contents (Rorty, 1990b:42-43). This "emancipatory socialization" is quite different from "conventional socialization."

In the view of "conventional socialization," Rorty's idea of two entirely distinct ideals and his idea of edification which is accomplished by revolting against socialization, are well-matched. However, in the view of anti-essential human nature, it is difficult to answer the question of how humans can revolt against themselves.

Based on his view of "emancipatory socialization," Rorty can provide a good argument of how a person can change from a passive absorber to an active creator. However, it does not match well with his idea of the two educational phases which is that socialization and individuation are equally valid, but should be entirely separated. In "emancipatory socialization" the curriculum of the lower level education and the curriculum of the higher level education become quite similar to each other. If individuation can be achieved by revolting against socialised conventional knowledge, the story of emancipation in the lower level education must be attacked by the story or the curriculum in the higher level education. In "emancipatory socialization", the curriculum for socialization, i.e. the story of social criticism and the narrative about revolting against normal discourse, should be criticised and revolted against by the curriculum for individuation which pursues exactly the same narratives.

It is obvious that Rorty's idea of curriculum contains a self-contradiction and is seriously flawed. These self-contradictory problems are mainly the result of Rorty's anti-essential view of the human being. Therefore it can be concluded that his idea of the human being does not provide a good "foundation" for educational idea and practice (cf. Kwak, 2004:

348-355).

4.2.3.2 Reductionism in Rorty's idea of curriculum

As mentioned in the previous chapter (section 3.4.3), Rorty insists that all knowledge is a certain kind of narrative and linguistic interpretation about the world. His view of knowledge as a linguistic description can be criticised for its reductional character by using Dooyeweerd's modal theory which is briefly mentioned in section 4.2.2.2. According to the modal theory, Rorty emphasises only the lingual aspect of knowledge, and reduces other various aspects into the lingual aspect.

According to Dooyeweerd, the modal aspects in reality are completely interwoven with each other, therefore we perceive and experience a concrete reality or a state of affairs in its total "interwovenness." It is not possible to distinguish and identify modal aspects in our naïve experience. These modal aspects can be distinguished only in our abstract theoretical or logical thinking (Kalsbeek, 1975:162). Each modal aspect has its own unique and irreducible meaning, concept and law (functioning principle). We can focus on a specific modal aspect and investigate its irreducible meanings, concepts and laws in scientific (theoretical) thinking. Scientific knowledge tries to focus on one modal aspect of reality, analyse it, abstract its essentials, and synthesise the findings (Van der Walt, J.L, 2002a:50). Therefore, we can understand the world more deeply and systematically through various kinds of scientific knowledge. These different kinds of scientific knowledge broadly correspond to school subject contents, that is, to distinct organizations of knowledge in one or more aspects (Van Brummelen, 1994:120-124). Van Brummelen presents the correlation between modal aspects and related subject disciplines in table 1 presented on page 145 (1994:121).

It is one of the important tasks of schooling to open up to students various modal aspects in reality. Students must be guided at first to be aware of the multi-dimensionality of the world, in which all aspects are structured and interwoven in reality. Teaching is an unfolding process to open up each and every dimension of reality to students (Fowler,

Van Brummelen & Van Dyk, 1990:160). Fowler (1991:215) says, it can be possible "only through theoretical knowing because these facets of structured functioning can be identified only by the process of abstraction that is a characteristic of theoretical knowing." Therefore, school curriculums must cover a wide scope of forms of knowledge and include all aspects of reality and deal with their key meanings (Van Brummelen, 1994:121-124). Although various subjects can be integrated in teaching that is a so-called "integral curriculum," all modal aspects and therefore, all school subjects, which deal with a specific modality should be identified. Laws, key meanings and concepts of each modality should not be blurred with others.

Table 1. Aspects of reality and related subject disciplines

Aspect of reality	***Key meaning***	***Related subject disciplines***
Confessional	Allegiance	Theology, religious studies
Ethical	Integrity	Ethics
Political/legal	Justice	Law, political science
Economic	Stewardship	Economics
Social	Personal interaction	Sociology
Lingual	Symbolic meaning	Language
Analytical/logical	Rational analysis	Logic, computer science
Aesthetic	Creative allusiveness	Visual art, music, dance
Psychic/emotional	Perception and feeling	Psychology
Biotic	Life	Biology, physiology
Physical	Energy	Chemistry, physics
Spatial	Space	Geometry, topology
Quatitative	Number	Arithmetic, number theory
Cultural formation	Faith, love and justness	History, Interdisciplinary studies

Rorty makes us aware well enough of the importance of language in knowledge. Obviously, language has a peculiar role in the knowing process and the lingual aspect is very important and cannot be reduced to other aspects. Van der Walt (J.L., 2002a:60-61) says about the importance of language in knowledge:

> ··· language should not be underestimated, since it is where our concepts of things are rooted, where they grow and develop, and in terms of which we are able to bring our conceptions of phenomena into connection with realities that we have in our minds, conceptually.

In the perspective of Dooyeweerd's modal theory, however, it is apparent that Rorty falls into a pitfall of reductionism. As Closer (1991:204-218) warns against reductionism, any aspect of reality should not be regarded as the only genuine aspect or as making the existence of any other possible. For Rorty, the genuine aspect of knowledge is lingual, and this ligual aspect makes other aspects possible. Therefore, it can be concluded that the lingual aspect is overemphasised in Rorty's idea of knowledge and that all other aspects are reduced to (aspects of) language.

In this section, the discussion tries to criticise Rorty's idea of the curriculum. Based on the discussion we find that 1) Rorty's idea of the curriculum has a serious self-contradictory flaw between curriculums in lower level education and in higher level education, and that 2) in his idea of the curriculum, the lingual aspect of knowledge is overemphasised and all other aspects are reduced to the lingual aspect.

4.2.4. A criticism of educational method

The discussion about Rorty's idea of the educational method in the previous chapter can be summed up as follows:

(1) In Rorty's pragmatic view, knowledge is regarded as a tool to cope with problems, and therefore the "problem-solving" method or "problem-centred learning" may become the most preferable way in teaching and learning practice. In this method, a problem is related across various different school subjects, and requires students to engage actively in the process of problem-solving.

(2) In terms of edification, Rorty's idea of conversation can be regarded as the most central method in the educational situation. Self-edification can be possible through listening to as many suggestions and arguments as students can in a free conversational situation.

4.2.4.1 The purpose of conversation: consensus or conversation itself?

It has been already mentioned in section 3.4.4 that Rorty distinguishes sharply between conversation and inquiry or dialogue in his early work, but moderates the firm distinction between these two notions later on. However, it is notable that he still seems to grasp at two different goals of conversation, i.e. social consensus and conversation itself, which do not harmonise. For Rorty, conversation is the only way to reach a social consensus in a community on a certain matter, and it is the only way to edify human self as well.

Rorty insists that knowledge must be seen "as a matter of conversation and of social practice, rather than as an attempt to mirror nature" (1980:171). Knowledge is a set of beliefs which is justified by social agreement (1980:178). Rorty says, "justification is not a matter of a special relation between ideas (or words) and objects, but of conversation, or social practice" (1980:170). Conversation is "the ultimate context within which knowledge is to be understood" (1980:389). Therefore, "the urge to come to free agreement with our fellow human beings – to be full participating members of a free community of inquiry" should replace "the urge to represent reality accurately" (1999:119). In this regard, conversation pursues a social consensus about what beliefs are good to deal with problems for a certain society's members. If knowledge is "the ability to get agreement by using persuasion rather than force" (1991b:88), it can be achieved only by conversation which can make possible "a free and open encounter" for the "unforced agreement" (Rorty, 1991b:39).

Rorty insists, on the other hand, that conversation has no other goal except conversation itself. He says that "the ironist ⋯ desperately needs to *talk* to other people, needs this with the same urgency as people need to make love. He needs to do so because only conversation enables him to handle these doubts, to keep himself together, to keep his web of beliefs and desires coherent enough to enable him to act" (1989a:186). Edification is a never-ending process during one's whole lifetime, and should not end at a certain stage of life. Conversation for edification therefore does not have a particular goal

such as "social consensus." Conversation for self-creation takes place between those who have different beliefs, desires and vocabularies and it does not try to reach an agreement. In this regard, there is no other goal of conversation, but conversation itself becomes the most important thing in conversation for edification.

Why does Rorty want to hold two different goals of conversation simultaneously, i.e. consensus and conversation itself? The reason seems to refer to his idea of dichotomy between the public and the private realm. According to him, in the public realm of life, humans should live as good citizens pursuing solidarity, but in the private realm, humans should live as ironists seeking self-individuation. These two realms are equally valid and necessary but cannot be accomplished in a single vocabulary or theory (Rorty, 1989a:xiii-xv). For this reason, on the one hand, Rorty insists that social consensus can be reached by conversation, but on the other hand, he denies any goal of conversation except continuing conversation in itself. That is why sufficient explanation about how self-creation can be achieved through conversation in Rorty's works cannot be found. It is obvious, therefore, that his notion of conversation also has a flaw, namely of incoherence.

4.2.4.2 Incommensurability and the possibility of conversation between different vocabularies

Rorty's conversation takes place between different vocabularies. However, he insists these different vocabularies or metaphors cannot understand each other because of the incommensurability between them. If so, it is legitimate to raise a question of how the conversation can be possible between two totally "incommensurable" vocabularies. In this section, the possibility of conversation or communication will be critically examined.

Different languages, vocabularies or in more general terms, theories, do not share any "common ground" with each other (1980:316). Therefore they cannot understand each other and, in a sense, are antagonistic to each other, so one cannot possess two different vocabularies at the same time. Rorty (1989a:48) says,

> Those who speak the old language and have no wish to change, those who regard it as a hallmark of rationality or morality to speak just that language, will regard as altogether *ir*rational the appeal of the new metaphors – the new language game which the radicals, the youth, or the avant-garde are playing. (…) Conversely, from the point of view of those who are trying to use the new language, to literalize the new metaphors, those who cling to the old language will be viewed as irrational – as victims of passion, prejudice, superstition, the dead hand of the past, and so on.

Rorty borrows the concept of "incommensurability" from Kuhn to explicate his idea that it is impossible to understand a different vocabulary in the framework of another vocabulary. He explains his notion of vocabulary, metaphor or discourse in terms of Kuhn's "paradigm." The incommensurability between different vocabularies cannot be avoided, as between two different paradigms in Kuhn's theory (Rorty, 1980:315-322).

Consequently, a meaningful communication or "fruitful conversation" can be possible only in a group which shares enough beliefs (Rorty, 1991b:30). On the other hand, Rorty still wants to retain his idea that conversation takes place between two different vocabularies. Rorty thinks that two different vocabularies cannot be translated the one into the other, but insists oddly that "untranslatability does not entail unlearnability, and that learnability is all that is required to make discussability possible" (Rorty, 1991b:48). We can learn from a different vocabulary although it cannot be understood in our own vocabulary. By what, or how can it be possible? Rorty may simply say "… by conversation." Obviously, it is not an adequate answer.

In fact, Rorty does not offer a full explanation about how conversation is carried on between different incommensurable vocabularies. At best, he seems to insist that we can compare two different vocabularies through conversation. For Rorty, conversation between different vocabularies seems to mean "comparison" with each other.

