

## Interlanguage

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### Interlanguage

The notion of ‘interlanguage’ has been central to the development of the field of research on second-language acquisition (SLA) and continues to exert a strong influence on both the development of SLA theory and the nature of the central issues in that field.

The term interlanguage (IL) was introduced by the American linguist Larry Selinker to refer to the linguistic system evidenced when an adult second-language learner attempts to express meanings in the language being learned. The interlanguage is viewed as a separate linguistic system, clearly different from both the learner’s ‘native language’ (NL) and the ‘target language’ (TL) being learned, but linked to both NL and TL by interlingual identifications in the perception of the learner. A central characteristic of any interlanguage is that it fossilizes – that is, it ceases to develop at some point short of full identity with the target language. Thus, the adult second-language learner never achieves a level of facility in the use of the target comparable to that achievable by any child acquiring the target as a native language. There is thus a crucial and central psycholinguistic difference between child NL acquisition and adult second-language (L2) acquisition: children always succeed in completely acquiring their native language, but adults only very rarely succeed in completely acquiring a second language. The central object of interlanguage research is to explain this difference – essentially, to describe and explain the development of interlanguages and also to explain the ultimate failure of interlanguages to reach a state of identity with the target language. Thus, some central research questions are: What are the psycholinguistic processes that shape and constrain the development of interlanguages? How are these different from those processes that shape and constrain the development of native languages? How might these differences account for the phenomenon of fossilization?

### The Interlanguage Hypothesis

#### Origins of the Concept of Interlanguage

The notion that the language of second-language learners is in some sense autonomous and crucially distinct from both NL and TL was developed

independently at about the same time in the work of several different researchers (see Selinker, 1992, for a detailed account of the historical development of this notion). Slightly different conceptualizations of learner language were referred to as ‘approximative system’ by Nemser and as ‘transitional competence’ by Corder. However, the notion of interlanguage seemed to be the one that caught on and which was used in the literature on second-language acquisition in the 1990s.

Prior to the development of the idea of interlanguage, contrastive analysts had asserted that the second-language learner’s language was shaped solely by transfer from the native language. Because this was assumed to be so, a good contrastive analysis of the NL and the TL could accurately predict all the difficulties that learner would encounter in trying to learn the TL. These claims were made on logical grounds and almost always supported only by reference to anecdotal evidence. It is important to note that these claims were not supported by reference to data obtained from the systematic study of learner language itself, but usually only to utterances that analysts happened to have noticed and remembered. Unfortunately, it is all too likely that analysts tend to notice data that their theories predict and not to notice data that do not fit their theories. Learner utterances that were clear evidence of transfer were noticed and quoted, but learner utterances that did not provide evidence of transfer apparently went unnoticed or were classified as ‘residue.’ Thus, in the late 1950s and the 1960s, there were virtually no systematic attempts to observe learner language and to document scientifically the way in which learner language developed, or to independently and objectively verify the strong claims of the contrastive analysis hypothesis that language transfer was the sole process shaping learner language.

Lado (1957: 72), in an influential statement, explicitly characterized the predictions of contrastive analysts as statements that should be viewed as hypothetical until they could be validated by reference to ‘the actual speech of students.’

Error analysis was an enterprise born of the attempt to validate the predictions of contrastive analysis by systematically gathering and analyzing the speech and writing of second-language learners. For perhaps the first time in history, the focus moved from teaching materials and hypotheses about second-language learning problems, to the systematic observation of learner language. The focus was what scientific study could reveal about the real problems of second-language learners. Preliminary evidence from early

studies began to come in, the results of which showed an increasingly large ‘residue’ of errors that did not in fact seem to be caused by transfer as contrastive analysts had predicted. These errors became an increasingly major source of difficulty for the contrastive analysis hypothesis, a hypothesis that had posed the interesting question of what shapes learner language, but which, increasingly clearly, could not answer that question satisfactorily.

Corder (1967, 1981) was the first and most persuasive scholar to develop an alternative framework: the idea that second-language learners do not begin with their native language, but rather with a universal ‘built-in syllabus’ that guides them in the systematic development of their own linguistic system, or ‘transitional competence.’ Thus, the second-language learner’s transitional competence is different from either the NL or the TL or even some combination of the two, since it begins with an essential, simple, probably universal grammar. Corder also pointed out that the native language often serves as a positive resource for second-language acquisition, facilitating the learning of TL features that resemble features of the NL. Corder argued that second-language learners’ errors were evidence of the idiosyncratic linguistic system that they were building and so were valuable data for research into the nature of the ‘built-in syllabus.’ Corder called for research involving the analysis of learner errors gathered longitudinally, proposed a framework for eliciting and analyzing those errors, and posed the goal as one of characterizing the built-in syllabus and the transitional competence of second-language learners. His students and colleagues set about pursuing that enterprise.

