

## Chapter 7 Linguistic aspects of interlanguage

In Chapter 6 we examined some of the cognitive structures involved in interlanguage development. To provide another perspective on L2 acquisition, we will now consider how the nature of the object to be acquired-language-influences development. This ties SLA to the discipline of linguistics.

Typological universals: relative clauses

A good example of how linguistic enquiry can shed light on interlanguage development can be found in the study of relative clauses. As we have seen, languages vary in whether they have relative clause structures. Some languages, like English and Arabic, have them, while other languages, like Chinese and Japanese, do not. This linguistic difference influences the ease with which learners are able to learn relative clauses. Learners whose L1 includes relative clauses find them easier to learn than learners whose L1 does not and, consequently, they are less likely to avoid learning them.

The linguistic properties of relative clauses affect L2 acquisition in another way. In languages like

English, a relative clause can be attached to the end of a matrix clause:

The police have caught the man *who bombed the hotel*.

or they can be embedded in the main clause:

The man *who bombed the hotel* has been caught by the police.

When learners of L2 English begin to acquire relative clauses they typically begin with the first type. Thus, the linguistic structure of English (i.e. the fact that relative clauses may or may not interrupt the main clause) influences how acquisition proceeds.

A third effect of relative clause structure on L2 acquisition can be identified. Linguists have shown that languages are more likely to permit relative clauses with a subject pronoun (for example, 'who') than with an object pronoun (for example, 'whom'). In fact, a hierarchy of relativization, known as the accessibility hierarchy, has been identified. This is illustrated in Table 7.1 for English, which, unlike many other languages, permits the full range of relative pronoun functions. The accessibility hierarchy is implicational in the sense that the presence of a relative pronoun function low in the order in a particular language implies the presence of all the pronoun functions above it but not those below it. For example, any language that permits the direct object function will necessarily permit the subject function but may not allow the indirect object function.

Example	Relative Pronoun Function
The writer <u>who won the Booker prize</u> is my lifelong friend.	Subject
The writer <u>whom we met</u> won the Booker prize.	Direct Object
The writer <u>to whom I introduced you</u> won the Booker prize.	Indirect Object
The writer <u>with whom we had dinner</u> won the Booker prize.	Object of Preposition
The writer <u>whose wife we met</u> won the Booker prize.	Genitive
The writer <u>who I have written more books than</u> has won the Booker prize.	Object of Comparative

Drawing on the accessibility hierarchy, SLA researchers have asked 'Does the hierarchy predict the order of acquisition of relative clauses?' There is some evidence that it does. For example, it has been found that the hierarchy predicts the frequency with which learners make errors in relative clauses, *fewest* errors being apparent in relative clauses with subject pronouns and most in clauses with the object of comparative function.

However, rather mixed results have been obtained for the genitive function. This has led to proposals that genitive relative clauses are not part of a single hierarchy but rather constitute a distinct hierarchy of their own. Whereas genitive structures may be more difficult to learn than non-genitive structures overall, some genitive structures are more difficult than others, the difficulty proving predictable on the basis of a separate hierarchy for genitives.

The accessibility hierarchy serves as an example of how SLA and linguistics can assist each other. On the one hand, linguistic facts can be used to explain and even predict acquisition. On the other, the results of empirical studies of L2 acquisition can be used to refine our understanding of linguistic facts.

### Universal Grammar

SLA also owes a considerable debt to another branch of linguistics-that associated closely with Noam Chomsky's theory of Universal Grammar (UG). Chomsky argues that language is governed by a set of highly abstract principles that provide parameters which are given particular settings in different languages. Let us consider an example. A general principle of language is that it permits co-reference by means of some form of reflexive. Thus, in the English sentence:

*The actress blamed herself.*

the subject, 'actress', is co-referential with the reflexive, 'herself' in the sense that both words refer to the same person. However, reflexives also vary cross-linguistically. In the case of English, a reflexive can only co-refer to a subject within the same clause, as in the example above. Thus, English only permits 'local binding'. 'Long-distance binding', where the reflexive co-refers to a subject in another clause, is prohibited. Thus, in this sentence:

Emily knew the actress would blame herself.

the reflexive must be understood as referring to 'actress' and not to 'Emily'. However, other languages such as Japanese, permit long-distance as well as local binding. Thus, the Japanese version of the sentence above is ambiguous; the reflexive can refer to either the actress or to Emily.