> … the world does not provide us with any criterion of choice between

> alternative metaphors, that we can only *compare* languages or metaphors with one another, not with something beyond language called "fact" (Rorty, 1989a:20, italics by author).

Rorty thinks that new vocabularies can be issued by comparisons and contrasts between current vocabularies (1982:xli).

There is another question concerning the comparison. Is it possible to compare two different vocabularies without a criterion? It is not possible to find a good answer to this question in Rorty's idea of conversation. Rorty insists that the comparison between different vocabularies is not an activity like logical inference, rather it is like a dialectic or "literary criticism" (1989a:77-80) which is a kind of aesthetic affair and therefore cannot be explicable logically. In this regard, it is apparent that Rorty's idea of conversation has a vague meaning and he equivocates about how conversation can be possible between different vocabularies, or how two vocabularies can be compared in conversation.

4.2.5 A general remark on Rorty's idea of education

According to the above discussion, it becomes apparent, firstly, that Rorty's idea of education contains incoherences and self-contradictions. These self-contradictions seriously devalue Rorty's idea, because of his "coherentism" in which all propositions or sentences are justified by a coherent relationship to others within the whole context. Rorty's idea of education is not consistent with his epistemic notion of coherentism and therefore, we can say Rorty fails to offer a coherent idea of education.

Secondly, through the discussion, reductive characteristics in Rorty's idea of education can be clearly seen. When we examine his idea of education in the view of Dooyeweerd's cosmology, it is obvious that Rorty overemphasises the lingual aspect in his view of knowledge and the affective aspect in his view of the human being, and that he neglects all other aspects of knowledge and the human being or reduces them to a single aspect.

Thirdly, although Rorty denies any foundationalism, there is a foundational idea on which Rorty's idea of education seems to be constructed. He uses his idea of the human being who has the ability to use language and the ability to feel humiliation, as a foundation for his idea of education.

Finally, we can also see ambiguous aspects in Rorty's idea of education. He does not provide sufficient explanation about how conversation can be carried on between incommensurable vocabularies, or how self-creation can be achieved through conversation between different vocabularies. In a sense, these questions about conversation are the most critical problems in Rorty's whole idea.

In the following section, the focus will move to Rorty's idea of knowledge in order to prepare a background for debating general problems of postmodern epistemology in schooling.

4.3 Critical evaluation of Rorty's idea of knowledge

In the previous section, Rorty's idea of knowledge was discussed in passing when his idea of education was considered. In this section, some fundamental issues of his idea of knowledge will be discussed critically. In order to discuss the educational implication of postmodern epistemology in the next section, this discussion will also refer to the general characteristics of postmodern epistemology.

The discussion will focus on the following problems:

(1) Two different kinds of worlds in Rorty's idea

(2) The ubiquity of language and its incoherence with Rorty's pragmatic idea

(3) A tacit foundation of knowledge in Rorty's idea

4.3.1 Two different kinds of worlds in Rorty's idea

The modernist conviction to know the world as it is has come to lose credibility and,

finally, it has been discarded completely in the postmodern era. We cannot know the world in itself, but only construct our knowledge about the world. This idea even goes further, as in the view of Baudrillard (1981), the world or reality itself should be eliminated, if we cannot know it. For Baudrillard, "representations (including scientific theories, language etc.) swallow the real and substitute it with the hyper-real of their own construction" and therefore, "we deal only with the *hyper-real* (i.e. reproductions and simulations)" (Coletto, 2005:18-19). Rorty also adheres to this idea when he refers to "the world well lost" (1982:3-18). In this section, the discussion will focus on Rorty's idea of the world or reality, and will try to show its double meaning and its incoherence.

For Rorty, knowledge is a linguistic description of reality. He says, "there is no way to think about either the world or our purpose except by using our language" (1982:xix). Therefore, all human awareness is a linguistic affair. There is nothing before language, so there is no "pre-linguistic awareness." Language is a horizon of human perception from which the human being cannot be transcended. Rorty says that "It is an impossible attempt to step outside our skins – the traditions, linguistic and other, within which we do our thinking and self-criticism – and compare ourselves with something absolute" (1982:xix). We cannot touch reality as it is. Whatever we perceive should be a kind of description, metaphor or vocabulary that has been filtered by language from reality itself. Consequently, we can deal with only a linguistically described world, not the world itself.

On the other hand, according to Rorty's pragmatic view, knowledge is a useful instrument to deal with reality. He insists that knowledge should be "a matter of acquiring habits of action for coping with reality," not "a matter of getting reality right" (1991b:1). Knowledge is a useful set of beliefs to deal with a certain reality, or a kind of understanding "to deal with problems as they arise" (Rorty, 1999:29). Therefore, scientific inquiries aim at inventing "descriptions of the world which are useful for purposes of predicting and controlling what happens" (Rorty, 1989a:4).

If we consider Rorty's idea of language and his pragmatic view of knowledge at the same

time, it is apparent that the meaning of the world becomes odd and problematic. According to his pragmatic view, we can say that we use "our" knowledge to deal with the world or a certain reality, or that we deal with the world through "our" knowledge. In this statement, it is reasonable to question whether reality or the world in the pragmatic view of knowledge is the same one as in his idea of language. In Rorty's idea of language, knowledge is a linguistic description of the world, and therefore, for human beings the world is always in linguistic description. However, in his idea of the pragmatic view, knowledge is a useful set of beliefs to deal with the world. So, human beings deal with the world through knowledge. If we compare Rorty's pragmatic view of knowledge with his idea of language, the world must be a linguistic description and, at the same time, an object to be dealt with. How can we deal with a described world by the same description? Therefore, the world in Rorty's idea has a double meaning: 1) The world is a linguistic description and also 2) it is something to be dealt with, to be controlled, or to be adjusted for achieving our desires through knowledge. In Rorty's pragmatic view of knowledge, the world cannot be regarded as the same world as in his idea of language. Two different meanings of the world in Rorty's idea should be distinguished, but these meanings are not coherent with each other.

In a sense, Rorty seems to assume that humans can experience the world in itself without linguistic description. When he says that knowledge is an instrument to deal with the world, the world is not described in language yet. In fact, he does not neglect the world out there which is the cause of our perception, saying that "He [the pragmatist] agrees that there is such a thing as brute physical resistance – the pressure of light waves on Galileo's eyeball, or of the stone on Dr. Johnson's boot." However, there is no "way of transferring this nonlinguistic brutality to *facts*, to the truth of sentences" (Rorty, 1991b:81). For Rorty, although "the world which is out there" can cause the human being to perceive something, it does not have any important meaning in human knowledge. The world in itself, which is not described in language yet, cannot be a firm foundation for knowledge. When we describe the world in language to achieve a certain desire or to cope with a certain problem, then the world has come to exist in human perception.

In Rorty's pragmatic idea of knowledge, the most important thing is whether a certain description of the world is efficient or not for a certain purpose. Therefore, the description of the world should be replaced continually by inventing a "better" description of the world. In this regard, it can be problematic how can we judge the better of the two descriptions? Rorty simply suggests that we can decide the better description through comparing different descriptions with one another. He says that "we can only compare languages or metaphors with one another, not with something beyond language called 'fact'" (Rorty, 1989a:20). However, it is impossible to judge the better one by only comparing different descriptions without referring to the reality.

For example, in the story of blind men who describe what the elephant looks like, it is impossible to decide the better (or best) description about an elephant by only comparing their descriptions without referring to the elephant. However, Rorty may refute this by saying that "a certain description can work better than others in a certain situation and it can be a truth until the situation is changed." The description that the elephant is like the ceiling is better than others when blind men need shade under the sun. The description that the elephant is like pillars becomes better than others when they need something to lean against. When we apply Rorty's pragmatic notion of knowledge to this case, what is the world which has to be coped with? The descriptions of the elephant or the elephant itself? In Rorty's idea of language, the world must be description, but in his pragmatic view of knowledge, description cannot be the world. Any description of the world is a human response to a pre-linguistic stimulation and therefore, in Rorty's pragmatic view of knowledge, the world cannot be a linguistic description, rather it should be regarded as "pre-linguistic" reality in itself.

According to the above discussion, it can be said that Rorty supposes implicitly the reality in itself which is not described in language yet. Although he maintains the postmodern pessimistic attitude to know the world in itself, he does not radically get rid of this modernist ontological notion.

The sceptical attitude to the possibility of knowing the world in itself is one of the common characteristics in postmodernist thinking. This attitude originated from Kant. He distinguishes the world into the *nouminal* world and the phenomenal world. If we follow Kant, it is not necessary to worry about the world which is out there, or "things in itself," since we can only know the world that we perceive through "a priori" forms. Actually, Rorty's ontological idea also seems to follow the scheme or structure of Kantian ontological ideas. In Rorty, the "a priori" forms of experience and understanding in the idea of Kant are simply substituted by language. For Kant, there is the "thing in itself" and it causes us to perceive/experience the world, but we can know only the experienced world, which is filtered into our mind through "a priori" forms of perception, not "the world in itself." Rorty also insists that there is something out there, like "physical brutality" and this makes us perceive reality, but we can grasp only a perceived or linguistically described world. Rorty does not dare to deny the existence of the world in itself, but maintains the same pessimistic attitude to the outer world, or reality as other postmodernists. Erickson (2001:240) points out the reason for such postmodernist pessimistic attitudes in ontology: "epistemological considerations ('we cannot know this exactly') have been metamorphized into ontological considerations ('there is no common state of affairs to be discussed')."

Postmodernists seem to say, "whatever we cannot contact/know, does not exist." In postmodern thinking, the knowable or the object of knowledge disappears, only the knowing subject or the knower remains. Therefore, as Kant insists, any knowledge claim should depend for its validity, meaning and foundation on the knowing subject. The universal or objective knowledge is possible, for Kant, because the subject possesses a universal form of knowledge. If the knowing subject does not have, however, as Rorty insists, any intrinsic common nature, what will happen? Universal knowledge cannot be possible at all, even the stable world does not exist, therefore humans have to create/construct their own world by and for themselves. This, their own created/constructed world, can be regarded as their "knowledge." That is why Rorty and

other postmodernists want to abolish ontology and epistemology, and want to reside in hermeneutics. It seems difficult to find a way in the postmodern idea to resolve the pessimistic deadlock about the possibility of knowledge.

Although we think that objectives cannot be known exactly in theoretical thinking, we experience/perceive something which can be called the world or reality, in our everyday experience. How can we fill the gap between the postmodern idea about the world and its knowability, and our naïve experience of the world? In sections 4.4.1, 4.4.2 and 4.4.3, a remedy for the pessimistic postmodernist idea of ontology and epistemology will be attempted from a Reformational perspective initiated as a philosophical theory by Herman Dooyeweerd (1984).

4.3.2 The problem of language in Rorty's idea of knowledge

Rorty's ontological ideas are closely related to his idea of language. In other words, his idea of language sets a framework for his whole philosophical idea. What Rorty calls the "ubiquity of language" is pivotal in the construction of his ontological idea and therefore, his epistemological idea as well.

