

1 The quest for the LAD

1.1 Two types of language acquisition – One kind of language making capacity?

Learn a foreign language in your sleep! Language learning made easy by hypnosis! Lean back, relax and learn! Diverse methods of relaxation promise fast and (almost) unfailing success in adult foreign language learning, relying, for example, on exposure to Baroque music or on special breathing techniques, designed to activate underused cognitive resources of the brain, especially in the right hemisphere, to synchronize both brain hemispheres, to put conscious and subconscious into communication, and so forth. These as well as other advertised methods of language learning attract large numbers of people wishing to acquire a second language, people who may be frustrated by previous language learning experiences in school. They seem to believe or are easily convinced that they do have the capacity to acquire other languages, but that, somehow, access to this language making capacity is blocked and can be made accessible by removing some mental or psychological obstacles.

After all, toddlers quite obviously have this capacity. Infants and very young children develop almost miraculously the ability of speech, without apparent effort, without even being taught – as opposed to the teenager or the adult struggling in foreign language classrooms without, it seems, ever being able to reach the same level of proficiency as five-year-olds in their first language. On the other hand, blaming it on the teachers or on teaching methods does not seem to be fair, either, since learners in a naturalistic setting do not fare much better, frequently even worse, in fact, as is demonstrated by the limited success of many immigrants who have acquired their knowledge of their new linguistic environment in the process of everyday communication, without ever attending classes.

The suspicion thus is that whatever enables the child to acquire the mother tongue might not be lost forever, rather that it could be hidden somewhere among or underneath our other cognitive faculties. Assuming this to be true, the obvious question to ask is whether it is possible to reactivate this language making capacity available to the toddler, to access it again in other language acquisition contexts, in foreign language learning in the classroom, in naturalistic second language acquisition, in relearning languages once learned but later forgotten, and so on. Are these and other types of acquisition perhaps only different instantiations of

one and the same process of language acquisition, the differences being caused by relatively superficial properties of the varying settings?

These are rather straightforward questions, it seems, and obvious ones to ask, once one begins to wonder why a task which is mastered so successfully by a child between, let us say, the ages of one and five, appears to be mission impossible for most teenagers and adults. And yet, the language sciences in general and language acquisition studies in particular cannot offer satisfactory answers. Not that there are no answers – there are many, but contradictory and frequently even mutually exclusive ones. This is all the more surprising since there is, indeed, consensus that children acquiring a first language develop it naturally, they need not be taught the necessary knowledge and the skills required to use it. Second language learners, on the other hand, apparently do need some guidance, although we do not know exactly how and to what extent these learners benefit from instruction. At any rate, to expect them to attain native or native-like competence after three, five or even eight years in the classroom appears to be an idea too unrealistic to be entertained seriously.

In view of the millions of students who – ever since the introduction of obligatory schooling in many countries in the nineteenth century – have been taught foreign languages through an almost countless variety of different teaching methods, one might have expected to find more definitive answers to the questions of what language teaching can possibly achieve and especially whether the child's language making capacity is, in principle, still accessible to the second language learner. And if one is inclined to give an affirmative answer to this question, how, then, can the obvious differences between child and adult learners be accounted for? If, on the other hand, one is to conclude that a negative answer is closer to the truth, how can the equally obvious similarities be explained? After all, in spite of the deplorable imperfections and limitations of second language learners' knowledge and skills, as compared to native learners, they fare infinitely better than chimpanzees and other primates coaxed into using different forms of communication mimicking human language.

These questions all relate to the core issues which will be discussed in the present volume. The story is primarily that of the LAD, the Language Acquisition Device (McNeill 1966; Chomsky 1981b) or the human language making capacity (LMC) as Slobin (1985) called it – its properties as they can be detected from studying child language development and its fate as it can be observed in the course of second language acquisition. A brief look at some lines of thought pursued in language acquisition research in the past may help us to understand why interest in such issues surged only fairly recently.

