

A Review of Process and Production in SL Studies¹

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I INTRODUCTION

During the past two decades there has been an upsurge of interest in the teaching and learning of languages in general and in the teaching and learning of second languages in particular. The interest taken in the study of the nature of language acquisition is reflected in the sizeable body of literature related to this area and available, nowadays, in the field of linguistics both in its 'theoretical' and 'applied' forms. Yet, as a review of such literature reveals, our understanding of the complex nature of language acquisition is far from being sufficient. The whole issue looks, therefore, in need of a great deal of further research. This is due to the fact that a "human language is a system of remarkable complexity" (Chomsky 1975:4).

In this field of Second Language Acquisition (SLA), the need for further systematic and extensive investigation is even more justified. Current trends in Interlanguage (IL) have challenged psychologists and teachers to re-examine their position in language teaching. The view that SL is acquired in 'somehow' natural order has gained impetus in recent years and has far-reaching implications for education policies and practices. The principal concern of scholars in the field of IL has been to account for and to describe the psychological process that go on when one produces or understands linguistic data. However, as Corder (1973:19) points out: "It (IL) cannot yet be fully accounted for by anyone within one wholly consistent and comprehensive theory".

Much of the change of focus in the teaching and learning of a second language which had its roots in the 1960's, led people to rethink the relationship between teaching and learning. Not only this, but indeed to think more about the nature of the learning process itself.

1. This article is based on the Second Chapter of Al-Buanain (1986), "Second Language Acquisition of Arabic: the Development of Negation and Interrogation among Learners in the U.K." Ph.D. Thesis. Applied Linguistic Department. University of Edinburgh.

II. THEORETICAL BACKGROUND

As an introduction, it is necessary, therefore to give a brief resume of the theoretical background that has provided the framework for SLA research.

Nativist theorists (e.g. Chomsky 1959, 1965; Lenneberg 1967; McNeil 1966, 1971) argued cogently that the child is not a completely empty receptacle, but that he/she brings an active participant and innate knowledge to the process of acquisition. Chomsky's (1959) 'Review of B.F. Skinner's verbal behaviour' questioned the very core of behaviourist theory (Skinner, 1957) as an account of language learning. Chomsky viewed acquisition as a kind of theory reconstruction that the child undertakes successfully without being given the instruction explicitly and only from small amounts of language data.¹ The child's ability to 'create' language comes from his/her possession of the language acquisition device (LAD). A LAD would contain a set of linguistic universals presumed to be innate and genetically transmitted.

An important contribution of this school is the notion of language as a rule-governed system: each language as a "system of systems". In other words, language is structured organisation of the rule of syntax, of morphology, of semantics, phonology and morphophonemics; further, these systems are ordered within themselves. The finite system of rules which form the 'intuitive grammar' of a native speaker generates an infinite number of sentences in production, comprehension, detection of ambiguity, synonymy etc. (Transformational Generative Grammar: Chomsky, 1965).

The basic problem, however, with the Generativist/Nativist approach is that it tends to create a 'mind-set' rather difficult to adapt to the kinds of problems in language acquisition. Acquiring/learning a language consists of adapting the genetic programme, (i.e. innate ability) revising it, adjusting it to fit the realities of the culture language he/she appears to encounter (Bickerton 1981: 297). Cook (1985: 4) defines language acquisition as "The growth of the mental organ of language triggered by certain language experiences". Additionally, the Nativists' belief was that "grammatical relations that determine semantic interpretation" (Chomsky 1965: 141) were defined by the phrase structure rule of transformational grammar. Thus, their preoccupation with the formal syntax (rules and structure of child's speech) was inadequate to fully account for the complexities of language learning since many were not taken into account. "There was no attention to linguistic **function** expressions" (Emphasis added) (Bloom 1970: 1). By the beginning of the seventies, such an approach was

¹ This view of L1 acquisition is essential to Dulay and Burt's (1973) L1 = L2 hypothesis as well as their theoretical model of SLA: *Creative Construction*.

considered somehow 'incomplete' and the need was felt for 'rich' interpretations, which would place Semantics at the centre of the language acquisition process (e.g. Bloom 1970, Brown, 1973).

As a consequence, SL scholars and researchers started to search for an adequate theory and/model valid for learning and teaching of SLs. Their studies were (and are still) motivated by the desire to understand more about the mechanisms involved in the learning of SLs.

III EMPIRICAL SLA STUDIES

1. Contrastive Analysis Studies

Following the Behaviourist's theory (e.g. Skinner, Thorndik, Pavlov and others)', which viewed language learning essentially as the formation of habits, applied linguists sought to identify areas of difficulty for SL learners by systematically comparing a description of the learners' native language (NL) with that of the target language (TL) (Lado 1957).