#### What is the significance of such linguistic information for L2 acquisition?

Clearly, Japanese learners of L2 English need to learn that reflexives in English permit only local binding; they have to reset the parameter. A number of studies have investigated whether Japanese learners are able to do this. In one such study, Japanese learners of English 'of different proficiency levels were shown sentences like the one above and asked to state which noun the reflexive referred to. Overall the more proficient learners were no better at this than the less proficient ones, suggesting that the learners operated in accordance with their L1 setting of the parameter and that no resetting for English was taking place. Other studies, however, have provided evidence that Japanese learners can reset this parameter. The results provided by research are, therefore, inconclusive. The question of whether learners whose L1 permits both local and long-distance binding of reflexives can learn that a language like English permits only local binding may seem a rather trivial matter. In fact, though, it concerns an issue of considerable theoretical importance'-the extent' to which a language other than our mother tongue is fully learnable.

### **Learnability**

Chomsky has claimed that children learning their L1 must rely on innate knowledge of language because otherwise the task facing them is an impossible one. His argument is that the input to which children are exposed is insufficient to enable them to discover the rules of the language they are trying to learn. This insufficiency is referred to as the **poverty of the stimulus**. For example, a child learning English needs to discover that sentences like this are ungrammatical:

*Sam kicked fiercely his toy car.*

because English does not permit an adverb between the verb and the direct object. Can this be learned solely on the basis of input? The argument is that it cannot if the input consists only of **positive evidence** (i.e. it provides information only about what is grammatical in the language) because learners can never be sure they will not hear a sentence where the adverb is between the verb and direct object. **Negative evidence** (i.e. input that provides direct evidence of what is ungrammatical in a language) would make it possible for children to find out that sentences like the one above are ungrammatical. However, children typically receive only positive evidence; their parents do not generally correct their grammatical mistakes. Thus, it is argued, the input seriously underdetermines learning. In other words, it does not provide the information needed for learning to be successful.

In the case of L1 acquisition, then, there is a logical problem. How do children invariably learn the full grammar of their mother tongue when the information they need is not always available in the input? The answer, according to Chomsky, is that children must have prior knowledge of what is grammatically possible and impossible and that this is part of their biological endowment. This knowledge, which in earlier

formulations of the theory was referred to as the Language Acquisition Device is what comprises Universal Grammar (UC). It is claimed that some errors, such as the one' involving adverb placement, simply do not occur in L1 acquisition because they are prohibited by UC.

But is this also the case in L2 acquisition? To answer this question we need to consider whether adult L2 learners have continued access to UC or whether they rely on some other kind of learning mechanism. We will begin by considering whether access depends on the age of the learner.

### **The critical period hypothesis**

The critical period hypothesis states that there is a period during which language acquisition is easy and' complete (i.e. native speaker ability is achieved) and beyond which It is difficult and typically incomplete. The hypothesis was grounded in research which showed that people who lost their linguistic capabilities, for example as a result of an accident, were able to regain them totally before puberty (about the age of twelve) but were unable to do so afterwards. It was subsequently supported by studies of people who had been deprived of the opportunity even to acquire an L1 as a child. For example, Genie was totally isolated in the early years of her life and consequently did not start learning language (English) until the age of thirteen. While she developed considerable communicative ability she failed to acquire many grammatical rules. In this respect she resembled Wes, the Japanese subject of the case study referred to in Chapter 1.

There is considerable evidence to support the claim that L2 learners who begin learning as adults are unable to achieve native-speaker competence in either grammar or pronunciation. Studies of immigrants in the United States show that if they arrive before puberty they go on to achieve much higher levels of grammatical proficiency than if they arrive after. Sometimes they become indistinguishable from native speakers. However, there does not appear to be a sudden cut-off age, beyond which full competence is impossible. Rather the capacity to achieve full competence seems to decline gradually, becoming complete by about the age of sixteen. Interestingly, age of arrival is a much better predictor of ultimate achievement than the number of years of exposure to the target language. In the case of pronunciation, the crucial age appears to be much earlier, possibly as early as six.

There is some evidence that not all learners are subject to critical periods. Some are able to achieve native-speaker ability from an adult start. In one case, Julie, an English woman, did not start learning Arabic until she was twenty-one years old but was found to perform like a native speaker on a variety of tests after she had lived in Cairo for twenty-six years.