1.2 Relating first and second language acquisition

The question of whether or not different types of language acquisition share essential properties was not addressed in a systematic fashion until the late 1960s. Until then, it apparently seemed self-evident to most

researchers that first (L1) and second language (L2) acquisition are fundamentally different. But this belief was not based on empirical research. In fact, L1 research did not pay much attention to L2 acquisition at all, and, surprisingly perhaps, this has not changed significantly since then. The idea that merely by contrasting different types of acquisition we can hope to gain a deeper understanding of the nature of the human language capacity began to spread only much later (cf. Wode 1981).

Until the 1960s, the research agenda of language acquisition studies, just like that of psychology and linguistics in general, was strongly determined by behaviourist learning theories. An explanation referring to mental capacities of the learner did not seem to make much sense in that context; it would, indeed, have been regarded as a non-scientific approach to the problem. Only after the constraints and restrictions of behaviourist psychology had been shaken off could the language sciences begin to understand language learning as a mental activity happening in the cognitive system of the individual. Chomsky's (1959) famous and influential review of Skinner's (1957) book *Verbal Behavior* is a milestone on this road to the *cognitive turn*. What this term is meant to convey is that it is the study of human cognition, which is now identified as the major task of linguistics, in close cooperation with other sciences, especially cognitive psychology and philosophy (see Chomsky 1968). With respect to the language faculty, the issues put on the research agenda by this change of perspective include, among other things, the problem of how to characterize the knowledge system represented in the mind of a person who speaks and understands a particular language, as well as to explain how this knowledge is used and, most importantly in the present context, how this linguistic knowledge and the ability to use it are acquired. The Language Acquisition Device, then, represents the initial state of the language faculty, that is, prior to any exposure to the language to be acquired (see Chomsky 1988). This new approach had an enormous impact on L1 research, and as early as in the early 1960s appeared the first of an ever increasing number of publications applying these ideas to the study of first language acquisition.

L2 research, on the other hand, took somewhat longer to liberate itself from the dominating influence of behaviourism. This is partly due, perhaps, to the fact that for a long time it had exclusively been occupied, and still continues to be primarily concerned, with foreign language learning in classroom settings, rather than with naturalistic L2 acquisition. The idea that learning crucially implies changing previously acquired behaviour seems to have been deeply rooted in language teaching. It is therefore not surprising that interference from L1 was, and in part still is, regarded as the major factor determining the shape of L2 speech. The research paradigm which elaborated this idea in considerable detail is Contrastive Analysis (CA).

Contrastive Analysis continued a line of thought which had been expressed quite clearly as early as 1945 by Charles C. Fries in the following frequently quoted statement:

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. (Fries 1945: 9)

The next step was taken by Robert Lado, a former student of Fries, in assuming that ‘individuals tend to transfer forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture’ (Lado 1957: 2). This assumption, which Lado as well as many others at the time regarded as an uncontroversial generalization based on empirical observation, was turned into a prediction, the perhaps major theoretical claim of CA, when Lado (1957) and Weinreich (1953) before him argued that ‘those elements that are similar to his [i.e. the learner’s, JMM] native language will be simple for him, and those elements that are different will be difficult’ (Lado 1957: 2). I should hasten to add that CA researchers were not content with this somewhat naive one-to-one and yes-or-no formulation of the prediction but were able to make far more sophisticated suggestions; see Larsen-Freeman and Long (1991: 53) who present a summary of the proposal by Stockwell, Bowen and Martin (1965) distinguishing between structural and functional/semantic correspondence.