Since the late sixties, there has been a considerable debate regarding the value of Contrastive Analysis Hypothesis (CAH). As a result of this debate, two versions of the hypothesis have emerged: a strong version and a weak one. The strong version, identified more with early CAH, claims that all errors in SL learning are attributed directly to the difference between the NL and TL. The implication of the strong version CAH is that errors can be avoided since they can be predicted and, then, it is the duty of language pedagogy to eliminate them. As Lado (1957) claims:—

"Individuals tend to transfer the forms and meanings and the distribution of forms and meanings of their native language and culture to the foreign language and culture" (p. 2).

Corder (1967) drew attention to the fact which has since become well known, that the CAH, and in particular, the strong version does not account for many of the learners' errors that can be observed in SLA. As Ellis (1986) put it:

"The behaviourist view of language learning as a habit-formation was rejected in favour of a more mentalist approach which took into account the active contribution of the learner." (p. 37).

As a result of the perceived weakness of the strong version of CAH, modifications become necessary. Thus, less enthusiastic estimates on the value of contrastive analysis can be found in Catford (1968); Lee (1968) and

1 Bolles (1975)

Wardhaugh (1970), who feel that a contrastive analysis cannot be used to **predict** language learning problems, although it may be useful in **explaining** known or discovered difficulties. This is the weak version of the hypothesis which is a model with explanatory as opposed to predictive power. It claims that we can look at errors once they have been made and offers an explanation of why these errors occurred based on a CA of that area of the linguistic level' in question, without necessarily considering the NL. The starting point of the weak version is the evidence of the linguistic transfer and the assumption is that an evaluation of the errors will reveal the learners' difficulties. Then, reference will be made to the two language systems only in order to explain any observed interference phenomenon. With this modification the weak version can be useful in accounting for the learner's errors. It is in this sense that the CAH is regarded as a subcomponent of Error Analysis.

2. IL Studies

Evidence that SL learners may acquire an SL without any regard to the mother tongue (e.g. Dulay and Burt, 1972) soon became available. It was suggested that SL learners may be moving through a sequence of developmental stages without any regard to the L1 structure. Felix (1980) pointed out the fact that structural similarity between the learner's native language and ungrammatical utterances produced by the learner in L2 does not constitute proof that interference is the cause of the errors "many originate from deeper regularities of the acquisition process" (p. 93). He justly drew attention to an important problem which is that:

"we do not possess well-established criteria by which it can be decided in a unique and principled way which ungrammatical utterances are demonstrably instances of language transfer" (p. 94)

With this development new types of analysis began to emerge.

2.1 Error Analysis (EA)

It is a linguistic activity that aims at systematically describing errors made by learners of a foreign language in their 'output'; it goes beyond this to give us insight about the psycholinguistic process of language learning, since learners reproduce some of their 'intake'. In EA a prospective comparison is made between the learner's NL and the TL.

1. (i.e. Phonology, Syntax and Semantics).

2.1.1. Error in EA

Corder (1967) proposed that 'the learner's errors are evidence of this system (IL) and are themselves systematic'. Since then, researchers and teachers in numerous countries have spent countless hours extracting errors from students' composition and conversation and used them as a base for theory construction and classroom practice.

Errors are the flawed side of learner's speech or writing. They are those parts of conversation or composition that deviate from some selected norm of natural language performance. Making errors is an inevitable part of learning, since people cannot learn languages without first **systematically** committing errors. Thus, they are different from mistakes which are unsystematic deviations. Mistakes can be due to memory lapses, physical states and so forth; of which the speaker is immediately aware; for example, slips of the tongue. This important distinction between errors and mistakes is Corder's (1967). Dulay *et al.* (1982: 138-199) discuss four types of errors: **developmental**, **interlingual**, **ambiguous** and **others** errors.

2.1.2. Learner's Language System

Resulting from EA which has focussed more on the learner and what his errors tell us about his SLA, a different view of native and second language acquisition has emerged. In this approach, the learner's behaviour is characterized as a type of rule-governed creativity in which both native and second language acquisition are viewed as a dynamic process involving the active participation of the learner. Thus, error analysts speak of the development of "Transitional Competence" (Corder: 1971b); "Idiosyncratic Dialects" (Corder: 1971a); "Approximative Systems" (Nemser: 1971); "Interlanguage" (Selinker; 1972) or a "Language-Learner Language" (Corder; 1978), to describe the evolving system of the learner language as he/she progresses from zero competence to native speaker competence in TL. Common to these theoretical notions proposed by Corder, Nemser and Selinker, is the idea that SL learners actively and continually revise their underlying grammatical systems as they move to the TL. In other words, the learner's performance is a means of testing his/her hypotheses about the structures of the TL. Corder (1981) suggests three main factors condition the learner's hypotheses. These factors comprise what Corder refers to as the learner's "Interlanguage (IL) background". First, the experience that the learner brings to SL learning; second, the current data to which the learner is exposed; and finally, the learner's language acquisition strategies.

