CHAPTER 5

THE MULTIDIMENSIONAL MODEL

5.1 Introduction

This chapter examines the multidimensional Model of SLA which, as Ellis (1994:350) notes, focuses on the relationship between implicit L2 knowledge and L2 output by indicating the strategies which have been mastered in order to produce different structures. This model, which is the brainchild of the Zweitsprachenwerb Italienischer Und Spanicher Arbites (ZISA) project, conducted chiefly at the University of Hamburg in the late 1970's under the direction of Jargon Meisel, makes three major claims regarding the SLA process:

(1) Learners acquire a number of grammatical features in a clear developmental sequence as a reflection of systematicity in the way L2 learners overcome cognitive constraints that govern production.

(2) Within the defined stages of development, learners display individual variation both with regard to the extent to which they apply developmental rules and the extent to which they acquire and use grammatical structures that are not developmentally constrained, as a reflection of the overall orientation to the learning task.

(3) Formal instruction directed at developmental features will only be successful if learners have mastered the prerequisite processing operations associated with the previous stage of acquisition. However, formal instruction directed at grammatical features subject to individual variation faces no such constraints. These claims can be briefly referred to as the developmental and variational dimensions of SLA as well as the teachability Hypothesis.

These three claims are examined in the next three sections respectively in order to evaluate the arguments advanced as well as the empirical research conducted in support of the claims. In the final section the flaws and limitations of the model are discussed.
5.2 The Developmental Dimension of the Model

The original research of the ZISA project, as Larsen-Freeman and Long (1991:270) and Ellis (1994:382) note, consisted of a cross-sectional study of 45 adults, and a two-year longitudinal study of 12 adults, both using interview data of the naturalistic acquisition of German as a L2 (GSL) by speakers of Spanish and Italian. One major focus of this research was GSL word-order rules, where it was found, that there was often an initial period during which language production consisted of isolated words and formulas, and that both children and adults adhered to a five-stage developmental sequence (see Pienemann, 1989:53), as shown in figure 5.1. Learners did not abandon one IL rule for the next as they traversed the sequence; they accumulated rules, adding new ones while retaining the old (Larsen-Freeman and Long, 1991:270).

With regard to the stages of development, Pienemann (1989:54) notes: "it is a general finding from research into sentence processing that a canonical word order is psychologically the simplest way of marking underlying grammatical and sentence-semantic relations". This is exactly the order at Stage X (Figure 5.1). In the following stages, the learner is seen to gradually build up his ability to re-order constituents in the way the target language requires. Pienemann (1989:55) argues that there are qualitative differences in these re-orderings. After the adverb preposing (ADV) the canonical order (SVO strategy) is still maintained (thus ADV + S + V + O), while for verb separation (SEP) and inversion (INV) this is not the case. This means that ADV is simpler than SEP and INV. The application of ADV is facilitated by the fact that ADV always moves elements into a psychologically salient position (which is easier to recognize and remember than other positions). In the case of SEP and INV associated elements (such as aux + V) have to be disrupted, and such disruptions eliminate the SVO strategy as a basic pattern for sentence comprehension. This means to say that sentences with SEP or INV have to be analyzed more deeply. In both cases, it is noted, an element in sentence-internal position has to be identified and to be moved into another position. The crucial difference between SEP and INV is that SEP moves an element into final position, which is perceptually salient, while INV moves the element into sentence-internal position. Thus, for SEP the learner can partially rely on a general perceptual mechanism, while for INV the operation has to rely solely on language specific processing prerequisites.
A further aspect of these stages, as Pienemann (1989:55) points out, is the implicational nature of the structures acquired at the different stages of acquisition: a sentence-internal permutation implies that an element can be moved from internal into a salient initial or final position. The latter implies that an element can be moved from one salient position into another salient position. The structure acquired at each stage is a prerequisite for moving on to the following stage, or the presence of one rule in an IL implies the presence of earlier rules in the sequence, but not later ones, as follows:

SVO> ADV> SEP> INV> V-END (See Figure 5.1).

Stage X - Canonical order (SVO)

die Kinder spielen mit Ball
the children play with the ball

(Romance learners' initial SVO hypothesis for GSL WO is correct in most German sentences with simple verbs.)

Stage X + 1 - Adverb preposing (ADV)

da Kinder spielen
there children play:

(Since German has a verb-second rule, requiring subject-verb inversion following a preposed adverb (there play children), all sentences of this form are deviant. The verb-second (or 'inversion') rule is only acquired at stage X+3, however. The adverb-preposing rule itself is optional).

Stage X+2 - Verb separation (SEP)

Alle Kinder müssen die Pause machen
All children must the break have

(Verb separation is obligatory in standard German).

Stage X+3 - Inversion (INV)

dann hat sie wieder die Knoch gebracht
then has she again the bone brought

(Subject and inflected verb forms must be inverted after preposing of elements.)

Stage X+4 - Verb-end (V-END)

er sagte, dass er nach Hause kommt
he said that he home comes

(In subordinate clauses, the finite verb moves to final position.)

Fig 5.1 Development Sequence for GSL Word Order Rules (based on Pienemann, 1987)
This implicational nature of acquisition, Pienemann and Johnston (1985) show, is caused by the way the learner acquires the necessary processing prerequisites serves as a general grid for the prediction of acquisitional chronologies for a wide range of structures in phonology and syntax (Pienemann and Johnston, 1985; 1996). This model, Pienemann (1989:55) notes, has been tested successfully for German and English as second language and a variety of typologically different source languages.

Ellis (1994:384) points out that the identification of developmental patterns is of no value to theory construction unless a principled explanation for them can be found. It is in this respect that the Multidimensional Model offers some help. Ellis (1989:384) writes:

*It explains why learners pass through the stages of development they do, and also on the basis of this, affords predictions regarding when other grammatical structures (those that have not yet been investigated) will be acquired. In other words, the model has both explanatory and predictive power.*

What makes the ZISA group's work on word order especially interesting is that it includes a proposed explanation for the GSL word-order data, and, "one which had potential generalizability to other developmental sequences and to other languages" (Larsen-Freeman and Long, 1991:272).

The explanation rests on the idea of processing constraints, Larsen-Freeman and Long (1991:272) and Ellis (1994:384) observe. Clahsen (1984:221) and Pienemann (1985a) explain that the five structures and the rules that account for them are manifestations of five (or more) underlying stages in IL development, and each stage in turn is a reflection of the learner's use of varying combinations of three speech/language-processing strategies. In other words, processing is constrained by the set of strategies available to the learner at any one time, and, development, viewed from this perspective, consists of the shedding of strategies, or of the gradual removal of the constraints they impose on what is processable, as Larsen-Freeman and Long (1991:272) point out. Each strategy corresponds to the degree of psychological complexity involved in the production of a particular word order rule:

(1) Canonical Order Strategy (COS)
No permutation or record of constituents in a structure occurs; utterances manifest a basic order that reflects a direct mapping of meaning on to syntactic form. This strategy blocks the interruption of the underlying structure.

(2) Initialization – Finalization Strategy (IFS)

No permutation involving the movement of an element in a structure to final position and vice versa is possible. For example, (xyz) can be re-arranged to become either (zxy) or (yzx), but not (yxx) or (xyx).

(3) Subordinate Clause Strategy (SCS)

Permutations of elements in subordinate clauses are avoided, but movement of an element from within a main clause to another position in the clause is possible.

As figure 5.2 shows, the three strategies can be used to explain the five developmental stages in the word-order data. Larsen-Freeman and Long (1991:272) point out that the strategy combinations are hierarchically related, such that each new one entails and adds to the sophistication of the previous one, thereby gradually allowing the processing of psycholinguistically more complex structures. Thus, SCS is not manifest until COS has been accessed. The complexity of a structure, Larsen-Freeman and Long (1991:272) argue, is determined by the type of recording and rearrangement of constituents necessary to map underlying meaning onto surface form. The strategies available to the learner determine what they are currently capable of processing, thereby acting as constraints on development. In other words, the acquisition of grammatical structures occurs as learners systematically overcome the constraints identified in these processing strategies. Ellis (1994:385) points out that “strategies are themselves developmental, not in the sense that learners do not already ‘know’ them – they clearly do, as they are involved in L1 production – but in the sense that they can only be accessed in the L2 incrementally”.

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Each subsequent stage in the sequence involves a qualitative change in the difficulty of processing structures at that stage. Thus, Stage $X + 1$ is perceived to involve the movement of elements from one salient (easier to recognize and recall) position in a string to another salient position (+IFS), i.e. either from initial to final or from final to initial position (the latter in the case of adverb-proposing in German or topicalisation in English), while leaving the canonical order intact (+COS). The learner still does not need any knowledge of the grammatical categories to which the moved elements belong. So, this stage, as Pienemann and Johnston (1987) note, is still ‘pre-syntactic.’

Whereas adverb-preposing (ADV) does not disturb the canonical order for the rest of the string, the two rules, SEP and INV, both do, making them more complex than SVO and ADV (Larsen-Freeman & Long, 1991:274). They are also more complex in that they require grammatical knowledge, thereby marking the advent of true syntax. Thus, Stage
X+2 involves disruption of associated elements (such as aux+V) inside a string (-COS) and movement of one of these elements to a salient (either initial or final) position (+IFS), as in the case of SEP in GSL or inversion in English yes/no questions. This means that the simple SVO strategy, as Larsen-Freeman and Long (1991:274) note, is no longer adequate for comprehending sentences of this type. Grammatical knowledge is involved because the learner must recognize the element that is moved from inside the string as belonging to a particular category, such as auxiliary, which qualifies for the move.

The same is true of structures at stage X+3, but these are still more complex because they involve disruption (-COS) and movement of an internal element not to a salient position, but to another internal position (-IFS), as exemplified by INV in GSL and inversion in English WH-questions. Whereas learners can rely on a general perceptual processing strategy (utilizing salience) at the age X+2, they are forced to depend on language specific processing prerequisites at stage X+3, involving recognition of elements in a string as being members of different grammatical categories. (Larsen-Freeman & Long 1991:274).

The final stage, stage X+4, illustrated by V-End in the GSL word order sequence and by indirect object/direct object word order (‘I gave him my pen’) in English, comes last in the sequence because it requires the ability to process or produce a hierarchical structure, which involves identifying sub-strings within a string (-SCS) and moving elements out of those sub-strings to other positions. Another notable example would be the processing of subordinate clauses, which are more marked than main clauses. Learners have to recognize that normal main clause processing strategies will not work here, and that subordinate clauses are processed differently.

It is further claimed that these processing constraints are universal. They are claimed to control all developmental sequences in IL, not just word order, and to work for any L2, not just GSL. Thus any structure (in any language) meeting the description of those processable by a particular strategy should be acquired at roughly the same time. In ESL, for example, Pienemann and Johnson (1987) propose that a learner should master the apparently unrelated horizontal sets of constructions listed in figure 5.3 at the same time because they involve the same kinds of movement and rearrangement, and therefore, the same strategies.
An initial problem with applying the model to English is that, whereas German has several word-order rules that are obligatory with use of quite a wide range of high frequency items (including all tense forms and models), word-order changes in English chiefly occur in a more restricted set of contexts, such as subject auxiliary inversion (only) in question and after fronted ‘negative’ adverbs (never had he seen...). They also note that several of those contexts tend to arise less frequently in typical IL speech samples, given for example, that researchers usually ask most of the questions in interviews.

