

Interlingual Transfer in Foreign Language Learning: A Critical Survey of the Second Half of the Past Century

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Abstract

Taking a critical look at some of the main issues related to the psycholinguistic phenomenon of interlingual transfer, this paper gives a brief historical review and goes to argue in favour of the use of the term "transfer" rather than "interference"; since foreign language learners fall back on their first language as a creative cognitive strategy employed to solve learning and communication problems. It also attempts to clear the confusion surrounding the use of the term "simplification" by distinguishing between simplification of the learning task and simplification of the linguistic system. Viewing the use of interlingual transfer as an obligatory choice for low-proficiency students, the paper argues that the low percentages of interlingual errors reported in some studies may not reflect the reality in foreign language learning contexts. The findings of such error qualification studies may not be reliable also because of methodological problems. This paper critically surveys previous error classification attempts and proposes a simple two-category scheme whereby interlingual transfer takes its right magnitude. It also postulates a positive facilitative role for the first language on the grounds of the existence of interlingual errors. Commission of such errors presupposes production of correct forms and structures due to the use of this creative strategy.

Introduction:

The issue of interlingual transfer seems to be going up to the other end of a U-shaped course, starting with the contrastive analysis hypothesis (Lado, 1957), played down by the creative construction

hypothesis (Dulay and Burt, 1973, 1977), and brought into focus again from a cognitive and developmental perspective. Thus three eras can clearly be detected with respect to the role of interlingual transfer in language learning, (see also Sharwood-Smith, 1979). The first era was characterized by the influence of structural linguistics and behaviourist psychology. Transfer from the native language was seen as a matter of habit and negative transfer or 'interference' be predicted in cases of difference between the native and the target language - the contrastive analysis hypothesis. The acquisition of new and stronger target language habits was believed to be the only way whereby the negative effects of the native language could be overcome.

The second era was characterized by a tendency towards cognitivism in psychology and language acquisition. It represented a reaction against the behaviourist habit formation theory. Language acquisition, whether native, second or foreign, was considered as a creative process. This theory has come to be known as the creative construction hypothesis, the identity hypothesis, or $L2 = L1$ hypothesis. In this era, the role of the native language was de-emphasized and interlingual transfer was excluded from the creative aspects of second or foreign language learning because of its association with the behaviourist habit learning theory.

The third era represents a corrective movement within the cognitive approach to language learning. The role of the native language has been revived, and creativity in learning has been extended to include interlingual transfer (for more information see e.g. Giacobbe, 1992). With renewed interest in the phenomenon of interlingual transfer, the notions of learner expectation and the perceived distance between the native and the target language were introduced as an alternative to the rigid view of equating linguistic differences with learning problems. The learner has come to be viewed as an active participant in the processes of learning, one who decides which elements of the native language are transferable and which are not. The distance between the native and the target language has come to be seen as "ultimately in the eye of the beholder", (Odlin, 1989). Thus, as Gass and Selinker (1983) say, the

phenomenon of interlingual transfer "has been somewhat like a pendulum, swinging from all to nothing, and now finally settling somewhere in the middle".

The fact that the native language plays an important role in foreign language learning is, as Swan (1985) says, "a matter of common experience". Overwhelming evidence has been presented supporting the central place which interlingual transfer occupies in foreign language learning, (see e.g. Cook, 2003; Gass and Selinker, 1983; Odlin, 1989). The availability of the native language to the second or foreign language learner brings about a difference between mother and other tongue learning in the sense that the native language is an additional source of linguistic knowledge not available to the mother tongue learner for hypotheses formation, (Rutherford, 1987). Evidence for the pervasiveness of interlingual transfer is indisputable particularly in foreign language learning contexts where the learners' exposure to the language is confined to the limited input provided through formal instruction, and where the native language is excessively used in explaining unfamiliar lexical and grammatical items. The widely documented influence of the native language at all linguistic levels and in both formal and informal learning situations might have led some researchers (e.g. Rivers, 1983) to believe that the second or foreign language is filtered through the native language. Blum-Kulka and Levenston (1978) express the possibility that "the assumption of word-for-word translation equivalence as a working hypothesis... is the only way a learner can ever begin to communicate in a second language". From the above brief account, we can conclude that the interlanguage of foreign-language learners exhibits the influence of their first language at all linguistic levels, especially if the target language is learned in a formal classroom context where the learners' exposure to that language is limited to a few 35-minute class periods per week.

Transfer vs Interference

Most of the definitions of the term 'transfer' derive from the psychological principle that previous learning is relied upon to facilitate subsequent learning, (see e.g. Adjemian, 1983; Brown, 1994; Dechert and Raupach, 1989; Ringbom, 1992; Taylor, 1975). According to Faerch and Kasper (1987) transfer is a psycholinguistic process whereby

second or foreign language learners activate their previous linguistic knowledge in developing or using their interlanguage. Some researchers (e.g. Gass and Selinker, 1983; McLaughlin, 1987) define transfer as either a learning strategy or a communication strategy. Oxford and Crookall (1989) believe that 'communication strategies' is a misnomer, because it refers only to the strategies used when speaking. They point out that communication takes place in reading, listening and writing as well as in speaking. However, this does not mean that the term 'communication' should be rejected, rather it can be used as a cover term referring to oral and written, and productive and receptive skills. When learners fall back on their native language, they may try to solve both learning and communication problems. Transfer may be used as a learning strategy to formulate hypotheses about the target language and as a communication strategy to test these hypotheses. Thus a communication strategy may promote learning through positive or corrective feedback (Bialystok, 1983; Bialystok and Sharwood-Smith, 1985).