The term ‘interlanguage’ was most persuasively introduced and developed into a set of testable hypotheses by Selinker (1972), after long conversations with Corder and other scholars in the field. The interlanguage hypothesis was intended to, and did, stimulate systematic research into the development of the language produced by adult second-language learners, with a view to objectively identifying psycholinguistic processes (transfer included) that shaped learner language, explaining how learners set up interlingual identifications across linguistic systems, and accounting for the troubling tendency of adult learners to stop learning, or to fossilize.

### Defining Interlanguage

The term interlanguage was defined by Selinker (1972) as the separate linguistic system evidenced when adult second-language learners attempt to express meaning in a language they are in the process of learning. This linguistic system encompasses not just phonology, morphology, and syntax, but also the

lexical, pragmatic, and discourse levels of the interlanguage. The interlanguage system is clearly not simply the native language morphological and syntactic system relexified with target language vocabulary; that is, it is not the morphological and syntactic system that would have been evidenced had the learner tried to express those meanings in his or her native language. Just as clearly, it is not the target language system that would have been evidenced had native speakers of the target language tried to express those same meanings. Rather, the interlanguage differs systematically from both the native language and the target language.

Interlanguage is usually thought of as characteristic only of adult second-language learners (but see ‘Revised Interlanguage Hypothesis’ below), that is, learners who have passed puberty and thus cannot be expected to be able to employ the language acquisition device (LAD) – that innate language learning structure that was instrumental in their acquisition of their native language. Children acquiring second languages are thought to have the ability to re-engage the LAD and thus to avoid the error pattern and ultimate fossilization that characterize the interlanguages of adult second-language learners.

Central to the notion of interlanguage is the phenomenon of fossilization – that process in which the learner’s interlanguage stops developing, apparently permanently. Second-language learners who begin their study of the second language after puberty do not succeed in developing a linguistic system that approaches that developed by children acquiring that language natively. This observation led Selinker to hypothesize that adults use a latent psychological structure (instead of a LAD) to acquire second languages.

The five psycholinguistic processes of this latent psychological structure that shape interlanguage were hypothesized (Selinker, 1972) to be (a) native language transfer, (b) overgeneralization of target language rules, (c) transfer of training, (d) strategies of communication, and (e) strategies of learning. Native language transfer, the process that contrastive analysts had proposed as the *sole* shaper of learner language, still has a major role to play in the interlanguage hypothesis; though it is not the *only* process involved, there is ample research evidence that it does play an important role in shaping learners’ interlanguage systems. Selinker (1972, 1992; following Weinreich, 1968: 7) suggested that the way in which this happens is that learners make ‘interlingual identifications’ in approaching the task of learning a second language: they perceive certain units as *the same* in their NL, IL, and TL. So, for example, they may perceive NL ‘table’ as exactly the same as TL ‘mesa,’ and develop an interlanguage in which *mesa*

can (erroneously in terms of the TL) be used in expressions like ‘table of contents,’ ‘table the motion,’ and so on. Selinker followed Weinreich in pointing out an interesting paradox in second-language acquisition: in traditional structural linguistics, units are defined in relation to the linguistic system in which they occur and have no meaning outside that system. However, in making interlingual identifications, second-language learners typically ‘stretch’ linguistic units by perceiving them as the same in meaning across three systems. An interesting research issue is how they do this and what sorts of units are used in this way; for example, they could be linguistic units like the taxonomic phoneme or the allophone, or syllables. Selinker raised questions about the ability of traditional linguistics frameworks, based as they are on assumptions of monolingualism, to handle interlanguage data in which transfer across three linguistic systems plays a central role.

A second psycholinguistic process is that of overgeneralization of target language rules. This is a process that is also widely observed in child language acquisition: the learner shows evidence of having mastered a general rule, but does not yet know all the exceptions to that rule. So, for example, the learner may use the past tense marker *-ed* for all verbs, regular and irregular alike: *walked, wanted, hugged, laughed, \*drinked, \*hitted, \*goed*. The overgeneralization error shows clear evidence of progress, in that it shows that the learner has mastered a target language rule, but it also shows what the learner has yet to learn. To the extent that second-language learners make overgeneralization errors, one might argue that they are using the same process as that employed by first-language learners.

