

**INDIVIDUAL DIFFERENCES, INPUT,
AND INTERACTION:
A COMPARISON OF FIRST AND
FOREIGN LANGUAGE LEARNING**

Peter Skehan

Abstract

This paper discusses the problems of relating the findings of First Language Acquisition (FLA) research to the findings of Second Language Acquisition (SLA) research and about relating both sets of findings to teaching. It is argued that the findings of acquisition order studies in FLA are not replicated in SLA studies; that other factors, such as L1 transfer, general language competence and memory capacity have more explanatory power in explaining variations in the process of acquiring a second language. The paper then describes a link which has been found between FLA and SLA in a study which followed the subjects of Gordon Wells' FLA research as they encountered Foreign Language Education in Secondary School. The paper then considers the implications of two findings of the original Wells project, INPUT and INTERACTION. The author argues that comprehensible input may be good for comprehension but not for acquisition of the language system; and that a transmission model of teaching precludes the learner from engaging in the type of interactions which Wells showed to be predictive of effective FLA.

Peter Skehan is a lecturer at the University of London Institute of Education. He previously worked at the University of Birmingham. He obtained his Ph.D. at Birkbeck College, London.

Introduction

Language teachers are often reminded of an embarrassing paradox. This is that children acquiring their first language do so without the benefit of a teacher who takes on the role of guiding their language development. Yet such children invariably succeed in learning their native language to high levels (i.e. native speaker levels!) by a remarkably young age. The lack of teaching, in other words, is associated with guaranteed success – in fact the prevailing view for foreign language learners in schools is that many of them are wasting their time, and will leave language study without having achieved any functional competence in the foreign language they have been studying.

This paradox – that learning seems more likely to be successful when trained teachers are *not* present – has led many researchers to re-examine the conditions for first language acquisition in the hope that such research will provide insights that will lead to foreign language learning becoming more efficient. A clearer view of what is happening in first language acquisition, it is hoped, will allow *teachers* to reproduce the conditions that seem to guarantee first language acquisition success. Indeed, the explosive growth of first language acquisition research since the mid '60s has been very influential in the birth and development of second language acquisition research, since this latter field often looks for inspiration to its first language counterpart.

This article is going to examine some of the more recent research on first language acquisition (FLA), particularly that from the Bristol Language Project in Britain. The Bristol Project, directed by Professor Gordon Wells, is important because it is the largest scale study of first language acquisition ever undertaken. It looked at the first language development of 125 children over a period spanning nearly five years. The present article will examine its implications for

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the foreign language learning field. It will consider the Bristol Project's findings on the issues of the invariant course of language development in first language acquisition; of the marked individual differences in *rate* of development; of the importance for such development of the opportunities for interaction that the child has available; of the quality of such interaction; and finally of the advantages that would come if such exposure to rich and varied interaction could be guaranteed in school.

Acquisition Orders

First of all, the Bristol research has demonstrated, very, very clearly, and in great detail, that children acquiring English as their first language follow remarkably similar developmental paths. Different systems of language, for example the pronoun system, are each clearly ordered within themselves; and, to a considerable degree, different systems are ordered with respect to one another (Wells 1985). Thus the order of acquisition of the systems is generally fairly fixed. However the rate of progress through the systems is not fixed, and the implication of this variability in rate is that the child brings a great deal of autonomy to the task of language learning.

Second language acquisition researchers have frequently turned to first language research for inspiration, and the original studies by Roger Brown (Brown, 1973) which suggested a developmental sequence in FLA have stimulated a large number of SLA studies. Basically, I would argue that despite the many claims that have been made that SLA developmental sequences too are invariant, there are good reasons to believe that while some consistencies exist, there is much less convincing evidence that the sequences are as invariant as in FLA. There are three main reasons for this claim.

First, SLA studies have been beset by a number of data

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collection problems: for example, they rely heavily on techniques like the Bilingual Syntax Measure (Dulay and Burt 1974), which is known to bias results in favour of a particular order (Porter 1977): similarly there are problems with the categorisation of error – for example they regard an incorrect morpheme as an error, but disregard superfluous morphemes (Andersen, 1977); they are also based on cross-sectional rather than longitudinal studies (Rosansky 1976).