In response to Barnes's (1976) assumption of 'learning by talking', James (1983) says that one cannot learn a language by talking because if one can talk in the language, one knows it already and, therefore, does not need to learn it. He then comes to the concession that "one can perhaps learn more of a language by speaking and using the parts of it that one already knows". The question is: How does one get the parts one already knows? The simple answer is that one first receives language before producing it since one cannot give what one does not have. This receive-and-produce process then becomes reciprocal and communication continues. Accordingly, one can learn a language by using it, with receiving as a starting point as can be observed in child language acquisition. Extrapolating from child language acquisition, some second and foreign language teaching methods (e.g. The Silent Way, The Natural Approach, etc...) give priority to the development of the receptive skills (i.e. listening and reading) where the learners are expected to build up competence during an initial 'silent period'. Thus learners 'learn' something first, 'use' what they have learned, and 'learn more' by receiving feedback on what they have learned and used. Language learning, then, as Hatch (1978) says, evolves out of learning how to carry on conversations. When a learner generalizes a native or a target language form, switches from the target to the native language,

asks for help, or even avoids a topic, he or she may be getting some feedback which will hopefully lead to learning. In other words, learners learn by having their hypothesis confirmed or modified.

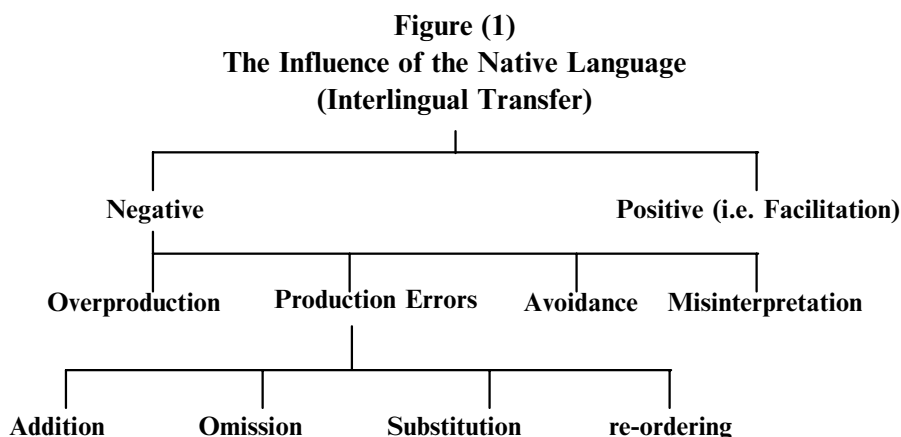
The role of the native language in learning and using the target language has been known for centuries (Selinker, 1984). As Singleton (1987) points out, interlingual transfer was a familiar phenomenon before the domination of the behaviourist theory of language learning. The existence of the phenomenon has never been and will never be denied as people continue to learn a second or foreign language after they have mastered a first one. At present, research on this phenomenon seems to have succeeded in transferring the term 'transfer' from the narrow behaviouristic view to be used in a broader sense including all types of carry over from any kind of previous knowledge available to the language learner. Accordingly, reliance on the previously learned parts of the target language is also a kind of 'transfer', (see e.g. Seliger, 1988; Van Els et al., 1984). According to Gundel and Tarone (1983) the term 'transfer' is misleading because of its association with behaviourism and because it obscures the complex interaction between the native language and the target language universals. Association with the behaviourist theory of habit formation is also the reason for which Corder (1983) and Adjemian (1983) reject the use of the term.

However, as Kellerman (1984) says 'transfer' should not be dropped from the dictionary of applied linguistics; it can be spared for reference to the general principle of making use of all types of previous knowledge when learning an additional language. Many researchers take pains to stress that transfer from the native language and generalization within the target language are the same in principle. The term 'transfer' can be used as a useful cover term referring to the underlying reliance on both the native language (i.e. interlingual transfer) and the limited knowledge of the target language (i.e. intralingual transfer). Finocchiaro (1974), for instance, defines transfer as "the ability to use knowledge about a feature of one's native language or of the target language in learning another related feature". Similarly, Marton (1988: 92) defines transfer as the process of applying already gained knowledge to new areas of language use and may involve both knowledge of the learner's native language and newly acquired (often fragmentary) knowledge of the target language.

Thus, it is under a cover term such as linguistic transfer, both inter- and-intralingual, that the creativity of reliance on the native language can be brought into the awareness of those who see it as a bad old habit leading to the so-called interference, (see e.g. Littlewood, 1998; Gass, 1984; Gass and Selinker, 1994). The mental effort exerted by the learner to make use of the native language in the process of learning and using the target language cannot simply be referred to as 'interference' when the transferred form does not conform to the target norm. Interference may imply that it is the native language that intrudes into the process of learning the target language, whereas in fact it is invited by the learner in the hope that it facilitates the task of learning or using the target language. Croder (1983) agrees with Gass and Selinker (1983) that the term interference should be avoided because it may imply that interlingual transfer inhibits the learning of the target language. Indeed it is the word 'interference' that can be discarded as being associated with the behaviourist theory where the negative effect of interlingual transfer is seen as an evil that should be eradicated. Reliance on the native language is not different from "using cooked rice as glue", an example which Dulay and Burt (1977) give in their attempt to explain the notion of creativity. In both cases, (i.e. the lack of glue and the lack of knowledge of the target language form), necessity is the mother of invention, as it were. Marton (1988) differentiates between negative transfer and interference errors. According to him negative transfer errors are due to the formation of incorrect hypotheses on the basis of the perceived distance between the native and the target language. Interference errors, on the other hand, are the result of forcing the learner to produce the target language forms which have not yet been automatized. However, when the negative influence of the native language is observed in the learner's language, it may be difficult to say whether it is due to negative transfer or interference. Forcing the learner to produce unautomatized forms can also be a reason for the formation of incorrect hypotheses based on the native language. Furthermore the term 'interference' may imply that the learner already knows the correct target language form but the influence of the native language form but the influence of the native language is strong enough to cause problems in the production of that form. As such, interference can be associated with the learning of motor skills such as pronunciation. Many Arabic

speakers, for example, pronounce words like think and that as sink, and zat, respectively although they "know" the correct sounds from modern standard Arabic. If they had not known / θ / and / δ / it might have been a case of negative transfer, that is, falling back on the native language forms to make up for the unknown target forms. Thus, we can see that language learners utilize their knowledge of the first language to assist them in learning and using other languages. Where this first language facilitates the task, we can postulate a positive role for interlingual transfer. Commission of interlingual errors resupposes production of correct forms and structures due to the use of this strategy.

