

5.5 Revised perspectives on the role of the native language

As discussed earlier, the question of the native language was historically posed dichotomously. Is language transfer of major importance in forming interlanguages or is it not? This is evident in such statements as:

language background did not have a significant effect on the way ESL learners order English morphemes.

(Larsen-Freeman, 1978, p. 372)

Interference, or native to target language transfer, plays such a small role in language learning performance.

(Whitman and Jackson, 1972, p. 40)

Direct interference from the mother tongue is not a useful assumption.

(George, 1972, p. 45)

But does the role of the NL have to be mechanical and uninteresting? Can there not be "selectivity" by learners in what is transferred and what is not transferred? If the latter question is answered in the affirmative, then transfer can be incorporated into a position consistent with a mentalist view of language. These topics are treated in this chapter. (Chapter 6 treats the role of the native language within the context of a specific formal model of language, namely Universal Grammar.)

Since the late 1970s, research on the role of the native language has taken on a different view, advocating a nonbehaviorist position and questioning the assumption that language transfer has to be part of behaviorism. That is, the assumption is that one can view transfer as a creative process.

That transfer was more appropriately viewed as something more than an involuntary hiccup implied by behaviorism could be seen in the work by Schachter (1974), in which she argued that there was avoidance of use based on facts of the native language. A second study, by Sjöholm (1976), further led to a rethinking and reconceptualization of the role of the NL. Sjöholm found that Finnish-speaking Finns learning English made transfer-induced errors that could be traced to Swedish (their L2) rather than to Finnish. On the other hand, Swedish-Finnish bilinguals (with Swedish as their dominant language) made transfer-induced errors that were traceable to Swedish (their L1), not Finnish (their L2). Thus, it appeared that both groups relied more on Swedish than on Finnish. This is accountable only if we take into account the learner's judgment, or perception as to what is more likely to work in the L2.

A number of studies carried out in Finland involving Finnish speakers learning English and Swedish speakers living in Finland also learning English point to the advantage that the latter group has over the former group. This is attributed to the similarities that exist between Swedish and English and the lack of similarity between Finnish and English. As Ringbom (1987, p. 134) stated:

What emerges is a consistent difference in test results between groups which are very much the same culturally and educationally, but which have an entirely different linguistic starting point when they set out to learn English. One conclusion is that the importance of the L1 in L2-learning is absolutely fundamental.

As an explanation, he offered: "Similarities, both cross-linguistic and inter-linguistic, function as pegs on which the learner can hang new information by making use of already existing knowledge, thereby facilitating learning."

During the mid- to late 1970s, the view of transfer that began to predominate can be characterized as qualitative as opposed to quantitative. That is, those interested in second language acquisition were less interested in a wholesale acceptance or rejection of the role of the native language. Rather, the emphasis was on the determination of *how* and *when* learners use their native language and on explanations for the phenomenon.

Most important in this discussion is the broadening and reconceptualization of language transfer and the concomitant examination of the terminology generally employed. Corder (1983, p. 86, 1992, p. 19) recognized the difficulty in continuing to use theory-laden terminology:

I have chosen the title of this paper deliberately, A role for the mother tongue in language learning, because I do not wish to prejudice the nature of my discussion of that role by using the term "transfer" or even less by using the term "interference." I would like to hope that both these terms should be banned from use in our discussions unless carefully redefined. The fact is that they are both technical terms in a particular theory of learning, and unless one is adopting that particular theory in one's discussions, it is best to find other terms for any alternative theoretical position one may adopt. The danger of using such technical terms closely associated with particular theories is that they may perhaps quite unconsciously constrain one's freedom of thinking about the particular topic.

It was for precisely these reasons that Kellerman and Sharwood Smith

(1986) suggested the term *cross-linguistic influence*, which is sufficiently broad to include transfer, in the traditional sense, but also avoidance, language loss (whether of the L1 or of another L2), and rate of learning.

5.5.1 Avoidance

In chapter 4 we showed that the native language may influence which structures a learner produces and which structures are not produced (i.e., avoidance). Further evidence comes from work by Kleinmann (1977) in an investigation of Arabic speakers versus a group comprised of Spanish/Portuguese speakers in the use of passives, present progressives, infinitive complements, and direct object pronouns. These four structures were predicted to be of differential difficulty for the learners given the facts of their native languages. In addition to gathering production data, this study differed from Schachter's (1974) in that Kleinmann ascertained that the subjects all "knew" the structures in question, at least from a comprehension perspective. Thus, the differential behavior between his groups could not be attributed to a lack of knowledge, but rather to some choice to use or not to use particular structures to express given concepts. The basis of the choice was related to the NL.