> The ubiquity of language is a matter of language moving into the vacancies left by the failure of all the various candidates for the position of 'natural starting-points' which are prior to and independent of the way some culture speaks or spoke (Rorty, 1982:xx).

For Rorty, human experience or perception is fundamentally linguistic, and all human awareness of entities is only a linguistic affair. He says, "language goes all the way down" (Rorty, 1982:xxxv), and "all our knowledge is under descriptions" (Rorty, 1999:48). Language becomes the horizon of our experience or perception, and human beings cannot escape from the cage of language in the affair of knowledge. In this sense, language is the only reality which humans can contact.

> Dewey thought that if scientific inquiry could be seen as adapting and

> coping rather than as copying (…) we would be receptive to notions like Derrida's – that language is not a device for representing reality, but a reality in which we live and move (Rorty, 1982:86-87).

By this idea, the ubiquity of language, Rorty means two things, namely that 1) we experience and know only what language makes possible and that 2) language is entirely our own creation (Clouser, 2005:10). Consequently, Rorty's idea may lead us to reach the conclusion that "all we ever experience and know is our own creation" (Clouser, 2005:12).

Rorty's idea of language represents a common feature of the postmodern epistemological thought. Groothuis (2000:94) describes a prevailing attitude to language in the postmodernist thinking as follows: "Postmodernists often argue that the semantics (word meanings) and syntax (grammatical structure) of human languages are contingent and ultimately arbitrary. They are mere constructions. Humans have many differing languages, and translations between languages are often difficult. Moreover, the way people understand reality is, at least to a large extent, supposedly dependent on the nature of their languages. These observations have led postmodernists to take language to be self-enclosed, self-referential systems."

Rorty's idea of language can be criticised, firstly, by pointing out the nonlinguistic aspects of our experience. In this regard, Clouser (2005:12) describes a situation by way of an example in which two persons collect mushrooms in the woods:

> You have explained to me how to tell the poisonous ones from the edible ones, and we are picking only the edible ones and putting them into a basket. The whole while, however, we are discussing Beethoven's Fifth Symphony so that our language exchange is completely occupied with the innovative nature of that composition …. The fact that this is possible shows that I have acquired a logical concept of the difference between edible and non-edible mushrooms that is not identical with words, and that I am employing that concept while engaging in a linguistic exchange about something entirely different. I am not thinking of the difference between the

> mushrooms in language; I do not have two conversations running simultaneously - one public and the other private. Rather, I am not thinking any words whatever about the mushrooms, though I am recognising their differences by perceiving them under the guidance of a new logical concept.

In this situation, of course, it is possible to represent or to discuss mushroom selection or tune invention. These activities have a linguistic aspect to them. However, all human activities also "have a nonlinguistic side, which does not depend entirely on language to be experienced" (Clouser, 2005:12).

Secondly, Clouser (2005:13) criticises Rorty's idea of language by pointing out that the latter's pragmatic view of language and his idea of linguistic ubiquity cannot be compatible with each other. According to Rorty's idea of language, in the above situation used as an example, if we do not have any language to designate the different mushrooms, it is impossible to distinguish mushrooms in edible and poisonous. In the real situation, however, we can experience and learn about the edible mushroom and the poisonous one, although we do not have a certain language to designate them. Otherwise, it can be said that there are no poisonous or edible mushrooms in reality, this is only a creation of our language. However, we learn to discriminate the difference of mushrooms and embody this in language, because we have already come to know the fact about the difference by our experience.

In Rorty's view of linguistic ubiquity, whatever we experience is possible in terms of language, but in his pragmatic view, language is our own tool to achieve our desires. However, we have to experience and know the needs of life in order to develop a language that can deal with them. This experience has to come before inventing a language, but our experience can be possible only through language according to his view of language. Rorty's pragmatic view "presupposes the priority of experience and logical thought language" (Clouser, 2005:13) and it becomes entirely incoherent with his idea of language.

Groothuis (2000:93-95) points out a fundamental fallacy in the postmodern idea of language. According to him, postmodernists have confused the relativity of term selection (semantic variation) with an inability of language to represent objective reality. We cannot find an intrinsic reason why we choose a certain word to designate a certain reality, either in language or in reality. However, this fact cannot be a reason to think that language does not represent reality. In this regard, Searle (1995:166) says,

> We arbitrarily define the word "cat" in such and such a way; and only relative to such and such definitions can we say, "That's a cat." But once we have made the definitions and once we have applied the concepts relative to the system of definitions, whether or not something satisfies our definition is no longer arbitrary or relative. That we use the word "cat" the way we do is up to us; that there is an object that exists independently of that use, and satisfies that use, is a plain matter of (absolute, intrinsic, mind-independent) fact.

Semantic and syntactical differences do not abolish the ability of language to refer to realities successfully. We do not create different worlds through our language as the postmodernists would have it, but we do use varying descriptions of the actual world, which either correspond or fail to correspond to the world that is there. In conclusion, Groothuis (2000:95) declares that "Even though our use of particular sounds and markings for words is not dictated by the nature of the things they describe, semantics and syntax can connect us with reality."

Based on the above discussion, it is obvious that Rorty's idea of language is incompatible with his pragmatic idea, and that Rorty neglects the ability of language to correspond to the reality which is out there.

4.3.3 A tacit foundation in Rorty's idea of knowledge

Rorty shows openly his antagonistic attitude to the modernist foundationalism in knowledge. He insists that the traditional philosophy assumes that "a common ground"

which can be "to be rational" exists, and that "an epistemology can be constructed on" such common ground. Therefore, in the modernist thinking, "To suggest that there is no such common ground seems to endanger rationality" (Rorty, 1980:316-317). However, Rorty asserts that it is impossible to find a "common ground" or a "starting point" for unshakable knowledge that lies "outside us." The reason is that human beings cannot transcend from their language to compare their linguistic description and reality as it is (Rorty, 1982: xix). Human beings cannot rise above their community either from which their belief and language are inherited (Rorty, 1982:165).

In this regard, Erickson's remark of the postmodern alternative view of knowledge is worthwhile in considering Rorty's anti-foundational attitude in knowledge.

> ··· postmodernism rejects epistemological realism, a correspondence view of truth, a referential understanding of language and foundationalism in epistemology. In the place of correspondence to reality, postmodernism often substitutes one of two options. One alternative is a coherent view of truth, the idea that the test of truth is to be found by taking our ideas as a whole, atomistically, and checking the coherence of the set of propositions. The other option is the use of a pragmatic view of truth, namely, the idea that truth is that which works, or enables us to make progress toward mutually agreed-on goals (Erickson, 2001:232).

Rorty, obviously, adopts both these postmodern alternative views of knowledge, i.e. a coherent view and a pragmatic view. He especially upholds coherentism with regard to the justification of knowledge. Instead of trying to find out an objective, external foundation for human inquiry into truth, Rorty suggests that getting a coherent relationship is necessary to justify a proposition or belief as knowledge.

> ··· the issue is not adequacy of explanation of fact, but rather whether a practice of justification can be given a "grounding" in fact. The question is not whether human knowledge in fact has "foundations," but whether it makes sense to suggest that it does – whether the idea of epistemic or moral authority having a "ground" in nature is a coherent one. (···) For the

> Quine-Sellars approach to epistemology, to say that truth and knowledge can only be judged by the standards of the inquirers of our own day is … to say that nothing counts as justification unless by reference to what we already accept, and that there is no way to get outside our beliefs and our language so as to find some test other than coherence (Rorty, 1980:178).

The central issue in Rorty's argument against the modernist foundationalism is how knowledge can be justified. He wants to substitute his own way to justify knowledge for the way of the modern foundationalist.

Modern foundationalists insist that there are certain unshakable starting points in the knowing process. These starting points are not justified by any other propositions, but are immediately justified. They are indubitable and incorrigible. These starting points or foundations serve to justify other beliefs as an authentic knowledge. Coherentism, in contrast to foundationalism, asserts that a belief is justified by its coherence with one's other beliefs (Erickson, 2001:252-254). Rorty compares two different ways of justification in knowledge.

> … we can think of knowledge as a relation to propositions in question and other propositions from which the former may be inferred. Or we may think of both knowledge and justification as privileged relations to the objects those propositions are about. If we think in the first way, we will see no need to end the potentially infinite regress of propositions-brought-forward-in-defense-of-other propositions. (…) If we think of knowledge in the second way, we will want … to reach the foundations of knowledge (Rorty, 1980:159).

The major difference between coherentism and foundationalism is how their propositions are related to one another in terms of their justification. Foundationalism maintains that there is a single directional justification and that foundational beliefs justify the derived beliefs, but not vice versa. Coherentism asserts that there are no basic propositions, and the relationship of beliefs is more complex. All propositions must be justified by their relationship to other propositions within the epistemic system.

Rorty is aware that his idea can be refuted as "relativism" when he discards foundationalism and adopts coherentism. This problem can be expressed in the question, "can it be regarded as knowledge if any proposition has its own coherent relationship with other propositions?" If we consider the condition of knowledge only in terms of coherentism, any proposition or belief can be knowledge if it has a coherent relationship within its whole set of beliefs. Apparently, coherentism cannot avoid relativism. Even his other view of knowledge, pragmatism, in which knowledge is "what is good for *us* to believe" (1991b:22), cannot prevent relativism. Since Rorty does not want his idea to be called relativism (1991b:30), he needs something more to add to coherentism to keep his idea from being called relativism: That is society or community. Rorty (1980:187) says, "We can only come under epistemic rules when we have entered the community where the game governed by those rules is played." To be in a certain conversational situation is the only legitimate context to justify our knowledge.

> To be ethnocentric is to divide the human race into the people to whom one must justify one's beliefs and the others. The first group – one's *ethnos* – comprises those who share enough of one's beliefs to make fruitful conversation possible. In this sense, everybody is ethnocentric when engaged in actual debate, no matter how much realist rhetoric about objectivity he produces in his study (Rorty, 1991b:30).

At least, in our own society, we can share with our fellow inquirers a set of common beliefs which has been agreed as "what is good for us to believe." Knowledge is justified not through finding a privileged foundation, but by gaining social agreement from a community. Consequently, knowledge can be valid only in a certain society from which its social agreement comes.

For Rorty, society is the only legitimate context to approve a certain belief as knowledge. Whatever society adopts or agrees as knowledge, must be taught to children as objective knowledge or absolute truth in the lower level education for socialization. Interestingly, social agreement is also very important in the higher level of education for

individuation. Rorty believes that higher education should be concerned mainly with edification. Therefore, he stresses the need for educational pluralism at the university: "There, within the sanctuary of a kind of academic freedom which cannot be extended to the secondary schools, doubts about the society may become central rather than marginal to education" (Rorty, 1990b:42). Knowledge may be regarded as a bag of tricks and the range of options available at the university should resemble those of bazaars or flea markets (Rorty, 1988:32). Rorty insists that university faculties should "exert themselves to take in representatives of every conceivable movement – deconstructionists, Marxists, Habermasians, Catholics, Straussians," and he would have academic decisions – for example, determining the contents of the university's core curriculum – made as a result of free and open debates between professors (Rorty, 1988:32).