The role of the native language goes beyond facilitation and error to include avoidance of certain target language forms and overproduction of some others. For instance, avoidance of the perfect tense and over-use of the conjunction "and" by Arab learners of English could be due to the influence of Arabic. As a result, it was necessary for researchers to think of a term which would include these phenomena (Kellerman, 1984). Corder's (1983) 'a role for the mother tongue' and Kellerman and Sharwood-Smith's (1986) 'crosslinguistic influence' have so far been proposed as cover terms. Positive and negative transfer can then be seen as subcategories under the influence of the native language (Figure 1):



The diagram above shows the various types of negative transfer errors that learners can commit when they fall back on their first language. Having said that, we should not lose sight of the positive role that the first language may play when second or foreign language learners produce and understand the target forms and structures correctly due to interlingual transfer. Detection of the facilitative effect of the first language is far more difficult than detection of its negative effects as reflected by errors.

Research on interlanguage and transfer is on its way to make for a better understanding of some key issues such as what can be transferred, how interlingual transfer occurs and how it interacts with other linguistic and non-linguistic factors in shaping the learner's language (see e.g. Kellerman and Sharwood-Smith, 1986; McLaughlin, 1987; Odlin, 1989; Ringbom, 1987).

Task Simplification vs Linguistic Simplification

Most researchers agree that transfer from the native language and overgeneralization within the target language are two manifestations of one process, (see e.g. Faerch and Kasper, 1986; Gass, 1984; Ringbom, 1987; Seliger, 1988). In both cases, second or foreign language learners fall back on their previous linguistic knowledge, their native language and their interlanguage, in order to simplify the task of learning, not to reduce the target language into a simpler system in the sense of replacing the difficult syntactic and lexical forms by other forms that suit their competence level in the target language (Campbell, 1987). Simplification or reduction of the language by dropping certain elements is only one consequence of transfer from the native or the target language, (Blum-Kulka and Levenston, 1978). It is a result of opting for the maximum amount of learning or communication with the limited number of forms or rules available, (Richards, 1975). The attempt to simplify the learning task by means of interlingual and interlingual transfer may result in inserting redundant elements as well as in dropping required ones. Some researchers (e.g. Meisel, 1983) tend to equate the learners' interlanguage with other types of simplified registers such as telegraphese, motherese and foreigner talk because the missing elements are similar in all cases. In doing so, these researchers rule out reliance on interlingual transfer as a possible reason for the

omission of elements in the interlanguage on the grounds that the same phenomenon is observed in the above mentioned simplified varieties used by adult monolingual native speakers.

However, we think that the reason for the missing elements in the learner's language might be different from that of other simplified varieties where the speaker or writer intentionally drops certain elements from his or her fully developed language. In other words, simplification resulting from the lack of knowledge of the target language cannot be seen as the same as purposeful simplification since, as Corder (1981) and Wode (1981) point out, learners do not have the complex system which they could simplify. Different reasons may be advanced for the same phenomenon, (Ellis, 1985; Fry, 1983; Ringbom, 1987). For example, someone may not use the present auxiliary verb "is/are" in a telegram for the sake of economy; a child native-speaker of English might also omit that verb due to cognitive immaturity while someone else might commit the same error under the influence of his first language. Of course children drop elements when acquiring their native language, but they might do so because of their cognitive limitations and their inability to attend to and produce minute linguistic details, (Littlewood, 1994). Children may also simplify due to reliance on their limited linguistic knowledge. The similarity of the elements dropped by children learning their native language to those of adult second or foreign language learners does not seem to be a convincing case to rule out interlingual transfer. First, second and foreign language learners all over the world use similar strategies. They employ avoidance strategies and linguistic and non-linguistic strategies. The linguistic strategies involve formation and testing of hypotheses based on any kind of previous linguistic knowledge (i.e. linguistic transfer). All learners may rely on the same strategy of linguistic transfer and make identical errors of omission but the previous linguistic knowledge on which they rely may be different. Thus linguistic simplification can be seen as a product of employing learning and communication strategies and not as a separate strategy on the basis of which linguistic transfer is rejected as an explanation of errors of omission.

Selinker (1972), for example talks about the causes of errors and presents the question What did he intended to say? as being due to overgeneralization (i.e. intralingual transfer), and I am hearing him as

being due to simplification. However, these may be examples of transferring irrelevant elements as a result of the learners' attempt to simplify the learning task and not the target language system. The second example, I am hearing him, may be an instance of intralingual transfer, based on similar forms such as I am listening and I am speaking. Since .. did ... intend ... and I hear... would be linguistically more reduced than ... did ... intended... and I am hearing..., then there seems to be reason to account for such complexifications' in terms of linguistic simplification. Rather, they are due to the simplification of the learning task which is, in most cases, the reason behind all kinds of errors (omission, addition, substitution, reordering) made by language learners. Linguistic simplification can then be clearly distinguished from simplification of learning task, and the various linguistic achievement strategies employed by learners can be seen as bridging steps leading from task simplification to linguistic simplification as one of the outcomes of task simplification.

Appel and Muysken (1987) maintain that intralingual or developmental errors are due to reliance on two strategies: simplification and generalization. They attribute the deletion of articles, auxiliaries, prepositions, and personal pronouns to simplification. Then they go on to make a compromise by saying that generalization could be viewed as a specific instance of simplification, because it also implies the reduction of the range of possible structures. However, we believe that since the deletion of the above elements (i.e. articles, auxiliaries, etc.) by Arabic speakers may be due to generalization of their native language features, interlingual transfer can be viewed as a strategy resulting in linguistic simplification. Selinker et al. (1975) classify the errors made by English-speaking learners of French into language transfer, overgeneralization, and simplification. According to them, using one form for all tenses is an instance of simplification. Seeing that there is no difference between such errors and those which they classify as due to language transfer or over-generalization, Selinker et al. say that simplification is related to language transfer and overgeneralization. They go a step further to say that it may be more fruitful to consider simplification as the 'super-ordinate strategy' with overgeneralization and transfer as types of simplification. However, this confusion may be cleared by viewing this 'super-ordinate strategy' as a step that the learner takes to solve his

learning and communication problems, that is, task simplification. Thus, we can conclude that language learners rely on their first language as well as on what they know from the target language in order to simplify the learning task. Hence, linguistic simplification (e.g. omission of certain elements) is one of the many surface manifestations of the two strategies of interlingual and intralingual transfer.