The source of avoidance is in dispute. Whereas there is significant evidence that differences between the L1 and the L2 are the major source of avoidance, as was suggested in the preceding discussion, there is also evidence that the opposite occurs. That is, when great similarities exist between the L1 and the L2, the learner may doubt that these similarities are real. This is discussed in section 5.5.5, with particular reference to the work of Kellerman.

Still another view holds that avoidance has less to do with NL-TL differences, but rather is based on the complexity of the L2 structures in question. For example, in considering the acquisition of phrasal verbs (e.g., *come in, take away, lay aside, shut off, let down, mix up*, etc.), Dagut and Laufer (1985) found that Hebrew-speaking learners of English (Hebrew does not have phrasal verbs) in general preferred the one-word equivalent of the phrasal verbs (*enter, remove, save, stop, disappoint, confuse*). Within the category of phrasal verbs, they preferred those that are semantically more transparent (e.g., *come in, take away*) to those that are less transparent (*let down, mix up*). Thus, Dagut and Laufer concluded that the complexity of the target language structure had a greater impact on the issue of avoidance than did differences between the NL and the TL.

In a study of Dutch learners of English (Dutch, like English, has phrasal verbs), similar results were obtained by Hulstijn and Marchena (1989), who found differences between transparent and nontransparent phrasal verbs but also found that learners did not accept phrasal verbs when there was close similarity between Dutch and English, most likely

given their "disbelief" that another language could have a structure so similar to the "unusual" Dutch one.

Finally, in a study by Laufer and Eliasson (1993), there was an attempt to tease apart these variables. In their study of Swedish learners of English, attention was focused on the use or avoidance of English phrasal verbs (*pick up, put down*). Two tests (a multiple-choice test and a translation test) were given to advanced Swedish-speaking learners of English (Swedish is a language with phrasal verbs). The researchers considered whether the responses to (or translations of) Swedish phrasal verbs consisted of single-verb synonyms or English phrasal verbs. The results were compared with results from Hebrew-speaking learners of English (remember that Hebrew does not have phrasal verbs). Different types of phrasal verbs were considered, including figurative ones (e.g., *back up = support, turn up = arrive*) and literal ones (e.g., *come down = descend, put in = insert*). The researchers found that the best predictor of avoidance is the L1-L2 difference. Although L1-L2 similarity and inherent complexity (figurative versus literal phrasal verbs) have a role, the only factor that consistently predicts avoidance is the L1-L2 difference variable.

5.5.2 Differential learning rates

Ard and Homburg (1983, 1992) advocated a return to the original concepts embodied in the terminology of the psychology of learning. In particular, they viewed transfer as a facilitation of learning. They compared the responses of two groups of learners (Spanish and Arabic) to the vocabulary section of a standard test of English. Of major interest were the response patterns to different items. One would expect differences in response patterns to those items in which a Spanish word and an English word were cognates, as in the following example,

- (5-11) It was the first time I ever saw her *mute*.
- (a) shocked
 - (b) crying
 - (c) smiling
 - (d) silent

but not to items in which all words were equally distant from the native languages of the learners, as in example 5-12:

- (5-12) The door swung slowly on its old _____.
- (a) fringes
 - (b) braids
 - (c) clips
 - (d) hinges

The Spanish learners did consistently better on this latter type of item than did the Arabic speakers. Ard and Homburg discussed this in light of learning time and hence accelerated learning rates. The Spanish speakers, because so many cognates exist between their NL and the TL, can focus more of their "learning time" on other aspects of language (in this case, other vocabulary items). It is the concentration on other vocabulary which results in a facilitation of learning. Thus, knowing a language that is related in some way to the TL can help in many ways, only some of which can be accounted for by the mechanical carryover of items and structures.

There is another perspective to be taken on the concept of differential learning rates. One such view was discussed in chapter 4 with regard to Schumann's (1979) work on negation, when it was pointed out that an NL structure that corresponded to a TL developmental sequence was a factor in preventing learners from moving on to the next sequential stage. In other words, the internal system of the learner's L2 grammar exhibited delayed reorganization.