However, what of those movements which are not conceivable – that is, those positions which now are not recognised as either minority views or legitimate – or those persons expressing unpopular thoughts who are not representatives of any recognised movement? According to Rorty, it would seem that they are out of luck and will be excluded. At best, they may continue to advance their perspectives until the time, if ever, that they persuade the faculty members that their positions should be granted recognition. Further, such persons are caught in a double bind: they must be recognised as legitimate in order to put forward their views, but they must also be able to put forward their views in order to be recognised as legitimate. Until they do persuade their fellows, though, they will be excluded (Fritzman, 1990:379-380).

Rorty drops the anchor of his "epistemology" for justification of knowledge not on a foundational proposition, but on society. Therefore, society becomes a strong foundation of knowledge in Rorty's idea. In a sense, there is no difference between a privileged proposition in the modernist foundationalism and society in Rorty's ethnocentrism, in playing a role of foundation to justify knowledge. Although Rorty denies any privileged proposition or belief which can justify other propositions as knowledge, he adopts a

different kind of foundation of knowledge, i.e. society. In this sense, Rorty's ethnocentrism can also be classified as a kind of foundationalism. Erickson (2001:254) says that, "In fact, the concept of foundationalism becomes so expanded that even ostensive anti-foundationalists are classified as foundationalists of a type." Triplett suggests a new category, "contextual foundationalism," to classify the group who adopt various different kinds of basic foundations in cultural, historical, pre-scientific conditions. According to him, Rorty also falls into "contextual foundationalism" saying that, "Although his metaphilosophical conclusions imply the rejection of any positive theory of knowledge, Rorty's specific comments on and criticisms of traditional theories of knowledge seem to imply one sort of Contextual Foundationalist account, according to which basic propositions are whatever fundamental assumptions remain accepted and unchallenged in a given social or even conversational context" (Triplett, 1990:101). Therefore, it has to be stated confidently that society is an unacknowledged, hidden and tacit foundation of knowledge in Rorty's idea. He adopts a very different type of foundation in knowledge, but it is the same as modernist foundationalism in the way of justification.

Since in most forms of postmodernism there is no universal or transcendent grounding of knowledge, each individual will find/devise his or her own knowledge claim. Then a relativistic view of knowledge is unavoidable, so, there can be a lot of different knowledges. In effect, everyone's knowledge claim would be valid, but only for the person holding it. It could result in fatal conflict among peoples who have different knowledge claims. The customary remedy of this problem is to introduce the role of the community. Knowledge is what the community's conventions have established and agreed. So, rather than being a relativistic opinion, knowledge has a measure of greater extensiveness, provided by the group. This seems to avoid the problems of relativism in knowledge. Actually, however, the problem is not solved, but simply transferred and enlarged. For the same problem potential conflict can occur at the level of the group or community. When two communities have different knowledge claims, the same relativistic problem on the individual level is present. In this case, the group is simply a larger version of the individual, with the same limitations. Therefore, Rorty's ethnocentric

idea of knowledge fails to provide a firm foundation of knowledge after modernist foundationalism. Rorty attacks modernist foundationalism and substitutes his own alternative to foundationalism, but ends with another kind of foundationalism.

4.3.4 A general remark on Rorty's idea of knowledge

In this section, Rorty's idea of knowledge has been critically examined by dealing with the main issues in his epistemological view. According to the discussion, it can be concluded that:

(1) There are two different kinds of worlds in Rorty's idea and Rorty seems, occasionally, to presuppose that we can perceive the world as it is without linguistic mediation.

(2) In Rorty's pragmatic view of knowledge, it must be assumed that a pre-linguistic awareness of reality, and his idea of ubiquity of language and pragmatic view of knowledge are incompatible with each other.

(3) Although Rorty claims anti-foundationalism in knowledge, he adopts a tacit foundation, that is society, to avoid relativism in his coherentist view of knowledge.

As the result of the above discussion, it becomes obvious that Rorty's idea of knowledge has many flaws of incoherence. Although, Rorty welcomes the demise of modern epistemology and wants to suggest his own alternative against modernist epistemology, he fails to provide a coherent idea of knowledge. His idea of knowledge shows several shortcomings, i.e. its reductionism, incoherence and vagueness.

At this point, it is necessary to formulate an alternative to Rorty's idea of knowledge as a basis for a further discussion about the positive aspects of Rorty's idea of knowledge, and about general characteristics of the postmodernist idea of knowledge. In the following section, the discussion will focus on an alternative idea of knowledge, namely "stewardship epistemology."

4.4 An alternative view of knowledge

Reformational philosophy has been developed in the Calvinistic tradition. Although Calvin did not develop a philosophical idea, he made a turning point to break with any synthesis between Christian and non-Christian principles in theoretical thinking and paved a way to a Biblical philosophy. Calvin's initiative was succeeded by Kuyper, and Kuyper developed important principles of Reformational philosophy. In the 20th century, Dooyeweerd, Vollenhoven (in the Netherlands) and Stoker (in South Africa) elaborated on Kuyper's ideas and founded Reformational philosophy as a significant school of philosophy. Dooyeweerd provided a well-structured idea about philosophy, viz. the Cosmonomic Idea. He also gave "more explicit formulation to the principle of the *Wetsidee* (the Cosmonomic Idea) and he devoted himself to working out its consequences (with Vollenhoven) systematically" (Young, 1952:96). For this reason, Reformational philosophy is often equated with the philosophy of the Cosmonomic Idea (Joh, 1997:144). Reformational philosophy starts by distancing itself from any synthesis of Biblical principles and motives derived from non-Christian philosophy. It tries to formulate purely biblical-philosophical thought (Spier, 1976:25, 27).

In this section, the idea of knowledge in Reformational philosophy will be briefly discussed to find a remedy for the problems of Rorty's epistemological idea and to discuss critically the general characteristics of knowledge in the postmodern idea.

4.4.1 The world: the knowable object

- *Distinction between the Creator, creation and the creational law*

Herman Dooyeweerd's Cosmonomic Idea sets its whole theory upon acknowledging the notion that the world is the creation of the Creator. The creation depends in its origin, its existence and its meaning on the Creator. The Creator governs and maintains all creation by his creational law. In this sense, the Creator is the law-giver and the creation is subject to the creational law, but the Creator himself is not subject to it (Dooyeweerd, 1984:507-508; Spier, 1954:31). The creational law is not creation, and it must be clearly distinguished from creation. This creational law is considered as the boundary between

the Creator and creation, and the boundary is regarded as "the living interface" where the Creator "interacts with His creation everywhere and at everytime as the fundamental condition of human creaturely existence" (Le Thanh, 2003:184). Fowler (1991:28) says about this interface between the Creator and creation:

> This conception of the Creator-creation relation as an interface where two realities meet in a real interaction in which the integrity of each is fully maintained is important for the question of lawfulness in human knowledge. On the Godward side of the interface, the Word of God is the governing law by which all creation is ordered. It is active in creation but does not belong to creation. On the creaturely side of the interface, we experience the creation order as a law-governed order in subjection to the ordering authority of the Word of God. In this creaturely experience we are able to formulate laws that hold good for all creaturely circumstances of the appropriate kind.

The world is a law-governed world, therefore it is stable; the stable creational law governs the world. The world does not depend for its stability on itself, but on its governing law which belongs to the Creator's side of the interface.

- *Distinction between law-side and subject-side in creation*

All creatures are subject to the creational law, and the human being, as a creature experiences creational ordinance or lawfulness in his or her naïve experience. However, this experienced lawfulness is not derived directly from the creational law, but from the fact that creation is subject to the creational law. Creation cannot form its own law and cannot exist apart from its law-side in which we can experience (in the created order) the operation of the creation-ordering law. We can encounter neither a bare fact nor the creational law, but always a fact, in other words, "a lawfully structured reality" that has a lawfulness from its subjection to the creation-governing law. In this regard, Van der Walt (J.L., 2002a:22) says that, "All people can experience reality, as well as the laws working in it. Although the laws originated at the divine side of the interface, their effect is visible on the creaturely side." Therefore, we cannot separate factuality (subject-side) and

ordinance/lawfulness (law-side), but should distinguish between them (Fowler, 1991:213; Van der Walt, B.J., 2002:149; Van der Walt & Fowler, 2006:26).

- *Distinction between the diverse aspects or modalities of reality*[9]

Creation is not created in only a single kind of aspect; rather it has many different modal aspects. Each modal aspect differs from another by the way in which it manifests itself. Each modal aspect is ordered and determined by its own peculiar laws. Each modal aspect is irreducible to the others. Every aspect has its own "meaning-nucleus" or "kernel" which constitutes the peculiar nature of each aspect. All aspects are unbreakably interwoven, therefore each modal aspect cannot be experienced separately in human experience. Each modal aspect can be distinguished and scrutinised only in a human's theoretical (abstract) thinking. The aspects of reality are basically the fields studied by the various special sciences (cf. the table on page 145) (Choi, 1999:18; Fowler, 1991:214-222; Van der Walt & Fowler; 2006:26).

- *Reality is dynamic*

Creation or reality is not static, but dynamic. Reality is constantly changing and every entity in the creation exists not by itself, but in interaction with other things. Although the creation is continually changing, the human being can have firm knowledge, because the changing is not arbitrary, rather the changing is also subject to the creational law. Van der Walt and Fowler (2006:26) say that "We are able to have stable knowledge of this constantly changing reality because the change is not random – though an element of randomness is incorporated within its lawfulness – but it is lawfully persistent patterns of interaction. The stability of reality is not secured by the immutability of its elements or of the relations between these elements but by the consistent lawfulness of the variable manner of their interacting."

[9] Dooyeweerd's modal theory was already mentioned in sections 4.2.2.2 and 4.2.3.2. Therefore, what has been already mentioned about the modal aspect of reality in the privious sections will not be repeated in this section.

♦ *The importance of creational law in the matter of knowledge*

It is notable that the creational law according to the Cosmonomic Idea, which cannot be found in any other philosophical school in Western thought, can offer a sure guarantee for both the stability of the world and the stability of human knowledge. Fowler (1996:23) says that "There are three factors involved in the human knowing activity. There is the knower, there is the knowable, and there is the law that governs both knower and knowable in the knowing situation." Like Rorty, Western thinkers try to find the stability of knowledge in either the knowing subject, or the world out there. When they fail to explicate how the creational order is possible – where they put their anchor for stable knowledge, i.e. human reason, language or community – there is no way to obtain stable knowledge. However, Reformational philosophy maintains that the possibility of stable knowledge is not because of the knower's intrinsic essence, i.e. human rationality or the world's intrinsic nature, but because of the creational law which comes from the Creator (cf. Edlin, 2006:85-102).

4.4.2 The human being: the knower who is a steward of the Creator in his/her knowing

♦ *Human beings, the Creator's stewards or office-bearers in/for creation*

The human being, as a creature, belongs to the world, but is placed in the privileged status in creation that is clearly distiguishable from other earthly creatures. The human being is mandated as the steward of the Creator, to govern, care and develop creation. As the Creator's steward, human beings are created with the innate ability to respond to the Creator's revelation (Van der Walt, J.L., 2002a:1).

> God equipped man with an intellect thus enabling him to distinguish the distinguishable as far as creation is concerned. (…) The intellect with which man was endowed can be described as a faculty of knowing and reasoning, including the understanding of himself and of creation (Taljaard, 1976:254).