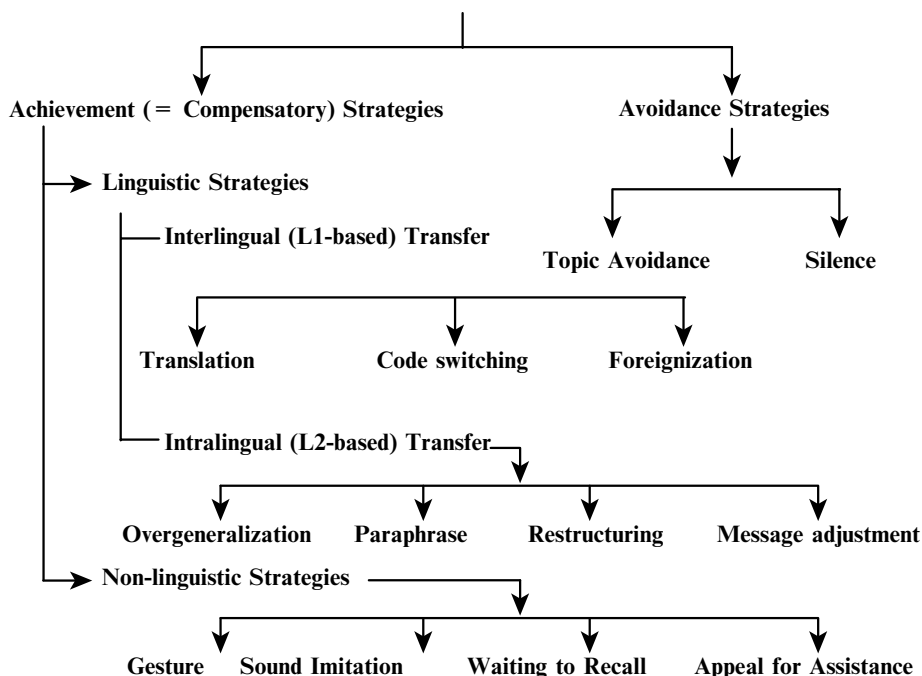
Mukattash (1981) de-emphasises the role of interlingual transfer by suggesting simplification as a reason for the omission of the couple by Arabic speakers. He borrows Menyuk's (1974, in Mukattash, 1981) and Ravem's (1974) examples: Where uncle Nat?, Why you smiling?, What you going to do tomorrow? However, we believe that the omission of the copula in these cases may be due to the children's inability to grasp minor details in the speech of adults, (e.g. the contracted forms of *is* and *are*). Mukattash (*ibid*) goes on to give yet another reason based on Richards (1974): similar omissions have been observed in the interlanguage of second or foreign language learners with different native languages. However, we agree with Ellis (1985) when he says commission of the same error by learners with different native languages cannot be taken as evidence that the error is intralingual. As we explained earlier, the same error (e.g. omission of the present auxiliary verb "is/are") may be made by two or more for different reasons. Wong and Choo (1983) experimented with learners from two different native languages assuming that errors due to interlingual transfer would be different while the developmental ones would be shared by all learners. Many of the errors were found to be similar as a result of the similarities between the learners' unrelated native languages. In terms of the Universal Grammar Theory, languages share principles and parameters to varying degrees (see e.g. Gass and Selinker, 2001; Sharwood-Smith, 1994). A language may share principles and parameter settings with another language without any family relationship.

Magnitude of Interlingual Transfer

There is a general agreement among second-language acquisition researchers that the mismatch between the communicative goal and the target language knowledge (i.e. the linguistic means falling short of achieving communicative ends) is a reason for reliance on the interlingual transfer strategy, depending on the typological similarities between the native and the target language. Si-Qing (1990) reported that low-proficiency Chinese

learners of English employed much more communication strategies than high-proficiency learners did. Nevertheless, the great distance between Chinese and English reduced the learners' tendency to use L1-based strategies because they knew these strategies would not work for them. By virtue of cognitive maturity and mastery of the native language, adult foreign language learners may want to talk or write about complex topics, something which they can fairly easily do in their native language (see e.g. Mohammed, 2000, 2002, 2003). In the face of the lack of the requisite knowledge of the target language, reliance on the interlingual transfer strategy, among other strategies, is one way to compensate for the inadequacies. In formal classroom learning situations, the learner is often not allowed to use other compensatory strategies which the language learners use in naturalistic learning environments, (see Corder, 1978). Figure (2) below is our synthesis of the communication strategies presented by Bialystok (1990), Cohen (1998), Corder (1981), Ellis (1985), Palmberg (1984), Puolisse, Bongaerts and Kellerman (1984), Ringbom (1987), Si-Qing (1990):

Figure (2)
A Synthesis of Communication Strategies



Since formal language teaching strives for achievement, the learners are usually not allowed to employ avoidance strategies as long as the classroom activities are controlled by the teacher. The use of non-linguistic strategies such as gesture, appeal for assistance and sound imitation is associated with oral communication. When adult learners are asked to express themselves orally, they usually prefer resorting to silence to fooling themselves, as they might think, by using such non-linguistic strategies. The use of intralingual (i.e. L2-based) strategies requires a relatively high degree of proficiency in the target language, (see Giacobbe, 1992; Khanji, 1996; Kobayashi and Pinnert, 1992; Mohammed, 1998; Si-Qing, 1990). Reliance on intralingual strategies increases with the increase in proficiency in the target language. Strategies such as paraphrasing, restructuring and word coinage require relatively richer linguistic resources to draw upon. For low-proficiency learners, the use of such strategies would be like jumping from the frying pan into the fire. Overgeneralization seems to be the least demanding of the intralingual strategies in the sense that many correct and incorrect target language forms can be produced simply by transferring the most frequent morphemes such as the past tense 'ed', the plural 's', the past participle 'en' and the negative 'un'. In error analyses carried out by the present writer (Mohammed, 1983, 1992, 2000) most of the intralingual (i.e. L2-based) errors made by the Arab learners of English were due to overgeneralization as distinct from interlingual transfer (i.e. L1-based).

