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NEW DIRECTIONS IN SECOND LANGUAGE ACQUISITION RESEARCH:

SOME IMPLICATIONS FOR CURRICULUM
DEVELOPMENT, TEACHING AND LEARNING

PAPER PRESENTED AT THE
1994 AARE CONFERENCE
UNIVERSITY OF NEWCASTLE

HEIND94.102.

INTRODUCTION

Current evidence from second-language acquisition research shows that the acquisition process, regardless of the setting (instructional, natural or mixed), is constrained by various factors affecting the teachability of the target language and, thus, affecting the progression of the acquisition process towards mastery, i.e. being able to use the target language accurately and fluently in normal speech (inside and outside the classroom).

Since the aim of mastery of a second language, explicitly stated in the National Statement on LOTE (AECCAC, 1993a) and the National LOTE Profile (AECCAC, 1993b), has been embraced by all states of Australia, it is of utmost importance to provide an appropriate instructional concept.

The author's review of second-language acquisition research suggests that there is considerable evidence that any state-of-the-art instructional model of second language acquisition has to consider three major factors, development, variation and teachability, affecting the acquisition process.

DEVELOPMENT

Second language acquisition research has provided a growing body of evidence that the developmental process of acquiring a second language is constrained by the ability to process certain linguistic forms (cf. Clahsen et al., 1983; Pienemann, 1981, 1984, 1990; Pienemann and Johnston, 1985, Johnston, 1985; Pienemann et al., 1988; Ellis, 1989).

Hence, the use of language for ideational, interpersonal and textual functions is constrained by the structural means available at certain stages in the process of second language acquisition.

The acquisition process of syntactical and morphological features, for instance, develops in a regular, sequential pattern. The acquisition process, however, is constrained by the processing complexity of the respective developmental feature which "is dependent upon the degree of re-ordering and re-arrangement of linguistic material involved in the process of mapping underlying semantics onto surface forms" (Pienemann, 1990, p.6). Pienemann et al. (1988) exemplify this process for German and English word order phenomena:

"The recognition of elements in perceptually salient positions is a prerequisite for the processing of structures like ADV (e.g. Adverb Preposing: 'yesterday I go to school', D.P.H.). This prerequisite is

needed for the processing of structures at the next stage of complexity where information can be transferred from a sentence - internal into a salient position (e.g. Yes/No - Inversion: 'have you car?', D.P.H.). At this stage, another processing prerequisite develops, the recognition of sentence-internal elements, which is needed at the subsequent stage (e.g. Aux-2nd: 'where has he seen you?', D.P.H.). Because of this implicational hierarchy, none of the abstract stages of processing complexity can be skipped. There would always be a gap in the necessary processing prerequisites" (p.225).

These underlying acquisition principles form the basis of the Teachability Hypothesis put forward by Pienemann (1984).

Pienemann (1984) predicts "that a given linguistic structure cannot be added through instruction to the learner's interlanguage at any desired point in time in his/her acquisitional career" (p.198) since formal instruction is constrained by speech processing prerequisites that have to be acquired sequentially.

The Teachability Hypothesis was tested by Pienemann (cf. Pienemann, 1984, 1986a, 1986b, 1987, 1989) in classroom experiments with children and adults.

The main findings in support of the Teachability Hypothesis are:

i) sequences of L2 development in mixed natural and formal settings are the same as in natural settings, which is in line with evidence provided by other researchers (cf. Felix, 1981; Hahn, 1982; Daniel, 1983; Westmoreland, 1983; Jansen, 1987; Weinert, 1987; Ellis, 1989);

ii) "L2 structures can only be learned by introduction if the learner's interlanguage is close to the point when this structure is acquired" (Pienemann, 1984, p.198), i.e. "although a structure from stage x can successfully be instructed at stage x-2, thus seemingly shortcutting

the 'natural' order of acquisition, this learning cannot result in actual use of the structure in normal speech (inside or outside the classroom) since processing it is not possible on the basis of the procedures available to the learner at this point in the development" (Pienemann, 1984, p.206).