To accomplish human stewardship in the world, human beings must know and understand creation. Human beings, in their capacities as the knowing subjects, are called to be stewards, therefore the notion of stewardship is to be expanded to epistemology (Middleton & Walsh, 1995:165; Van der Walt, J.L., 2002a:15). Creation does not depend on man for its significance and meaning, but it waits on man to unfold and unlock what the Creator has placed in it. To do this, the human being has to listen to the voices of creation in general and to all the creatures (Van der Walt, J.L., 2002a:16-17). Therefore, knowledge is the human's epistemological response, in his/her stewardship, to the creation which is ordered by the creational law. Knowledge is not an order imprinted onto the human being, rather it is a product of the human activity of ordering creation (Fowler, 1991:48).

♦ *Naïve experience and theoretical thought*

Dooyeweerd distinguishes naïve, concrete experience from scientific and theoretical thought. The former refers to an experience of daily life without the theoretical analysis of its structure, whereas the latter views reality from various numbers of abstract theoretical perspectives: the physical, biological, social, ethical, and so on (Choi, 1999:16; Taljaard, 1976:265-266). The scientific knowledge is not superior or more accurate than naïve experience: they are merely different.

Spier (1976:138) says about naïve experience or naïve knowledge that,

> The relation of subject and object plays the decisive role in naïve knowing. By means of this relation the knower, conscious of the reality of a thing in its entirety, takes cognizance of all its cosmic aspects, and without systematic abstraction, he grasps this reality in concepts. These concepts are closely related to our sensory psychical life. The naïve knowing-process, as the scientific, is in touch with reality, and is *systatic* and cosmic in nature. It is closely connected with life. Naïve knowing is subject to the laws of knowing and therefore has legitimate claims to truth.

Spier (1976:137-138) explains theoretical knowledge or scientific knowledge as follows:

> The subject-object relation does not play a fundamental role in the acquisition of scientific knowledge. Scientific knowledge is attained by means of *abstraction* and *synthesis*. The scientist isolates a specific cosmic aspect from the other aspects, and places the isolated aspect in such a position that it sustains an antithetical relationship to his analytical cogitative function.

The most significant difference between naïve experience and theoretical knowledge is that in naïve experience, we focus on objects as a whole, without distinguishing its several modal aspects, but in theoretical knowledge we focus on specific modal aspects of objects. In other words, each is concerned with the same concrete world, but while one focuses on objects as wholes, the other focuses on properties of these objects (Fowler, 1991:56, 214-222). These two different kinds of knowledge must be distinguished, but not separated. Theoretical knowledge cannot be kept in touch with reality unless naïve experience keeps in touch with reality, and naïve experience cannot be given authenticity unless theoretical knowledge provides it (Fowler, 1991:61).

- *Knowing activity should be subject to the creational law*

The human being, as a creature, belongs to the world, and therefore remains always on the creaturely side of the interface. However, the human being can perceive the stability of the world. The human being can experience the creation order or lawfulness which is possible through the creational law. Humans can formulate the creational law in their experience of the creation order. However, this humanly formulated law is not the creational law itself. The law which the human formulates is a human's response to his/her naïve experience of the governing law in the lawful order of creation (Fowler, 1991:213; Spier, 1954:36-37). Van der Walt and Fowler (2006:26) say that "What we encounter in all the diversity of our experience is not the law but a lawfully structured reality in which we ourselves function as one of the constituents; what we know is not the law but the contours of the lawful structure." In human knowing behaviour, the activity to know reality in itself is subject to creational law, and human knowledge is also subject to the same law. According to Dooyeweerd (1959:74), when the creational data are neglected or interpreted incorrectly theoretical thought itself will end up in antinomies and

contradictions. In a sense, creation itself is the judge of our theories and it will remain a normative source of all knowers (Dooyeweerd, 1959:72; Coletto, 2005:11). Therefore, it is necessary to obey the creational law in human response to formulate the law. In order to know reality as it is, "we plot the lawful structure of interactions between the entities within the relational field of our experience. The more completely we can plot these relational interactions, the better we will know reality as it is" (Van der Walt & Fowler, 2006:26).

4.4.3 Knowledge

- *Knowledge is about reality out there that is ordered, lawful by/in the creational law*

Reformational philosophy does not agree with the notion that reality is a merely formless entity that can be ordered in the knowing subject's cognisance. The world is already orderly structured before human congnisance of it, and governed by the creational ordering law. The world has a "givenness," i.e. its stability, order and lawfulness which come not from the world itself, but from the Creator through the creational law. Human knowledge is about the world that is ordered, lawful and stable and therefore, it can claim its objectiveness.

- *Knowledge is the result of faithful response to a given and already structured reality*

The human being, as the Creator's steward, has the innate ability to respond to the Creator's revelation in the creation. To accomplish his/her creational task as steward of the Creator, i.e. caring for and developing the creation, the human being has to know and understand the world. To be the Creator's steward is, in a sense, to be called to know this world. Middleton and Walsh (1995:167) say, "we are called to epistemological responsibility in response to this gift [the creation]." Knowledge can result in a relationship between the knowing subject and creation. Creation is not composed of inert objects awaiting human objective analysis and control. Rather, all creation is subjective and all of creation speaks. The task of human knowing is to translate that creational

glossalia into human terms (Middleton & Walsh, 1995:168-169). Human knowledge is responsive to creation and human beings are responsible in their knowledge to the Creator.

- *A fallibilist objectivity in knowledge*

Although the creational law is stable, and creation is structured orderly, human knowledge of creation cannot be entirely stable and infallible. The human being does not contact the creational law itself, but can only experience its subject-side and formulates the lawfulness of creation in knowledge. However, Reformational philosophy claims a certain objectivity of knowledge, because the certainty and stability of the world are guaranteed by the creational law. In this regard, Van der Walt and Fowler (2006:26) introduce the notion of "a fallibilist objectivity."

> … the whole world of our experience including ourselves and the various aspects of our functioning is a world of objects with their own structures and with structural relations between them. We can make ourselves objects of our knowing in order to better understand the structural relations of our own persons, including our inter-personal relations. Then, there are structured objects the nature of which qualifies the nature of these objects. There are also structured relations between the objects of our experience that are independent of our knowing. Hence the knowledge we seek is one that will be consonant with these complex structures in the diverse world of objects we experience. At the same time, we recognise that our knowledge structures are the fallible structures of fallible humans that will need ongoing change to achieve a closer consonance with the object world.

The world, the knower, the knower's activity in knowing and knowledge as the result of knowing are subject to the creational law. Even though we cannot have absolute true knowledge, we can have a reliable and stable knowledge. This knowledge can claim its objectivity, as far as it is consonant with the world, which is structured orderly by the creational law. Knowledge is always fallible, but is not totally contingent.

- *Knowledge should be distinguished into two different types: concrete and theoretical knowledge*

As far as knowledge is concerned, we should distinguish two types of knowledge, i.e. pre-scientific and scientific knowledge. Both of them are knowledge but they differ as far as distinctions of detail are concerned (Taljaard, 1976:265-266). These two different knowledges are concerned with the same concrete reality, but their focuses are different. Pre-scientific or concrete knowledge perceives reality as a whole, whereas scientific or theoretical knowledge focuses on a certain property or modal aspect of reality. Theoretical knowledge opens up to human beings rich fields of knowledge that are not accessible to concrete knowledge. It provides a unique insight into the law-governed functioning of the creation, and thus enables human beings to shape their own way of living more fruitfully (Fowler, 1991:57-58).

4.4.4 Discussion: Positive aspects of Rorty's idea of knowledge in the perspective of Reformational philosophy

Although Rorty's idea of knowledge has been criticised throughout the previous two sections (4.2 and 4.3), his idea does not have negative aspects only. His idea contains valuable insights as well, as do those of other postmodern thinkers. Before moving the focus of our discussion to criticism of the general characteristics of the postmodern epistemological idea, positive aspects of Rorty's idea of knowledge will be mentioned.

Firstly, Rorty points out that knowledge is not a part of the unshakable creational law, but a human's creaturely formulated order. Reformational philosophy accepts Rorty's assertion, viz. that human beings cannot stand in the third position between the world and our description of the world, to compare them and judge the accuracy of the description. Therefore, human knowledge cannot claim firm objectivity and absolute truthfulness, as the modernists insist in their knowledge claims. Knowledge is constructed by the human being who belongs always to the creational side of the interface between the Creator and creation. Knowledge is, above all, a human enterprise.

Secondly, Rorty emphasises the important role of language in human knowledge. Reformational philosophy does not agree on the ubiquity of language, that what we can do is only to describe the world by language and to give an order to the world by describing the world which is assumed metaphysically unstructured. However, Reformational philosophy accepts Rorty's awareness of the significance of language in the knowing activity. Without language, human beings cannot accomplish their epistemological works as the Creator's stewards, especially in theoretical or scientific knowledge which focuses abstractly on a specific modal aspect. Van der Walt and Fowler (2006:21) say that "In the absence of language all of this [knowledge] must be a severely limited, finite construction but with the aid of language it expands into a complex conceptual network that is not restricted to the limits of the immediate sensory experience and the memory of past experience."

Thirdly, Rorty calls our attention to the important role of the community in the matter of knowledge. All human knowledge is influenced by the conditioning effect of our background and circumstances, especially of our community. Knowledge is not only a procedural and methodological matter. It also has a social dimension. Knowledge is a coalitional human enterprise, because human beings, as the Creator's stewards, are always called in a social relationship. The individual person has to decide about his/her research problem which must be accepted as valuable and valid by his/her community. The formulation of his/her findings also has to follow a conventional form established by the society that enables him/her to communicate knowledge to others. Knowledge claims can be accepted or rejected by inter-subjective evaluation (Van der Walt, J.L., 2002a 78-96).

Finally, Rorty points out the monarchial character of the modernist notion of knowledge by his anti-foundational, anti-essential and anti-realistic view of knowledge. Modern theories of knowledge have tried to elucidate the nature of an unshakable knowledge, but all theories referred their basic source of knowledge to a monolithic reason. Rorty's idea of language, society and self-creation helps us to be free from the one-dimensional

framework of knowledge. Human reason is not a unique authentic way of knowledge, but only one of various ways to attain "rational" or "reasonable" beliefs (Van der Walt, J.L. 2002a:57). Although Rorty falls into a trap as do modernist philosophers with regard to reductionism, his idea has helpful elements to show that human knowledge does not have only one modal aspect, i.e. the analytical or logical aspect, which is overemphasised in the moder(nist) idea of knowledge.

Rorty points out the vulnerability of the modernist ideas of knowledge, but his idea also contains many flaws of incoherence and ambivalence as discussed in sections 4.2 and 4.3. These problems are not only found in Rorty's idea, rather these weak points are found commonly in other postmodernist theories of knowledge as well. Therefore, it is necessary to discuss critically the general characteristics of postmodern epistemological ideas to find an alternative way of schooling in the postmodern era.