A similar view is adopted by Zobl (1982), who discussed the concepts of (a) delayed rule reorganization, or in his words "the pace with which a sequence is traversed" (p. 169), and (b) the number of structures in a given developmental sequence. With regard to pace of development, Zobl pointed to data from Henkes (1974) in which three children (French, Arabic, Spanish) were observed in their acquisition of English. A particular concern was the acquisition of the copula (the verb *to be*), a form present in French

(5-13) Sa maison est vieille.
his house is old

and in Spanish

(5-14) Su casa es vieja.
his house is old

but absent in Arabic

(5-15) baytuhu qadimun.
house his old
"His house is old."

Consistent with the work of the time, notably a diminution of the importance of the NL, Henkes attempted to show that, for the Arabic child, the lack of use of the copula is not native language-related, as both of the other two children also failed to use the copula consistently.

However, as Zobl pointed out, what is particularly interesting is the fact that, whereas the Arabic child continued to use the copula variably, even at a fairly advanced state of syntactic acquisition, the other two children regularly employed the copula at this stage. Thus, although the same pattern of copula use was observed in all three children, it took the Arabic child longer to get the facts of English straightened out due to the absence of the category in the NL.

5.5.3 Different paths

The previous section dealt with rate of acquisition across a similar path. In many instances, however, paths of acquisition are not identical for speakers of all languages. Zobl (1982) compared the acquisition of the English definite article by a Chinese-speaking child and a Spanish-speaking child. With the Chinese-speaking child, early evidence of a form that appears to serve the function of a definitizer is the use of *this*. What is further noteworthy is that when there is native speaker modeling of *this*, it tends to be retained in the child's speech, whereas when there is a model of the definite article *the*, it is deleted or changed to *this* (see Table 5.2). Thus, the data in Table 5.2 show that the definitizer *this* developmentally precedes the article *the*.²

On the other hand, from the beginning of data collection with the Spanish-speaking child, both *this* and *the* were frequent, as can be seen in Table 5.3.

Table 5.2 Data from Chinese-speaking learner of English

NS	NNS
1. Is this airplane your brother's?	<i>This airplane . . . Brent</i>
2. Show me the airplane.	<i>Show me airplane?</i>
3. Put it on the chair.	<i>Chair? This one?</i>
4. Ask Jim "Where's the turtle?"	<i>Jim, where's turtle?</i>
5. You want to push the pen.	<i>I want to push pen. Push, pencil</i>
6. Is the table dirty?	<i>Yes, this is dirty. Table is dirty.</i>
7. Whose bike is this?	<i>This . . . Edmond's. Mark, I want this bike.</i>
8. What are you going to do with the paper?	<i>I want this paper school.</i>
9. Ask Jim if he can play with the ball.	<i>Jim, can you play the ball?</i>
10. Ask Jim if you can have the pencil.	<i>Jim, you want this pencil?</i>
11. Is he washing the car? What is he doing?	<i>Washing car.</i>

Source: From "A direction for contrastive analysis: the comparative study of developmental sequences" by H. Zobl, 1982, *TESOL Quarterly*, 16, 169-183. Reprinted by permission.

Table 5.3 Data from Spanish-speaking learner of English

1. Hey hey this. Here the toy.
2. The car.
3. Lookit this. Lookit this cowboy.
Here. This cowboy.
Indians D'Indians. That d'Indians.
4. This one . . . that truck.
I gonna open that door.
Get the car.
Shut the door.
5. The car.
Same thing this car.

Source: From "A direction for contrastive analysis: the comparative study of developmental sequences" by H. Zobl, 1982, *TESOL Quarterly*, 16, 169-183. Reprinted by permission.

Furthermore, when modeling of *the* occurred, there was not the same change to *this*, as was seen with the Chinese-speaking child. Additional examples from the native Spanish-speaking child are given in Table 5.4.

Table 5.4 Data from Spanish-speaking learner of English

NS	NNS
1. Look.	<i>Lookit the little house.</i>
2. You gonna draw the man?	<i>The man.</i>
3. Guero, she wanna know what are you making.	<i>I make. I make it the blue.</i>
4. Are you going to get me a cup?	<i>Where's the cup? Get the cup.</i>

Source: From "A direction for contrastive analysis: the comparative study of developmental sequences" by H. Zobl, 1982 *TESOL Quarterly*, 16, 169-183. Reprinted by permission.