In spite of improvements made over the years, researchers became increasingly dissatisfied with CA. The arguments put forth against this approach are manifold; compare, for example, Whitman and Jackson 1972, Schachter and Celce-Murcia 1977, and Long and Sato 1984. But what ultimately led to profound disappointment was the fact that its prognostic powers turned out not to be satisfactory. After all, CA had been advertised as a scientific method, not just another intuitive way of dealing with language teaching and learning. It was based on a theoretical claim, the transfer hypothesis, and on a scientific description of the objects of its study, the native and the foreign language. Most importantly, this enabled researchers to formulate predictions about difficulty and ease of learning, not merely *post factum* ‘explanations’. But it became increasingly obvious that, in spite of certain refinements in these claims, prognosticated errors were not found in the data, whereas learners clearly encountered difficulties where CA did not foresee any. An example of the latter case is presented by Hyltenstam (1977); the overprediction of transfer errors will be discussed in more detail in chapter 3 and in section 4.3.

Looking at it from today’s perspective, Contrastive Analysis does not necessarily appear as fundamentally wrong. Its major shortcomings, direct consequences of its behaviourist descent, however, are such that it could not, in principle, lead to insights about what the learner has to know and do in order to acquire a second language successfully. This is primarily due to two problems.

First, the role of transfer was grossly overstated. The problem is neither the fact that two languages are contrasted nor the claim that transfer may occur. It would

be absurd to ignore the fact that L2 learners, as opposed to monolingual and even bilingual children acquiring their first languages, have access to previously acquired linguistic knowledge and that, as a consequence, the L1 might interfere with the learning of the L2. But transfer from L1 occupied everybody's mind so much that other factors determining L2 acquisition were severely neglected or simply ignored, a point which is also stressed by Selinker (1992: 9). Why such undue stress was put on a single factor is difficult to assess. I believe, however, that it is, to a large part, caused by a notion of 'learning' defined primarily by habit formation. As Selinker (1992: 7) points out, Fries (1945) already saw the goal of the 'first stage of language learning' as 'the building up of a set of habits for the oral production of a language and for the receptive understanding of the language when it is spoken'. Since learners are claimed to transfer habits from the native to the foreign language, L2 learning must crucially imply changing some of these habits of learners (Lado 1957). Again, this is not in itself an unreasonable assumption. But the CA approach goes seriously wrong when learners' linguistic competence is equated with and reduced to sets of habits.

This brings us to the second point: the nature of linguistic knowledge. What Contrastive Analysis contrasts in order to predict difficulty and ease of learning are abstract linguistic systems, or rather grammars written by linguists. These researchers did not claim, however, that their grammatical descriptions captured some kind of psychological reality. In fact, mainstream linguistics, at the time, explicitly rejected mentalist considerations of this sort. Yet this inevitably leads to a paradox. CA claims that 'the grammatical structure of the native language tends to be transferred to the foreign language' (Lado 1957: 58).¹ The question, however, is not only from where and to where transfer could happen. The crucial issue is to determine the nature of what is transferred. In our understanding today, transfer must necessarily happen in the mind of the learner. The entire notion of transfer, therefore, does not make sense unless one is ready to claim that mental representations of the source as well as of the target system exist (Meisel 1983b, 1983c, 2000b). In other words, transfer cannot go from one abstract linguistic system to the other. If we want to postulate that it plays a part in the language learning process, we cannot avoid referring to psycholinguistically plausible entities. If the grammatical structures involved do not qualify as such, we should expect the above mentioned habits to do so. But this is a reasonable alternative only if one is ready to make strong psycholinguistic claims with respect to the parsing, processing and production mechanisms hidden behind the term 'habit' – a solution not available to an anti-mentalist theory of language and of learning.

An example may help to clarify the argument that linguistic structures cannot be used innocently in order to justify claims about second language learning without committing oneself to the hypothesis that they reflect mentally represented knowledge. German word order, especially the position of the verb, has frequently been observed to represent a major difficulty for second language learners. This problem will be discussed in more detail and in a more technical

fashion in subsequent chapters of this volume. For the present purpose it suffices to look at the examples in (1).