Further support for the instructional imperviousness of acquisitional sequences can be found in studies by Daniel (1983) and Westmoreland (1983) both of whom carried out cross-sectional studies of adult beginners learning German at university and in a cross-sectional study of adults with various degrees of previous knowledge of German carried out by Ellis (1984);

iii) premature instruction of structures, that is teaching the actual use of the structure, can have detrimental effects on the acquisition process, i.e. if, for instance, structures from stage x-2 are introduced to learners at stage x, deviant forms (e.g. in standard German) representing stage x-1 may be avoided although they can be used effectively in communication (cf. Pienemann, 1989) and are the surface form of a processing prerequisite to be acquired in order to progress to stage x-2;

iv) however, "instruction can improve acquisition with respect to a) the speed of acquisition, b) the frequency of rule application and c) the different contexts in which the rule has to be applied" (Pienemann, 1984, p.206), as well as it can stimulate the creative construction of untaught structures and expansion (the number of constituents in a sentence) if the learner has acquired the necessary

prerequisites for the respective stage of development.

A systematic application of such an instructional concept presupposes a second language curriculum that provides for statements of objectives in listening, speaking, reading and writing and states as outcomes the obligatory structures to be acquired at each stage of development, the obligatory structural contexts of rule application and the potential expansions to be stimulated, applied to a variety of situational contexts requiring the use of various ideational, interpersonal and textual language functions.

VARIATION

Second-language acquisition research has provided convincing evidence that target-language correctness does not gradually increase, instead, it can vary considerably with the progression through the stages of development.

Since the acquisition of developmental features is an active, individual language construction process different developmental features of a certain stage are not necessarily acquired at the same

time (cf. Pienemann, 1984, 1985), for all structural contexts (cf. Clahsen et al., 1983; Pienemann, 1985; Johnston and Pienemann, 1985), or acquired at all, i.e. different structural possibilities (permutations) are not automatically exploited by the learner (cf. Pienemann, 1987). There is no linear progression as to the application of structures in obligatory structural contexts or as to the supply of articles, prepositions, copula, auxiliaries, main verbs, personal pronouns etc. (Cf. Meisel, 1980).

Thus, there are two systematic and independent dimensions in SLA: development and variation" (Pienemann et al., 1988, p222).

In this multi-dimensional model the orientation of the learner to the language development process (cf. Clahsen, 1980; Meisel, 1980; Pienemann, 1980, 1981; Meisel et al., 1981; Clahsen et al., 1983; Nicholas, 1983; Nicholas and Meisel, 1983; Johnston and Pienemann, 1985) determines his/her position on the variational axis of the multi-dimensional model of second-language acquisition.

Learner orientations are a result "from a combination of individual reactions to different combinations of external circumstances and factors" (Nicholas, 1985, p.193) and are manifested in strategies of simplification used by the respective learner.

Based on comparative studies of simplified lexical and syntactical features of English, German and French, Meisel (1980) distinguishes between 'restrictive simplification' and 'elaborative simplification': "the first kind serves the purpose of achieving an optimal result in communication while reducing the grammar in a way which makes it easy to handle. This is the case in early stages of all kinds of second language acquisition" (p.36). The second kind, elaborative simplification is "a strategy which helps to complexify the grammatical system" (p.37), "learners tend to formulate hypotheses about a certain rule which may be approximations to the actual rule and will be corrected as the learning process proceeds" (p.37).

In order to influence a learner's position on the variational axis towards target-language correctness, the appearance/omission of certain features (cf. Meisel, 1980) has to be monitored and input focusing on the correct supply of these features has to be provided.

However, Pienemann (1985) reports the findings of an experiment that he conducted to test the teachability of variational features, such as the use of copula. Focussed instruction increased the correctness of copula insertion significantly but decreased again after instruction was discontinued, i.e. in spite of the initial instructional success, due to external factors, such as the learner's orientation to the language development process, achieved accuracy in the use of variable features may decrease (cf. Meisel, 1980; Meisel et al., 1981;

Pienemann, 1981, 1985; Nicholas, 1985).

Since the orientation to the second language learning process is determined by extra-linguistic factors one has to ask the question whether or not the orientation of a particular learner can be altered to ensure the acquisition of a non-stigmatized variety of the target language.

Clahsen (1984), describing variations within the stages of development of different acquirers of German as a second language, indicates that although "systematic variation within the developmental stages depends on combinations of extra-linguistic factors ... it is not possible to make any strong claims about the nonlinguistic correlates of the individual differences" (p.236). And Johnston and Pienemann (1987) point out that in many studies where extra-linguistic factors have been studied for their influence on the process of second-language acquisition this "interaction has been studied in a quantitative manner, more of factor x correlates with more of factor y (say accuracy)" (p.101) and "that this kind of quantitative finding ought to be checked very carefully for the influence of intervening variables (p.101).