The differences between these two children suggest that facts of their native languages lead them down two different paths—the Chinese child through a stage in which *this* occurs before the definite article, and the Spanish child to a starting point in which the definite article and the demonstrative *this* co-occur.

A similar perspective comes from Wode (1977), who argued that there is a predictable order of structures and that certain developmental structures must be used by learners before the NL can be expected to have an influence on second language production. He discussed the acquisition of English negation by German L1 children.

The first stage of negation, as we have already seen, is preverbal *no*, in which there is no evidence of NL influence.

(5-16) No cold.

(5-17) No play baseball.

Only at a later stage do the following sentences appear:

(5-18) That's no right.

(5-19) It's no Francisco.

At this stage of development, the child is able to see a similarity between German and English negation, because in German the negative morpheme appears after the verb *to be*.

(5-20) Es is nicht wahr.

it is not true

It is at this stage that these German-speaking children produce the sentences in 5-21 and 5-22, sentences that are clearly influenced by German, which forms negatives by placing the negative marker after the verb in main clauses:

(5-21) I'm steal not the base.

(5-22) Marilyn like no sleepy.

Thus, learners must see some resemblance between the language they are learning and their native language before they are able to recognize that the NL might be "useful" to them. This can also be stated as the Transfer to Somewhere Principle which we deal with in section 5.5.5.

5.5.4 Overproduction

Not only do we find there are different paths of development, but we also find quantitatively different uses of forms depending on the native language. For example, Schachter and Rutherford (1979) examined compositions written in English by Chinese and Japanese speakers. Both of these languages are of the type that relies heavily on the concept of topic. Sentences are organized around a topic-comment structure, as in 5-23:

(5-23) As for meat [topic], we don't eat it anymore [comment].

What Schachter and Rutherford found was an overproduction of sentences like the following:

(5-24) It is very unfortunate that . . .

and sentences with *there is* or *there are*:

(5-25) There is a small restaurant near my house in my country.
Many things of the restaurant are like those . . .

They claimed that these structures were being used to carry the weight of a particular discourse function, even though the TL makes use of other forms for that same function. They hypothesized that the NL is at play here: there is an influence of NL function (the need to express topic-comment type structures) to L2 form. Han (2000) further investigated this structure supporting earlier research, claiming that this structure, which she refers to as a *pseudo-passive*, becomes more like a target-like passive as learners become more syntactically sophisticated. She examined spontaneous writing of two Chinese learners of English (advanced proficiency) finding both a true passive and a structure that looks more like a topic-comment structure in the same writing, as is shown below.

(5-26) From Han (2000, p. 88)

They told me that the attractive offer will be sent to me a bit later since **what I sent to them have not received.**

The first part of this sentence includes a target-like passive, whereas the second part, *what I sent to them* (topic) and *have not received* (comment) is more L1-like. What is noteworthy, however, is that the first part of the sentence may be somewhat formulaic and may have been used as a formulaic chunk from a letter the writer had received. Clearly, this example shows that the L1 exerts a subtle influence even at later stages of proficiency.

5.5.5 Predictability/selectivity

In the late 1970s interest in the role of the NL shed its earlier dichotomous perspective and took on a *when* and *under what conditions* perspective. That is, the question was: Under what conditions does transfer take place?

Andersen (1983) developed the Transfer to Somewhere Principle, which stated that

A grammatical form or structure will occur consistently and to a significant extent in interlanguage as a result of transfer *if and only if* there already exists within the L2 input the potential for (mis-)generalization from the input to produce the same form or structure.

(p. 178)

This proposal has limitations (for example, this is limited to syntax, and there is little possibility of disproving it because the potential must be in the mind of the learner and it is difficult to show that there was

no potential), but it does contribute to the discussion in which the learner and his or her perceptions, rather than merely language, are at the center.

The notion underlying contrastive analysis—that similarities implied learning ease and that differences implied learning difficulty—proved to be invalid. Kleinmann (1977) suggested the opposite: when something in the L2 is very different from the L1, there is a “novelty effect.” In his study, this was the case with the progressive, which is absent in Arabic, yet Arabic speakers learned this early and well. It may be that the frequency of the progressive in English, along with its perceptual saliency, leads learners to notice that structure more easily than other structures.

Supporting evidence comes from Bardovi-Harlig (1987). She examined differences in the order of acquisition between sentences like 5-27 and 5-28.

(5-27) Who did John give the book to?

(5-28) To whom did John give the book?