Transfer of training occurs when the second-language learner applies rules learned from instructors or textbooks. Sometimes this learning is successful; that is, the resulting interlanguage rule is indistinguishable from the target language rule. But sometimes errors result. For example, a lesson plan or textbook that describes the past perfect tense as the ‘past past’ can lead the learner to erroneously use the past perfect for the absolute distant past – for all events that occurred long ago, whether or not the speaker is relating these to any more recent or foregrounded event, as in the isolated statement, ‘\*My relatives had come from Italy in the 1700s.’ These have also been called ‘induced errors.’

Strategies of communication are used by the learner to resolve communication problems when the interlanguage system seems unequal to the task. When, in the attempt to communicate meaning, the learner feels that the linguistic item needed is not available

to him, he can resort to a variety of strategies of communication in getting that meaning across. So, for example, if the learner wants to refer to an electrical cord in English and does not know the exact lexical item to use in referring to it, he can call it ‘a tube,’ ‘a kind of corder that you use for electric thing I don’t exactly the name,’ or ‘a wire with eh two plugs in each side.’ The linguistic forms and patterns used in such attempts may become more or less permanent parts of the learner’s interlanguage (see **Communicative Language Teaching**).

Strategies of learning are used by the learner in a conscious attempt to master the target language. One such strategy of learning is learners’ conscious comparison of what they produce in IL with the NL and a perceived target, setting up interlingual identifications (see the example given above for transfer). Other examples of learning strategies are the use of mnemonics to remember target vocabulary, the memorizing of verb declensions or textbook dialogues, the use of flash cards, and so on. Clearly, such strategies are often successful, but they can also result in error. Memorized lists can get confused with one another, for example, or the mnemonic mediator word may become confused with the TL word. An example of the latter might be that an English-speaking learner of Spanish might use a mediator word *pot* in order to remember that the Spanish word for *duck* is *pato* – but might end up using *pot* in interlanguage references to a duck.

Research evidence was provided to show that all five of these psycholinguistic processes could affect the construction of interlanguages, and a call for more research went out. Many research projects were undertaken in response to this call to investigate each of these hypothesized processes, and the result was a flurry of papers, conferences, and publications, and ultimately something that was referred to as a field of research on second-language acquisition.

### **The Relevant Data for the Study of Interlanguage**

In his 1972 paper, Selinker stated clearly that the relevant data to be used in the study of interlanguage consisted of utterances produced by second-language learners when they were trying to communicate meaning in the target language. The relevant data were clearly *not* learner utterances produced in response to classroom drills and exercises where the learner was focusing attention on grammar rules or target language form. Just as clearly, the relevant data were *not* the learner’s introspections and intuitions about what was grammatical in the target language; such data, according to Selinker, would not provide information about the interlanguage system, but only

about the learner's perception of the target language system – and these were different things.

It is important to note that although Selinker was clear about what *he* thought the relevant data of interlanguage study were, there was disagreement on this point from the beginning. Corder, for example, argued early on and strongly that researchers ought to draw on a whole range of data sources in exploring learners' language, and learner intuitions of grammaticality were clearly a valuable data source. Others, particularly those investigating the role of universal grammar in SLA, have shared Corder's perspective.

A serious question, however, is this: when one uses different data elicitation techniques in the study of interlanguage, do all those data pools provide information about the same linguistic system? There are, after all, three linguistic systems involved: NL, IL, and TL. If one asks a second-language learner whether a given sentence is grammatical, one cannot be sure whether that learner's response is based on the NL norm, the IL norm, or the learner's perception of the TL norm; all of these may differ strikingly from the IL norm revealed when one analyzes that same learner's utterances produced in the attempt to communicate meaning. In essence, the most basic research design question involved in the study of interlanguages – what data shall one use to study interlanguage? – raises very complex issues concerning the relationship between intuitions of grammaticality, language production, and language perception, very similar to issues raised by Labov (1970) in sociolinguistic work. This issue is unresolved in SLA research and in fact is complicated by evidence that interlanguage seems to vary by discourse domain (see 'Revised Interlanguage Hypothesis' below).