- (1) (i) Sie hat den Wein probiert.
She has the wine tasted
'She tasted the wine'
- (ii) Sie will den Wein probieren.
She wants the wine to taste
'She wants to taste the wine'
- (iii) Einen Chardonnay will sie probieren
A Chardonnay wants she to taste
'A Chardonnay she wants to taste'
- (iv) ... dass sie den Wein probiert.
that she the wine tastes
'... that she tastes the wine'
- (v) ... dass sie den Wein probieren will.
that she the wine to taste wants
'... that she wants to taste the wine'

What does a Contrastive Analysis approach predict, in this case, if the learners' first language is, for example, English or a Romance language, that is, an SVO language where both the finite and the non-finite verb normally follow the subject and precede the object in main as well as subordinate clauses? The prediction must be that English or Romance word order patterns, or habits of placing elements in this order, are transferred into the L2 German which would thus be analysed as an SVO language. Learners then have to discover that non-finite verbal elements must be placed in clause-final position, as in (1) (i) – (iii), and that in main clauses the order of the subject and the finite verb must be inverted in case an element other than the subject appears in initial position; see (1) (iii). In subordinate clauses, on the other hand, the finite verb too has to go to the end of the clause, as in (1) (iv), even following the non-finite one, see (1) (v). In other words, learners have to acquire the so-called rules of 'non-finite shift', 'subject-verb inversion' (in main clauses), and 'verb-end placement' (in subordinates). Note that if native German was analysed as an SVO language, as used to be assumed by traditional grammarians, children learning German as an L1 would face learning tasks identical to those of the L2 learners. The crucial point with respect to the argument to be made here is, however, that the definition of what kind of operations the learning tasks imply, for example 'inversion' and two kinds of 'verb movement', depends on one's grammatical analysis. The importance of this observation becomes evident if one considers the fact that native German is indeed commonly *not* analysed as an SVO language, that is, an alternative solution exists which is generally preferred. Most current treatments of German syntax agree that its canonical or underlying word order is SOV. Under this analysis, it can be argued that non-finite verbs need not change their position; rather, they remain in their original position, and only finite verbs have to move. And since these may go as far as to a position preceding the subject, a special

operation (or rule) of subject–verb inversion is not needed, either. This is, in fact, the most widely accepted hypothesis about what kind of grammatical knowledge German (L1) children need to acquire. If, however, this is correct, that is, if in L1 development children treat German as an SOV language whereas in L2 acquisition SVO order may be transferred from the L1 to L2 German, as predicted by a CA approach, we are claiming that L1 and L2 learners face radically different learning tasks. Irrespective of whether or not this is indeed the case, it should be obvious now that contrastive analyses as a tool of language acquisition studies only make sense if one is prepared to interpret linguistic structures as representing the implicit knowledge of the learner about the target language – ‘implicit’ because learners are normally not aware of this knowledge and do not have direct access to it by simple introspection.

Returning to our point of departure, we can sum up by saying that second language research suffered longer than first language research from its behaviourist heritage. By focusing on the comparison of linguistic structures justified exclusively in grammatical terms rather than with respect to their psycholinguistic plausibility, and, moreover, by defining learning primarily in terms of habit formation and changing of habits, questions relating to the possibility of a common underlying language making capacity for the various types of language acquisition could not even be formulated. As a result, the role of the native language in second language acquisition was seen exclusively as a possible source of transfer.

Let me emphasize, once again, that this is not to say that CA did not make a significant contribution to our understanding of second language acquisition or that contrastive analyses could not be used as a tool for second language research. In fact, later developments in this field tend to incorporate previous hypotheses, methods and findings; they do not really stand in sharp contrast to earlier ones. One might, in fact, argue that more recent approaches to L2 acquisition, according to which parameters of the L1 grammar are transferred to early L2 grammars (see, e.g., White 1985), follow research strategies resembling those of classic CA, for example, contrasting structures from both languages and exploring the transfer hypothesis (see chapter 4). The crucial difference, however, is that in this theoretical context, grammatical structures are indeed interpreted as hypotheses about mental representations of the implicit linguistic knowledge of the learner.

An explicitly cognitive orientation of second language acquisition research was initiated in the late 1960s. Here is not the place to write a history of L2 research; the only point of interest, in the present context, is to see how language acquisition studies came to be interested in parallels and differences between first and second language acquisition.