However, the relative lack of success of most L2 learners in comparison to L1 learners suggests that there may be radical differences in the way first and second languages are acquired. These differences· may be of many kinds. It is likely, for instance, that differences in the social conditions in which L1 and L2 learners learn have some kind of impact. L1 learners, for example, do not experience social

distance. It is also possible that L1 and L2 acquisition draw on different learning mechanisms because most adult L2 learners no longer have access to UG.

### **Access to UG**

There is, in fact, no agreement as to whether adult L2 learners have access to UG. We will briefly examine a number of theoretical positions.

#### **1) Complete access**

It is argued that learners begin with the parameter settings of their L1 but subsequently learn to switch to the L2 parameter settings. An assumption is that full target-language competence is possible and that there is no such thing as a critical period. Learners like Julie constitute evidence in favour of this position.

#### **2) No access**

The argument here is that UG is not available to adult L2 learners. They rely on general learning strategies. According to this position, L1 and L2 acquisition are fundamentally different. Adult L2 learners will normally not be able to achieve full competence and their interlanguages may manifest 'impossible' rules (i.e. rules that would be prohibited by UG).

#### **3) Partial access**

Another theoretical possibility is that learners have access to parts of UG but not others. For example, they may have access to only those UC parameters operative in their L1. However, they may be able to switch to the L2 parameter setting with the help of direct instruction involving error correction. In other words, L2 acquisition is **partly regulated by UG and partly by general learning strategies.**

#### **4) Dual access**

According to this position, adult L2 learners make use of both UG and general learning strategies. However, the use of general learning strategies can 'block' the operation of UG, causing learners to produce 'impossible' errors and to fail to achieve full competence. This position assumes that adult learners can only be fully successful providing they rely on UG.

The existence of such contradictory positions shows that the role of UG in L2 acquisition is still uncertain.

### **Markedness**

This uncertainty regarding the contribution of linguistic theory to the study of L2 acquisition is also evident in another area of linguistic enquiry-the study of markedness.

This term refers to the general idea that some structures are more 'natural' or 'basic' than other structures. In typological linguistics, unmarked structures are those that are common in the world's languages. In Chomskyan linguistics, unmarked structures are those that are governed by UG and which, therefore require only minimal evidence for acquisition. Marked structures are those that lie outside UG (for example, have arisen as a result of historical accident). In addition, attempts have also been made to distinguish degrees of markedness in the different settings of a parameter of UG. For example, 'local binding' of reflexives is considered unmarked in relation to 'long-distance binding'.

A number of hypotheses relating to markedness have been examined in SLA. One is that learners acquire less marked structures before more marked ones. On the face of it, there is considerable evidence in support of this. For example, if the accessibility hierarchy is taken to reflect the degree of markedness of relative pronoun functions (see Table 7.1), then, clearly the degree of markedness correlates with the order of acquisition. However, there is a problem. We need to be sure that it is markedness and not some other factor that determines the order of acquisition. Learners may acquire the subject function first not because it is the least marked but because it is the most frequent in the input. To test whether it is markedness or input frequency which determines acquisition order we must identify unmarked and marked structures that are respectively less and more frequent in the input. Research completed to date suggests that learners are more likely to acquire a frequent but marked structure

### **Cognitive versus linguistic explanations**

In this chapter we have examined a number of ways in which linguistics can assist SLA. The typological study of languages affords interesting predictions about what learners will acquire first and what they will transfer from their L1. UG also serves as a source of finely-tuned hypotheses about what structures will cause learning difficulty and, in addition, raises important questions about whether L2 and L1 acquisition are the same or different.

How should we view these linguistic explanations? Are they alternatives to the psycholinguistic explanations we examined in Chapter 6 or are they complementary? The answer to this depends on whether linguistic universals and markedness are seen as exerting a direct effect on L2 acquisition (as is the case in SLA studies based on Chomskyan linguistic theory) or whether they are seen as having only an indirect effect, mediated by psycholinguistic mechanisms of the kind considered earlier (a position entirely compatible with the typological study of language). In short, it comes down to whether L2 acquisition is to be explained in terms of a distinct and innate language faculty or in terms of general cognitive abilities. There is no consensus on this issue. It should be noted however that UG does not claim to account for the whole of a language or even the whole of the grammar of a language. As such, it allows for modularity-the existence of different components of language that are learned in different ways, some through UG and others with the assistance of general cognitive abilities.