The group of strategies that seem to be readily available to many Arab learners of English are the interlingual (i.e. L1-based) ones. Cases of foreignization and code switching are relatively rare, may be, for the same reason that prevents the use of avoidance and non-linguistic strategies. Another reason may be that the learners realize that the resulting forms would not be English. Unlike the non-linguistic strategies, foreignization and code switching can be used in both oral and written communication. Literal translation is the interlingual strategy that is most frequently employed by Arab learners of English. In the absence of the other strategies, the role of translation becomes prominent. Some researchers (e.g. Poulisse et al., 1984; Ringbom, 1987) define this interlingual transfer strategy as the creative cognitive process of making use of the knowledge of the native language to simplify the task of

learning and communicating in the target language. As we stated earlier, this creative process may also lead to the correct comprehension and production of the forms and structures of the target language.

The magnitude of the role of the native language in second or foreign language learning is still a point of debate. Dulay and Burt (1973, 1977) and their followers de-emphasize the role of the native language in favour of a 'creative construction hypothesis' proposed as a reaction against the behaviourist habit interference theory. However, Dulay and Burt's hypothesis does not seem to have gained grounds. Their claims have been criticised by many researchers for various methodological and other problems affecting the reliability of the results. The very small percentage may be due to the fact that the data were collected from children in a second language learning context where exposure to the target language is greater than in a foreign language learning context, (see also Seliger, 1988). As Kellerman (1984) points out, Dulay and Burt tried to analyze errors in a way that would support their creative construction hypothesis where many errors in the target language would be classified as 'developmental' and not as interlingual, simply because they are similar to those made by children who learn the language as a mother tongue. White (1977) notes that a number of errors which were classified as 'developmental' would not be developmental at all. Interlingual errors might have also been classified as ambiguous, and in case of ambiguity, the benefit of doubt was given to developmental factors, (Singleton, 1987; Wode, 1981). According to Appel and Muijs (1987) "cross sectional data were interpreted longitudinally." It has been maintained that the results were based on a limited number of grammatical structures less susceptible to the influence of the native language than the other aspects of the language. Abbott (1980) says that Dulay and Burt did not explain how they grouped the errors into the four categories of (1) interference like, (2) developmental, (3) ambiguous, and (4) unique errors. He also says that they did not admit that half of the developmental errors could also be due to transfer from the native language. Ringbom (1987) believes that the influence of the native language might have been positive (i.e. facilitative) for Spanish-speaking subjects whereas for the Chinese it could be reflected in avoidance depending on the perceived distance between the native and the target language.

The claims advanced by both the proponents and opponents of the role of the first language seem to be based only on the analysis of the learners' production errors as opposed to comprehension errors. The following table presents some of the studies attempting to quantify production errors made due to negative interlingual transfer.

Table (1)
Percentages of the Interlingual Errors Reported in Various Studies

Sheen (1980)	74%
Mougeon and Hebrard (1975)	70%
Richards (1971)	53%
Mohammed (1992)	53%
Tran-Thi-Chau (1975)	51%
Sah (1971)	50%
Arabski (1968)	50%
Schumann (1981)	50%
Lott (1983)	50%
Mohammed (1983)	50%
Pietropauto-Saura and Roffee (1985)	49%
Grauberg (1971)	36%
Lance (1969) approx.	33%
Brudhiprabha (1972) approx.	33%
George (1972) approx.	33%
Flick (1980)	31%
Mukattash (1977)	23%
White (1977)	21%
Dulay and Burt (1973)	3%
James (1980)	33 - 50%
Littlewood (1984)	33 - 50%

Arabski (1968) did not count article error as due to interlingual transfer on the grounds that if there are no articles in the native language, their omission in the target language cannot be attributed to transfer because there is nothing to transfer. However, Arabski's justification is not convincing. A more comprehensive view of the role of the native language in foreign language learning would include both achievement and avoidance. Like errors of addition, substitution and re-ordering, errors of omission may be due to the influence of the native language. The lack of a form in the native language may result in the commission of such errors. Hence, the lack of a surface representation of the indefinite article before a noun in Arabic may lead the students to drop it in English.

Although such percentages may not be sufficient for language acquisition research purposes, (Kellerman, 1984), however, they are important for pedagogical purposes where avoidance and over-production are not considered as serious as production errors. Besides, the percentage of the interlingual errors detected can be affected by a number of factors.

- (1) The learning environment, that is, whether the target language is a second or foreign language. It is generally believed that the influence of the native language is stronger in foreign than in second language learning contexts. In other words, acquisition-poor environments invite more reliance on the interlingual transfer strategy than do acquisition-rich environments.
- (2) The analyst's level of proficiency in the learners' native language. For experienced foreign-language teachers who share their learners' native language it is easy to identify the native language features in the interlanguage, (Brown, 1980).
- (3) The level of linguistic analysis; phonology, morphology, syntax, semantics, pragmatics, and so forth. It is generally agreed that the influence of the native language is dominant at the phonological level.
- (4) The theoretical stance on which the analysis is based. The role of the native language has been trivialized by researchers (e.g. Richards, 1985) adopting 'a non-contrastive approach' or 'L1 = L2 hypothesis' (Dulay and Burt, 1973). In the light of these ap-

proaches, many interlingual errors have been classified as intralingual or ambiguous. Richards (1985), for example, collects about 125 errors from different researchers and different native languages and presents them different researchers and different native languages and presents them as intralingual or developmental as opposed to interlingual errors. However, similar errors have been observed in the written English of Arabic-speaking students (Mohammed, 1983), and about 42% of the 125 errors could possibly be due to transfer from Arabic. Dulay and Burt (1973) go further and cast an element of doubt on interlingual errors by describing them as 'interference-like' errors. On the other hand, research seems to have gone a long way towards the accommodation of interlingual transfer in a cognitive creative approach to language learning, (see e.g. Ho, 1986). This will hopefully reconcile the transfer position with the anti-transfer position. Referring to the intralingual errors as 'developmental' gives us the impression that the interlingual ones are not transitional. Since both interlingual and intralingual errors usually decrease with increased proficiency in the target language, then both types are transitional and, therefore, development. It would make sense to use the term 'developmental' to describe both types as opposed to 'fossilized' errors.