Stage X:

You are student? (SVO)
I no like (no + X)
I like Sydney (SVO)

(Structures at Stage X conform to the canonical SVO Order).

Stage X+1

In Vietnam, I am teacher (ADV-FRONTING)
Do you have apartment? (Do-FRONTING)
Why you no eat? (WH-FRONTING)

(Note that the canonical SVO order is undisturbed by the fronted items).

Stage X+2

Have you job? (YES / NO INVERSION)
I like to eat my friend house (COMPLEMENTISER INSERTION)
You can take your coat off (PARENTESE SEPARATION)

(The canonical order is now disturbed by movement of string-internal elements to initial or final position. Grammatical knowledge is also required for identification of moveable elements, marking the beginning of true syntax).

Stage X+3

Why did you go? (AUX SECOND, with agreement)
She does not know (‘DO’ SECOND, with agreement)
I wrote it myself (REFLECTIVE PRONOUN)
He gave the money to the police (DATIVE ‘to’)
She eats too much (3rd SINGULAR ‘-s’)

(Movement at this stage requires recognition that the elements moved are members of certain grammatical categories, and is string-internal).

Stage X+4

She makes me work hard (CAUSATIVE)
He has never met her (ADVERB VP)
He didn’t leave, did he? (QUESTION TAG, with agreement)

(Grammatical sub-strings must be recognised, and operations conducted within and across those sub-strings).

Fig 5.3 Developmental Stages and Sample ESL Structures (based on Pienemann and Johnston, 1987)
However, Larsen-Freeman and Long (1991:275) point out, the problem was ameliorated when Pienemann and Johnston (1985) showed that some morphological items could also be analyzed in terms of the same strategies. For example, the third person singular -s is classified as a stage x+3 structure, requiring learners to be able to handle string-internal movement. Pienemann and Johnston’s rationale for this is provided by Larsen-Freeman and Long: “given that the -s morpheme contains information whose source is a noun phrase (NP) or pronoun, the easiest, most natural place to put the -s in linear production is immediately following that source, yielding (ungrammatical) source-marker-verb strings”. The psychological plausibility of this is suggested by the fact that many learners often produce utterances like “He’s go” and “They’s want”.

However, in order to produce the correct English version, learners have to move -s to the end of the finite verb following the source NP or pronoun (or, as some might prefer to conceive of the operation, to hold -s in short-term memory until the verb to which it is attached is produced). In other words, learners have to recognise the grammatical status of two string-internal elements (the -s marker and the finite verb in source-verb-mark strings) and permute them to produce source-verb-mark string. Such an operation, it is noted, is analogous to auxiliary inversion (‘Where did you go?’). This analysis is strongly supported by findings on developmental sequences for this and other morphological and syntactic structures from Johnston’s (1985) Syntactic and Morphological Progressions in Learner English (SAMPLE) project, using interview data on twelve Polish and twelve Vietnamese naturalistic acquirers of Australian English. Similar reasoning places adverbial -ly, comparative -er and superlative -est suffixes at stage x+3, and also allows classification of a variety of other structures by stage before an empirical study is undertaken, as figure 5.2 shows.

According to the developmental axis of the model both children and adult L2 learners adhere to a five stage developmental sequence of acquisition, after an initial period during which learner production consists of isolated words and formulae. Underlying these stages of IL development, are speech or language processing strategies and these strategies constrain processing. IL development, viewed from this perspective, consists of the shedding of the strategies, or of the gradual removal of constraints they impose on what is processable (Pienemann & Johnston, 1996; Meisel, 1997)
5.3 The Variational Axis of the Model

As the ZISA researchers (Meisel, Clahsen & Pienemann 1981) note, there is considerable variation among learners within the stages of IL development. The model is called the ‘multidimensional’ model because of this second dimension to SLA along which learners differ. This is called the variational axis, as figure 5.4 shows. This notion of ‘learners’ orientation, as Pienemann (1989:55) calls it, implies that while developmental IL sequences are held to be invariant (i.e. fixed and predetermined), there is nevertheless sufficient room for the individual to find his own path in the acquisition of the L2.

Variational orientation can be standard or simplifying. This means that L2 learning can be characterised by a standard or simplifying orientation. A predominantly ‘standard’ orientation favours accuracy, whereas a simplifying one favours communicative effectiveness. For example, a learner’s orientation may involve insertion of the copula. When some learners start using equational sentences, they produce them without the copular (‘he good’ instead of ‘he is good’), while others produce such sentence in the correct form immediately. The former type of learner is a simplifying learner type (meaning-focused/message-focused), while the other type is standard orientated (form-focused). Another tension between accuracy and communicative effectiveness obtains in
standard-orientated and simplifying learners’ differential application of ADV and INV, the learner finds himself in a conflict situation the moment he enters the stage ADV, since whenever he applies ADV, INV will automatically be violated, as it cannot be processed at this stage. As in the preceding example, the learner is said to have a choice between being ‘correct’ by avoiding ADV or being communicatively effective by exploiting ADV despite the resulting ‘deviations’. It has been found that while simplifying learners tend to exploit ADV early, standard-oriented learners tend to avoid it, thereby preserving accuracy at the cost of communicative effectiveness (see Larsen-Freeman & Long, 1991:282).

The ZISA group distinguishes between two kinds of simplification: restrictive and elaborative. Restrictive simplification involves omission of various grammatically obligatory but communicatively redundant items (‘Julia happe’, ‘She eat sandwich’), and elaborative simplification is said to involve over-suppliance of such items (‘He wanted’, ‘theys go’). The relative frequencies of the two kinds of simplification, as Meisel, Clahsen and Pienemann (1981) note, differ between certain groups of learners (learner types) at one time, and within learners over time. These simplification strategies are accounted for using social and psychological variables. Such an account is in terms of a continuum reflecting learners’ orientations towards the learning task. Restrictive simplification on the one end of the continuum is more common among segregatively orientated learners, i.e. those with less leisure-time contact with native speakers, through discrimination on the part of native speakers and a general lack of either instrumental or integrative motivation. Elaborative simplification, on the other end of the continuum, is more frequent among integratively oriented learners, i.e. those with a strong desire to assimilate into the L2 culture or those with no desire to acculturate but with a strong instrumental need to learn the L2.

In summary, individual learners follow different paths of routes in SLA in terms of the degree to which they display either a predominantly standard orientation or a predominantly standard simplifying one. In spite of this, both groups exhibit two kinds of simplification in their ILS: restrictive and elaborative simplification. Restrictive simplification has more to do with segregatively oriented learners, and elaborate simplification is more common among integratively oriented learners. The variational axis accounts for why some L2 learners are more accurate but less fluent and vice versa.
The model, therefore, has two principal axes, the developmental and the variational. This allows for learners to be grouped both in terms of their stage of development and in terms of the kind of simplification they engage in. As figure 5.5 shows, two learners (A and B) at stage 5, two at stage 4 (C and D), and two others at stage 3 (E and F) do not only reflect their progress on the developmental axis (or dimension) but also show differences between the learners at each level. For example, learner B produces more standard-like language than learner A. As Ellis (1994:384) notes, what Meisel, Clahsen and Pienemann (1981) emphasize is that progress on one axis or dimension is independent of progress on the other. It is theoretically possible, in other words, for a learner who practices elaborative simplification to use more target-like language overall than a learner who is developmentally far more advanced. For instance, Learner F is only at stage 3, but uses more standard-like construction than Learner A, who is at stage 5. According to this model, therefore, L2 acquisition entails progress on the two axes (Ellis, 1994:384).

Fig 5.5 Progress along the two axes of the Multidimensional Model (adapted from Ellis 1994:384)

5.4 A Critique of the Multidimensional Model

Whatever the ultimate validity of the Multidimensional Model may turn out to be, both the model itself and the ZISA project from which it sprang have already made several important contributions to the study of SLA. As Ellis (1994:386-387) notes, the model is powerful not only because it provides a satisfactory explanation of observed development in learner language, but because it also constitutes a predictive framework. The identification of underlying processing strategies and operations afforded by the cognitive dimension, Ellis
Ellis points out, allows researchers to form hypotheses regarding which grammatical structures will be acquired at which general stage of development. By studying the learning process in this way, researchers can seek to explain SLA, and to understand how it happens. Also, the predictive framework has been applied in both cross-sectional and longitudinal studies, resulting in the successful testing of predictions relating to a number of morphological and syntactical rules.

Another contribution by the Model to SLA study is the attempt, whether successful or not, to tie contextual factors, including a range of social and psychological variables, to internal psycholinguistic processes, in the form of simplification and processing strategies, and these in turn to precisely defined exponents in the IL data. In other words, the Multidimensional Model seeks to explain how such factors interact with cognitive mechanisms to produce precisely defined microlinguistic feature. Larsen-Freeman and Long (191:283) perceive this interaction to be the mediating effect of standard and simplification orientations, predictable from learners' affective profiles, leading to differing degree of attention to accuracy or communicative effectiveness, and finally to differing rates of suppliance of the so-called variational features (see figure 5.5).

Another positive characteristic of most work inspired by the model is the degree of accountability to data. That is to say hypotheses are empirically tested. As Larsen-Freeman and Long (1991:284) put it, "research within the predictive framework has generally maintained a welcome degree of linguistic precision". Hence Pienemann's (1989) prediction that learners will only benefit from approximately timed instructions is testable, since learners' current abilities, as well as both appropriate and inappropriate structures for them, can be defined linguistically in terms of the developmental stages. Whether or not the stages turn out to be correct, the important point is that they are empirically testable, and the framework in turn falsifiable.

Furthermore, the single most important strength of the Multidimensional Model is its independent motivation of the observed developmental stages through use of the speech-processing constraints (Larsen-Freeman & Long, 1991:284). That is, the sequence of developmental stages comes with an explanation, and one derived from another source (experimental psycholinguistics) rather than from the data themselves. Larsen-Freeman and Long (1991:284) argue that this is always preferable because the independence of the
explanation from these particular data means the model has greater potential for predicting and explaining new data. As they put it, "This is really another way of saying that the data are made interesting by their combination with a causal-process theory, an explanation with predictive power, and so with generalizability, in this case, not only to other sequences and linguistic domains, but also to other languages, since the speech-processing constraints are supposedly universal." The explanatory power of the theory is generalisable (not language-specific) as it leads to an understanding of SLA – any L2.

Despite these positive characteristics, the Multidimensional Model is not without problems. As Larsen Freeman and Long (1991:284) note, potentially the most serious of these is the possibility that the Model may turn out to be quite revealing about constraints on acquisition, among other things, without saying much about how learners actually learn whatever they do, constrained as they are (see Larsen-Freeman & Long, 1991:284). There is no account of how or why learners overcome the processing constraints. Put another way, Larsen-Freeman and Long (1992:285) argue, identifying the nature of the processing strategies governing some aspects of acquisition (assuming this is achieved) will be an especially important advance due to their universal status and consequent cross-linguistic generalizability, but how it is that learners learn whatever they manage to produce despite the constraints would still not be clear. For example, Larsen-Freeman and Long (1991:284) wonder what kinds of grammatical rules underlie the structures that are produced in conformity with the processing constraints, and how they are acquired, or whether they or some other kind of knowledge are innate.