On the other hand studies that have tried to determine the precise influence of external factors on L2 acquisition such as Wong-Fillmore (1976); Klein and Dittmar (1979); Meisel et al. (1981); Pienemann (1981) have focused on variables that were strongly related to the context of natural acquisition (e.g. contact with target language groups, time, age on arrival, length of stay) and, hence, do not provide a concrete framework of correlations that applies to an instructional setting.

However, to influence the learner's orientation, ensuring the acquisition process develops towards mastery, the current evidence about individual learner factors need to be taken into account and to be integrated in the concept of L2 instruction.

Extra linguistic factors, such as attitudes/motivation, age, capabilities and previous knowledge have been studied extensively and the evidence suggests that they impact on the process of acquiring a second language. Since these factors have to be seen as interrelated to various degrees, conclusions drawn from current research only permit to define relatively general conditions within an integrative concept of second-language instruction.

Attitudes/Motivation

Attitudes towards the target language community and towards the utility of the language being learned do not seem to have a direct influence on the acquisition process but rather on the learner's motivation (cf.

Gardner, Smythe and Brunet (1977); Gardner, Lalonde and Pierson, 1983; Lalonde and Gardner, 1984; Gardner, 1985 and Spolsky, 1989).

Gardner, Lalonde, and Pierson's (1983) study of 140 first-year French

university students confirms that a learner's level of motivation is influenced by "attitudes relating to outgroups and foreign languages, attitudes towards the specific language community and integrative orientations to language study" (p.2) and attitudes towards the whole language learning situation, i.e. "the learner's evaluation of the course and the teacher" (Spolsky, 1989, p.156).

To raise the level of motivation favourable attitudes need to be consciously developed towards learning the target language, its speakers, its culture and country. Hence, the second language curriculum has to provide for statements of objectives concerning the development of positive attitudes and for statements of outcomes that are expressed as motivations.

Age

Research on age-related differences in phonology, syntax, semantics and pragmatics shows:

a)The initial rate of acquisition of syntax and morphology increases with age, i.e. younger children have a lower initial acquisition rate than older children and adults and child-beginners' level of attainment is higher than that of adult beginners (cf. Krashen, Long and Scarcella, 1979; Krashen, Scarcella and Long, 1982; Long, 1990).

"b)There are sensitive periods governing language development, first or second, during which the acquisition of different linguistic abilities is successful and after which it is irregular and incomplete.

c)The age-related loss in ability is cumulative (not a catastrophic one-time event), affecting first one linguistic domain and then another, and it is not limited to phonology.

d)The deterioration in some individuals begins as early as age 6 - not at puberty as is often claimed" (Long, 1990, p.251).

Age-related effects on the second-language acquisition process have to be accounted for in the second language curriculum by defining realistic progress rates as to the acquisition of syntax and morphology and the expected degree of accuracy in pronunciation.

Capabilities

Skehan's (1989) review of studies concerning language aptitude, comprising the ability of sound discrimination and memorisation, the ability "to break the stream of speech into constituents and to generalize about its structure" (Spolsky, 1989, p.106) and the ability to memorise words, concludes that "people vary in their language aptitude and such variation has considerable significance for language learning success" (p.136).

Since aptitude comprises different abilities which are "(fairly) independent" (p. 137) "two people with the same overall aptitude score may have different component abilities" (p.137).

Hence, in order to facilitate the overall acquisition process all three component abilities should be exploited to their fullest and developed further through focused instruction aiming at the acquisition of the phonetic system, an appropriate lexicon, and certain explicit grammatical knowledge of the target language, i.e. the second language

curriculum has to provide for statements of outcomes in the above three areas and progress of individual learners in achieving the defined outcomes has to be monitored.

Previous knowledge - the influence of the first language on the second language acquisition process

Research evidence suggests that the widely held view that "language distance (between L1 and L2, D.P.H.) is most probably a major determinant of the amount of time students will need in order to become highly proficient in a language" (Odlin, 1989, p. 153) is highly questionable. Such a view implies that structures/elements that are most difficult to learn are those that are obligatory in the target language but absent in the learner's first language and that similar structures/elements that can be found in both the first and the second language are least difficult to learn.

Pica (1984) cites evidence that casts serious doubts on Odlin's (1989) conclusion: "Research revealed that items in the target language which diverge only slightly from those of the learner's native language frequently cause more difficulty than those which differ considerably. For example, Buteau (1970) found that native English speakers had more difficulty learning sentence patterns of French which are structurally similar to those of their native language than those which were structurally different. In other studies target structures which appeared to be highly unlike their counterparts in the learners' native language, and which would thus have been predicted to cause difficulty, were in fact acquired quite rapidly. Gillis and Weber (1976), for example, found that their Japanese subjects acquired English negation rather quickly, in spite of the fact that Japanese marking of that

feature is highly unlike the use in English of not after an auxiliary verb" (p.692).