Secondly, SLA acquisition sequences are usually based on group studies and produce group accuracy orders. When these orders are applied to individuals, they do not very often hold up (Andersen 1977, 1978), i.e. relatively few individuals actually behave as the group orders would lead us to believe.

Thirdly, one often finds differences in SLA developmental sequences in different environmental conditions (Larsen-Freeman 1976; Ellis, 1984), and these inconsistencies cannot be related to different conditions of language use simply by appeal to different capacity to “monitor” as Gregg (1984) points out. Variability in performance seems to be of fundamental importance, and will have to be explained by any worthwhile theory of second language acquisition, rather than defined as trivial.

In sum, the powerfully and widely established natural sequences in first language acquisition are not replicated in second language acquisition. What we have had, rather, is SLA researchers looking to FLA work for inspiration and methods, and demonstrating a reluctance to accept that in SLA, while some consistency has been found, it is nothing like as much as in FLA. Certainly the most we can speak of is the existence of a certain degree of consistency in *accuracy* ordering, rather than *acquisition* systems as with FLA (Andersen 1977).

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Acquisition Orders and Teaching

The consequences of an invariant SLA order being confirmed would have been very great. It would have implied that powerful inbuilt structures and processes have a determining role in second and foreign language development. In turn, this would have suggested a very limited role for the teacher in structuring learning, and would have suggested that teachers would be most effective as providers of a rich and varied corpus of language material which learners would use as fodder for inbuilt processing mechanisms to operate upon. Now while teachers behaving in such a way at least some of the time would not be a bad thing at all, the failure to establish a universal SLA order does suggest some differences in orientation. It suggests firstly that teachers need not see themselves as required to follow a particular naturalistically determined order and secondly that there is some scope for believing again in the once non-controversial claim that learners can learn what they are taught.

First Language Transfer

Connected with the demise of natural sequences (and the natural processes supposed to underlie them) is a resurgence of interest in some earlier aspects of interlanguage research which may have some explanatory power in accounting for the route of language development. L1 transfer, for example, denied in importance except in the early stages of learning by Dulay, Burt, and Krashen (1982) is now re-asserting itself as a potent factor in L2 performance at a variety of levels. Thus we see work such as Roger Andersen's (1979) on the importance of transfer for Spanish learners of English which indicates that although such interference may sometimes be difficult to isolate experimentally, and although errors may seem to have more than one potential cause, L1 transfer is often a very strong candidate explana-

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tion. Similarly, Harley and Swain (1985) have recently shown that English learners of French in immersion classes manifest very clear L1 interference, as with, for example, the word order of utterances like “je toujours prend l’auto” and sometimes more subtle interference and avoidance as with “j’etais donné beaucoup de medication” to avoid the use of an impersonal form.

General Knowledge of Language

Other areas have also reasserted themselves. For example, Felix (1978) has shown how second or foreign language learners draw upon some level of knowledge of grammar as part of their developing competence in the target language, reflecting the frequently made claim that learning a second language cannot be the same as learning a first. Such learners are able to draw upon pronominal forms which they manipulate effectively to achieve communication knowing that such generalized forms can be made to stand for other (missing) items of the target language which will be correctly interpreted by their interlocutors. Hence learners know they will be able to “get away with” utterances of some metalinguistic sophistication, such as “You that there” since they can expect that the correct interpretation will be made.

Memory

Attention has also been given to another of the cognitive abilities of the second language learner – his (or her) greater memory capacity. Investigators have shown that the language learner may often rely on memorized, unanalysed chunks of language which are used as self-contained units (Wong-Fillmore 1979; Peters 1983). The greater memory of the second language learner, even the *child* second language learner, allows this to happen, so that quite a wide repertoire

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of such memorized “prefabricated” utterances may be available. These can then be the basis for a slow and painstaking analysis on the part of the learner as he or she arrives at a more productive, analytical competence with the language. This also connects with developments in language aptitude research, which suggest that there are grounds for identifying learner “types,” (Skehan 1986), one of whom is the learner who achieves success by dint of impressive memory abilities which need *not* be linked to very great analytic power with language.