2.1.3. EA Studies

A number of studies over the past decade have used EA as a technique for measuring changes in the transitional competence of SLA. Such studies assume that a change in the frequency of a particular error in the spoken or written language of the learner can indicate a change in the learner's IL; the fewer the errors or the lower the frequency of a particular error, the closer the transitional competence of the learner is to the competence of a native speaker. These studies of EA including [e.g. Duskova (1968); Buteau (1970); Bhatia (1974); Richards (ed.) (1974b); Taylor (1974) and many others] have contributed significantly to the understanding of SLA development and process.

Whilst the advent of EA undoubtedly signified a crucial advance in IL studies, the approach, however, has its limitations. Schachter and Celce-Murcia (1977), identified six weaknesses concerning EA. These are as follows: 1) The analysis of errors in isolation produced only partial accounts of learners' ILs (e.g. Andersen's, 1977 study)¹; 2) The classification of identified errors was often subjective; 3) Comparisons of the absolute frequencies of errors attributable to either negative transfer or developmental processes, under-estimated transfer influence on IL development, because transfer usually operates over longer linguistic domains (e.g. word order); 4) The identification of points of difficulty in the TL was often impressionistic and vague. More than one source of errors was possible, but analysts sometimes chose just one; 5) Emphasizing on systematic errors led to ignore the avoidance phenomenon; and lastly, 6) The biased nature of sampling procedures, with over presentation of certain ILs, certain types of subjects and certain types of data. Secondly, there is an inappropriate use of simplistic classification to explain learner's errors. Since language learning is an interaction of internal and external factors, explanation of errors must reflect that interaction. Learner's IL seems much too complex to be explained simply by identification of errors. Adequate explanation of learner's language system must account for a number of environmental factors, (e.g. training procedures, communication, situation and so forth), as well as a number of internal processing factors (e.g. simplification, overgeneralization, transfer, etc.). On

¹ This study of the use of articles by Spanish-speakers learning English, indicates that the subject produced many errors in using the article (a/an) and few errors in using the article (the), which in isolation were non interesting factors. From a deeper analysis of the data with a close inspection of the correct use of articles, Andersen (*ibid*) concluded many of the subjects were using the strategy of providing the English equivalent of the article which was required in Spanish in such a context. This resulted in few (the) errors and many (a/an) errors. Without careful consideration of both errors and non errors, this strategy, namely transfer, would not have been discovered.

the basis of the above limitation some researchers (e.g. Schachter and Celce-Murcia; 1977) came close to calling for a return to CA; others (eg. Schachter, 1974) explicitly advocated a combination of EA and CAH strong version in an attempt to "tap more directly into" learner's transitional competence which is the ultimate object of IL studies.

2.2 Morpheme order Acquisition (MOA) Studies

2.2.1 Introductory Remarks

It is well believed that language acquisition is a gradual process which can take anywhere from several months to several years. During that time, learners acquire the different structure that make up a TL (e.g. complements, negatives, plural markers, tense endings etc.). MOA analysts claim that learners acquire some of these structures almost immediately, for example, word order is learned very early. Other structures such as **simple verb tenses** and **3rd person singular** are acquired later (Dulay *et al.* 1982).

Studies of acquisition order seek to determine the order in which learners acquire language structure. These studies are inspired (in addition to other factors) by the fact that teachers have noted that no matter how much they drill or correct certain errors, students keep making them. Dulay *et al.* (op. cit.) give an example to demonstrate the idea that students do not learn structures in the order in which they are taught. In early stages when teaching English as an SL, it is a 'losing battle' if teachers attempt to get students to add the **3rd person singular** to a verb or to use **has** instead of **have**. Students, however, may very well use these items correctly in a drill or a memorized dialogue, but they invariably fail to do so in spontaneous conversation.

For the last statement, this could be the artifact of teaching **form** rather than **function**. Formal foreign language learning is embedded in a classroom situation and primary guided by the (voluntary or enforced) intention to learn. It is, thus set apart from communicative behaviour and within the framework of social interaction approaches the status of role play (Littlewood, 1981).