Theoretical considerations based on markedness (forms more common among the languages of the world are unmarked, whereas those less common are marked; see chapter 6 for a detailed discussion of the concept) predict the acquisition of 5-28 before 5-27. However, the data show the reverse pattern: 5-27 is acquired before 5-28. Bardovi-Harlig identified salience as the main contributing factor to the unexpected outcome. In her terms, salience is defined as the availability of input. It is because there is a greater quantity of input for sentences such as 5-27 as opposed to 5-28 to which learners are exposed that the acquisition patterns are what they are.

The role of salience in SLA received greater support from Doughty (1991) in a study of relativization. She compared three groups of subjects engaged in a computer-assisted language-learning project. The groups differed in the format of presentation of the language material. Besides a control group, there were two experimental groups: a meaning-oriented treatment group and a rule-oriented treatment group. As the names suggest, in the latter group there were explicit metalinguistic statements about relative clauses, whereas in the meaning-oriented treatment group there were no such explicit statements. If it is correct that salience can come about through focusing a learner's attention on particular grammatical features, then one would expect that the rule-oriented treatment group would do better on a posttest than the other two groups. This was not the case: the two experimental groups improved more or less equally. However, a closer examination of the experimental materials brings us back to the question of salience and what it is that makes something salient. There are many ways in which increased salience can be

brought about. Among these is frequency of input (possibly at both ends—that is, highly frequent and highly infrequent items/structures). Form-focused instruction is yet another (see chapter 11 on instructed SLA). Although, there is a caution—studies cannot in absolute terms determine how externally manipulating salience impacts what happens in a learner's head.

Returning to Doughty's study, we see that both saliency and redundancy (i.e., frequency) were built into the tasks of the meaning-oriented treatment group. In the experimental material, this group saw reading passages with certain features, namely head nouns and relative clause markers, highlighted on the screen. Additionally, there was typographical capitalization of the juxtaposed head noun and relative clause marker, thereby visually making this part of the reading passage salient to the learner. Thus, if saliency has an important role in SLA, Doughty's results (given her particular methodology) are what would be predicted, as both forms of pedagogical intervention focused on drawing learners' attention to relative clause formation. (We return to the concept of attention in chapter 8.)

Thus, as Kleinmann (1977) suggested, some L1-L2 differences may prove to be relatively "easy" to learn due to their saliency in the L2 input. In a similar vein, Ringbom (1987) pointed out that similarities may obscure for the learner the fact that there is something to learn. Oller and Ziahosseiny (1970) suggested that learning is "the most difficult where the most subtle distinctions are required either between the target and native language, or within the target language" (p. 186).

Both the Ringbom and the Oller and Ziahosseiny views are consistent with placing the learner (rather than just the learner's language) at the center. How the learner relates the first to the second language is of primary importance in understanding how second language learning is affected by knowledge of the first language.

One of the most interesting proposals in the area of cross-linguistic influences was that made by Kellerman (1979). Basic to his view of the role of the NL is the learner's perception of the distance between the first and second languages. The significance of this work, and other work of the time, is the attempt to place the study of transfer, or cross-linguistic influences, within a cognitive domain, thereby discrediting the implicit assumption of the necessary relationship between transfer and behaviorism. In this view, the learner is seen as "making decisions" about which forms and functions of the NL are appropriate candidates for use in the second language. The constraints on language transfer transcend the linguistic boundaries of similarity/dissimilarity of the native and target languages and encompass as a major variable the learner's decision-making processes relating to the potential transferability of linguistic elements. This is not to say that similarity/dissimilarity dimensions are

irrelevant, for clearly this is not the case. Considerations of similarity/dissimilarity are central to a learner's decision-making processes.

If learners use the NL to make predictions about the TL, what is the basis on which these decisions are made? In Kellerman's framework, linguistic information is categorized along a continuum ranging from language-neutral information to language-specific information. What is meant by this?

Language-neutral items are those items a learner believes are common across all languages (or at least the NL and TL). The accuracy of this belief is irrelevant, because what is of concern is how the learner views the situation. Language-neutral parts of language might include writing conventions, certain aspects of semantics, stylistics, and/or certain grammatical structures. It is reasonable to assume that without prior knowledge, a prototypical speaker of English brings to a language-learning situation the belief that all languages use commas, periods, quotation marks, question marks, and so forth, in the same ways as they are used in English. Similarly, our same speaker of English is likely to believe that all languages are able to express the semantic concept embodied in 5-29.