Another problem concerns the falsifiability of certain aspects and the predictive framework of the model. Larsen-Freeman and Long (1991:285-286) identify three falsifiability problems. First, the extension of the analysis to morphology explicitly assumes that morphemes have the psychological status of words, with syntax of their own. However, as Larsen-Freeman and Long point out, this is not always the case with early 'chunked' morphology, since SL learners, like children acquiring their L1, frequently produce their first tokens of such items as English irregular past, plural -s, and even third-person singular -s as part of unanalyzed forms, such as 'went', 'stairs' and 'breaks'. This means that some tokens of such items will occur in the speech of learners well before they reach the stages at which they are predicted to attain productive use of them. There are, therefore, apparent violations due to the premature appearance of some items in chunks, but chunks not
recognized as such, and the unavailability of the empirical option each time the predictive framework is applied to new languages.

A second problem in falsifying the model is the difficulty of identifying beforehand which features are variational and which features are not variational. As Larsen-Freeman and Long (1991:285) observe, it is currently impossible to distinguish between two interpretations of the potential outcome of some teaching experiments, namely, when a grammatical item is learned by students whose current stage of development predicted that it would not be learnable:

(1) the result is a disconfirmation of the model (assuming there was nothing wrong with the way the structure was classified in terms of the processing constraints), and
(2) it is a (newly discovered) variational feature of the language concerned (hence, teachable at any stage), and so not a disconfirmation.

A further complication where variational features are concerned seem to be that they, too, have developmental sequences, not all of, which, therefore, can be teachable at any stage. Unless we are able to stipulate beforehand which features are variational and which developmental, it is easy to dismiss any feature that fails to conform to the predictive framework of the model on the grounds that it is variational (Larsen-Freeman & Long, 1991).

A third falsifiability problem is seen to arise from the vagueness as to what would constitute violations of the processing constraints among mainstream developmental features. For instance, it has been found in a study of English as a L2 and Japanese as a L2, that the general IL profile for some learners might place them, say, at stage X+4 in ESL, but still show them producing stage X+3 structures in one or more domains and X+5 structures in one or more domains (Larsen-Freeman & Long, 1991:286). The question arises as to how many developmental levels can separate the least and most advanced structures before the model can be said to have been falsified. In brief, setting limits on such gaps is not the way out of this problem.

Another problem concerns the operational definition of acquisition. Ellis (1994:387) argues that, whereas the original research on which the Multidimensional Model was based quantified all the features examined by indicating their overall proportion of suppliance in
obligatory contexts (as in Meisel, Clahsen, & Pienemann 1981:112), Pienemann and his co-workers have subsequently redefined acquisition in terms of ‘onset’ (i.e. the first appearance of a grammatical feature). While it is accepted that the study of onset is legitimate in a model that emphasizes the importance of processing operations, there is nevertheless a feeling that much of the work lacks rigour because Pienemann “does not set quantitative or qualitative criteria to be met by the learner’s production, in order to be considered as evidence for the operation of a predicted processing strategy,” (Hulstyn 1987:114). This problem of defining ‘onset’ derives in part from the difficulty of identifying formulas and variational features.

Finally, Ellis (1994:387) observes that the Multidimensional Model only provides an explanation of acquisition in terms of learner production. It tells us nothing about how learners come to comprehend grammatical structures, nor does it inform us about how comprehension and production interact. In particular, the theory fails to address how learners obtain intake from input and how this is then used to reconstruct internal grammars. It is not clear whether the same processing constraints are supposed to or can apply to both comprehension and production.

5.5 Conclusion

While it is too early to assess its validity, the Multidimensional Model has already clearly made several valuable theoretical and methodological contributions to SLA. There are some current problems with the falsifiability of the predictive framework of the Model, and a major question looming concerning just what the Model will explain about acquisition, as opposed to explaining constraints on acquisition. These are, however, mostly limitations rather than flaws. Most importantly, the predictive power of this model promises several potentially exciting practical applications, which are discussed in chapter 6.
CHAPTER 6

IMPLICATIONS OF COGNITIVE THEORIES FOR
L2 TEACHING

6.1 Introduction

This chapter considers the contributions to L2 teaching made by the theories which have been discussed, namely, interlanguage theory, theories based on implicit-explicit knowledge distinctions, variability theories and the multidimensional model.

Language acquisition research can offer no formulas, no recipes, but it is an essential component of teacher education, because it can give teachers appropriate expectations for themselves and their students. Greater consciousness of the complex process of language learning will not guarantee more effective teaching - arguably our state of knowledge is insufficient to warrant firm pedagogical applications - but will stimulate critical thought, challenge old principles, and maybe suggest a few new ones. A conscious understanding of L2 acquisition is a basis for modifying and improving teaching.

Lightbown (1985:180) urges researchers to proceed very carefully in making specific recommendations about language teaching on the basis of research in language acquisition. Second-language acquisition research does not tell teachers what to teach, and what it says about how to teach, teachers have already figured out.

What second-language acquisition research does is to give explanatory support to formal interventions. All teachers have a theory of language learning. This theory, however, may not be explicit. It is only when principles are made explicit that they can be examined with a view to amending or replacing them. Teachers who operate in accordance with implicit beliefs may be not only uncritical but also resistant to change. Alternatively they may shift and change in an unprincipled way, following blindly the latest fashion in language teaching.

The most important generalisations made by each theory are identified and the impact of the generalisations on L2 teaching are discussed. If teachers - especially new teachers - come
to language teaching with some knowledge of the results of language acquisition research and know how to teach, they will have much more realistic expectations about what can be accomplished.

6.2 Interlanguage Theory

6.2.1 L2 acquisition is strongly influenced by the learner's L1

It has been stated in Chapter 2 that behaviourist learning theory predicts that transfer will take place from the first to the second language. Transfer will be negative when there is proactive inhibition, and errors will result. In this case L1 interferes with L2 learning. Transfer will be positive when the first and second language habits are the same, and no errors will occur.

In behaviourist accounts of L2 acquisition, errors were considered undesirable and had to be avoided. To this end attempts were made to predict when they would occur. By comparing the learner's native language with the target language, differences could be identified and used to predict areas of potential error. In this way classroom practice could be directed to the problem areas in order to help the learner overcome the negative effects of L1 transfer. The means that were used to predict potential errors were contained in the procedure known as Contrastive Analysis (CA).

Contrastive Analysis was rooted in the practical need to teach a L2 in the most efficient way possible. Four decades ago, Fries (1945:9) commented that the most efficient materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner. Selinker (1992:7) maintains that this is still a useful current position. Contrastive Analysis had both a psychological aspect and a linguistic aspect.

The psychological rationale takes the form of the Contrastive Analysis Hypothesis (CAH). This exists in a strong and a weak form. The strong form claims that all L2 errors can be predicted by identifying the differences between the target language and the learner's first language. Selinker (1992:12) believes that it is unfortunate that the extreme claims of CA
as L2 acquisition prediction led many to abandon CA entirely because of those cases when the prediction of errors, especially, did not come true. Selinker argues that in order to understand interlanguage, and the forces that create it, we have to strive for some balance, for it is a fact that CA predictions sometimes work.

The weak form of the hypothesis claims only to be diagnostic. A contrastive analysis can be used to identify which errors are the result of interference. Thus, according to the weak hypothesis, CA needs to work hand in hand with Error Analysis (EA). First, actual errors must be identified by analysing a corpus of learner language. Then a contrastive analysis can be used to establish which errors in the corpus can be put down to differences between first and second language. The weak form claims a less powerful role for the L1 than the strong form of the hypothesis.

The linguistic aspect of CA claims that a comparison of two languages can be carried out using any of several different models of grammar. The procedure followed was (i) description (formal description of the two languages); (ii) selection (certain items, which may be entire subsystems such as the auxilliary system or areas known through error analysis to present difficulty, are selected for comparison); (iii) comparison (identification of areas of difference and similarity); and (iv) prediction (identifying which areas are likely to cause errors). The procedure had some limitatations such as the inability to predict areas that are likely to cause errors.

It is, however, important to realise, as Selinker (1992:5) does, “that in studying IL and the influences that shape it, we have never left, and cannot leave, some fundamental insights inherent in CA”. Interference is a relevant factor in L2 acquisition if its operation is related to that of other non-interference factors. A cognitive view of L2 acquisition does not preclude a contribution from the L1. Rather, as Ellis (1985(b):37) argues, the use of the L1 is merely one manifestation of a very general psychological process - that of relying on prior knowledge to facilitate new learning.

The challenge is that the teacher should design activities to address the negative influences of the learner’s L1. The L2 teacher can use a variety of teaching procedures to facilitate a range of pedagogical options such that the negative L1 influence is, at least, minimized or completely eradicated. There is evidence (for example, Winitz, 1996; Tschirner, 1996; Ellis,
which suggests that instructional procedures determine L2 learning results. In view of the inconclusive nature of L2 acquisition studies about the way to teach grammar (Borg, 1998:10), Ellis (1994:646) suggests that “it is probably premature to reach any firm conclusions regarding what type of formal instruction works best”.

To deal with L1 influence, L2 teachers can adopt procedures that are characterized by the use of the target language as a means of instruction and communication in the language classroom, and by the avoidance of the first language and of translation as a technique (Stern, 1983:456). Teachers are often faced with the dilemma of choosing between form-focused instruction and meaning-focused instruction (Ellis, 1998:30). Each of these approaches has its value, depending on what the instructional goal is (Winitz, 1996:37). The communicative approach is preferred because it accommodates both form and function. Communicative language teaching techniques include group work, dialogues, problem-solving activities, projects, games. These techniques serve to create a low-anxiety teaching/learning context in which the learners can express themselves in the target language while focusing on solving a problem, or any communicative activity. These activities encourage language production through learner interaction and cooperation. The teacher must facilitate the activities, guide learners, and listen to language errors for the planning of remedial work.

Researchers (e.g., Krashen, 1995; Sharwood Smith, 1994; Truscot, 1998) are agreed that older learners may benefit from explicit grammar instruction. Explicit grammar teaching develops the metalinguistic awareness of the students. Negative feedback on grammar increases grammar gap awareness and can lead to improved accuracy (Truscot, 1998:122). Explicit grammar instruction must, however, be immediately followed by communicative practice.

The direct method has been recommended as ideal for young learners in the primary school as well as adult beginners. Advocates of the method work on the premise that a pupil learns to speak by speaking, to understand by listening and to read by reading. They argue that this is the way in which L1 pupils learn their own language and it is also the manner in which the L2 pupils learn when placed in a foreign language situation. Pre-knowledge is important and should link with the new knowledge. The spoken language is most
important. Rules and grammar have to be learnt through using the language, i.e inductively. The rules have to be deduced.

In the direct method, the standard procedure involves the classroom presentation by the teacher of a short and, usually, narrative text tuned to levels of beginners. Difficult expressions are explained in the target language with the help of paraphrases, synonyms, demonstrations, or context. The teacher asks questions about the text to clarify the meaning of the text. The students read the text aloud for practice. Grammatical observations are derived from the text read and students are encouraged to discover for themselves the grammatical principle involved. Much time is spent on questions and answers on the text or on talk about wall pictures. Exercises involve transposition, substitutions, dictation narrative, and free oral composition. Since the direct method class involves much use of the spoken language, the acquisition of a good pronunciation is also stressed. The method makes the language learning situation one of language use and trains the L2 learner to abandon the first language as the frame of reference.