### Development of the Interlanguage Hypothesis to the Early 1990s

Soon after Selinker set out the Interlanguage Hypothesis, Steve Krashen (1981) proposed the Monitor Model. The Monitor Model initially relied heavily on the work of a group of researchers (the creative constructionists) who claimed that there was *no* evidence at all of native language transfer in the morpheme accuracy rates of child second-language learners; thus, the contrastive analysts had got it all wrong, at least as far as children were concerned. Where the Interlanguage Hypothesis accords a central role to native language transfer, the Monitor Model does not. The Monitor Model suggests that when second-language learners, adult or children, acquire a second language unconsciously, there will be no evidence of native language transfer; it is only

when they consciously learn a second language that transfer effects appear. The study of the role of universal grammar in the process of second-language acquisition similarly has tended to downplay the role of native language transfer in that process. One of the contributions of the Interlanguage Hypothesis to the field of second-language acquisition in the early 1990s is, thus, a historically rooted, research-based, and theoretically motivated framework for the study of second-language acquisition, which can easily account for both the role of native-language transfer and of universal grammar in shaping interlanguage.

### The Revised Interlanguage Hypothesis

In 1993, the central claims of the Interlanguage Hypothesis remained essentially unchanged, and the intervening years have provided substantial support for them. However, there have been some modifications and expansions since its first detailed proposal in print in 1972. Some of these have been hinted at and will be expanded on below.

The original interlanguage hypothesis was restricted to apply only to adults acquiring second languages. However, evidence emerged subsequently that children in language immersion programs, such as the French immersion programs in Canada, also produce interlanguages, in that they evidence apparently fossilized linguistic systems with substantial influence from native language transfer. There appear to be sociolinguistic reasons for this phenomenon; the children receive native-speaker input only from their teacher, and give one another substantial nonnative input. They have not usually been given enough opportunity and incentive to produce what Swain calls 'comprehensible output' – attempts to use the interlanguage to communicate meaningfully with significant others. To the extent that these children produce interlanguages in these contexts, there is some question whether they are using their LADs to internalize the target language or whether they are using those psycholinguistic processes described as more characteristic of adults learning second languages. A great deal more research is needed with this population in order to find out how, if at all, they differ from adult learners.

A second expansion of the IL hypothesis has occurred in response to the growing interest in the influence of universal grammar on the development of interlanguage. The crucial question here, early on, was this: universal grammar is assumed to be central to the development of natural languages, but is interlanguage a natural language? There have been two positions taken in response to this question. Selinker's initial hypothesis takes the first position: that it is not, at least as the notion 'natural language' has

been defined in linguistics. This early position argues: (a) natural languages are produced by LADs; (b) language universals exist in human languages by virtue of the way in which the language acquisition device is structured; (c) but interlanguages, unlike native languages, fossilize and evidence native language transfer; (d) interlanguages therefore are a product of latent psychological structures, not LADs; (e) so interlanguages do not have to obey language universals. Adjémian (1976), and following him others, took the opposing position that interlanguages *are* natural languages (although, unlike other natural languages, IL rule systems are 'permeable'). As natural languages, interlanguages do have to obey language universals; central to this position is the view that interlanguages are products of the same language acquisition device that produces native languages. In this view, interlanguages fossilize because of complex changes in cases where parameters have already been set for one language and a second language must be learned. Debate on this issue is certainly ongoing and lively.

A third modification has been a growing emphasis on something barely hinted at in 1972: the way in which interlanguage development seems to vary in different social contexts, or discourse domains. Increasing evidence seems to show that learners can produce a significantly more fluent, grammatical, and transfer-free interlanguage in some social contexts than in others. International teaching assistants, for example, may be more fluent and grammatical in lecturing on their academic field than when talking about an everyday topic like favorite foods or bicycling. Key processes such as fossilization may be more prominent for a given learner in one context than in another. This variation in interlanguage production, documented in dozens of studies reviewed in Tarone (1988), is probably related to the problem of data elicitation discussed above and certainly has profound implications for data elicitation in research. As suggested above, SLA researchers have argued for the use of a range of elicitation devices in investigating interlanguage. However, if learners do vary at a single point in time in the fluency and grammaticality of the language they produce, depending on variables such as topic, focus on form, interlocutor, and so on, then how are researchers to handle the data they elicit when they do use a variety of tasks? Minimally, when researchers interpret their data, they need to keep the data from each elicitation technique separate and to keep track of the contextual variables that were in play in each elicitation. Conceptually, this chameleon-like character of ILS raises serious questions about whether and how traditional linguistic notions developed to account only for

monolinguals can apply to interlanguages. This is a complex problem for SLA researchers to resolve.