A Link between FLA and SLA

So far the discussion has been concerned with *processes* in language acquisition and the case has been argued that while there are similarities between first and second language acquisition, there are also important differences. These differences suggest that the fact that a second language learner is older, more cognitively mature, and comes to the second language through the medium of the first, makes the two types of acquisition far from identical. However, mention of language aptitude leads to a focus, next, on a point of contact between first and foreign language learning – that of the role of individual differences, as reflected in differences in *rate* of first language development, as well as amount of foreign language aptitude and achievement.

The children whose first language development was studied in the Bristol Project are now aged between thirteen and fifteen years. The large majority of them are in secondary schools in the Bristol area, and this fact suggested the possibility of the sort of longitudinal study often called for but rarely conducted in second language acquisition. In this case one would aim at relating the first language development of the children (where it has already been shown that there are wide individual differences) to the children’s current

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foreign language aptitude as well as their current foreign language achievement.

A research project long these lines was funded for one year from September, 1984 by Britain's Economic Social Research Council (ESRC). Although only a limited proportion of the results from the study have been analyzed, some of them are well worth commenting upon. (Further details are provided in Skehan in press, a; in press, b). Several of the indices of first language development, reflecting as they do the wide individual differences in first language ability, correlate significantly with several of the foreign language aptitude measures. Although none of these correlations is greater than 0.60, the prevailing impression is that a clear, if moderate, level of relationship is involved. When one considers that there is a time interval of something like ten to twelve years between the data sources, such a level of relationship is remarkable. It suggests that children who are more rapid developers in their first language tend to have more foreign language aptitude.

Of course, the existence of correlations of the order of 0.4 to 0.5 between various first language and various language aptitude indices raises the question of the determinants of foreign language aptitude, and whether there are inbuilt differences which account for some of the common features of language ability. The data that is currently available cannot yet provide any definite answers.

One of the first language measures that was included in the analysis was an index of the amount of talk addressed to the child, since Wells' work (Barnes, Satterly, Gutfreund, and Wells 1983) had indicated important sources of variation in this area. And the highest general level of correlation that was found with the aptitude measures was with the index of the amount of talk addressed to the child. In other words, the greater the amount of talk addressed to the child in early life, the greater is the tendency for the child to have higher foreign language aptitude. On the one hand, this might

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suggest that the influence of the early environment in terms of amount of speech addressed to the child is enduring and pervasive, and that the quantity of speech has a causal role. On the other hand, the amount of speech addressed to the child might be a function of the linguistic development and personality of each child, with more advanced children generating different quantities and also different qualities of input, so that language addressed to the child might be a reflection of, rather than an explanation for, the rate of language development. Such a suggestion would relate to Seliger's (1983) proposal that there are students who are high and low input generators in language teaching classrooms, and that such input generation capacities are linked to the subsequent progress that such language learners make.

For the moment then, we have results which link first language development and foreign language aptitude. Possibly further research will allow the competing explanations to be evaluated, and provide a more complete picture of the nature of language aptitude and the extent to which it is malleable. Skehan (in press a,b) provides more extensive coverage of this longitudinal data.

The Role of Input

The Original Bristol Project also addressed the role of input in language learning. Here again first language studies have exerted considerable influence on second language investigators, and the first language emphasis during the 1970's on "motherese" has been followed by a current pre-occupation in second language work with "comprehensible input." Theorists such as Krashen (1985) have proposed that the provision of syntactically simplified input which is "tuned" either roughly or finely to the learners' developmental level and which has a "here-and-now" emphasis will facilitate the process of acquisition. Indeed Krashen draws

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even more on a first language influence when he advocates a "silent period" approach to foreign language instruction which he claims is based on the comprehension-production lag characteristic of children's native language development.

It is interesting to note that this emphasis on comprehensible input is beginning to receive its share of criticism. Wells (1985) has described how, in a first language context, simplification of input, or tuning, is *not* predictive of the subsequent rate of development. Rather it is the interactive types of parental response which foreshadow more rapid development — these include a concern to establish that the child's intended meaning has been understood, and, most importantly, attempts to extend and respond to the topics nominated by the child.