Krashen's dual competence model "Learning VS Acquisition" (i.e. conscious VS unconscious learning) would neatly explain the situation by asserting that the items produced in a drill or a memorized dialogue are learned, but not acquired, and therefore not produced in automatic conversation (Krashen, 1981). Dulay *et al.* (1982), however, claim that the main reason behind the situation mentioned in the above example is discovered by recent researchers:

"The third person (-s) and (has) appear relatively late in the order in which learners naturally acquire English structures. If such structures are presented early in a course, learning them and will not learn them until they have acquired enough of the English rule system" (pp. 200-201).

2.2.2. L1 MOA Studies

The notion of MOA (it is also called 'difficulty' or 'accuracy' order) has grown out of the Harvard Project (in particular Brown, 1978). Brown's (1973) classical longitudinal study of the acquisition of English as a first language by three children holds a significant position in MOA studies. He demonstrated that children acquiring English as a first language show a common order of appearance of 14 English grammatical morphemes¹ accurately supplied in obligatory context (SOC). Certain morphemes, e.g. **—ing** and **plural** tend to be acquired relatively early, while others, e.g. the third person singular **-s** in verbs in the present tense or the possessive **'s** marker, tend to be acquired late. The critical point of acquisition can be set arbitrarily, preferably around 90% of target-like usage. The absence of direct correspondence between the order found and certain environmental characteristics added particular strength to Brown's findings. Brown found that the structures that were most frequently produced in the children's linguistic environment were not necessarily learned earlier; nor was positive reinforcement (in the behaviourist sense) effective for language acquisition.

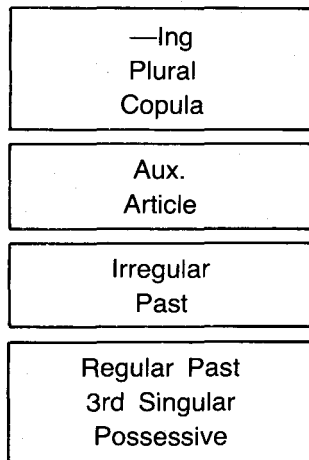
2.2.3. Child and Adult SL MOA Studies

After the first language acquisition order research, questions have arisen. Might there also be a common order of acquisition for certain SL structures? Is there an acquisition order from certain English structures which is characteristics of SL learners? The morpheme order approach, therefore, was widely adopted by SL researchers, seeking to test major hypothesis of there being a built-in-syllabus' (Corder 1967) in SLA similar to that in first language acquisition (e.g. Dulay and Burt, 1973, 1974, 1975; Bailey *et al.*, 1974; Hakuta, 1974; Larsen-Freeman, 1975; Rosansky, 1976). The acquisition hierarchics (Figure 1), show that the items in Group (1) are acquired before those items in the groups below it. Item in one group are assumed to be acquired at about the same time and are considered to be unordered with respect to each other. Krashen (1981), taking data from a large number of studies proposed 'a natural order' for the most frequently studied morphemes.

1 Present progressive, in, on, plural, contractible copula, uncontractible copula, past regular, past irregular, 3rd person regular, 3rd person irregular, articles, possessive contractible auxiliary, and uncontractible auxiliary.

FIGURE 1

From Krashen (1981: 59)



Burt and Dulay (1980) in a lengthy article which summarizes and attempts to justify the morpheme order studies argue that "acquisition order studies could also provide practical guidance in the development of the curricula, materials and assessment instruments" (p. 266). The implication is that if a universal order is found and if such an order conflicts with pedagogical orders (syllabuses), then, certainly the natural order should be the basis of curricula and materials, since it reflects a psychological reality. Krashen and Terrell (1983) present a "new approach to the teaching of second and foreign languages" (P. 1). Their approach is called the "natural approach", which is mainly based on Krashen's (1981) 'natural order' of acquisition hierarchy.

2.2.4. Criticism of MOA Studies

The MOA studies were and still are the subject of debate. On the one hand, some researchers argue about the validity of Dulay and Burt's findings supporting their claim with empirical evidence (e.g. Bailey *et al.*, 1974; Fathman, 1975; Krashen *et al.*, 1976 and others). On the other hand, others criticize the methodology and/or the results, putting forward on their part empirical evidence to support their arguments (e.g. Andersen, 1976; 1977, Cazden *et al.*, 1975; Larsen-Freeman, 1975, 1976; Hakuta, 1974; Porter, 1977; Rosansky, 1976; Wode, 1976; Wode *et al.*, 1977, 1978 and others).