L2 learning researchers such as White, 1989; Brown, 1998 believe that the acquisition of syntax and the acquisition of phonology are qualitatively different and this belief is based not so much on experimental evidence as it is on general observations that L2 learners often have extraordinary difficulty mastering the pronunciation and intonation patterns of their second language, often retaining an accent when their syntactic knowledge of the L2 is quite native-like. This perceived disparity between the acquisition of syntactic knowledge and phonological knowledge has led some researchers (e.g White, 1989:42) to conclude that the acquisition of phonological knowledge by L2 learners is irrelevant to the question of whether or not UG operates in L2 acquisition. Recent experimental research by Brown and Matthews (1997) demonstrate an active role of UG in the acquisition of phonological representations by children. The issue of UG accessibility in the acquisition of L2 phonology by adults has been investigated by Brown (1998) and she found that a speaker’s L1 grammar may actually impede the operation of UG, preventing the L2 learner from acquiring a non-native phonemic contrast. Only those aspects of UG that are manifested in the native language will be acquired by the L2 learner. Brown (1998:187) provides evidence that, when the necessary conditions (i.e, appropriate input) are met, L2 learners can successfully acquire UG determined properties of the target language.
These claims about L2 phonology acquisition suggest that the teacher should set aside time to devote to the teaching of phonology. The teacher can use a variety of activities such as rhymes, limericks, pronunciation games to mention a few. Rhymes are commonly used with children at the elementary and intermediate stages of L2 learning and they provide playful learning. Limericks can be used as learning tools for both children and adults. When using a limerick as a learning tool, the procedure described below is but one of many possibilities. The teacher can divide the class in pairs or in small groups and distribute slips of paper with a limerick written on each one. He can then have the learners read the limerick and analyze its content, emphasizing mainly the semantic aspect. Members of pairs or groups must work together and rely on each other. At the end of the activity, the most outstanding group performance is selected. Learners now have the gist of the humour in the limerick and the teacher can concentrate on pronunciation. The teacher can use the same limerick as a springboard for instruction in pronunciation. At the end, learners could be asked to try to write their own limericks.

6.2.2 Language-learner language is permeable, dynamic and systematic

The L2 learner’s interlanguage system is permeable, in the sense that rules that constitute the learner’s knowledge at any one stage are not fixed, but are open to amendment. For example, most L2 learners of English (e.g. those with IsiXhosa as a L1) pass through a stage involving main verb negation before introducing an auxiliary into their interlanguage system, as in “He not coming today”. Permeability is a good feature of interlanguage which teachers should strive to preserve at all costs, because it is the loss of permeability that prevents native-speaker competence being achieved by most learners.

Related to interlanguage permeability is the notion that language-learner language is dynamic. The L2 learner’s interlanguage is constantly changing. However, Ellis (1985b:50) observes that the L2 learner does not jump from one stage to the next, but rather revises the interim systems to accommodate new hypotheses about the target language system. This takes place by the introduction of a new rule, first in one context and then in another, and so on. A new rule spreads in the sense that its coverage gradually extends over a range of linguistic contexts. For example, early WH-questions are typically
non-inverted (e.g. 'What you want?'), but when the learner acquires the subject-inversion rule, he does not apply it to all WH-questions. To begin with, he restricts the rule to a limited number of verbs and to particular WH-pronouns (e.g. 'who' and 'what'). Later he extends the rule, by making it apply both to an increasing range of verbs and to other WH-pronouns (see Ellis 1985b:50 for the example). This process of revision and extension of rules is a feature of the inherent instability of interlanguage and its built-in propensity for change.

Language-learner language is also systematic in the sense that it is rule-governed. Despite the variability of interlanguage, it is possible to detect the rule-based nature of the learner’s use of the L2. He does not select haphazardly from the store of interlanguage rules, but in predictable ways. If teachers are aware of the learner’s language behaviour they would be able to explain the learner’s errors.

The three concepts, 'permeable' ‘dynamic’ and ‘systematic’ are closely related. Taken together, they mean that the learner’s interlanguage system does not develop in linear fashion because rules have to be constantly revised and extended to accommodate new hypothesis about the target language system. In other words, interlanguage is both rule-governed and creative.

There is, therefore, an inherent opposition in interlanguage, namely, that interlanguage is both rule-governed and creative. L2 instruction must strike a balance between the need to maintain order, regularly and the necessity to provide the opportunity, within the rules and regularities, to go beyond the given, to innovate and to be creative. This means to say that L2 teaching must take into account the regularities as well as the possibility of making use of the regularities in varied, novel, and sometimes unique ways as demanded by a given situation (the creative aspect). The critical question is: What practical steps can L2 instruction consider to deal with this dilemma?

As Widdowson (1978) suggests, L2 can be taught as communication. This means that teachers must teach the learners, not just linguistic skills but communicative abilities as well. By linguistic skills is meant those activities which operate only on “what is verbally manifested” and which require only a knowledge of correct grammatical usage. Communicative abilities, by contrast, operate on everything that is communicative in the
discourse as a whole, including not just purely linguistic elements but also—and more importantly—non-verbal elements, illocutionary acts, rhetorical conventions, and other pragmatic factors. Communicative abilities embrace linguistic skills, but not vice versa (see Widdowson, 1978:73-74). This raises the crucial question of exactly how best to teach communicative abilities.

Widdowson (1978) proposes that teachers can use a cross-curricular approach to language teaching. As he argues, a second language can be associated with those areas of use which are represented by the other subjects on the school curriculum and this not only helps to ensure the link with reality and the pupils' own experience but also provides teachers with the most certain means they have of teaching the language as communication, as use, rather than simply as communication (Widdowson, 1978:16). His argument is based on the following line of reasoning: First, communicative abilities develop out of a combination of linguistic skills and pragmatic skills (interpretive strategies relating to discourse conventions, non-verbal elements etc.). Second, by the time learners begin to study a second language, they have developed, or are developing, communicative abilities in their native language, including communicative abilities associated with specific school subjects. Third, linguistic skills are language-specific, but pragmatic skills are not. Fourth, pragmatic skills are, thus, necessary for developing communicative abilities in the second language—or those pragmatic skills associated with certain school subjects, at least—are already available to the learner. Finally, if the learner is continuing his or her study of those same subjects while transferring from the native language to the second language, teachers need only associate the teaching of the second language with the teaching of those school subject in order to tap those pragmatic skills.

For communicative language learning to succeed, L2 teachers can create favourable classroom conditions in which:

- pupils are motivated and participate actively.
- pupils are able to discover aspects of language for themselves.
- pupils' mistakes are seen as a natural part of the learning process.
- pupils are able to express themselves with confidence.
- pupils learn the skills of listening, speaking, reading, writing in a meaningful context.
pupils learn to find out information, carry out instructions, and solve problems in the new language.

the individual learner's needs are considered.

Various communicative language teaching (CLT) techniques can be used to ensure that learning is indeed communicative. As readers or listeners, students can be exposed to imperfect, even confusing samples of discourse (use of realia). They can be made to make educated guesses, to dig out main points, to recognize and interpret "hedges". As writers or speakers, they can be made to adapt their discourse to the needs and expectations of various audiences, to construct arguments, to exercise persuasion, to focus the reader or listener's attention on important points. In brief, by encouraging the learners to exercise their pragmatic skills, they (learners) can reasonably be expected to develop communicative abilities in the L2. Other techniques include dialogue, problem-solving, games, and role-play. These techniques encourage interaction, collaboration and co-operation which are the cornerstones of communication. They provide pupils with challenges, fun and realities about life.

For example, the following dialogue between the teacher and his/her learners encourages learners to exercise their pragmatic skills and to make educated guesses.

**Teacher:** I've got a picture to show you today. Can you guess what it will be about?

**Pupil:** The station.

**Teacher:** That's a good guess. I read you a poem about trains yesterday. It is about some form of transport but it is not the station.

**Pupil:** Is it a picture of an airport?

**Teacher:** No, it is not the airport. It is something we see everyday.

**Pupil:** Is it a bus?

**Teacher:** Very close. Well done.

**Pupil:** Is it a taxi?

**Teacher:** Good, but it's not just one taxi, it's a lot of taxis...

**Pupil:** It's a taxi rank.
Well done, you're correct, it's a taxi rank. Now, Where shall I put the picture?

Stick it on the board.

I could do that but we might have a problem later. Why?

We might need to write on the board.

Yes we might need the board to write on. Where else could I try?

The wall.

How shall I stick on the wall?

With pins.

With cello tape.

With prestick.

Pamela, please see what we have in the cupboard for sticking up pictures with ... etc.

The following example is a game called hide and seek and can be used to encourage learners to use their pragmatic skills to develop communicative ability in the use of prepositions. In this activity, one of the learners mentally hides an object somewhere in the classroom. The other learners then take it in turns to find out where the object has been hidden by asking questions like:

Is it on the bookcase?

Is it under the desk?

The teacher can limit the learners to using only part of the classroom to make the game quicker.

It can be concluded, therefore, that the regularities and creativity of the L2 can be dealt with better within a communicative language teaching approach than the traditional approaches such as the structural approach. The traditional approaches tend to focus on linguistic skills only whereas CLT focuses on communicative abilities, which, as stated above, embrace linguistic skills. Favourable classroom conditions are created through fun-filled, exciting and challenging techniques. These techniques require that the L2 teacher be innovative and enthusiastic.
6.2.3 L2 learning fossilizes

It is broadly agreed that L2 learners, unlike L1 learners, generally do not reach the same level of competence as native speakers. Their "final state" grammar is not the target language grammar because certain rules and items fossilise, no matter what age of the learner or amount of explanation and instruction he receives in the target language. Fossilisable structures tend to remain as potential performance, re-emerging in the productive performance of an interlanguage even when seemingly eradicated. This backsliding is common in phonology (cf. Ellis, 1995).

There have been speculations on the possible cause of fossilisation. Selinker (1992:251) observes that there are some arguments for the importance of social and psychological distance from target language speakers, other arguments for personality factors and strategies of learning as possible causes of fossilisation. Vigil and Oller (1976) place great emphasis on the nature of the feedback on learner's use of L2. Positive cognitive feedback, signalling "I understand you", results in fossilisation, whereas negative feedback, signalling "I don't understand you", helps avoid fossilisation. Higgs and Clifford (1982) identify communicative pressure as another factor in successful interlanguage learning. They argue that persistent pressure to communicate ideas that require the use of language that exceeds the learner's linguistic competence leads to fossilisation. Another possible cause of fossilisation is lack of learning opportunity. Ellis (1994) claims that learners who lack opportunities for receiving input and for using the L2 are not likely to succeed in interlanguage learning. Selinker and Lamendella (1978) conclude that there is probably no single cause of fossilisation; many factors play a role.

The central claim of fossilisation, namely, that there exist forms which will remain in learner speech permanently, no matter what the learner does to attempt their eradication, certainly causes concern among language teachers. It seems to undermine the language teaching process. Selinker (1992:252), however, assures language teachers that some effects of fossilisation can be bypassed in the learning/teaching process if emphasis is placed on communicative abilities in context. The hypothesis is that one can 'get round' fossilisation if one realised that most, if not all, learners can be taught to express meanings in an L2 and to interact with L2 speakers in clearly specified discourse domains. A stronger hypothesis,
yet to be tested, is that catching learners at the beginning of (academic) discourse domains might lower the expected fossilisation curve (see Selinker 1992:252).