The change is best illustrated by the seminal paper by Pit Corder (1967). He refers to the child’s ‘innate predisposition to acquire language’ and the ‘internal mechanism’ which makes the acquisition of grammar possible, and then raises the question of whether the child’s language making capacity remains available to second language learners. Although he is careful about the conclusions to be

drawn from these assumptions, he leaves no doubt about the fact that he favours a positive answer, postulating ‘the same mechanism’ for both L1 and L2 acquisition, and proposes (p. 164)

as a working hypothesis that some at least of the *strategies* adopted by the learner of a second language are substantially the same as those by which a first language is acquired. Such a proposal does not imply that the course or *sequence* of learning is the same in both cases.

What exactly Corder means by ‘strategies’ is not entirely clear, nor does he elaborate on the last point, that is, what might cause the emergence of different learning sequences in spite of the claim that the underlying mechanisms are the same. He does, however, list what he sees as differences between the two acquisition types, namely that (1) children acquiring their L1, as opposed to L2 learners, are inevitably successful, (2) L1 development is part of the child’s maturational process, (3) at the onset of second language acquisition, another language is already present, and (4) the motivation for language acquisition is quite different in the two cases. Corder suspects that this last factor, motivation, is the principal one distinguishing first and second language acquisition. In order to gain insights into the nature of the underlying mechanism and of the strategies used in second language acquisition, Corder suggests studying the errors found in L2 speech. He distinguishes between random *mistakes* and systematic *errors*. The latter, he claims (p. 166), ‘reveal his [the learner’s, JMM] underlying knowledge of the language to date, or, as we may call it his *transitional competence*’. If, for example, learners use the form *thinked*, this suggests that they have acquired knowledge about tense marking in English, even if this particular form is an *error*, deviating from the target norm.

The study of errors has attracted the attention of L2 researchers ever since and continues to do so. In view of the rather limited success of error prognostications based on contrastive analyses, researchers concentrate on actually occurring errors, attempting to work their way back to the sources of such errors. As should be obvious, however, this type of Error Analysis (EA) lacks the predictive power of CA, unless error sources other than L1 transfer are identified which can be shown to lead to new predictions about possible learning difficulties. Yet since in EA transfer continues to be the single most frequently studied source of errors, little is gained and much is lost. Furthermore, by concentrating on errors, EA tends to underestimate learner achievements; on the other hand, in cases where learners avoid difficult structures, EA is likely not to detect this lack of knowledge or of skills and overestimates the knowledge of learners; see Larsen-Freeman and Long (1991: 61) for a critique of EA.

The truly stimulating ideas in Corder (1967), with respect to the present discussion, are that he explicitly suggested the same underlying mechanism for L1 and L2 acquisition, introduced the notion of ‘transitional competence’, and demanded that the focus of L2 research should be on the learner, rather than on learners’ productions. This can only be achieved if acquisition studies strive for

psycholinguistically plausible grammatical analyses of learner utterances. In other words, L2 learners are assumed to acquire systematic knowledge about the L2; a ‘third system in addition to the NL [native language, JMM] of learners and the TL [target language, JMM] to be learned’ is introduced, to use Selinker’s (1992: 18) words. Note, however, that assuming a kind of transitional competence does not oblige us to subscribe to the idea of one and the same mechanism underlying L1 and L2 acquisition. The L2 competence might still be the product of some other cognitive capacities – whether this is indeed the case will be discussed in some detail in chapters 3 to 5.