4.5 Critical evaluation of general characteristics of knowledge in postmodern thinking

The general characteristics of the postmodern epistemological idea were sketched in section 2.5 of the historical review on how the idea of knowledge has changed from the modern to the postmodern era in Western philosophy. In this section, the discussion will attempt to evaluate critically the general characteristics of postmodern knowledge from the point of view of Reformational philosophy.

4.5.1 A critical evaluation of the postmodern sceptical attitude to the idea of objective knowledge

The modern idea of knowledge started with Descartes' well-known declaration, *cogito, ergo sum* (I think, therefore I am). Descartes clearly divides the object and the subject, in his own terms, "extential substance" and "thinking substance," in knowledge for gaining indubitable and objective knowledge. Then, he puts the anchor of certainty in the subject. For Descartes, the knowing subject, the human being is above all a "thinking" being,

therefore the certainty of knowledge comes more exactly from human reason. If we have the authentic method to use human reason and apply it to knowing activity in the right way, we can attain "clear and distinct knowledge." The world can be known by human reasoning, and knowledge can be objective. For Locke, the source of sure knowledge about the world is "sensory experience" which belongs to the self. Although Locke disagrees with Descartes about the source of knowledge, he keeps the dichotomic scheme between the object and the subject in knowledge as well. Kant also prepares his brilliant idea of knowledge in the same scheme, but the world in itself becomes too vague in his idea. It does not mean, however, that objective knowledge is not possible, rather the human being can compose universally valid knowledge through a logical structure which is located intrinsically in the human self. In the modernist theories of knowledge, each philosopher insists on a different foundation. They put the anchor of the certainty in the human self, the subject side.

When the notion of the world as it is becomes dubious from Kant's point of view, the intrinsic notion of the self also becomes dubious. Finally, all postmodern thinkers insist, there is no human nature and essence which can be a sure anchorage for the certainty of knowledge. In the postmodern idea, theories try to find different places to put their anchor, such as language, internal coherence, power or community. The object of knowledge, "the world out there" disappears. Postmodern thoughts maintain that the knowing subject does not have any inherent essence and thus is merely contingent. Consequently, the objective knowledge that is valid not only to me/us, but also to others, is not possible.

Reformational philosophy does not agree on the postmodern scepticism of objective knowledge. With regard to the objective knowledge, the creational law is the most important notion in Reformational philosophy. The certainty of knowledge does not originate from either the object or the subject, but from the creational law. The order of the outer world can be experienced by the human being, because both the creation (the world) and the human, as a part of the creation, are subject to the same creational law.

Human beings can have "an objective knowledge," as far as their knowing activities are consonant with the creational law. The creational law is the norm in the knowing activity, therefore human beings have to follow/obey it. Human knowledge is about the infallible structure of the world, but it is a fallible structure formulated by fallible human beings. Therefore, no human knowledge claims can be absolute, or be completely contingent either. Objectivity is not a myth, rather it is possible, but not in the way of the modernist philosophers assumed. In Reformational philosophy, the objectivity of knowledge is always "a fallibilist objectivity" (Van der Walt & Fowler, 2006:29).

4.5.2 A critical evaluation of the plurality of human reason

Although modern philosophers insist on a different foundation or source of knowledge, i.e. human reason for Descartes, sensory experience for Locke and categories for Kant, they all believe that absolute true knowledge which is universally valid for all human beings, can be attained by a single kind of reason. Descartes, for example, thought that all kinds of science are eventually one science, and therefore only one universal scientific method should be applied to all scientific fields, i.e. metaphysics, physics, medical science, mechanics, and ethics.

However, this notion of universal reason comes to be doubted by postmodern thinkers. There is no universal reason, and thus knowledge becomes only a locally and temporally valid set of beliefs to cope with a specific situation. In fact, postmodern thinkers humbly acknowledge that a single reason cannot cover all different kinds of knowledge, and realise that many different factors or facets are involved in human knowledge.

Reformational philosophy agrees with postmodernist thinkers about the notion that there are many aspects functioning simultaneously in the acquisition of knowledge. If we glimpse at the historical review on how the concept of knowledge has changed from the modern era up to now, it is obvious that each philosopher emphasises a specific aspect of knowledge. For, example, Descartes emphasises a mathematic facet in human reason. Locke points out the importance of the empirical aspect in reasoning. Nietzsche wants to

show that the aesthetic and physical facets also have important roles in knowledge. For Foucault, the most important fact in knowledge is historical change and power. In this regard, modernists and postmodernists do not differ much in emphasising the specific facets in knowledge. They are aware of a certain modal aspect in reasoning, and they understand knowledge accordingly. The difference is that modernists try to achieve universally valid knowledge with only one specific kind of reason, but postmodernists are aware that there are more facets than one in the matter of knowledge. However, neither modernists nor postmodernists can avoid reductionism, because they do not achieve a balanced perspective of all its modal aspects.

Reformational philosophy does not agree with postmodern pluralism which maintains that there are many different truths, or knowledges and there is no criterion to judge the universal truth among many different knowledge claims. There are many different modal aspects functioning at the same time in the matter of knowledge, but all aspects are interwoven and function in unity. Therefore, Reformational philosophy accepts many different ways of knowledge, but denies the pluralistic view of knowledge, since the creational law gives universal order to the world. Van der Walt (J.L., 2002a:86) says that "Although reality and phenomena in the world can be differently understood and interpreted, reality itself can never be subjected to the discretion of a particular researcher."

4.5.3 A critical evaluation of postmodern anti-foundationalism

Modern theorists want to found their theories of knowledge on noninferential belief or proposition which is not necessarily justified by another belief or proposition. However, postmodernists doubt the possibility of such a foundation for sure knowledge, and adopt the coherent and pragmatic view of knowledge. If there is no belief in the intrinsic value of certain beliefs, there is nothing beyond various human interests (Erickson, 2001:210). In postmodern thinking, knowledge becomes, finally, a tentative strategy to attain a specific purpose in a contingent situation.

On the one hand, Reformational philosophy agrees with postmodern anti-foundationalism, because the foundation of knowledge can be found in neither the world nor the self. No immanent realities can be a sure foundation of knowledge, because all realities in creation depend for their existence on the Creator, and refer their meaning to the Creator. Creation is not self-sufficient and self-sustaining, but dependent and creaturely. The only legitimate foundation for knowledge is, in Reformational philosophy, the Creator who transcends creation.

On the other hand, Reformational philosophy does not agree with the postmodern thought that there is no foundation of knowledge. Dooyeweerd insists that philosophical thinking (therefore, scientific thinking as well) needs a fixed point, an Archimedean point of reference, from which to proceed and to find its ultimate support. For this reason, although postmodernists frequently insist on their anti-foundational view of knowledge, all postmodern ideas have their own foundations explicitly or implicitly, through which their own beliefs and theories can be justified. The Archimedean point of philosophy (and knowledge) must be sought outside the philosophical domain. In philosophical thinking as much as in any other area of life, the only fixed or reliable starting point is the Creator's law (Kalsbeek, 1975:56-61). Neither modernists nor postmodernists agree with this Reformational idea, and they try to find their Archimedean point within the boundaries of their own thinking. All efforts to find the foundation of knowledge in immanent realities, either creation or the self, fail to attain sure knowledge. Therefore, the postmodern sceptical view of knowledge is a natural result of all immanent philosophical ideas. Postmodernists seem to be aware of the impossibility to establish foundations either in the creation or in the human self, but they cannot find a principle for the legitimate foundation of knowledge.

4.5.4 A critical evaluation of postmodern awareness of the significant role of language

Modern philosophers thought that the world and the self have an intrinsic nature and essence, and those essential natures can be represented by language. Language is a reliable medium between the knowing subject and the knowable object, therefore human

beings can express the world as it is exactly by language. However, when postmodernists doubt about the intrinsic essence of both the world and the self, only one thing remains in the matter of knowledge, and that is language. There is no innate structure and order in the world, rather it can merely be described and structured by human linguistic effort. There is no inherent essence in the knowing self, but it is shaped, as the human being, by language in a certain community. Therefore, language becomes the most influential factor in postmodern epistemological thinking, although language does not have any intrinsic essence and meaning in itself.

Reformational philosophy acknowledges the postmodernist's contribution to the knowing process by recognising the importance of language. However, it denies what postmodernists insist in regard to language. The world does not consist of arbitrary lumps, but is an orderly structured and a governed creation. The self is not a centreless agglomerate, but a capable subject who can respond to the Creator and creation. Language is a part of creation, which is subject to the creational law, as other creatures are. Language cannot rule over the human being in the matter of knowledge, rather the human, as the steward of the Creator, takes the initiative always in using language. Language is not totally contingent, as postmodernists insist. Rather the human being can perceive the ordinance or lawfulness of language because of the creational law for language. Therefore it is possible to formulate human knowledge in language, because only the human has been given, by the Creator, the authority to work as the subject in the world. Language cannot decide about what we know, but we use our language to respond to the world and to formulate our knowledge about the world. Reformational philosophy strives for a balanced view in thinking and practice of knowledge with regard to both linguistic and non-linguistic aspects.

Reformational philosophy agrees with the postmodern idea of the value of the narrative. Postmodernists convince us that there are many different ways to convey knowledge, and that modern propositional knowledge is only one way to encode and communicate knowledge.

> … words and mathematical symbols are not the only way of encoding knowledge. Neither do they represent a higher level of learning and knowledge. Especially in today's world, we need to understand that knowledge is encoded in visual images. Today's media make heavy use of images and all images convey meaning. Then we may also think of the knowledge of the artisan. This knowledge can be described up to a point in linguistic and mathematical symbols, but the most fundamental way in which it is encoded is in patterns of actions incorporating what Polanyi called 'tacit knowledge'. (…) The pagan Greek legacy left us with the belief that theory is the highest form of knowledge. This is a belief that needs to be challenged (Van der Walt & Fowler, 2006:23).

Postmodernists, especially, are aware that narrative can be a useful communicational device for knowledge. The same meaning and content can be encoded in different forms and styles, and each style works differently in its effectiveness. In modernist thinking, logically structured statement is the only proper mode of knowledge, but postmodernists suggest many different ways to express knowledge. It is necessary to use various different modes of knowledge, for example, narrative style or visual style, especially at the present time, when the modern notion of reason has faded and multi-modal rationality becomes favourable (Erickson, 2001:317-318).

4.5.5 Concluding remarks on the general characteristics of postmodern epistemological ideas

According to the above discussion, it becomes apparent that the postmodern epistemological idea contains both a positive and a negative side. Therefore, the postmodern idea offers new opportunities with regard to the failed modern theories in education. At the same time, the postmodern idea contains shortcomings that make us fall into a trap which is different from that which the modern idea brought. Consequently, it is necessary to consider the alternative way of schooling in regard to the new opportunity and crisis which the postmodern idea of knowledge brings about. In the following section, the discussion will be focused on how schooling shall be done in the perspective of Reformational philosophy, though also with regard to a postmodern notion

of knowledge.

4.6 The way of schooling in the postmodern era: an alternative from a Reformational perspective

In the above discussion, it becomes noticeable that Reformational philosophy does not incline to either the modernist idea or the postmodern idea, rather it has a quite balanced stance to modernism and postmodernism. Therefore, it is reasonable to expect that Reformational philosophy will give a meaningful insight for schooling in the postmodern era. In this section, the discussion will focus on the educational implication of Reformational philosophy in relation to the postmodern idea of knowledge in general.