2.2.4.1. The Acquisition order as an "Artifact" of the BSM

Most of the MOA studies used the same elicitation instrument: Bilingual

Syntax Measure (BSM). Many researchers criticized the results reported in these studies as due to the instrument being used. [e.g. Hakuta (1974), Cancino *et al.* (1975), Larsen-Freeman (1975) and Porter (1977)].

2.2.4.2. Reservations about the Methodological Techniques

Other arguments against the morpheme order studies are raised by Tarone, (1974), Rosansky, (1976), Andersen, (1977), Wode *et al.* (1978), Boland (1984) and Long and Sato (1984). These researchers agree that methodological problems concerning data collecting procedures and statistical evaluation made the result of these studies difficult to interpret.

2.2.4.3. Inadequate to Capture Developmental Regularities

There are other more serious objections to the MOA approach in addition to those mentioned in the previous sections (2.2.4.1 and 2.2.4.2.). Wode *et al.*'s, (1978) paper, entitled 'Developmental sequence: an alternative approach to morpheme order' is a severe criticism of the approach of MOA studies. In that paper, they demonstrate that such an approach misses important phenomena for our understanding of SLA processes such as avoidance of particular forms, underlying acquisitional strategies and principles and subtle influence of the NL. They argue that "the morpheme order approach cannot capture numerous acquisitional regularities" because the approach focusses only on 'target-like usage'. "Pre-target-like regularities", however, "must be regarded as an essential part of the total process of acquiring a language". (Wode *et al.*, 1978: 176). As an alternative, they put forward the notion of developmental sequence, a notion that is described as being "richer and more powerful than the morpheme order" (Wode 1981: 65). Wode (1978) and Huebner (1979) also express the same view.

In spite of the various shortcomings, the importance of MOA studies should not be underestimated. Not only do the studies pioneer other research in SLA, e.g. developmental studies, but also they raise many important and interesting theoretical issues in SLA (e.g. natural order, universal mechanisms, L2=L1 hypothesis and so forth).

2.3 Developmental Studies

2.3.1. Introductory Remarks

Dulay *et al.* use the term 'transitional constructions' to refer to "the language forms learners use while they are still learning the grammar of a language" (1982: 121). The term 'developmental sequence' is used by Wode, (1976) and his colleagues in Germany (e.g. Felix, 1978, 1980; Wode *et al.*, 1977; Wode *et al.*, 1978) to refer to the transitional constructions and the orders in which they appear. Meisel *et al.*, (1981) proposes that the term

'developmental stage' be used in a strict technical sense to refer to a structural attainment which is necessary in order for a learner to proceed further in a developmental continuum.

The learner's different realizations of a particular structure (e.g. wh - questions: Raven, (1968, 1974); Negation: Milon, (1974); Reflexive pronouns: Dulay and Burt, (1977); Article system: Huebner, (1979)' are extracted from a body of data and used to define what are generally considered to be sequential stages of development.

Much of the work in this area of SLA has involved comparisons of the grammatical construction used by SL learners with those made by young children acquiring their first language (see Figure 1). The results had showed "striking similarities between the transitional constructions produced by first and second language learners". (Dulay *et al.*, 1982). Differences, however, were also noted. For instance, SL learners appear to produce a wider variety of forms, in one developmental phase, than do first language learners. (e.g. adults use **this** and **these**, while children use only **this**), which could be an evidence of the fact that adults are more mentally sophisticated than children (See Al-Buanain, 1986: Studies of the Effect of Non-Linguistic Variables).

Researchers also found that many of the errors in transitional constructions produced by SL learners bore no relation to their NLs. Hatch, (1978), for example, concluded her analysis by asserting that there were high degrees of similarities in the SL production of the learners and in their developmental stages, irrespective of their linguistic background.

The theoretical motivation for SL developmental studies research are: finding syntactic regularities to establish the existence of a system (i.e. IL), finding a developmental sequence to understand how language learning progresses over time, finding universal strategies for language acquisition, and lastly, to find out the extent of L1 influence.

2.3.2. Views Related to the Developmental Studies

Some of the issues discussed below have been mentioned earlier.

2.3.2.1. Does L2 Sequence = L1 Sequence?

This hypothesis was first claimed by Dulay and Burt, (1973, 1974) for MOA studies. In a discussion of their studies, dulay and Burt (1974) state that:

1. All these studies investigated English as an SL.

"Our L2 = L1 hypothesis was very specific and narrow in scope [...], it encompassed only syntactic error types not the entire process of language acquisition". (Tarone, 1974: 59).