Suggestions similar to the ‘transitional competence’ were indeed made by a number of authors, proposing ‘approximative systems’ (Nemser 1971), ‘idiosyncratic dialects’ (Corder 1971) or ‘interlanguages’ (Selinker 1972). These terms are not synonymous, but they coincide in so far as they postulate a structured transitional knowledge base in the L2 learner. It contains elements of the target grammar, possibly also elements of the L1 grammar (‘interlingual errors’, Richards 1971), and, most importantly, elements different from both source and target systems, ‘developmental errors’ (‘intralingual errors’, Richards 1971) which prove that the learner is actively and creatively participating in the acquisitional process. The term most generally adopted is Selinker’s (1972) ‘interlanguage’ (IL),² and I will therefore also use it in this volume, although it is somewhat misleading since it refers to the product of language use, in spite of the fact that it is intended to capture properties of the learner’s linguistic competence. ‘Approximative system’ renders the intended idea better but is perhaps not as elegant an expression and is less commonly used in the more recent L2 literature.

1.3 Searching for the questions to ask

Conceptualizing language acquisition, first or second, as a sequence of approximative systems represented in the learners’ minds only became possible as a consequence of the cognitive turn in the language sciences. It is this perspective which will determine the route to be followed in the quest for the LAD undertaken in this volume, shaping the questions to be asked and therefore also the kinds of answers to be expected. One important consequence is that the parallels and differences to be studied are ultimately those *underlying* the ones to be observed in language use. The crucial question is whether the tacit knowledge guiding second language acquisition is in fundamental ways different from that available to first language learners, and whether the mechanisms of language use differ in significant ways. In addition, we must consider factors which might influence language acquisition or use in a way that leads perhaps to observable differences in spite of fundamental commonalities.

The most obvious fact in which the two types of acquisition differ is, of course, that in one case more than one language is present in the learners’ environment and in their minds. The other obvious difference between these acquisition types is

the age of onset of acquisition (AOA). In order to be able to disentangle the roles of these and other potentially intervening factors, it should be useful to contrast L2 and monolingual L1 with a third type of acquisition, the simultaneous acquisition of two or more languages (2L1). It resembles L1 in that both are acquired from birth, and it resembles L2 in that more than one language is acquired. On the other hand, 2L1 differs from L2 because the two languages develop simultaneously in 2L1 whereas they are acquired successively in L2. If we were to find significant differences between these acquisition types, the central issue of this debate is which causal factors can explain these differences. My assumption is that the ones just alluded to qualify as the most plausible and promising candidates: the need to acquire, process and store more than a single grammatical system, possible interaction between the newly acquired and simultaneously or previously acquired linguistic knowledge, and possible alterations of the language making capacity as a result of maturation and age. Concerning the latter, another problem arises, namely the identification of the developmental phase or age range during which such changes happen. Perhaps the most practicable way to proceed is to first focus on adult second language learners, that is, learners of approximately twelve years of age and older at the onset of acquisition, and to contrast them with monolingual as well as bilingual children. Subsequently, the results of this analysis can be compared to those obtained with child second language learners (cL2) (see especially chapter 6). In this fashion, the role of both age and bilingualism can be assessed. The age range for what counts as child second language acquisition, however, still needs to be justified. For the time being, I will simply assume that it covers approximately the period between ages four and eight (see Meisel 2008b).

One consequence of the cognitive turn in linguistics is that one asks questions about cognitive systems. It therefore makes sense to examine one such system, namely grammar, and to focus on the underlying principles and mechanisms of language acquisition. This is why this book is concerned almost exclusively with the acquisition of grammar. In fact, reflecting research concerns over the past decades in the area of second language acquisition, this amounts to saying that it will primarily deal with the acquisition of morphology and syntax. Second language acquisition will indeed be discussed in more detail than first language development, for there is a broad although not total consensus among language acquisition researchers that children are equipped with a species-specific language making capacity. The role, however, which this capacity might play in L2 acquisition is quite controversial and requires more attention.

In recent years, a considerable amount of research has been devoted to the study of similarities and differences between various types of language acquisition, enhancing our knowledge on this issue significantly, as compared to the time when Corder (1967) speculated about the availability of the child's language making capacity to second language learners. The goal of this volume, then, is to suggest at least a tentative solution to this puzzle by assembling pieces of available knowledge and by filling some of the gaps with additional facts, reflections and speculations.