The crucial question is: Can learners be defossilised, and, if so, how can defossilisation be carried out? In an article which investigated ultimate attainment in L2 acquisition, White and Geneese (1996:233) found that both children and adults can achieve linguistic competence which is indistinguishable from native speakers. Selinker (1992:252) expresses a similar opinion and argues that some effects of fossilization can be bypassed in the learning/teaching process if emphasis is placed on communicative abilities in context. McIntyre and his colleagues (1998:545) propose that willingness to communicate (WTC) should be the primary goal of instruction. They argue that WTC embraces both linguistic and communicative competence, but not vice versa.

WTC is the readiness to enter into discourse at a particular time with a specific person or persons, using a L2 (MacIntyre et al., 1998:547). It implies a behavioural intention such as: “I plan to speak up, given the opportunity”. For example, if a teacher poses a question to her or his learners, several of them may have the desire to speak and feel confident enough to answer. If learners are required to raise their hands before speaking, even if only one learner among many actually verbalizes the answer, all of the learners who raise their hands express WTC in the L2. In fact, learners raising their hands to answer a teacher’s question commit themselves to a course of action, indicating that they are willing to attempt an answer if called upon; that is, if given the opportunity (McIntyre et al., 1998:547).

WTC is an accumulation of factors which work together to produce this disposition in the learner. McIntyre et al. (1998:547) have proposed a heuristic model (figure 6.1) to show the range of potential influences on WTC in the L2. The anticipated interrelations among the constructs are presented in a pyramid-shaped structure. Reaching the point at which one is about to communicate in the L2 (top of the pyramid) is influenced by both immediate situational factors as well as more enduring influences. The pyramid shape shows the immediacy of some factors and the relatively distal influence of others. The broadest factors (e.g. intergroup climate, personality) are conceived to be the basis or platform on which the rest of the influences are built.
Figure 6.1  Heuristic Model of Variables Influencing WTC (MacIntyre, Clement, Dorny, & Noels, 1998:547)

The WTC model explains why particular learners raise their hands in the first place. They feel self-confident with the language in general to understand the question and formulate a response. They feel self-confident in their answer and wish to say something to their teacher and classmates. They feel motivated by the interpersonal situation, likely to be a combination of affiliation and control motives (to both please the teacher and to get good grades). It is obvious that the students are taking the course for a reason and, assuming that they were not coerced into it, this reflects some sort of motivation for language learning, possibly an affiliation (integrative) or control-based (instrumental) motive. Their prior language learning has led to the development of self-confidence, which is based on a lack of anxiety combined with a sufficient level of communicative competence, arising from a series of reasonably pleasant L2 experiences. If these conditions had not been met, the learners would have been disinclined to volunteer answers in class (MacIntyre et al., 1998:548). Finally, the learners’ personalities may play a role in their approach to language learning (e.g. why a conversational course versus a literature course?). Social context may explain not only why the language is taught (e.g., why teach English and not Afrikaans?), but also why the learner chooses to learn one language instead of another.
The challenge for the L2 teacher is to create and maintain these conditions in the classroom in order to 'get around' fossilization and let the teaching/learning process continue successfully. Three teaching/learning strategies which have been extensively researched and applied can meet this challenge, and these are: cooperation, collaboration, and interaction. Oxford (1997) describes important distinctions among what she calls three communicative strands in L2 language classroom. The strands, Oxford (1997:443) says, have different connotations, which, when understood, can help teachers better comprehend language learning and teaching. Cooperative learning refers to a particular set of classroom techniques that foster learner interdependence as a route to cognitive and social development. Collaborative learning has a "social constructivist" philosophical base, which views learning as construction of knowledge within a social context and which therefore encourages acculturation of individuals into a learning community. Interaction is the broadest of the three terms and refers to personal communication, which is facilitated by an understanding of four elements: language tasks, willingness to communicate, style differences, and group dynamics. A brief description of the application of these strategies in the classroom is presented below.

The first strategy cooperative learning (CL), refers to several related methods of organizing and conducting classroom instruction. Dornyei (1997:483) identifies three key components of CL which make a learning approach "cooperative". First, learners spend most of the class time working in small groups of between 3 and 6 learners. Second, learning is structured so that group members are motivated to ensure that their peers have also mastered the material or achieved the instruction goal, and therefore an intensive process of cooperation is generated, involving various creative collaborative learning strategies. Third, evaluating and rewarding the group's achievement in a CL class becomes as important as or more important than evaluating and rewarding individual achievement. Other principles of CL include the following (from Oxford, 1997:445):

- **Positive interdependence:** Gains for one person are associated with gains for others. It means that "If I win you win and vice versa", "If I lose you lose and vice versa.

- **Accountability:** Every person is accountable through individual grading and testing; the groups is accountable through a group grade; improvement scores are possible.
Team formation: Teams are formed in various ways - randomly; by student interest; by the teacher using specific criteria (heterogeneously, representing different characteristics such as aptitude or gender; or homogeneously).

Team size: Groups of smaller than 7 members usually work best.

Cognitive development: This is often viewed as the main goal of cooperative learning.

Social development: Development of skills such as turn-taking, active listening, and so forth are as important as cognitive development. Social skills may need to be taught because placing learners in a learning group and expecting them to cooperate effectively may not be successful (Johnson and Johnson, 1995:122). Cohen (1994) recommends open modelling and controlled practice for teaching these skills. These principles are the cornerstones for group dynamics and the motivational basis of student achievement in cooperative learning.

Lesson-planning for cooperative learning can be designed along the following five decision points:

1. Specify objectives.
2. Make decisions (e.g. about the group size and assignments, arranging the room, planning materials, and assigning group roles.
3. Communicate the task, the goal structure, and the learning activity.
4. Monitor and intervene.
5. Evaluate and process groups.

Virtually any L2 activity can fit into this structure. Johnson et al. (1990:5) assert that effective instruction indicates that cooperative learning should be used when we want learners to learn more like schoolmates better, like each other better, and learn more effective social skills. Compared to competitive or individualistic learning experiences, cooperative learning is more effective in promoting intrinsic motivation and task achievement, generating higher order thinking skills, improving attitudes towards the subject, developing academic peer norms, heightening self-esteem, increasing time on task, creating caring and altruistic relations, and lower anxiety and prejudice.
The second approach, collaborative learning, focuses on social relationships in a community of learners. It is based on certain beliefs about the L2 learning/teaching process. Oxford (1997:448) identifies these beliefs. First the L2 learning process is situated in a particular social context. It involves becoming part of the culture of the learning community. For the L2 learner, the immediate, close-at-hand learning community is the classroom. Second, the L2 learning community can and should also extend beyond the classroom. L2 learning can be a global adventure that involves learning about, understanding and (at least to some extent) identifying with another culture in which people use a different language. Third, the L2 teacher often acts as an envoy or representative of the target culture, not just as a participant in the culture of the classroom. In unilingual contexts where the target language is viewed as a foreign language, the teacher might be the main or only direct contact that the language learner has with the target culture. Fourth, in a community of L2 learners, cultural and linguistic ideas are best shaped through reflexive enquiry with other people (teachers, peers, native speakers etc.) who help the learners negotiate his or her own zone of proximal development (ZPD), that is, the learners’ degree of potential under the best conditions (Oxford, 1997:448). In a strong L2 community, these people provide scaffolds, consisting of multiple forms of assistance that can be removed bit by bit as the learner becomes more proficient in the language and the culture (Scarcella & Oxford, 1992; Oxford, 1997).

Collaborative L2 learning, when compared with co-operative L2 learning, seems less technique-oriented, less prescriptive, and more concerned with acculturation into the learning community (the L2 class). Collaborative L2 learning techniques involve language games, role-play, problem-solving exercises and most communicative language teaching techniques.

For example, a role-play lesson (e.g asking for things in a shop) could include the following four steps:

1. **Setting the scene**

1.1 **Language input**

The teacher reminds the students of language structures they have already learned in previous lesson. New vocabulary may be introduced.
1.2 The aims of the lesson
The learners are told what they are supposed to do.
The class is divided into groups (pairs or small groups)

1.3 Introducing the topic
The teacher introduces the setting with the help of pictures or other visual aids (e.g. a quarrel between a shop assistant and a difficult customer).
The chosen experience must be part of the pupils' experience.

1.4 Giving roles to the learners
The teacher talks about relationship between characters - how they would stand and move. The teacher could also talk about feelings, attitudes, and facial expressions. The teacher can involve the learners by asking a lot of questions. The teacher may take a role in the beginning but must be avoid the tendency to dominate the discussion.

2. The role play

All the learners should work at the same time - there should be no passive spectators. The teacher must give the learners a time limit, sometimes get them to exchange roles, and make suggestions only if necessary. Noise levels must be controlled - busy, active noise is acceptable, though.

3. Report back

This can take the form of a discussion of what happened and how learners felt. One or two selected groups could do their role-play for the whole class, though this must not go on for too long. The learners can think about what language structures they needed to know in the role-play situation.

4. Follow-up

This may be written homework, artwork, or remedial work on errors the teacher noticed during the exercise.
The third approach, interaction involves interpersonal communication. In the L2 classroom, interaction relates to:

- types of language tasks
- willingness to communicate with each other

Certain kind of L2 activities encourage interaction: simulations, games, role plays, drama, and the use of electronic data (intranet). These can be used as part of either cooperative learning or collaborative learning provided they are using the principles of the approaches.

Simulation is a general term which includes a variety of activities such as games, role plays and drama activities (Crookall & Oxford, 1990:2-24). A simulation can represent some real-world systems such as a mock international relations summit. At the same time, a simulation is an actual, current reality in and of itself. Simulations are relatively safe and involve the low-cost of making an error (Oxford, 1997:449).

In playing games there can be a lot of conversation practice. For example, in a game called building words, pupils may work in pairs to make new words from the letters of one long word. The teacher could produce (teach, eat, her, cat, etc). Electronic data also encourages interaction. Relevant tasks include networking between learners and teachers, talking in a small group gathered around the computer and tracking one’s own learning strategies interactively via computer (Crookall & Oxford, 1990; Holland, Kaplan & Sams, 1995).

L2 research (e.g. Scarcella & Crookall, 1990) indicates that interactive tasks generate vast amounts of authentic language, cause active learner involvement, engage learners’ motivation and interest, help learners think about and live the target culture to some degree, and enable learners to practise L2 communication skills.

Willingness to communicate has already been dealt with as the prime goal of L2 teaching, beyond linguistic and communicative competence (see 6.2.3). It is related to communicative confidence and to the degree of anxiety a person experiences about interacting with others in a communicative setting (Gardener & MacIntyre, 1993). It is also associated with input generation. High input generators, Oxford (1997:450) says, initiate
L2 conversation with the teacher or with peers, using any number of means to take an active role. Low input generators, she argues, take a more passive role in the L2 classroom, interacting almost exclusively with the teacher.

Learning styles potentially influence L2 classroom interaction. Styles refer to the general approaches students use to learn a new subject or tackle a new problem (Oxford, 1997:450). Some of the approaches involve a high degree of interaction whereas some emphasise less interaction. Oxford & Anderson (1995:201-215) identify a composite of style dimensions which include the following, among others: global versus analytic, concrete-sequential versus intuitive random, closure-oriented versus open, extroverted versus introverted, and visual versus auditory versus hands-on. Understanding the style preferences of individual language learners and of any L2 class in general helps the teacher design lessons that provide a range of activities suitable for all people in the class.