4.6.1 Educational purpose

In Reformational philosophy, the world is governed, structured and maintained by the Creator through the creational law, and the human being is placed in the world as the Creator's deputy or steward. To accomplish the human being's stewardship, the human has to understand the world, and inherently he/she has an ability to know the world and respond to creation. Creation has multi-dimensional aspects which are interwoven with each other in unity, and these aspects are not discerned in ordinary experience, but only by theoretical thinking. It is necessary to discern each modal aspect to understand the creation rightfully.

Therefore, it is the ultimate educational purpose to open up all multi-dimensional aspects of the world to students. By school education, students should grasp the significance of the creational order. The task of educational enterprise is not merely to transmit abstract and factual knowledge to the student, nor to inculcate social conventional beliefs in the young. What the student must learn at school is the creational order through all subjects. If students can discern all the different modal aspects appropriately, and understand the lawfulness and ordinance of the world, then they become equipped as the stewards for creation. Their knowledge can be useful to respond to their calling as the stewards of the

Creator. Therefore, from a Reformational perspective, knowledge as an educational purpose is "responsible" or "serviceable." The goal of acquiring knowledge is responsible action, not autonomous mastery (Fowler, 1990:80). If educational enterprise is consonant with its own creational law, students will become competent to respond to both the Creator and creation, and to accomplish their stewardship in the creation. These ideal ends will be achieved through opening up the creation and presenting the creational law to the student.

According to a Reformational philosophy, the core meaning of knowledge in education is not mastering the factualities of the world, nor creating a new description of the world, but enabling students to practise their stewardship in and for the world.

4.6.2 The educand

The student is not merely a rational being, or a kind of animal without any intrinsic nature. He/she is a multi-dimensional being of which rationality is only one aspect. The human being has a specific place in creation that is obviously distinguishable from that of other creatures.

The educand, as the Creator's steward in creation, is responsible to the Creator and creation. While they are educated at the school, students cannot be charged with their full responsibility in their stewardship. They are under the responsibility of their parents and educators, and their full responsibilities are postponed until they complete their educational course. However, the educand must be respected as a responsible steward in an educational situation. Students should not be passive absorbers of knowledge, rather they must be encouraged to participate actively in their learning. They have to be aware of the fact that they are responsible to the Creator for their learning. Knowledge is a humanly structured formulation of the creational law. Students should be guided to find the lawfulness of the world and to formulate their finding in faithful responsibility.

In regard to the multi-modal aspects of the world and the human being, the educational

enterprise should not focus only on rational knowledge, but on other different kinds of knowledge as well. The educand has to be opened up to various modal aspects of the world, according to various different modal aspects in his/her integral functioning. Humans are integral beings whose modalities are interwoven in all their functionings, i.e. in their experiences, thinking and actions. Therefore, in educational enterprise, this integration must be carefully considered. When all modal aspects of the world are well opened up to students, they can appreciate and enjoy the many-sided richness of the world and the many different ways in which these riches can be enhanced by their work for the world.

4.6.3 The curriculum

The school curriculum is the written instructional program that explains what is to be taught in the school and how it is to be taught (Edlin, 1999:141). According to a Reformational philosophy, the curriculum should reflect firstly the rich diversity of the creation. All aspects of reality, and therefore all areas of study called academic disciplines are essential in organising a school curriculum. This curriculum aims at equipping students to live as subjects in all aspects of human life in response to the creational law. The curriculum has to be organised by discerning the core meaning, concept and lawful structure of each modal aspect. Students can have insight in the creational law of each specific modal aspect through each subject discipline. Each school subject should reflect the lawfulness of its related aspect, and help students to open up its specific aspect.

In the human experience, the multi-dimensional aspects of reality are interwoven and are usually not distinguished into specific aspects. Students see the world as an integrated entity and in their view, it is an interactive whole. Learning is “an integral phase of human development” (Van Brummelen, 1994:217) that is total, embracing the whole person physically, emotionally, socially and intellectually. Therefore, the curriculum should be integrally organised. A well-designed integral unit is one that has internal unity and external consistency, and deals with significant, natural interrelations that exist between

its central concepts and the various subject disciplines (Van Brummelen, 1994:116-117). It does not mean that all subjects should be represented in each unit in order to provide relatedness, rather, the integral curriculum should stimulate students to see and to respond to the coherence which is already given in creation.

Fowler (1990:180-181) mentions four principles of curriculum from the perspective of a Reformational philosophy: Firstly, the curriculum aims at unfolding the basis, framework and implications of human stewardship. Secondly, the curriculum fosters conceptual development and the abilities that proclaim the unity and diversity of creation. It also enables students to employ all their given talents in loving, faithful service to the Creator through service to their fellow creatures. Thirdly, the curriculum makes students experience the meaning of living as the Creator's stewards and enables them to make personal and communal decisions. Finally, the curriculum helps students to commit themselves to live responsibly to the Creator and creation.

4.6.4 Educational method

A Reformational philosophy accepts various kinds of educational methods, as far as possible. Every method appropriately contributes to achieve a specific educational purpose. In the perspective of a Reformational philosophy, it is possible to devise proper educational methods according to the creational law from which the educational purpose can be derived. The problem is how a certain method can be used properly for a certain purpose. The criterion of educational method is the creational law. Therefore, some educational methods are totally unacceptable, because their basic ideas are not consistent with the creational law. In the perspective of a Reformational philosophy, for example, "token economies," which are systems of behaviour modification based on the principles of operant conditioning (Ullmann, 1996:911-912), are not acceptable, because they are based on "behaviourism", in which human beings are regarded as organisms which can only react mechanically to the stimulus of the outer environment. The anthropological assumption of behaviourism acknowledges a few modal aspects of the human being, and neglects the rest of the whole modal structure of the human being.

With regard to the educational method, there is no fixed list, but various methods can be applied flexibly for a certain educational purpose. The method should be chosen and applied according to the demands of creational law.

4.7 Conclusion

In this chapter, the discussion attempted to evaluate postmodern epistemology and to suggest an alternative educational idea in the current postmodern epistemological context. For this purpose, first Rorty's idea of education and his idea of knowledge, which is the base of his educational idea, have been criticised. After the evaluation of Rorty's idea, general characteristics of postmodern epistemology were evaluated in the perspective of a Reformational philosophy.

According to the critical evaluation, it becomes apparent that there are many incoherent and vague notions in Rorty's idea of education and the problems that originate from his idea of knowledge. His idea of knowledge is also problematic.

To overcome the shortcomings of postmodern epistemology and its educational implication, the discussion also focused on a Reformational philosophy as an alternative view to postmodernism. A Reformational philosophical perspective provides a fruitful insight into postmodern epistemology and its educational implication. Based on the discussion about Reformational philosophy, it becomes clear that postmodernism contains both positive and negative epistemological and therefore also educational aspects. An alternative idea of education was briefly suggested in the context of the postmodern idea of knowledge.

In the following chapter, the whole discussion will be closed by reviewing the findings of this study, and restating an alternative approach to education in the current postmodern context.

5. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This research has dealt with the question of how postmodern epistemology may affect schooling (education, teaching and learning). For this purpose, firstly, in chapter 2, a historical survey was done of how the concept of knowledge has changed from the modern epoch to the postmodern era. In chapter 3, the educational implication of the postmodern idea of knowledge was discussed by examining Rorty's idea of knowledge and his idea of education. Finally, the postmodern ideas of knowledge and their educational implications were criticized from the perspective of a Reformational philosophy in chapter 4.

In this final chapter, the findings, the general conclusion of this study, recommendations based on the findings, and recommendations for further research will be presented.

5.2 Findings

Based on this study, the following findings can be mentioned:

1. In the Renaissance period, the confidence about human rationality was restored, and two scientific methods, i.e. the inductive and deductive, which were fully developed throughout the modern epoch, were devised. Instead of ontology, epistemology came to be a central part of the philosophy throughout the Renaissance period (2.2.1).

2. In Descartes' idea, the world and the self exist as totally different substances. "Clear and distinctive" knowledge can be attained by applying inductively the correct scientific method from the first intuitive proposition, which is the existence of "myself" (2.2.2).

3. In Locke's idea, the world has qualities which cause (stimulate) human sensual

experience and human beings can perceive the external world by sensory experience. The sensory experience provides "ideas" which can be the object of knowledge, and the "ideas" become transformed into knowledge by reasoning (2.2.3).

4. In Kant's idea, the world must be distinguished into *noumena* (the world as it is) and *phenomena* (the experienced world). Only *phenomena*, the experienced world, can be the object of knowledge. The human being has inherent forms (categories) of sensibility and understanding, and can have factual and universal ("synthetic a priori") knowledge through the two types of categories (2.2.4).

5. Nietzsche doubts the modern notions of knowledge. He thinks that the world is continually changing without any essential structure; therefore human beings can only interpret the world in a certain perspective. Knowledge is human interpretation of the world in order to get "power" to rule over or to master the world (2.3.1).

6. Heidegger thinks that human beings and the world do not exist separately; rather they are in a mutual dependent relationship. Knowledge is an aesthetic interpretation and it is always only meaningful for a person in a certain concrete situation (2.3.2).

7. Popper thinks that scientific knowledge is achieved by "falsification," and all knowledge claims are tentatively valid until a new knowledge claim substitutes the old one. Absolute true knowledge is not possible for human beings and all human knowledge is provisional and hypothetical (2.3.3).

8. Kuhn insists that knowledge is a result of a problem-solving process in accordance with a certain paradigm. Knowledge is generated by a specific society's interest and need, and is evolved by pre-scientific perspective, value and worldview. Therefore, it cannot be objective or neutral. Knowledge is not developed accumulatively in a linear process, but is radically changed in a revolutionary way according to "paradigm shifts" (2.3.4).

9. For Habermas, knowledge is constituted in the contexts of universally given "knowledge constitutive interests" and it is driven in a free communicative situation in which individuals interact dynamically. Rational knowledge enables us to be emancipated from irrational repression and distortion in social life (2.4.1).

10. Lyotard thinks that metanarratives cannot be used to legitimate knowledge claims. Postmodern knowledge should not pursue consensus for attaining objective knowledge, because consensus is possible only by means of a metanarrative that is a modern notion and is not acceptable any more. Knowledge is constructed by social discourse, and is evaluated by its efficiency in a certain situation (2.4.2).

11. Foucault insists that knowledge has been changing arbitrarily throughout history, and is always contingently decided by a certain social condition. Knowledge is only a product of power in a certain historical situation. The human being does not have intrinsic nature, i.e. reason; rather the human is constituted by social discourse. Human reason is also determined by society (2.4.3).

12. For Rorty, knowledge is not an objective proposition which is assumed to mirror nature exactly as it is; rather it is linguistic description in a specific perspective to deal with a certain problem. The reliability or validity of knowledge does not depend on objectivity, but on solidarity; therefore, knowledge is, above all, a set of beliefs which a certain society accepts as truth (2.4.4).