One may speculate therefore that comprehensible or "tuned" input is excellent for promoting comprehension (which is obviously no bad thing) but less effective at promoting *acquisition* and the continuing *development and growth* of a language system. In a similar way, others have argued that comprehensible or simplified input may do the first language learner a disservice since it provides him with a restricted corpus on which to base his learning (Wexler 1982).

Another point to make about the role of input in language learning is that there is growing evidence, particularly from immersion programs in Canada, that providing learners with extensive exposure to meaningful language comprehension is not enough to guarantee that they will produce language correctly, even after an appreciable time-lag (Swain 1985). It would appear that the productive skill is one which requires explicit teaching and fostering, and that although one might want to provide proportionately more comprehension work than production, it may be important to engage learners in the skills of speaking and interaction from very early stages.

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The Role of Interaction

I have mentioned that the types of first language input that are most predictive of rate of development are those which draw the child into interaction with the adult on a topic chosen by the child. Development in first language (as well as learning about the world) comes more quickly via parents who respond to the interests of the child. In this way interaction can be seen as a system of checks and fail-safe devices which ensures that the sensitive parent can be guided in such a way that s/he, in turn, can guide the child.

If we apply such a view of the relationship between interaction and language learning to the second or foreign language field, the situation is rather worrying. The constraints of numbers in language teaching classrooms usually mean that there is little opportunity for learners to influence the nature of input that they receive. As a result, the nature of language use departs from that typical of native speaker conversations. The research of Long (1981) and Long and Sato (1983) has shown, for example, the striking differences between the use of question forms by language teachers, where display questions are common, and ordinary language users, where it is typical to ask a question because one does not know the answer, and because one supposes that one's interlocutor does. Other aspects of classroom language are likely to be similarly distinguishable from natural language use.

Of course, this reliance on teacher-centered approaches can be justified, to a certain extent, on the grounds that it ensures the most effective organization of the time available, and that it is for the teacher to structure the learning environment in the optimal manner. However, there are costs involved. Principally, such an approach *disengages* the language learner from initiative in influencing the interaction that takes place. The result is to deprive him of the sort of opportunity

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of interaction that Wells has spoken of in relation to the first language field. Consequently, while the choices made by the teacher may have a lot to commend them, there is no easy route for the participation of the learner in the language class. The checks and balances built into effective first language interaction have been removed. And most importantly of all, the learner is put into the position of having to defer the usefulness of what he is being taught until he can participate in conversational interaction himself at some later stage, and probably outside the classroom. It is likely that some learners will be much less effective at doing this than others.

Conclusion

It is unfortunate but true that a rather bleak picture has been painted in this comparison of first and second language learning. However, language teaching practices are changing, and the current growth in importance of communicative language teaching may go some considerable way to reducing the chasm between native and foreign language learning. We are moving, hopefully, to a situation where the static transmission model of teaching that has been alluded to here no longer applies in many language teaching classrooms, and where many teachers are now building into their classes a greater degree of communicative activity, of interactive language use, and of communication strategy teaching (Long and Porter 1985). To the extent that this is done, we may see a greater cross-fertilization between first and second language acquisition research, on the one hand, and classroom procedures, on the other. Such an attempt to investigate and hopefully substantiate classroom procedures in terms of natural language learning processes would be an excellent way to avoid the degree of failure that confronts many contemporary foreign language learners.

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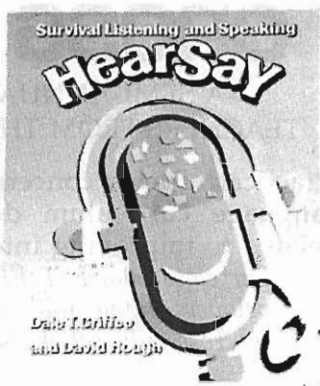
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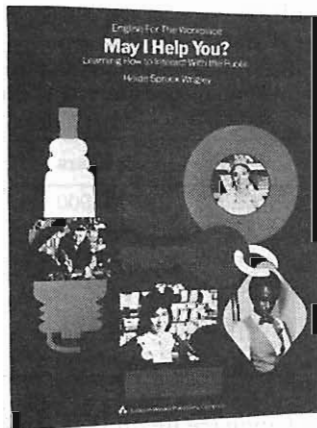


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