A final aspect of classroom interaction is group dynamics. Groups that are cohesive tend to perform tasks much more efficiently than less cohesive groups. Small groups are more effective than large ones.

In conclusion, it can be stated that defossilization is possible. Both children and adults can achieve linguistic competence which is indistinguishable from natives. The key factor is that L2 instruction should aim at developing a willingness to communicate in learners. Willingness to communicate can be achieved if teachers create opportunities for learners to engage in cooperative learning, collaborative learning, and interaction in the L2 classroom.

6.2.4 There are predictable sequences in L2 acquisition

One of the major arguments in interlanguage studies concerns the nature of the interlanguage continuum. Is the continuum to be conceived as stretching from the learner's mother tongue to the target language? Corder (1978a:6) refers to this view of the continuum as a restructuring continuum. Alternatively, is the continuum to be conceived as the gradual complexification of interlanguage knowledge? Corder refers to this as the recreation continuum. In the former view the learner is seen as gradually replacing features of his mother tongue as he acquires features of the target language. In the latter view the
learner is seen as slowly creating the rule system of the target language in a manner very similar to the child’s acquisition of his first language. As the role of the L1 began to be questioned, the view of the continuum as mainly a restructuring one fell out of favour and interlanguage was viewed as a recreation continuum (see Dulay and Burt 1973, 1974b). This ‘creative construction’ interpretation of the interlanguage continuum claims that L2 acquisition follows a ‘natural’ route of development.

Cross-sectional research and longitudinal studies have been carried out to investigate the order of acquisition of grammatical morphemes and other aspects of L2 development. Two early studies (Dulay and Burt 1973, 1974b) claim that the vast majority of errors produced by child L2 learners are developmental (i.e. not subject to L1 interference) and that the acquisition orders of child learners remained the same, irrespective of their first languages or of the methods used to score the accuracy of use of the morphemes. Replication studies achieved similar results. The general picture that emerges is that the ‘acquisition order’ for various grammatical functions is more or less the same, irrespective of the subjects’ language backgrounds, of their age, and of whether the medium is speech or writing.

The grammatical subsystems of negation, interrogation, and relative clause modification in L2 acquisition provide the best indicators of the progression which, according to interlanguage theory, is the basis of L2 acquisition (see Ellis, 1985a:59-62). For example, an investigation of the development of negatives in English as a L2 (ESL) involved both instruction and natural exposure to the target language. Four stages are distinguishable. Initially, negative utterances are characterised by external negation. That is, the negative particle (usually ‘no’) is attached to a declarative nucleus:

No very good.
No you playing here.

The questions are: If L2 learning occurs in a predictable sequence, does it mean that L2 instruction is useless? If not, what role should L2 instruction play? Recent research suggests that L2 instruction has a valuable role to play in L2 acquisition (Truscott, 1998; Krashen, 1995, 1982, 1985; Ellis, 1994; Winitz, 1996). L2 instruction raises grammar awareness/conscious monitor (Sharwood Smith, 1994; Krashen, 1995), accelerates the rate of acquisition for learners who are ready for it (Krashen, 1982; Pienemann, 1989) and increases the ultimate level of attainment (Ellis, 1994). Of utmost importance to the teacher.
is the claim that L2 learners must be ready to acquire a grammatical item. How should instruction be structured? Krashen (1985:69) proposes a stage-oriented model of instruction which can act as a practical guide for L2 to provide a smooth path from the early learning phase, to higher education and training level, and higher learning level. Comprehensible input must be provided all the way as it is the only way of increasing proficiency in the classroom (Krashen, 1985:69). Krashen proposes a four-stage approach and the stages are general language teaching, sheltered language teaching, partial mainstream, and full mainstream. A brief discussion of the stages and how they apply to the common second language situations follows.

The first stage, general language teaching, aims at providing comprehensive input to beginners in a low-anxiety situation and in an organised way. Within this stage, Krashen (1985:70) distinguishes three sub-stages:

1. A pre-speech stage, in which the focus is on the presentation of comprehensive input, with little or no demand for student oral response. Learners can participate merely by using gestures, names, and ‘yes/no’.

2. Early production stage in which the learners are able to answer using lexical items.

3. Extending production stage in which the learners can use short phrases.

Stage one assumes that a learner does not have any previous knowledge of L2. She/he has to go through a silent period before production emerges (Krashen, 1982:27). During this period the L2 learner is building up competence in the second language via listening, by understanding the language around him, i.e teacher-talk. For teacher-talk to be comprehensive at this stage the learner’s knowledge of the world must be utilized. In addition, the teacher can use teaching aids such as pictures and realia. Teacher-talk must be roughly-tuned because learners may not be at the same stage. With natural roughly-tuned input, i+1 will occur and reoccur. This approach has been called the Natural Approach (Krashen & Terrell, 1983).

This stage can be applied to any entry level: grade 1 or adult basic education or tertiary, as long as it is the learners’ first L2 learning opportunity. For high school and university beginners whose primary goal is often the ability to read and appreciate literature in the L2, stage one focuses on aural comprehensible input on topics of interest, extensive reading on topics related to class discussion, and formal study of grammar for the conscious monitor...
(Krashen & Terrell, 1983). The same focus applies to beginners in adult basic education. But the grammar component can be made optional for adult learners. Some adult learners will appreciate the formal knowledge, others will not, Krashen (1985:89) says.

The second stage, sheltered language teaching, seeks to address the problem of transition from classroom use of language to use of language outside the classroom in understanding and communicating with native speakers. Krashen (1985:70) believes that the language class need not produce learners who speak the L2 at native levels but only intermediates, learners who can use the language for real communication with its speakers. Learners need not acquire the entire language in the language class. When they finish class, they will still make mistakes. Their acquisition will continue as they interact with and receive comprehensive input from native speakers. But even this modest goal, Krashen (1985:71) notes, is rarely achieved. Learners complete even excellent senior primary phase classes, but are not ready to use the language on the outside in any truly demanding situation. There is a transition problem.

Krashen suggests that sheltered teaching can provide the solution to the transition problem in the academic situation. It can function as a bridge between the language class and the academic mainstream. There is, however, no sheltered teaching in South Africa. Instead, cross-curricular teaching attempts to utilize the learner's pragmatic skills in order to develop his/her communicative abilities. The focus is mainly on the subject matter so that the learners' attention is on the message, not the medium. In cross-curricular teaching, learners gain in subject-matter knowledge and acquire some of the special language of the subject matter.

For high school and tertiary level L2 programmes, the main focus can be on topics related to literature, history, of speakers of the target language, current events, geography in order to provide background information that can make the subsequent study of literature more meaningful. Elective pleasure reading (detective stories, romances or adventures) done outside of class is recommended. The assumption is that such reading could provide exposure to the most common syntax and vocabulary of the L2. A linguistic foundation for reading of classics is provided and efficient reading strategies are developed. Grammar study at this stage aims at improving the monitoring skills in writing and providing background information that will be used in the study of literature.
Teaching-across-the-curriculum for adult education programmes can be in any area that is comprehensible and interesting, e.g. job related courses. Subject matter might include the culture and history of the speakers of the target language, current events and others.

The third stage, partial mainstream, aims at exposing the learner first to areas that he/she has best chance of understanding and gradually expanding to other areas. Learners from stage two will not be ready for the full range of mainstream second language use. Some parts of the mainstream will be more comprehensive than others due to the presence of background information that helps make the input comprehensible. Krashen (1995:73) suggests that learners should be first exposed to narrow input.

Narrow input means that students are encouraged to read on only one topic at a time or several books by the same author (Krashen, 1985:73). Narrow input facilitates acquisition in several ways (Krashen, 1985:73; 1995:48-49). Since the input is concentrated around one subject matter, the acquirer has the advantage of a familiar extra-linguistic context, and as Krashen (1995:49) states, this facilitates comprehension and thus acquisition. That is, the more one reads in one area, the more one learns about the area, and the easier one finds subsequent reading in that area. In addition, narrow input exposes students to new vocabulary and a variety of writing styles in a comprehensible context and built-in review (Krashen, 1985:73). The reader is motivated to read more. Involvement in a topic of real interest has a chance of resulting in the students’ focusing on the message, which is a prerequisite, Krashen (1985:74) argues, for real language acquisition.

Learners at this stage should be encouraged to do massive reading in elective areas, done outside of class. Learners could be asked to summarize each story and/or set and answer questions on the texts. Alternatively the teacher could set the questions to direct learners’ focus. Reading should be in areas which students are familiar with. This would provide linguistic foundation for advanced reading and could result in the development of reading strategies. Learners should first concentrate on authors whose works are set in times and situations that are familiar to students (sometimes this means contemporary writers before ‘classic’ authors). In addition, linguistics which should cover the structure, history and dialects of the target language, can be taught to satisfy the learners’ intellectual curiosity about the target language.
The final stage, full mainstream, means that the learner is able both to communicate in the L2 wherever and however it is used. Learners are assumed to have specialized vocabulary and deep knowledge of many areas. The full mainstream stage and the partial mainstream stage do not differ sharply. Krashen (1985:74) argues that it may be more correct to speak of one mainstream, one stage three, that consists of gradual expansion of competence from a few narrow areas to other related areas. The advanced level usually means reading the classics in the target language. Krashen (1985:78) suggests that a ‘survey course’, consisting of selections chosen from various genres and covering a wide time period, would be an ideal approach for the full mainstream.

To conclude, the predictable sequences in L2 acquisition can be addressed by adopting the four stage model proposed by Krashen (1985). The schema predicts that learners will have problems when a stage is skipped, and that they will stop improving when the next stage is not provided and when an early stage is overprolonged. Similar claims are made by the Multidimensional model in section 6.4. The importance of comprehensible input in promoting acquisition has also been emphasized. Comprehensible input-based L2 teaching methods like the Natural Approach, Total Physical Response, and teaching across-the-curriculum are recommended (Krashen, 1995).

6.3 Theories Based on Implicit-Explicit Knowledge Distinctions

6.3.1 ‘Learned’ knowledge cannot be converted to ‘acquired’ knowledge

Krashen (1981; 1982) claims that learners possess an ‘acquired system and a ‘learned’ system which are totally separate (see chapter 3). An acquired system is developed by means of acquisition, a subconscious process which arises when learners are using language in communication. A learned system is the result of learning, a process of paying attention to language in an effort to understand and memorise rules. The acquisition/learning distinction mirrors the implicit/explicit distinction (Krashen, 1982:10). Krashen claims that explicit L2 knowledge cannot be converted to implicit L2 knowledge. That is to say, there are two distinct and independent ways of developing competence in a second language: language acquisition and language learning (Krashen, 1995:45).
Language acquisition is similar or identical to the way children develop ability in their L1 (Krashen, 1982:10). It is a subconscious process. Language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using language for communication. The result of language acquisition, acquired competence, is also subconscious. Learners are usually not aware of the rules they have acquired. Instead they have a “feel” for correctness. Acquisition is sometimes called implicit learning, informal learning, or natural learning.