However, several reports (e.g. Milon, 1974) on the SLA of English have suggested that the same developmental sequence holds for the acquisition of structures like interrogatives or negatives, irrespective of whether English is acquired as a first language or SL. These studies have been conducted within the Klima and Bellugi (1966) framework.

Wode, (1976) rejects the L2 sequence = L1 sequence hypothesis and argues that different sequences for SL development can be expected as a result of the SL learner's use of prior L1 knowledge, which is similar to Corder's 'IL background'.

Other variable likely to account for different L1 — L2 sequences can be cited. The most basic are cognitive differences as a sequence of age difference. With young children, first language and SL learning may often be viewed as parallel learning of systems; as if children are learning two dialects (Leopold, 1953). Learning strategies arising from different cognitive styles need to be considered as well as motivation and personality variables. The effect of different learning contexts is also crucial.

(See Al-Buanian Op. Cit. Sections 2.2.2.5.1. and 2.2.2.6).

It seems to me that the L2 = L1 hypothesis is a very strong claim. First and second language could be related, but certainly they are not the same.

A lot of studies, (for example, Dulay and Burt, 1972, 1973, 1974; Krashen, 1977, 1981; Wode, 1981, 1984 and others) indicate that learners do not proceed in totally different and wholly unrelated ways. Rather, they seem to learn languages in much the same way. However, the way is not identical and this is very obvious from these studies which report 'striking similarities' between the subjects' IL, yet not **identical** ones. The fact that the order of morpheme acquisition first and second languages is not the same, is not considered to negate that acquisition of first and second language is related. Corder, (1967: 165) suggests although the process may be basically the same, such differences could exist. The hypothesis formula could be rewritten as $L2 \approx L1$, rather than $L2 = L1$.

2.3.2.2. Variability within Developmental Sequences

As indicated in the previous section the type of transitional constructions observed the same order for almost all subjects. This implies that the learner's IL develops systematically. Variability, however, has been shown in many different studies (e.g. Larsen-Freeman 1975; Rosansky, 1976, and others), for

learner's IL in general and for the developmental sequence in particular.

2.3.2.3. Developmental Sequences Overlap

Developmental studies have given and continue to give us valuable insights into the SLA process. Nevertheless, it is difficult, as a result of their relatively small scale in terms of the number of subjects, to make string claims of generality for the notion of stages in terms of development of language over time especially with respect to its rate, the nature of the learning patterning, if any, and of variability apparent as the developmental sequence is moved through. Indeed, the classical presentation of stages of development as discrete steps with no overlap is an idealization of the real data. Such an idealization is absolutely misleading. The developmental stages are not separate but often overlap. Since IL is a dynamic continuum, (Corder, 1976, 1976, 1977), we cannot isolate developmental stages; and there are times when the learner seems to regress to an earlier stage or to skip a stage.

2.3.2.4. L1 Effect on Developmental Sequences

Zobl, (1982) relates the substance of the CAH to a small sample of developmental continua and identifies two L1 specific effects on these. (1) Differences in the rate of development; and (2) differences in the initial developmental structure learners arrive at. For the first effect, he argues that, despite overall similarities among learners of different linguistic backgrounds, there seems to be little doubt that learners whose L1 marks, for example, definiteness and indefiniteness with a system of articles, achieve a measure of target-like control of the SL article system more rapidly than learners whose L1 does not possess a corresponding formal category, and mark the distinction through some other system means like word order, (e.g. Chinese and Russian). Such findings hold for English as an SL reported by Hakuta, (1974, 1976); Fathman (1975); Mace-Matluck, (1977); and Sajavaara, (1978). This type of interlingual relationship is commonly referred to as **Zero Contrast** (i.e. the SL possesses a category that is absent to the learner's NL), which is opposite to **Categorical Congruence**, (i.e. both languages have comparable categories).

As for the second effect of L1 on the developmental sequences, Zobl argues that it amounts to an alteration of the developmental sequences, in terms of the number of developmental structures, a learner has to follow.

Corder's (1978) article investigates the creative constructive process in relationship to language contrast. He grants that structural similarity "may make passage along the built-in syllabus faster" (p. 30). However, where the NL is different, Corder is of the opinion that this will have no effect on the acquisition sequence:

"In such a case the learner is left with his own unaided cognitive learning capacities to discover those aspects of the L2 which are not similar to his L1" (P. 30-31).

This is consistent with Zobl's first effect of NL on developmental sequences, but not with the second.

2.4 Performance Analysis (PA) Studies

The PA studies dominated North American research in the seventies. They were initially represented as the MOA studies (Section 2.2).