- (5) The procedure used to elicit the data together with the 'observer paradox', a term which Taylor (1986) quotes from Labov (1972, in Taylor, 1986) to refer to the intervention of the analyst in the collection of data. The most frequently used techniques for the elicitation of interlanguage are free composition and translation. Free composition is believed to have the disadvantage of giving room for avoidance, (see e.g. Lococo, 1976) and translation is thought to increase interlingual transfer, (see e.g. Meisel, 1983; Poulisse et al., 1984; Ringbom, 1987; Van Els et al., 1984). Moreover, Johansson (1975) points out that the learner may avoid an error by an inexact translation or a translation that is correct from the point of view of the target language but is an incorrect translation of the original text. In other words, a form may be linguistically correct but contextually incorrect. Nickel (1989) argues that translation does not necessarily result in more inter-

lingual transfer errors than free composition because students realize that "translations do contain transfer temptations". However, translation may be better than free composition when focusing on specific linguistic forms (Mohammed, 1992, 2000). In order to eliminate the intervention of the analyst, Taylor (1986) and Mukattash (1986) suggest using data produced for someone else other than the analyst. This, however, is a solution which Johansson (1975) considers as a serious limitation in error analysis. He believes that the data will not reveal much relevant information if the test is constructed for other purposes than explaining learners' errors. Based on the present writer's experience in teaching English for specific purposes, the essays written for teachers of other subjects (e.g. Chemistry, Biology, Economics etc...) may not serve the purpose of error analysis for two reasons:

- (a) the learners may produce memorized sentences, paragraphs, or even whole essays. This is a way for limited proficiency learners to get around the language barrier. As a result, the errors made by such learners may be far less than those made by more proficient learners who try to spontaneously express the ideas in their own language;
- (b) the learners may produce telegraphic sentences (i.e. content words without structure words) which, they think, will be quite enough to show the teacher that they know what they are expected to know. The learners' tendency to produce telegraphic sentences often seems to be overlooked by subject-matter teachers in English-medium universities in their quest for facts. Furthermore, there are teachers who prefer telegraphic answers to full sentences containing language errors. Thus, communication of facts is achieved at the expense of linguistic accuracy and thoroughness.

In a foreign language learning situation where the most basic requirements of teaching and learning are hardly met, the learners may not be able to attain even in intermediate level of proficiency after six years of classroom language instruction. As a result, reliance of foreign language learners on their native language is a major achievement strategy. In such a situation, a very small percentage of interlingual

errors such as that reported by Dulay and Burt would be unrealistic. It would be normal to find a percentage of 50 or more in the English of Arab intermediate and secondary school students (5 to 6 hours of English per week) since 50% were found to have been made by university students after attending a remedial language course (6 hours per week) together with exposure to English through other subjects (10 to 15 hours per week) for four months, (see Mohammed, 1992). The high percentage of interlingual transfer errors reported in many studies should not give us the impression that the role of the first language is invariably negative. Second or foreign language learners may produce numerous forms and structures correctly when they rely on their first language. The problem is that it would be difficult to say whether a correctly used form is due to direct acquisition or due to positive interlingual or intralingual transfer.

Error Classification: A Two-category Scheme

An important characteristic of the learners' interlanguage is that it is a continuum which starts from zero knowledge of the target language and proceeds towards the adults' full fledged language through transitional states. It passes from one stage to another through the process of hypotheses formulation and testing. Thus linguistic development is achieved through confirmation of the correct hypotheses and modification of the incorrect ones. The errors resulting from incorrect hypotheses are, therefore, a natural part of the developmental process. They tend to decrease irrespective of their underlying strategies as the learners' competence in the language increases, (Ellis, 1985). Thus, most of the learners' errors, whether interlingual or intralingual, are developmental in nature in the sense that they are eradicated over time with increased proficiency in the language. Accordingly, instead of classifying errors as interlingual versus developmental, or intralingual versus developmental (e.g. Dulay and Burt, 1973), the term 'developmental' can be used to refer to errors which do not fossilize irrespective of their underlying strategies. Richards (1971, 1985), for example, considers as developmental those errors which reflect the strategies whereby learners acquire a language; those illustrating how learners attempt to build up hypotheses about the target language. In this sense, however, it is difficult to see any difference between such errors and those made due

to linguistic transfer. Based on the linguistic strategies of learning and communication, the learners' errors are either interlingual, intralingual or both. Since learners employ these and other strategies to develop their interlanguage, then the term 'developmental' can be used as a cover term including errors made and corrected in the process of developing the native, second or foreign language.