According to the language acquisition hypothesis, the best methods of language teaching are those that supply “comprehensible input” in low anxiety situations, containing messages about “real life” situations. These methods, Krashen (1982:7) argues, do not force early production in the L2, but allows learners to produce when they are ready, recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production. Such methods include the Natural Approach, Suggestopedia, Total Physical Response which could be subsumed under the Communicative Approaches to Language Teaching.

Communicative Approaches address the problems of learners’ active participation, group dynamics, meaning negotiation, comprehensible input and interaction. They also address aspects of learners’ personalities like self-confidence, self-efficacy (who do you blame for failure?), motivation and willingness to communicate, learner anxiety and others. Methodology includes dividing the learners into small groups, allocating work to the groups and facilitation by the teacher. Group work could take the form of games, role-play, drama, and projects. These activities should be designed to encourage language production in a fun-filled context (see sections 6.2.2 and 6.2.3).

Language learning (in Krashen’s terms) refers to conscious learning of a L2, knowing the rules, being aware of them, and being able to talk about them. It is “knowing about” a language, grammar or rules. Language learning is sometimes called formal learning of a language or explicit learning. In terms of language learning, L2 instruction should take the form of explicit grammar teaching. This could involve the isolation of specific linguistic structures are isolated for specific attention. The form-function relationship are explained,
illustrated, and exercised. As stated earlier (see 6.2.1), explicit-grammar teaching develops the metalinguistic awareness of the students.

Krashen (1995) argues that explicit grammar instruction is not desirable for L2 instruction because it encourages self-correction and therefore, is apt to disrupting communication. The message suffers when the communicator is focused on form rather than meaning. There is, however, some value in applying rules when time permits, when rule use does not interfere with communication. Applying rules can also make writing and speech more polished (Krashen, 1982:112).

According to Krashen (1982, 1995), both acquired and learned competence are of value to communication. Acquisition, however is more important and valuable and should therefore, be the focal point of L2 instruction. Learning could be used as a supplement to develop students’ monitor use which can be applied when the time permits (for example, writing examinations or assignments). Krashen (1995) maintains that explicit grammar teaching cannot lead to communicative competence, and that only comprehensible input-based methods can help develop communicative ability. One conclusion can be drawn from this argument: L2 instruction must consider the specific goals of the learner and attempt to provide the appropriate form of knowledge to achieve those goals.

### 6.3.2 Explicit L2 knowledge can become implicit L2 knowledge

Bialystok (1982) maintains that explicit L2 knowledge can become implicit L2 knowledge through practice. She differentiates between formal and functional practice. Formal practice involves either conscious study of L2 or attempt to automatize already learnt explicit knowledge (see dialogue in 6.3.1). Functional practising is an attempt to maximize exposure to language through communication. Through functional practice, explicit knowledge can become implicit. Functional practice techniques include the communicative strands: co-operation, collaboration and interaction (see 6.2.3

The following guessing game, for example, can be used to practise the contrast:

He does....., He does not ..... , He wears ..... , He does not wear .....
The teacher thinks of a person well known to the class, like the headmaster. The pupils then have to suggest things that the person does or doesn’t do. For example:

He does smoke
He wears smart clothes

The teacher nods or shakes her head in response to each suggestion. The pupils who has made a suggestion must then write the appropriate sentence on the board. For example:

Pupil : He does smoke
Teacher : (shakes her head)
Pupil : (comes up to the board and writes: He does smoke.)

Once a certain number of sentence have been written, the pupils must guess who the person is. The game can be played in smaller groups with fewer sentences being written once the pupils understand how it works.

When choosing or planning practice activities, the teacher must make sure that:

♦ the activity has a simple, clear objective,
  the activity involves the active use of language - listening, speaking, reading, and writing,
♦ there are opportunities for lots of repetition in a variety of situations,
  the pupils will be interested and motivated, the task is open-ended (i.e, it allows for different levels and types of response from pupils), and the pupils will be relaxed and confident by giving them the encouragement and approval they need.

According to Bialystok’s (1990) perception, L2 classroom practice can cater for both formal and functional practice, depending on the needs of the students at any point in time. Formal practice must be followed by functional practice in order to achieve communicative competence. The important question is not whether grammar should be taught, but in what way it should be taught in order to achieve the different communication needs of the learners. For Krashen, L2 knowledge is either explicit or implicit and the two cannot be linked. Bialystok maintains that L2 knowledge is a continuum between explicit (analyzed, formal) knowledge and implicit (unanalyzed, functional) knowledge. Variabilists in section 6.4 below adopt a perception which is similar to Bialystok’s: they perceive L2 knowledge as a continuum between formal and functional poles.
6.4 Variability Theories of L2 Learning

Language-learner language 'style-shifts' systematically and non-systematically

Language-learner language is not stable, as has been stated in Chapters 2 and 4. Interlanguage is permeable because the rules that constitute the learners' knowledge at any stage are not fixed, but are open to amendment. The learners' interlanguage system is constantly changing, undergoing revision as new rules are acquired. The change is systematic because the new rules are acquired in predictable ways. These perceptions were raised in section 6.2.2. Interlanguage and variable theorists overlap in this regard. Both perceive interlanguage as systematically variable.

Variable theorists further perceive the systematic variability as of two types: individual variability and contextual variability (Ellis, 1994). Individual variability is the product of individual learner factors like, personality, motivation and age. For example, some learners are introverts while other are outgoing and self-confident; others are less enthusiastic to learn the L2. Contextual variability is determined by both situational context and linguistic context. Tarone (1983) represents the effects of situational context as a continuum of interlanguage styles (see figure 4.2). Ellis (1985) calls the continuum a discourse continuum. At the one end of the continuum is the vernacular style (or unplanned discourse) which is called upon when the learner is not attending to speech. It is the most natural and systematic speech. At the other end the continuum is the careful style which is most clearly evident in the tasks that require the learner to make a grammatical judgement (e.g. to say whether a sentence is correct or incorrect). The careful style (or planned discourse) is called up when the learner is attending closely to his speech. Thus the stylistic continuum is the product of differing degrees of attention reflected in a variety of performance tasks.

Variability as a result of linguistic context occurs when two linguistic contexts induce different forms, even though in the target language they acquire the same form (Ellis, 1985:83). For example, the learner might use the third person singular '-s' correctly when the linguistic context consists of a single clause utterance as in:
The girl writes neatly.

But the learner fails to use the ‘-s’ correctly when the linguistic context consist of a subordinate clause, as in:

The girl who write neatly is absent from school.

Non-systematic variability is of two kinds: Performance and free variability. Performance variation involves psycholinguistic factors like the learner’s emotional or physical condition which can lead to slips, hesitations and repetitions. This variability does not shed light on how acquisition takes place. Free variability is the variation apparent in the haphazard use of two or more alternate forms which exist within the learner’s interlanguage. This causes instability in interlanguage because the learner will try to improve the efficiency of his interlanguage system by developing clear-cut form-function relations.

This subsection addresses the question: How can we take account of what is known about the nature of variability in L2 acquisition in language teaching? Krashen suggests a natural approach, and Bialystok proposes a balanced approach between form-focused and meaning-focused approaches (see section 6.3). Ellis’ (1987) proposal is the same as Bialystok’s: the variability perspective provides a principled basis in L2 acquisition for ‘accuracy’ work as well as ‘fluency’ work. The blanket rejection of grammar teaching is not warranted if account is taken of interlanguage as a variable system. A variability perspective stresses the dual contribution of formal and informal instruction, accuracy and fluency.

With regard to syllabus design, a variability perspective warrants a parallel syllabus incorporating both product and process elements. A product syllabus can serve two functions. First, it can provide a basis for developing the learner’s careful style (which, in the case of learners who have no need or wish to engage in spontaneous language use, will be sufficient in itself). Second, it can serve as a basis for fostering variable structures in the learners’ interlanguage by introducing new variants, which, later on, given the right conditions, can spread through the stylistic continuum and so become available for use in more casual styles.

The rationale for a process syllabus is that the spread of knowledge along the stylistic continuum requires the opportunity to engage in a range of language styles, including the
vernacular. The process syllabus presents the learner with a series of tasks, the main purpose of which is to motivate communication.

The question arises as to how the two syllabuses can be combined into a single integrated syllabus. Ellis (1987:188) suggests that a parallel syllabus is ideal. The syllabus has two strands, one for 'products' and the other for tasks, each graded and sequenced separately. In such a syllabus the teacher must decide what portions of teaching time to allocate to the product and process strands. This decision will to be informed by a number of factors including the goal of the syllabus (e.g. whether to develop a full stylistic range in the learner or whether to focus on developing a one-style competence, careful or vernacular) and the age of the learner (e.g. young children may not have developed the cognitive capacity to acquire a careful style and so would benefit from a syllabus heavily weighted in favour of the process component).

Two kinds of language teaching materials can be used for implementing these syllabuses. First, materials are needed to introduce the learner to the norms of the chosen target language variety, that is, to present and practise specific linguistic items derived from the product component of the syllabus. We can refer to these as 'focused materials'. Second, materials are needed to enable the learner to develop his variable interlanguage system. These will facilitate the dispersal of variants throughout the stylistic continuum (Ellis, 1987:189). The materials will consist of 'unfocused' activities based on the process component of the syllabus.

When focused materials are used, the teacher has to decide how to deal with meaning. Structural materials focus on linguistic forms and meaning is handled through context. In functional-notional materials the focus is on meaning, and linguistic form is handled by selecting exponents of specific functions and notions. For example, various ways of expressing requests can be taught by focusing on simulations in order to elicit appropriate structures. These activities enable the learner to consciously manipulate specific linguistic items for conveying specific meanings, when the learner is focused on form. There should, however, be no expectancy that focused materials (structural or notional-functional) will in themselves foster the ability to use these items in spontaneous language use (i.e., vernacular style). Language instruction lays a foundation of knowledge upon which the learner can
himself or herself act in the subsequent process of building a variable interlanguage (Ellis, 1987; Bialystok, 1982).

Unfocused activities are designed to stimulate ‘authentic’ communication in the classroom. As mentioned in section 6.3 these activities are message-based, have a gap of some kind to be bridged, and involve meaning negotiation. Classroom techniques include the use of drama, and projects for language practice and production while attending to some non-linguistic task.

The following are some practical hints to teachers: Teachers should expect variability in students’ performance and should cease to be surprised that ‘backsliding’ occurs. Also, the teacher needs to recognize that change is bound to be gradual. No matter how skilful the teacher handles the presentation and practice of new items, these will not be immediately assimilated into the learner’s system. Credit for production that show progress should be given even though they are still ‘deviant’ in terms of the native speaker’s grammar. The learner’s progress needs to be measured with reference to performance in each style considered separately (Skehan, 1987:199).

A major aspect of classroom practice is classroom interaction between the teacher and the learners, in pairs or groups of learners or between learners and texts (see 6.2.3). Various kinds of interaction can be classified according to whether they afford ‘planned’ or ‘unplanned’ discourse. In planned discourse we find roles, formality, rigidity and lack of reciprocity. For example, teacher-directed drills are planned discourse, participation in which leads to the acquisition of target language norms in the learner’s careful style. Such discourse is likely to be characterized by a three-phase pattern: initiate-response-feedback, and by overt error correction. It seeks to enforce pedagogic norms. On the contrary, in unplanned discourse, there is interchange of roles between the participants, informality, spontaneity, and reciprocity.