This type of analysis has been put forward to overcome problems associated with MOA studies mentioned earlier (Section 2.2.2.4). One attempt to improve upon the MOA methodology is now known as "target-like-use" analysis (Long and Sato, 1984: 15). The structured formula used for calculating percentage suppliance in obligatory context disregards the non-obligatory contexts with inappropriate suppliance. The percentage of the TLU is calculated on both numbers of the correct suppliance in obligatory contexts as well as the incorrect suppliance in non-obligatory contexts. Thus, this measure of TLU seems to give a more accurate estimate of learners ability.

2.5 IL Contexts Studies

The emphasis on **form** rather than **function** in some studies, (e.g. MOA) omitted from consideration: (1) the possible functional variation of a form; and (2) all occasions where other forms of learner's IL may have covered the same functional/semantic scope as the forms actually analyzed, (Long and Sato, 1984: 22). These limitations are addressed by two alternative ways of analysis: (a) to start from form moving to function (form to function analysis); or (3) to start with function and then move to form (function to form analysis). Such ways of analysis are investigated in context rather than in isolation. Analyzing linguistic and conversational contexts of IL performance, includes both contexts SL speakers create for themselves and the contexts created for them by their interlocutors. Studies of IL in context also investigate the way the task affects IL performance and the relationship between development of particular sub-system in the context of the wider IL grammar.

Meisel, Clahsen and Pienmann's (1981) work is an investigation of IL context. They examine the interactions between the development in two related subsystems (word order and certain movement rules), in untutored migrant workers acquiring German. The researchers found that through the developmental stages in German, word order temporarily involves learners in deleting other elements (e.g. Verb or Object Noun), over which one has to

move. In an attempt to incorporate the new, more complex sets of movement rules at each stage, learners displayed such deleting in their ILs. Meisel *et al.*, justly, point out that it would have been misleading to classify learners as more or less advanced in German, **only** on the basis of the presence or absence of the deleted elements in their ILs. Because the acquisition of those elements depends upon the stage of development attained by learners of different types in other related areas of the grammar. Investigating IL linguistic and conversational contexts means a discourse analysis of IL which "is not a distraction from the (traditional/classical) study of the development of syntax", since:

"by clarifying structural organization at other levels, one can leave in clear relief the syntactic apparatus used to accomplish cohesion, procedural repair work, interpersonal goals, and the referential semantic communication that traditionally was thought to be the primary function of syntax" (Ervin-Tripp, 1977; 18).

Her comments indicate the interdependence of linguistic levels in SLA which is also expressed by Givon's (1979a; 1979b and 1981) functional-typological syntactic analysis. He views the linguistic coding devices of word order, intonation and morphology as to contribute differentially to the marking of functional domains (e.g. temporality) of language. In addition, from a psycholinguistic perspective, Hatch (1983), points out that linguistic levels "leak". In other words, each of the traditional levels (phonology, morphology, lexis, syntax, semantics and discourse) is affected to varying degrees by one or more of the others. According to Hatch, these are interrelated levels of psycholinguistic planning. This 'leaking', however, is inevitable since IL is a dynamic continuum. An example of this is Sato's (1983, 1984) study.

2.5.1 *The effect of Input on SLA*

Studying IL in contexts emphasizes the role of linguistic environment in SLA, which seems essential for anyone wishing to explain IL development. Language input (linguistic environment) encompasses everything the language learner hears and sees in the TL. It may be : (1) **formal** teaching including only language classroom activities and a few books and recordings (2) **informal** including a wide variety of situations (e.g. conversation with others, chatting with friends, watching T.V. etc.); (3) it could be both formal and informal. Consequently, a distinction between formal and natural/naturalistic language environment could be made (e.g. Dulay *et al.*, 1982; Felix, 1978; Wode, 1976). In the former, the focus of the speaker is on the form of the language, whereas in the latter, the focus is in the contexts of the communication. Formal language instruction versus naturalistic SL environment i.e. untutored learning), becomes of special importance when the

learner's performance is to be analyzed in terms of the learning/acquisition distinction proposed by Krashen's Monitor Model (Krashen, 1981). Learning an SL in a naturalistic environment obviously favours unconscious learning i.e. acquisition in Krashen's terminology). Formal language instruction, on the other hand, emphasizes conscious learning processes.