13. Postmodern theorists deny the modern notion of objective knowledge. In modern ideas, the possibility of objective knowledge is not doubtable. To attain unshakable knowledge, the modernist philosophers separate the knowing subject and the knowable object, and try to find the certainty of knowledge either from the self or from the reality. However, postmodernist thinkers insist that there is no intrinsic essence in both the self and reality. Therefore, knowledge always becomes perspectival for the sake of an

individual or a community (2.5.1).

14. Postmodern philosophers favour plural forms of rationality instead of a single universal reason. In modern ideas, only scientific reason can provide the authentic knowledge for all scientific areas. However, postmodernists are aware that many different kinds of reason can be distinguished and used. These different reasons are valid in different study fields, areas or situations (2.5.2).

15. Postmodern ideas reject foundationalism and support the coherent and pragmatic view of knowledge. In modern thinking, certain/sure knowledge is founded on a self-evident foundation, but postmodernists doubt the possibility of such a foundation. The postmodernist thinks that knowledge can be justified by its coherence with the rest of the body of knowledge and its effectiveness (2.5.3).

16. Postmodernists are aware of the important role of language in knowledge. Language is a reliable medium between the knowing subject and the knowable object, so it can represent to the knowing subject the world as it is, according to modern philosophers. Postmodern thinkers deny the intrinsic essence or nature of the world and the self, and insist that language plays a significant role in the knowing process. Human beings perceive the world through their language, and knowledge is a linguistic description (2.5.4).

17. Rorty, as a prominent representative of postmodernism, insists that knowledge is a certain community's linguistic description of the world in order to deal with a certain problem. Knowledge does not represent reality as it is, and is not based upon a self-evident belief; rather it is a socially agreed set of beliefs and changeable by inventing a new vocabulary which works more effectively for a certain problem (3.2.1, 3.2.2, 3.2.3, 3.2.4).

18. According to Rorty's idea of education, the human being does not have any intrinsic

essence; rather he/she is a centreless network of beliefs. Therefore, the human being is shaped through language which is instrumentally formulated by a certain society in order to achieve certain beliefs and desires. The most important concern of education is to create a new self by inventing a new vocabulary. Rorty calls this kind of education "edification" and later on: "literary criticism" (3.3.1).

19. Rorty suggests dividing education into two different phases: the lower level education for socialization and the higher level of education for "individuation." Since self-creation is possible only based on socialization, these two different educational tasks cannot be done in a single educational enterprise (3.3.2).

20. According to Rorty's idea of knowledge, individuation by re-describing the self in a new vocabulary can be regarded as the ultimate purpose of education. All school curriculums should be regarded as kinds of stories or literature; therefore, the distinction between different school subjects becomes blurred. Any educational method can be used for a certain educational purpose; the "problem-solving" method especially, is favoured in Rorty's pragmatic view of knowledge (3.4.1, 3.4.2, 3.4.3, 3.4.4).

21. In Rorty's idea of educational purpose, inequity cannot be avoided, because self-creation is possible only in the higher level education, and higher education cannot be equally enjoyed by all citizens. Rorty does not elucidate clearly the reason why the human being should re-create his/her socialized self, if everything – including the newly created self – is contingent (4.2.1).

22. Although Rorty insists that there is no intrinsic human nature, he assumes certain aspects of human nature, i.e. the ability to use language and the ability to feel humiliation. Rorty overemphasizes the linguistic and the affective aspects of the human being, and reduces other human aspects to these two (4.2.2).

23. In Rorty's idea of curriculum, the self-contradiction between two curriculums of the

lower level education and the higher level education cannot be avoided. For individuation, the curriculum of the lower level education must consist of narratives about continual social criticism, but these narratives must be revolted against in the higher level education. Rorty emphasises only the linguistic aspect in the curriculum and reduces other aspects to the linguistic (4.2.3).

24. Rorty's idea of conversation, namely as an educational method, has two different goals: consensus and conversation itself. These two goals cannot be reconciled. Rorty does not explain how conversation is carried on between different incommensurable vocabularies (4.2.4).

25. In Rorty's idea of knowledge, there are two different worlds. On the one hand, he insists that human beings can perceive the world only in human language, but on the other hand, he assumes a pre-linguistic reality which must be dealt with by human linguistic description (4.3.1)

26. Rorty emphasises the contingency of language by reference to the fact that we cannot explain why we choose a certain word to designate a certain reality. Rorty neglects the fact that language can represent reality, after a certain word has been applied to refer to a certain reality (4.3.2).

27. Rorty denies any kind of foundation of knowledge, because the world (the object of knowledge), the human self (the subject of knowledge) and language (the medium of knowledge) are contingent and do not have any intrinsic essence. However, he adopts another foundation to justify knowledge, namely society (4.3.4).

5.3 Conclusions

Based on the findings of this research, the following conclusions which relate to the aims of the research can be drawn:

1. In postmodernism, the concept of knowledge has drastically changed, away from modernist notions. In the postmodernist thinking, knowledge is not objective anymore, but a temporal strategy to deal with a specific situation. Postmodernists prefer plural human reasons, instead of a single universal reason and acknowledge many different forms of knowledge. Knowledge is not inferred from a foundational principle, but is shaped through social agreement. For postmodernists, language is the most important factor in knowledge.

2. The postmodern idea of knowledge radically affects schooling, education, teaching and learning. To know the world accurately can no longer be **the** educational purpose. Rather, to create a new description of the world and the self becomes the ultimate educational goal. The educand does not have any intrinsic nature able to know the world. Knowledge which is contingently determined by a certain society shapes the educand as a human being. As far as the curriculum is concerned, the traditional school subjects come to be reduced into a kind of narrative and the distinction between different subjects is blurred. Various educational methods can be used for a certain educational purpose, and the only criterion for any educational method is its efficiency.

3. According to a Reformational philosophy, the postmodern idea of knowledge has a positive side in that it contributes to overcoming the problem of the modern idea of knowledge. However, it also contains many flaws; one of those problems is that various different aspects of knowledge are reduced to one or two specific modal aspects of reality and/or of the human being.

4. A Reformational philosophy does not lean either to the modernist idea of knowledge or to the postmodernist idea of knowledge. It provides a balanced view of knowledge. Therefore, the Reformational idea of knowledge can be expected to provide a balanced insight for schooling as well.

5.4 Recommendations

For balanced and authentic schooling in the postmodern era, the following is recommended from a Reformational perspective of knowledge and education:

1. It is important to recognise three factors or agents in the process of knowing, i.e. the knower, the knowable and the creational law. The creational law provides a sure guarantee for the stability of the world and of the human being. Both the world and the human being are subject to the creational law. The world is already structured by the creational law and the knowing activity of the human being is also subject to the creational law. If the knowing activity is done in obedience to the creational law, human knowledge can be stable.

2. It is necessary to discern each irreducible modal aspect from all other different modal aspects of creation in theoretical knowledge. Each modal aspect is governed and ordered by its own peculiar law, and has its own core meaning. Therefore, all aspects are equally important and none of them should be overestimated or reduced to other modal aspects. This is required in order to understand the world in a balanced view.

3. The human being is the steward of the Creator, and has the innate ability to respond to the Creator's revelation of Himself. He/she does not experience the creational law directly, but experiences the lawfulness of the world in the subject-side of reality. The human being formulates the lawfulness of the world in his/her own knowledge. Since this humanly formulated law is not the creational law in itself, it is fallible and falsifiable, but since it is consonant with the law, human knowledge has a certain reliability and stability.

4. Schooling based on a Reformational perspective should strive to open up all multi-dimensional aspects of the world to the student. Through schooling, students can discern all the different modal aspects, and understand the lawfulness and ordinance of the world. Ultimately, schooling purposes to equip students as the Creator's capable stewards in

creation.

5. The educand should be respected as a responsible/response-able person in educational situations. He/she is not a passive absorber of knowledge, but an active agent able and called to formulate the creational law in the learning situation. By schooling, the student has to be opened up to different modal aspects in his/her integral functioning when all different aspects of the world are opened up to him/her.

6. The school curriculum must reflect the diversity of the creation. Each school subject has to be distinguished clearly from other subjects, because each modal subject focuses on a separate irreducible modal aspect of the world. The curriculum should be integrally organised without blurring the distinctiveness of each subject because the student experiences the world as an integrated entity.

7. Various educational methods can be devised according to a Reformational perspective. The creational law is the most important criterion in adopting and applying a certain educational method. The propriety of an educational method should be examined for its proprieties according to the creational law.

5.5 Recommendations for further research

This research does not deal with all matters concerning the postmodern epistemology and its educational implications. Therefore, many research problems had to be put aside in expectation of further research. Only a few are mentioned.

1. In Rorty's idea, two fundamental ideas, i.e. "freedom" in the private and "solidarity" in the public, are antagonistic. His theory of knowledge is based on these two ideas. His twofold educational scheme also originates from these ideas. Dooyeweerd suggests the notion of "religious ground motives" in philosophical thinking, and uses it to analyse philosophical ideas. It is necessary to analyse Rorty's idea from the vantage point of

Dooyeweerd's notion of religious ground motives, especially, "nature and freedom" which is the ground motive in classical humanism. This analysis may provide a new insight about the fundamental motives of Rorty's philosophy.

2. One of the most important problems in postmodernism is to find an authentic strategy to deal with pluralistic situations. Rorty and many other postmodernists suggest "conversation" to deal with the problem of plurality. However, Rorty's idea of conversation is vague; he seems not to provide a clear explanation of it. Reformational philosophy also maintains the possibility of conversation (or dialogue) between different groups which have entirely different perspectives, opinions and viewpoints. It is necessary to analyse Rorty's idea of conversation and to draw an alternative from Reformational philosophy.

3. This research refers only to Rorty's ideas in the discussion of the postmodern approach to knowledge and its educational implication. It is necessary to also examine the epistemological ideas of other postmodern philosophers, such as Habermas, Lyotard, Foucault and Derrida, and their educational implications, in order to grasp the general features of the postmodern educational problem and to reach finer and more reliable alternatives to their concepts of knowledge and education.

4. It is recommended to future researchers to consruct a fully-fledged idea of schooling according to a Reformational philosophy. Many studies have already been done about this by educational theorists (e.g. Fowler, 1987; Van Brummelen, 1988; Edlin, 1999; Van Dyk, 2000). However, more studies of schooling based on a Reformational philosophy are necessary, in the process taking cognisance of the postmodern idea of knowledge.

5.6 Final conclusion

This research has revealed how the concept of knowledge has changed drastically from the modern era to the postmodern epoch, and how the postmodern ideas of knowledge

can affect schooling. Postmodern ideas of knowledge reveal the shortcomings of the modernist view, but in the process tend to lose the stability and reliability that the modernists pursued. The postmodern idea of knowledge and its implications for education contain many flaws and vaguenesses, and tend to fall into the traps of inconsistency and reductionism. A Reformational approach to knowledge and education provides an authentic alternative idea both of knowledge and of schooling through its notions of the creational law, the modalities, and the stewardship duties of the human being. Based on the creational law, knowledge can be objective, reliable and stable. A balanced view of knowledge, which reflects all dimensions of the world, is possible through awareness of the various modal aspects of reality, which human beings share. Knowledge can be made more serviceable if it is based on the notion of the human being's stewardship. Authentic schooling is also possible if it is based on a Reformational view of knowledge.

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