To conclude, a variability perspective stresses the importance of both formal and informal instruction and of the relationship between ‘accuracy’ and ‘fluency’ activities. According to variabilists, a connection between accuracy and fluency exists. Variabilists share Bialystok’s perception (see section 6.3.2) but differ from Krashen’s (section 6.3.1).
6.5 The Multidimensional Model

Some language features are developmentally constrained and others are developmentally free.

Researchers (e.g. Pienemann, 1989; Clahsen, 1990; Meisel and Johnson, 1996; Meisel, 1997) observe that all language learners must pass through the general stages of acquisition (or developmental stages). These stages are discussed in section 5.2. and figure 5.1 shows the stages. The acquisitional stages of developmental features are fixed and predetermined. That is to say, these features are developmentally constrained. This perspective of L2 acquisition, which is called the Teachability Hypothesis, is similar to the Creative Construction Hypothesis (Sharwood Smith, 1994) proposed by the champions of the Natural Order Hypothesis (e.g. Dulay and Burt, 1974; Krashen, 1982). The Creative Construction Hypothesis is discussed in sections 2.2.2 and 6.2.4 and the Natural Order Hypothesis in section 3.2.1.

According to the Teachability Hypothesis, language processing strategies play a decisive role in determining the order in which given sets of L2 items are acquired by different individuals. The structures that are acquired at different stages are implicational in nature. This means that the structure acquired at each stage is a prerequisite for moving on to the next stage. The processing operation characterizing stage \( X + 1 \) is also required for stage \( X + 2 \), and likewise the operation characterizing stage \( X + 3 \) cannot be processed by the learners at stage \( X \) or \( X + 1 \), since they have not yet acquired the necessary processing prerequisite for the operation in question. Every learner builds her or his own grammar. The Teachability Hypothesis states that instruction can only promote the acquisition of developmentally constrained features if the interlanguage is close to the point when the structure to be taught is acquired in the natural setting. This is what Krashen (1982) refers to as 'readiness' to acquire a structure in his Input Hypothesis.

The Teachability Hypothesis also predicts that variational features will be free of the kinds of constraints which affects the teachability of developmental features. There is no learning barrier for variational features. Once a variational feature can be produced at all it can be said to be teachable.
If some language structures are developmentally constrained whereas others are not, the question that needs to be addressed is what role L2 teaching can play in the acquisition of developmental and variational features. There is no way of determining which features are variational and which developmental (Ellis, 1994). There is no way the teacher can determine the stage of the learner with regard to a structure to be taught. In Krashen’s (1995) terms, the teacher cannot determine the learner’s current state (x) or his/her readiness to acquire a structure.

In order to cater for developmentally constrained structures, L2 instruction could be modelled according to the stage-wise teaching model as proposed by Krashen (1985). A detailed discussion of Krashen’s model is presented in section 6.3.1. The model maintains that the methods of language teaching are those that supply comprehensible input in low anxiety situations, containing messages about ‘real life’ situations. Such methods allow learners to produce L2 when they are ready, recognizing that improvement comes from supplying communicative and comprehensible input and not forcing and correcting production. Krashen’s four-stage model of teaching predicts that learners will stop improving when the next stage is not provided and when an early stage is overprolonged. The stagewise development perspective of the Multidimensional Model could be served well by Krashen’s teaching model.

To cater for variational features, a variability perspective of L2 instruction can be adopted. The perspective stresses the importance of both formal and informal instruction and of the relationship between accuracy and fluency activities. Variational features can be taught using both ‘focused’ and ‘unfocused’ materials depending on the general requirements of the syllabus. If the syllabus requires the development of a full range of variation styles, both types of materials can be used. If one-style competence is required, either focused materials can be used for developing a formal (careful) style or unfocused materials for an informal (vernacular) style (see Section 6.4 for details these types of instruction).
6.6 Conclusion

It has been stated that L2 acquisition research can offer no formulas, no recipes, but can give teachers appropriate expectations for themselves and their learners. L2 acquisition research gives explanatory support to formal interventions. This chapter attempted to raise the critical awareness of the L2 teacher by outlining the important generalisations made by the theories, and by relating those generalisations to L2 instruction.
CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

7.1 Introduction

The purpose of this chapter is to step back and take a look at the four cognitive theories and their implications for L2 instruction in order to highlight what has been achieved in research and what still needs to be done. The study addressed the claims of the four most influential cognitive theories of L2 learning and what their implications for L2 instruction are.

It clear that the theories reflect widely diverging and sometimes conflicting propositions regarding which phenomena need to be explained, and how this explanation can best be provided. It is also clear that the divergence and conflicting perspectives make the cognitive theory complex and, sometimes, inaccessible. By analyzing and discussing the claims and the empirical foundations of the theories, the purpose has been to bring the divergence between the theories to the awareness of the second language practitioner and researcher. What is also clear is that the influence of the theories on L2 teaching is great. Some of the most important influences have been discussed in order to highlight the impact of the conflicting perspectives on second language teaching. Below, highlights of what has been achieved (i.e. conclusions) and what still needs to be done (i.e. recommendations for further research) are presented.

7.2 Conclusions

This section summarizes the main arguments of the theories which also happen to be central in current debates about second language acquisition and teaching. The main claims of each theory are highlighted and briefly discussed.
Interlanguage Theory (Chapter 2) stresses the importance of cognitive strategies in L2 learning. The dominant role of the first language in second language learning within a behaviourist learning theory and the denied or minimised role of L1 in L2 learning within the context of Universal Grammar theory were briefly reviewed. It was observed that although the learner’s L1 is an important determinant of L2 acquisition, it is not the only determinant, and may not be the most important. But it is theoretically unsound to attempt a precise specification of its contribution or even to try to compare its contribution with that of other factors.

Interlanguage theory also focuses on the developmental route along which learners pass. The theory claims that L2 learners follow broadly similar routes, although minor differences can also be observed as a result of the learner’s L1 and other factors. One of the most important effects of this perception of L2 acquisition has been the reassessment of errors. Whereas in behaviourist accounts errors were treated as evidence of ‘non-learning’, the UG perspective regards errors as evidence of the learner’s active contribution to acquisition. It is doubtful, in fact, whether learners ever completely fossilize, according to this perspective. It is believed that some revision of the interlanguage system always carries on. Errors are the external manifestation of the hypothesis-testing process, which is responsible for the continual revision of the interlanguage system. From this perspective, Interlanguage Theory shares similar perceptions with the Multidimensional Model.

Early interlanguage paradigms focused on the systematicity and variability of interlanguage. It was hypothesized that interlanguage refers to an interim grammar that is a single system composed of rules that have been developed via different cognitive strategies such as transfer, overgeneralization, simplification, and the correct understanding of the target language. Furthermore, the development of interlanguage is different from the process of first language development because of the likelihood of fossilization. Interlanguage Theory also takes into account the variability inherent in language-learner language. Interlanguage is perceived to be analysable into a set of styles that are dependent on the context of use. At any given stage of development, the learner’s interlanguage system contains a number of competing rules, with one rule guiding
performance on one occasion and another rule at a different occasion. This notion of systematicity and variability later developed into variability models of L2 learning.

A re-examination of the term, *transfer* took place in later interlanguage studies. Researchers have argued that the term *L1 transfer* is inadequate and should be replaced by a superordinate term that is theory-neutral. The term has, however, persisted, although its definition has been considerably broadened to include other cross-linguistic phenomena.

The theories based on implicit-explicit L2 knowledge distinction adopt two conflicting views with regard to how learners acquire a L2. It is generally agreed that L2 learners possess two kinds of knowledge: explicit and implicit L2 knowledge. There is, however, controversy over whether the two knowledge types interact. Krashen’s perspective is that the two do not connect, whereas Bialystok’s maintains that there is interaction between the two types. The controversy has deadlocked.

Variability theories adopt a different view of L2 knowledge from the dichotomous view of knowledge as either explicit or implicit. Interlanguage development is perceived to vary systematically along a continuum of styles. There are more than two knowledge types. Two variability perspectives exist: the Capability Continuum Paradigm and the Variable Competence Model. This divergency involves conflicting opinions, though the models differ in terms of how they explain the phenomena involved.

The Capability Continuum Paradigm perceives the interlanguage continuum as having the vernacular and the careful styles at its poles and a number of styles in between. The vernacular style is called upon when the learner is not attending to his/her speech. It is also the style that is most natural and most systematic. The careful style is most evident in tasks that require the learner to make a grammatical judgement (i.e. whether a sentence is correct or incorrect). It is called upon when the learner is attending closely to his/her speech. Thus, the stylistic continuum is the product of differing degrees of attention reflected in a variety of performance tasks.
The Variable Competence Model perceives interlanguage development as a discourse continuum which has an unplanned and a planned discourse pole. Unplanned discourse is constructed through the use of primary processes such as semantic and functional simplification. It is characterized by spontaneity. Planned discourse is constructed through secondary processes such as monitoring and borrowing.

The Multidimensional Model explains L2 knowledge development in ways that are similar to Interlanguage Theory's 'natural route' or Krashen's Natural Order Hypothesis by proposing a stage-bound, predictable L2 development model. The model predicts that L2 structures that are developmentally constrained will not be acquired unless the learner has acquired the prerequisite structures. Some structures build on other structures. The Multidimensional Model also hypothesizes that some L2 structures will not be constrained by stages of development and will thus be teachable at any moment.

The implications of these theories for L2 teaching were considered in Chapter 6. It is clear that researchers cannot prescribe teaching methods to teachers, but can suggest appropriate expectations for themselves and their learners. The discussion centred around the best possible approaches and teaching strategies which could be used to address L2 acquisition issues that are raised by the various cognitive theories. Those issues which are deemed important in the study but which have not been resolved and which require more research are discussed in the following section.

### 7.3 Recommendations for further research

The issue of whether there is interaction or not between implicit and explicit L2 knowledge has not been resolved. Krashen (1982) argues that acquired and learnt knowledge are entirely separate. There is no relationship between the development that arises from accuracy-focused and fluency-focused teaching, as each contributes to a distinct kind of competence. On the other hand, Bialystok (1982) maintains that there is interaction between accuracy and fluency through functional practice. This issue is far
from being resolved. Although a variable perspective offers an alternative perception of L2 competence, the debates concerning explicit and implicit L2 connection continues.

There is a need for researchers to look into possible ways of resolving the deadlock. Some of the questions that could be addressed are:

1. Whether L2 knowledge should continue to be perceived as either explicit or implicit and L2 instruction as either accuracy-focused or fluency-oriented teaching.
2. Whether L2 knowledge should be viewed as a continuum between explicit and implicit poles and L2 instruction as a continuum between accuracy and fluency teaching.

If these questions were addressed, it could pave the way towards a coherent approach to L2 teaching.

Some important issues regarding the Teachability Hypothesis of the Multidimensional Model warrant further research. The hypothesis claims that some L2 structures are developmentally constrained and others are variational and therefore free from developmental constraints. Some structures are built on other structures and cannot be acquired before these other structures. It would be useful for researchers to determine exactly which grammatical structures are constrained and which are variational and, therefore, teachable. For features where specific orders have been established, it would make sense for syllabus construction to present the grammatical structures according to their natural order of acquisition. To construct formal input which contradicts natural sequences may impede rather than promote language acquisition. More information is needed on developmental features and on how to identify features that are variational.
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