Dulay *et al.*, (1982) suggests that language performance is enhanced when learners are exposed to natural language input, preferably from peers of members of the same ethnic group when focus is on meaning (not on linguistic form) and on comprehensible concrete referents (here-and-now), and when learners are not forced to speak before they are 'ready' to do so (a 'silent' period). Such characteristics produce a favourable **macro-environment**. On the other hand, the salience and frequency of language items and the correction of errors which have often been assumed to be favourable features of the linguistic **micro-environment** are said to be of questionable value. Quite simply, the studies and thoughts mentioned above indicate that crucial differences in the linguistic input will obviously lead to differences in the linguistic output. Cognitively, however, SL learners who follow formal instructions are similar to those acquiring language in a naturalistic environment. (See Felix 1981).

2.5.2 *The Effect of Task on SL Performance*

The effect of task on IL performance is one of the factors that has attracted the interest of researchers not only in studies of IL in context, but also in other types of IL studies. The special concern with this possible cause for variability last, but not least, developed in what one might call the post-MOA studies era (Section 2.2).

As mentioned above (Section 2.2.4.1) one of the major criticisms of these studies focussed on the effect that the elicitation instrument (BSM) used presumably exercised an effect on the results. Ever since then, a number of studies have documented the variability phenomenon when using various combination of tasks (e.g. Larsen-Freeman, 1976; Rosansky, 1976 and others). Therefore, some researchers have focussed on the theoretical aspects of task variation in IL (e.g. Hyltenstam, 1983; Tarone, 1979, 1982, 1983). In an attempt to explain the variability phenomenon, models of SL learner's competence have been suggested (e.g.) (1) dual competence models: The Monitor Model (Krashen; 1977, 1978, 1981); The Explicit and Implicit Knowledge Model (Bialystok: 1978); as well as (2) other models, e.g. The Capability Continuum Model (Tarone: 1979, 1982, 1983); The Multi-dimensional Process (Meisel *et al.*: 1981). A comprehensive and acceptable account, however, for this complex phenomenon; (i.e. variability) is still lacking.

IV. CONCLUSION

Different SLA studies are phases of one goal. The ultimate goal of SLA research is to understand and then facilitate the process of SL learning and consequently facilitate SL teaching, by studying the phenomenon of 'errors' within a scientific framework that is consistent with both linguistic theory and learning theory. All SLA research, either explicitly or implicitly is pointed in this direction. We wish to know **What** it is that is acquired; **How** it is acquired; **When** it is acquired; as well as **Why** this item and not some other.

Thus, SLA research cannot be easily divided. For instance, in spite of the attack on both external grounds (of empirical validity) and internal (theoretical foundation), CA today, however, is not entirely on the defensive, not only do "message of hope" keep appearing from time to time in studies like Schachter, (1974); Wode, (1976) and others. The proponents of alternate approaches (EA and IL) implicitly or explicitly incorporate CA in the attitude towards the learner's performance and particularly towards 'errors'. Whilst CA is exclusively concerned with that aspect of the learners performance which can be predicted from the characteristics of his or her NL; IL avoids this limitation. Methodologically, IL may be said to incorporate the assumption of both CA and EA. CA contracts the learner's NL and the IL, and conventional EA involves contrast between the learner's performance and the TL. IL, on the other hand, takes all 3 systems (NL, TL and learner's language) into account. Explicitly IL incorporates the CA of the learner's IL with both his NL and TL. The main difference is that in IL, the CA is an initial filtering device, making way for the testing of hypotheses about the other determinants of the learner's IL. As for EA, its aim is to describe the whole of the learner's linguistic system and to compare it with that of TL. This is why EA is a "brand of comparative linguistic study" (Corder, 1973: 274).

CA, however, places the L1 in an underserved central place as a reference point; while EA prompts a wrong notion of 'errors' because the learner's linguistic system has been analyzed only as deviations from the TL norm. There was no attempt to study the learner's language in its own right. Nowadays, errors are being analyzed to know more about learning and communicative strategies and process, and to provide an indication of learning having taken place. Still, an ultimate understanding of the event (SLA) itself has not been achieved. Yet, as strong as the desire is, one would not expect, given the vast and deep complexities of human cognition as well as the complexities of a human being himself, to be able to come up with a single explanatory heuristic theory for the language learning/acquisition event. No type of SLA, therefore was perfect enough to achieve such success. Various partially valid explanations, however, for the outcome of language learning, both first and second, have been, and still are being discussed. These explanations for SLA include accounts based upon theoretical models and hypotheses about SLA. (Cf. Al-Buanain, 1986, Chapter 3).

Abbreviations for Journals:

LL	= Language Learning
IRAL	= International Review of Applied Linguistics
TESOL Q	= Teachers of English to Speakers of Others Language Quarterly
WPB	= Working Papers on Bilingualism
ISB	= Interlanguage Studies Bulletin

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