The most widely documented reasons for the systematic errors made by second or foreign language learners are: reliance on interlingual transfer, and reliance on intralingual transfer, (see e.g. Littlewood, 1984; Wode, 1981). In addition, some researchers (e.g. Brown, 1980) propose learning and communication strategies as reasons. However, these do not seem to have added anything new since inter-and-intralingual transfer is the strategy hereby learners try to fill in their linguistic voids when learning and using the target language. The number of errors under such redundant categories can be included in the two major categories of transfer so that their actual weight can be reflected. Lococo (1976), for example, classifies errors under six categories as follows:

	L1	L2	Error	No. of Errors
Interlingual	Rule	No Rule	L1 rule applied	69
Intralingual		Rule	Wrong L2 rule applied	192
Dual	No Rule	Rule	No rule applied	121
Lack of Transfer	Rule	Rule	No rule applied	11
Communicative: Learners attempt a form not yet taught				101
Overlap:				33
TOTAL				527

According to her criteria for classification; the six categories can be reduced to only three because 'dual' and 'lack of transfer' appear to be the same as 'interlingual' and 'intralingual' respectively. A moment's reflection on how learners attempt to compensate for the unknown forms would have led Lococo to subsume 'communicative' errors under interlingual, intralingual, or overlap errors. If the total number of the error she found in the free compositions and translations (i.e. 527) were grouped under three categories, the interlingual errors would amount to

36% instead of 13% (i.e. 190 instead of 69), and the intralingual errors would increase by 3% only (i.e. from 192, 36% to 203, 39%). The same observation may apply to White's (1977) categories labelled 'interference', 'developmental', 'ambiguous', and 'other errors'. She refers to 'other errors' as 'interlanguage errors', as if the so-called interference and developmental errors are not interlanguage errors. She classifies 60% of the errors as developmental simply because they resemble those produced by children learning the language as a mother tongue.

We agree with Broughton et al. (1980) that a category which can reasonably be added to the two major categories (of interlingual and intralingual transfer) is the one which covers the errors which learners make due to faulty presentation by the teacher or the materials designer. This category is variously referred to as 'transfer of training', 'poor, inadequate, or misleading teaching', 'induced errors', 'sequencing of teaching items', 'linear progression', 'the exigencies of the teaching learning situation', 'context of learning'.

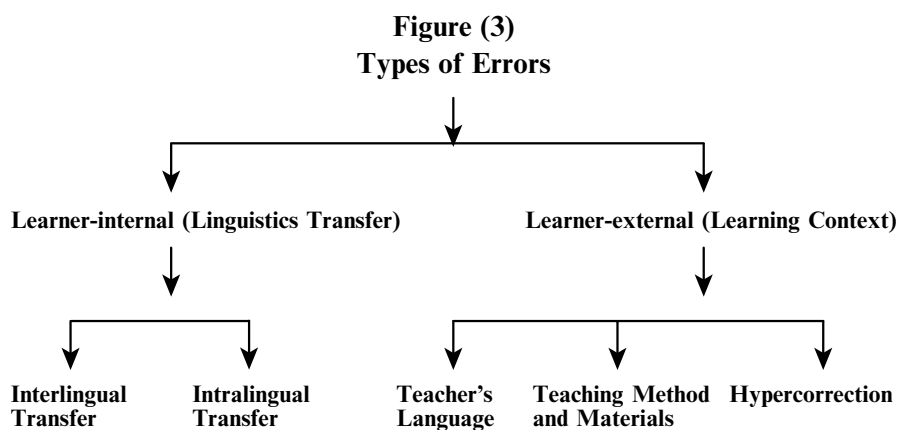
Broughton et al. (1980) suggest three categories of errors according to their causes: (1) learner-external factors such as bad teaching and poor materials, (2) the learning process (3) mother tongue interference.

Although they believe that learning is a process of hypotheses testing and that the learner makes a guess on the basis of his knowledge of his mother tongue and of what he knows of the foreign language, they exclude interlingual transfer errors from those resulting from the learning process; they use the term 'interference' which expresses the behaviourist attitude towards the role of the native language.

However, the native language is available to the foreign language learners as a source of previous knowledge on the basis of which they form and test their hypotheses about the target language and, therefore, it is one of the learner-internal factors leading to errors and non-errors in the learning process. Thus, the three categories presented by Broughton et al. can be reduced to two: (1) learner-external factors including teaching methods and materials, (2) learner-internal factors including linguistic transfer from the native language and the limited knowledge of the target language. Since learners make production errors in their attempts to fill in the linguistic gaps in their target language, then there is essentially one cause of errors: the lack of knowledge of the relevant form in The target language. The learner-external and learner-internal

factors presented as causes of errors are in fact the steps taken by the teacher, the textbook writer and the learners themselves to make up for the deficiency in the learners' knowledge of the target language.

Perhaps a suitable error-classification scheme seems to be the one that is suggested by Faerch et al. (1984). According to them, there are only two categories: (1) learner-internal factors (i.e. linguistics transfer), and (2) learner-external factors (i.e. learning context). The various classification procedures suggested so far by different error analysts can be reduced and represented as in Figure (3) below:



Many researchers (e.g. Faerch et al., 1984, Lott, 1983; Mukattash, 1981) agree that it is difficult to decide on the source of the error in certain cases. Therefore, a category covering ambiguous errors is necessary at all stages of the analysis, including:

- (1) classification of errors under different linguistic levels (e.g. phonology, syntax, lexis, morphology, orthography, discourse, etc...),
- (2) classification of errors under various areas within a single linguistic level (e.g. tenses, agreement, pronouns, articles, etc...)
- (3) classification of errors according to their underlying strategies, (i.e. interlingual vs intralingual transfer).

Classification of errors, within the linguistic transfer category, into inter- and intralingual errors is a problem that is often encountered by many error analysts, (see also Gass, 1984; Lennon, 1991). Wode (1981)

agrees with White (1977) that the low incidence of interlingual transfer errors reported in various error analyses may be due to that problem. Corder's (1981) algorithm seems to be a suitable procedure for the identification of errors made due to interlingual transfer. He suggests the translation of the learner's erroneous construction into the native language. When the native language construction is translated literally into the target language, the error can be classified as interlingual if the literally translated native language forms are identical to the learner's erroneous forms. The following sentence produced by an Arab student may be used to clarify Corder's steps:

- (1) Learner's target language construction:

From psychological side, which I see it most important from the sociological, she feel that she is important person.

- (2) Arabic construction:

من الناحية النفسية التي أراها أهم من الناحية الاجتماعية هي تشعر أنها إنسانة مهمة.