Implications to be drawn from the above evidence are that since slight dissimilarities between structures/elements from the first and second language can pose the greatest learning difficulties and thus can prolong the process of acquiring the correct target form. The monitoring of the acquisition process provides the means for identification of unexpected slow progress and focused input to overcome certain learning difficulties.

TEACHABILITY

Various factors have a bearing on the acquisitional process and constrain the teachability of a second language to varying degrees.

Apart from psycholinguistic and linguistic factors affecting the acquisition of developmental features and socio-psychological factors affecting the variation within stages of development, as outlined above, there are general cognitive factors that constrain the teachability of a second language: the acquisition of knowledge and the accessibility of that knowledge.

Knowledge of a second language can be differentiated as implicit knowledge, that is subconscious, procedural knowledge ('knowing how' (cf. Anderson, 1980) and explicit knowledge, that is conscious, declarative knowledge ('knowing that' (cf. Anderson, 1980)). Such a differentiation is in accord with various studies cited by Ellis (Krashen and Pon, 1975; Hultijn and Hultijn, 1984; Kadia, 1988) that demonstrate the separateness of the two types of knowledge.

Second language development requires the acquisition of implicit knowledge. Manifested as acquisitional sequence, implicit knowledge is mainly acquired through meaning-focused instruction, since it provides a communicative environment that promotes acquisition.

Ellis (1990) review of theoretical positions concerning classroom interaction and language learning (e.g. Frequency Hypothesis, Input Hypothesis, Interaction Hypothesis, Output Hypothesis, Discourse Hypothesis, Topicalization Hypothesis) and of some of the research they have generated concludes that optimal interaction that promotes acquisition "is most likely to occur in meaning-focused instruction" (p.27).

Consequently, language input has to account for the need of meaningful communication.

Meaningful communication, thus, presupposes instruction that allows for

an active construction process of language, i.e. "ensure that the students are given opportunities to control the topic of conversation", "use of effective interactional strategies on the part of all the participants to ensure that comprehension is achieved", "students are encouraged to produce utterances which tax their linguistic resources, "students participate in the kind(s) of discourse (planned and/or unplanned) which correspond to their communicative needs outside the classroom", learner "production is not forced" (Ellis, 1990, p. 126-127) and reflects a clear understanding of the functions of use (ideational, interpersonal, textual), the context and the developmentally and functionally appropriate linguistic forms.

Second language development and the acquisition of a non-stigmatised variety of the target language can be facilitated by acquiring explicit knowledge of structural and functional properties of the second language. Explicit knowledge does not, however, turn into implicit knowledge (cf. Ellis, 1990). It rather has a consciousness-raising effect and, thus, helps "the learner to intake-a necessary (but not sufficient) step for internalization of the feature as implicit knowledge" (Ellis, 1993, p109). Explicit knowledge is mainly acquired through form-focused instruction, consolidating the correct use of obligatory structures in obligatory structural contexts, the correct use of an appropriate lexicon, the correct application of the phonetic system in speaking, reading and writing, and attempting to expand sentences in appropriate situational contexts, for a variety of language functions.

Such form-focused instruction, aiming to support the overall acquisition process and its progression towards mastery, has to provide input in context, imparting knowledge about the second language as a system that can translate into meaningful communication.

Furthermore, the development of control, that is the ability to access both implicit and explicit knowledge with an increasing degree of automaticity, is crucial for the achievement of accuracy and fluency in speech production (cf. Bialystok, 1988; Bialystok and Sharwood-Smith 1985; Ellis, 1990).

Ellis (1990) elaborates that "acquired knowledge is typically accessed only by means of controlled processing. With opportunities for free practice, however, it can be processed more rapidly and efficiently" (p187), i.e. meaning-focused instruction "provides the conditions the learner needs to activate those procedures that are responsible for both automatizing knowledge and for compensating for lack of it" (p.112). Ellis (1990) concludes: "in order to develop control the

learner needs to practise in 'real operating conditions'. Only in this way will the learner develop the strategic abilities needed to perform her competence accurately and fluently" (p.192).

It is in this context that the importance of meaning-focused instruction is confirmed and the role of specific formulae, that can be used to fulfill an initiating function in verbal interactions, becomes more evident.

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