(5-29) The ball rolled down the hill.

Our learner would probably begin with the assumption that learning to express this concept in a second language only involves learning the specific lexical items and appropriate word order of the language being learned.

From the domain of syntax, there are also structures in a second language to which learners most likely expect to find translation equivalents. Simple structures such as

(5-30) The sky is blue.

are not likely to be considered structures that other languages do not have.

On the other extreme of the continuum are language-specific items. These are elements that a learner views as unique to his or her language. Included in this category are a great deal of the syntactic structure of a language, much of the phonology of language, idioms, inflectional morphology, slang expressions, and collocations.

None of these categories are absolute. For example, idioms and collocations can be of different types, with some being more transparent than others. An idiom like *kick the bucket* would most likely be considered language-specific by most people, given that the meaning of the composite cannot be determined from the meanings of the different words.

Learners would not be expected to do a word-for-word translation of the idiom when using a second language. Thus, an English speaker learning Italian would be unlikely to say something like this:

(5-31) *Quel vecchio ha dato un calcio al secchio.
 that old [man] gave a kick to the bucket
 "That old man kicked the bucket."

On the other hand, a collocation like *make a difference* appears to be more transparent in meaning; hence, our speaker might indeed be expected to say this:

(5-32) Quel libro ha fatto una differenza.
 that book has made a difference
 "That book made a difference."

The knowledge reflected in this continuum, representing how one views one's own NL in terms of language-specific versus language-neutral items, is known as a learner's psychotypology.

However, the language-specific/language-neutral continuum is not intended to be absolute. An additional important variable is perceived language distance (presumably closely related to actual language distance). Languages that are closely related may influence learners in their beliefs about what is language-neutral and what is language-specific. For example, whereas we suggested earlier that phonology may be considered language-specific, this may only be the case for learners learning very dissimilar languages (e.g., Japanese speakers learning Polish). Spanish speakers learning Italian may consider all of their NL phonology as being "the same" as that of the TL phonology. Hence, in this learning situation, we would expect to find much more transfer. This is schematized in Figure 5.5.

The Xs indicate the extent to which the NL is expected to influence the L2. What is crucial is that the degree of language closeness is based on a learner's *perception* of both the distance (not necessarily the actual language distance) between the languages and on the learner's perception

	Close								Distant
Neutral	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X		
	X	X	X	X	X				
	X	X	X						
	X	X							
Specific	X								

Figure 5.5 Schematized version of Kellerman's model of language transfer.

of the organization of his or her NL (i.e., the extent to which parts of one's language are considered language-neutral/language-specific, and the extent to which the determination of language specificity is rigid or is susceptible to change, based on the perception of language distance).

In an empirical study, Kellerman (1979) attempted to show how intuitions about NL semantic space are used to predict translatability of items (in this case, various meanings of a single lexical item), from which one can infer transferability.

To determine NL influences, he gave Dutch learners of English a list of Dutch sentences with various meanings of the word *breken* (to break; see problem 1 in "points for discussion"), and asked them which of the translation equivalents they thought could be used in English.

What Kellerman found was that the concept of *coreness* was important. Coreness is determined by a combination of such factors as frequency, literalness, concreteness, and listing in a dictionary. In considering lexical items with multiple meanings, we can differentiate between core meanings and noncore meanings. Core meanings are those that are most frequently used (*He broke his leg, She broke his heart*), have literal meaning (*He broke his leg*), are concrete rather than abstract (*The cup broke*), and are listed first in a dictionary or are the first to come to mind. It is unlikely that any dictionary would give the meaning in *His voice broke when he was 13* as one of the first meanings of the verb *to break*. Similarly, a teacher, when asked to explain the meaning of *break* in class, is unlikely to use the sentence *The news story broke at six o'clock* as the first (or even any) attempt at definition.

Core meanings are likely to be equivalent to language-neutral items, whereas the noncore meanings are likely to be equivalent to language-specific items. What does this say for a theory of transfer? To answer this question, consider Figure 5.6, which is a revised version of Figure 5.5. Again, the Xs indicate those areas where we are likely to find NL influences.