- (3) Literal translation into English:

From the side the psychological, which/whom I see it/her more/most important from/than the side the sociological/social, she feels that she person important

The interlingual errors would include:

- (1) The redundant pronoun *it* in the relative clause modifying an object noun.
- (2) The use of the superlative *most* instead of the comparative *more*, since only one form (أهم) is used in Arabic.
- (3) The use of *from* in the comparative construction instead of *than*, both are (من) in Arabic.
- (4) The use of *sociological* instead of *social* since one Arabic word is used for both (اجتماعية).
- (5) The omission of the indefinite article *an* before the noun *person*, Arabic does not have an equivalent form that goes before the noun.

The errors which could be intralingual are:

- (1) The omission of the definite article "the" before psychological side since there is (ال) Arabic.
- (2) The omission of the third person singular "s" from the verb feels since Arabic and English are orthographically and morphologically different.

Some researchers believe that Corder's algorithm is difficult to apply in practice. Abbott (1980), for example, maintains that it "does not specify a workable procedure". However, as far as the distinction between interlingual and intralingual errors is concerned, an analyst who knows the native language of the learners will find such an algorithm of great help to arrive at sound explanations for most of the ambiguous errors. In Corder's (1981) words, "we can make a correct plausible interpretation of the great majority of the erroneous sentences produced by learners, particularly if we are familiar with them and with their mother tongue". Van Els et al. (1984) see the time factor as a problem since the learner may forget what he intended to say as the time gap between the error and consultation increases. However, an analyst sharing the learners' native language and culture may not need to refer to the learner at all. Immediate consultation with the learner is, of course, one solution. Another solution which the present writer found useful is to ask the learners to write a composition in their native language first and then express the same ideas in the target language. The compositions written in the native language should be collected with the target ones for reference in cases of difficulty of interpretation. This kind of 'guided composition' is in line with the learners tendency to think in the native language and write in the target language. It also solves the problem of what to say and leaves the learners with the problem of how to express their own ideas.

Conclusion:

Evidence of the existence of interlingual transfer is indisputable particularly in foreign language learning contexts where the learners' exposure to the target language is confined to the limited input provided through formal classroom instruction. In such situations, interlingual transfer is used as a learning strategy to form hypotheses and as a

communication strategy to test those hypotheses. Learners transfer from their native language to fill in linguistic gaps in their communication and confirm or modify their hypotheses based on the feed back they receive. Since reliance on the previously learned parts of the target language is a kind of 'transfer', the term 'transfer', then can be used to refer to reliance on both the native as well as the target language. thus, interlingual transfer can be seen a creative communication and learning strategy rather than unwelcome 'interference'. The term 'interference' is to be spared for cases where the first language intrudes into the target language uninvited as in the case of pronunciation when the learner knows the correct sound because it exists in the first language. Learners' reliance on the interlingual transfer strategy may lead to the addition, omission, mis-ordering, or substitution of linguistic elements. Needless to say, it could also lead to the production of correct language forms and structures. Since the positive effects of interlingual transfer cannot be easily detected, it is only through errors that we can discern the role of the first language. In this connection, the present study takes a closer look at omission errors to clear the confusion inherent in the use of the term 'simplification'. We distinguish so-called linguistic simplification (i.e. omission of linguistic elements) from task simplification (i.e. simplification of the language learning task by using linguistic transfer). Task simplification leads, among other things, to linguistic simplification.

Interlingual transfer seems to be the most readily available strategy in foreign language situations where learners may not use the intralingual strategies due to their low proficiency in the language. The lower the students' proficiency level in the target language, the more interlingual errors they tend to make. Hence the small percentages reported in some error quantification studies do not appear to be realistic. Such low percentages could also be due to methodological problems in those studies. The present study also discusses some of the drawbacks of error classification attempts. It reveals the complications and redundancies inherent in many of these taxonomies and proposes a simple two-category classification. We believe that all external-internal errors are either interlingual or intralingual. As we stated earlier, the existence of interlingual transfer errors presupposes production of correct forms and structures due to the use of this creative cognitive strategy. Therefore, the role of the first language is not always negative.

النقل من اللغة الأولى في تعلم اللغة الإنجليزية: دراسة نقدية لأدبيات النصف الثاني من القرن المنصرم

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ملخص

تتناول هذه الدراسة بالتحليل والنقد بعض الموضوعات الرئيسة المتعلقة بظاهرة النقل، فتبدأ بخلفية تاريخية موجزة ثم تبرر الإشارة إلى دور اللغة الأولى بأنه نقل وليس تداخلا، طالما يلجأ متعلمو اللغة الأجنبية إلى لغتهم الأولى كاستراتيجية إدراكية خلاقة لحل مشاكل التعلم والاتصال. تحاول هذه الدراسة كذلك إزاحة الغموض والتناقض اللذين يكتنفان مفهوم التبسيط، فيفرق الباحث بين تبسيط عملية التعلم أي تسهيلها وتبسيط اللغة أي حذف بعض عناصرها التركيبية. ومن منطلق أن النقل من اللغة الأولى هو الخيار متاح أكثر من غيره لذوي المستويات المتدنية من متعلمي اللغة الهدف يرى الباحث أن النسب المئوية الصغيرة من أخطاء النقل والتي نجدها في بعض الدراسات لا تعكس الواقع في ظروف تعلم اللغة الهدف كلغة أجنبية إذ يكثر فيها هذا النوع من الأخطاء. هذا بالإضافة إلى العيوب المنهجية التي تقلل من موثوقية تلك الدراسات. تناقش هذه الدراسة محاولات الباحثين لتصنيف الأخطاء فتشير إلى ما بها من تعقيدات وإطناب وتقترح تصنيفا مبسطا تدرج بموجبه كل الأخطاء تحت نوعين فقط. يرى الباحث أن ارتكاب أخطاء النقل من اللغة الأولى يدل على أن الاستراتيجية قد تؤدي كذلك إلى إنتاج أشكال وتراكيب لغوية صحيحة مما يدعونا إلى الاعتقاد بأن دور اللغة الأولى ليس سلبيا دائما.

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