A fourth issue that has occasioned substantial discussion in the literature centers on the phenomenon of fossilization itself and whether it is inevitable. Selinker argued essentially, that no adult learner can hope to ever speak a second language in such a way that he or she is indistinguishable from native speakers of that language. There are inevitable forces that lead to the cessation of learning. In Selinker's view, there are neurolinguistic reasons for this inevitability. Scovel proposed the Joseph Conrad Phenomenon, in order to draw attention to the very common case where an adult learner's phonological system may fossilize, but the morphology, syntax, and lexicon may not, continuing to develop until reaching full identity with the target language. Scovel (1988), like Selinker, argued that the causes of phonological fossilization are neurolinguistic in nature and related to the process of cerebral lateralization, which is completed at puberty. But there is certainly disagreement among interlanguage researchers as to both the inevitability of fossilization and (relatedly) the causes of fossilization. Typically, those who argue that fossilization is caused by sociolinguistic forces (such as the NL group pressure to conform, or one's need to identify with the NL social group rather than the TL social group) also argue that fossilization is not an inevitable process. Such researchers suggest that if learners can identify with the TL social group, or if their need is great enough, they will be able to continue learning the second language until their production/perception is indistinguishable from that of native speakers. This issue also is far from settled, since it relates to matters of human potential rather than humans' actual behavior.

There has been some change in the way in which some of the psycholinguistic processes shaping interlanguage are viewed. For example, native language transfer is viewed as operating selectively; some things transfer from the NL to influence IL, and some things do not. A crucial question in the 1990s, therefore, is: What gets transferred? Can we predict in advance what NL characteristics will influence an IL and which ones will not? One promising notion is that of multiple effects: when NL transfer combines with other influences, such as markedness factors, learning strategies, or transfer of training, then there will be greater likelihood of fossilization. So, for example, an early stage of verbal negation common among all second-language learners involves putting a negator (like *no*) before the verb. Learners whose native languages (like Spanish) do negate verbs this way (as in *Juan no habla* for *John does not talk*) will be more likely to fossilize at this stage (producing

*John no talk*). Thus, negative NL transfer has the effect of amplifying the possibilities for fossilization when it interacts with other negative influences. Another psycholinguistic process shaping interlanguage is the learning strategy. A great deal of research has been done (e.g., Cohen, 1990), using elicitation techniques such as verbal report, in order to gain insight into the ways in which learners may consciously set about trying to internalize aspects of the target language. Some interlanguage researchers have drawn heavily on the work of cognitive psychologists who have studied the influence of the use of mnemonics on memory. The result of this research has lent itself easily to educational applications, such as the establishment of workshops and even centers to train students in the use of language-learning strategies.

Finally, research on interlanguage has expanded far beyond its original focus on phonology, morphology, syntax, and lexis, to include the sociolinguistic component of communicative competence. Research on interlanguage includes comparative work on the way in which learners execute speech acts across three linguistic systems; Cohen and Olshtain (1981), for example, have studied the way learners attempt to apologize, using their interlanguage, in target language social contexts, and compared this to the way native speakers of both the NL and the TL apologize in the same contexts. Learners' politeness strategies in NL, IL, and TL have been examined on a number of levels by researchers such as Beebe, who have explored miscommunications that have arisen when learners have transferred NL politeness strategies into IL-TL communications.

The Interlanguage Hypothesis provided the initial spark that ignited a field of research on second-language acquisition/learning, and it continues to provide what some feel to be the most productive

framework for research. The research questions it originally raised continue to be among the most central and interesting research questions in the field.

*See also:* Communicative Language Teaching; Labov, William (b. 1927); Second Language Acquisition: Phonology, Morphology, Syntax.

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## Internal Modification

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Internal modification is the name given to morphological processes whereby some inflectional property or derivational relationship is signaled not by adding new material to the base (that is, by affixation) but by changes internal to the base itself. Examples involving inflectional properties are English *feet* (plural of *foot*) and *sang* (past tense form of *sing*), Maori *waahine*

(plural of *wahine* 'woman'), and Welsh *egyr* ('he or she opens,' third-person singular present of the verb *agor* 'to open'). Examples involving derivational relationships are English verb/noun pairs such as *sing/song*, *believe/belief*, and *tormént/tórment*. Such changes can affect vowels, consonants, or suprasegmental characteristics such as stress.

Internal modification and affixation are not mutually exclusive. Here are two examples involving inflection: English *wives*, in which plurality is signaled both by the suffix *-s* and by the voicing of the final consonant of the stem *wife*, and Zulu