Thus, in probabilistic terms we can predict where transfer will and will not occur. The greatest likelihood of transfer is in core elements, regardless of perceived distance. The second area of probable transfer is

	Close							Distant	
Core	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X		
	X	X	X	X	X				
	X	X	X						
	X	X							
Noncore	X								

Figure 5.6 Revised model of language transfer.

between languages perceived as close (e.g., Spanish/Italian, Dutch/German), regardless of the status of core versus noncore elements.

Placing the learner in the center of the determination of transfer also implies that these predictions are not absolute across time. It may be that a learner begins learning a language with the expectation of great similarity, only to find that there are more differences than originally anticipated. This would necessitate a revision in what was considered transferable. Conversely, a learner might begin the study of a second language with the expectations of great differences, only to find that there are more similarities than originally anticipated. So the categories of language-neutral (coreness) and language-specific (noncoreness) are variable, along with the perceived NL-TL distance.

In summary, there are three interacting factors in the determination of language transfer: (a) a learner's psychotypology, that is, how a learner organizes his or her NL; (b) perception of NL-TL distance; and (c) actual knowledge of the TL.

Transfer, then, is only predictable in a probabilistic sense. One can never predict in any given situation whether a learner will be influenced by the facts of the NL or not. In terms of falsifying this view, one must also think in probabilistic terms. What would count as counterevidence? Large numbers of learners going against the predictions of this learner-centered model of transfer would call into question its predictive value. A single occurrence would not. A single instance of a learner transferring a nonpredicted element—let's say, the idiom *kick the bucket*—would not serve to counter the validity of this model.

Recent work on language transfer has added new dimensions to our understanding of the concept with notions such as "conceptual transfer" being introduced. This refers to the transfer of semantic concepts. Odlin, who in 1989 provided the first general summation of language transfer studies, in more recent work (2005, 2008) has considered research on linguistic relativity as well as investigations of the transfer of concepts and meaning. In a study by Odlin and Alonso-Vázquez (2006), the evidence indicates that what is seemingly a present or past perfect verb phrase can have distinct meanings in the interlanguage that vary considerably according to the learner's L1. Thus, while French-speaking learners of English tend to overuse the English perfect by referring to past events (e.g., *I have gone to Rome last year*), Spanish speakers often use the perfect in target-like ways (e.g., *I have gone to Rome a few times*). In contrast to these groups, Turkish speakers often use the past perfect to refer to events that they have no direct knowledge of, as in *My friend had gone to Rome last year* while the same learners use the past simple for events that they do have direct knowledge of, as in *I went to Rome last year*. The differences between the use of the perfect by French speakers and Turkish speakers reflect grammatical and conceptual meanings in their

native language. Turkish systematically contrasts past events that a speaker knows of firsthand from past events known only from inference or hearsay. This obligatory contrast in Turkish often finds its way into interlanguage English verb phrases, just as when the French *passée composée* influences Francophones' choices of perfect forms. These studies show that the language-specific semantic and conceptual character of the L1 has important implications for our concept of language transfer that are only beginning to be understood.

5.5.6 Second language processing

As the field of SLA continues to develop, a greater emphasis has been on how learners process language. This area is discussed in greater detail in chapter 8, but we include a brief discussion here because it relates to the role of the L1. For example, Fenck-Mestre (2005) reviews studies that suggest different processing strategies between learners and native speakers where the learners resemble native speakers of the L1 rather than native speakers of the L2. She analyzes the results of learners of French (native speakers of Spanish and of English) processing sentences such as *Jean saw the daughter of the woman who was leaving the shop*. Each group of learners (English and Spanish) was divided into two levels of proficiency depending on their length of residence in France. Spanish and French native speakers each have a tendency to interpret *who was leaving the shop* as referring to the first noun phrase (*the daughter*), whereas English interprets the relative clause as referring to the second noun phrase, *the woman*. Beginning learners rely on their L1 processing strategies as they comprehend these sentences, whereas more advanced learners (the English learners of French) move to an L2 processing strategy and interpret the relative clause as referring to the first noun phrase. This suggests an important role for L1 processing when confronted with the L2.³

In a series of three experiments, VanPatten and Keating (2007) investigate the acquisition of tense processing by L2 learners. They found that learners begin with a universal processing principle and not with their L1 processing strategy, although they do abandon their L1 strategies with greater proficiency. VanPatten and Keating were contrasting reliance on adverbs as a way of interpreting tense (e.g., *last night*) and finite verbs. It may be that with more complex syntax, as in the case of the Fenck-Mestre studies, a greater reliance on the L1 may be found.