Chapter 2 linguistic perspectives of SLA: learner language

2.1 cross-linguistic influence

Highlights

- By definition L2 acquisition takes place in humans who already possess one or more languages. This being so, the mother tongue (and any other known languages) universally influences the processes and outcomes of L2 learning.
- Transfer is a highly complex phenomenon. It can be caused by perceived L1–L2 similarities as well as by large differences, and it goes well beyond strident calques and awkward transliterations from the L1.
- The influence of the mother tongue cannot explain all phenomena in interlanguage development, because universal influences that operate in all natural languages exercise a powerful effect also on L2 development. Knowledge of the L1 interacts with such developmental forces but does not override them.
- Pre-existing knowledge of the mother tongue influences interlanguage development by accelerating or delaying the progress learners make along the natural, developmental pathways (e.g. orders of accuracy, natural sequences and developmental stages), but it neither predetermines nor alters such pathways.
- What gets or does not get transferred is also in part determined by:
  - universal constraints and processes, such as developmental sequences and markedness, that apply across all natural languages and play a role in L1 as well as L2 acquisition
  - psychological perceptions of transferability
  - inherent complexity of the L2 subsystem in question
  - proficiency level.
- Crosslinguistic influences, even in cases of negative transfer, may or may not lead to ungrammatical solutions. Transfer can be manifested in errors of commission, errors of omission (avoidance) and L1-patterned frequencies (underuse and overuse). It can also result in subtle effects beyond form–form or form–function misidentifications and can occur at all levels of language, from information structure, to pragmatics, to thinking-for-speaking.
- L1 transfer does not happen mechanistically or deterministically. Rather, it is about tendencies and probabilities. Consciously or unconsciously, learners seem to operate on the basis of two complementary principles: 'what works in the L1 may work in

the L2 because human languages are fundamentally alike' but 'if it sounds too L1-like, it will probably not work in the L2'.

- Knowledge of two (or more) languages can accelerate the learning of an additional one, and all previously known languages can influence knowledge of and performance in an L3.

1. Introduction

Previous language knowledge as an important source of influence on L2 acquisition

- Key issues:

If knowledge and capabilities for competent language use are already available to L2 learners through the mother tongue or another language they may know, how do they affect the development of the new language?

Familiar notions:

Transfer/cross-linguistic influence

interference

L1-L2 differences and similarities

2. Contrastive Analysis

CA is an approach to the study of SLA which involves predicting and explaining learn problems based on a comparison of L1 and L2 to determine similarities and differences

Pedagogical in nature

Heavily influenced by structuralism and Behaviourism

Representative work: *Linguistic Across Cultures* (1957)

...we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the native language and culture of the student. In our view, the preparation of up-to-date pedagogical and experimental materials must be based on this kind of comparison.

- Major assumptions of CA

Structuralism: surface forms of L1 and L2; Focuses only on native language and target language; bottom-up analysis (smaller units to larger ones); what does this indicate for learning?

Behaviourism: language learning as habit formation; Stimulus-response-reinforcement: learners respond to the stimulus (linguistic input), and reinforcement strengthens the response; they imitate and repeat the language that they hear, and when they are reinforced of that response, learning occurs.

Transfer: L1 habits to L2; positive vs. negative transfer; difference=difficulty; similarity=easiness

Major arguments from Lado (1957)

> To summarize Lado's (1957) position: the easiest L2 structures (and presumably first acquired) are those which exist in L1 with the same form, meaning, and distribution and are thus available for positive transfer; any structure in L2 which has a form not occurring in L1 needs to be learned, but this is not likely to be very difficult if it has the same meaning and distribution as an "equivalent" in L1; among the most difficult are structures where there is partial overlap but not equivalence in form, meaning, and/or distribution, and these are most likely to cause interference. Lado gives examples in Spanish and English for some of the types of

- Levels of difficulties in SLA based on CA

same form and meaning, different distribution

same meaning, different form

same meaning, different form and distribution

different form, partial overlap in meaning

similar form, different meaning

- Problems with CA

a) CA analyses not always validated by evidence from actual learner errors (many predicted errors don't emerge; CA cannot account for many L2 errors; much predicted positive transfer does not materialize)

b) Predictions made by CA did not always materialize in actual learner errors. More importantly, perhaps, many real learner errors could not be attributed to transfer from L1 to L2.

c) As linguistic theory changed, the exclusive focus on surface-level forms and patterns by structural linguists shifted to concern for underlying rules.

d) instructional materials are language-specific and unsuitable for use with speakers of different native languages

e) Only focus on L1 and L2, no concern for learners themselves

f) The behaviourist assumption that habit formation accounts for language acquisition was seriously questioned by many linguists and psychologists. There was a shift to Mentalism in explanations of language acquisition, with emphasis on the innate capacity of the language learner rather than on external influences.

3. Error analysis

- Assumptions

Mentalism: knowing a language as a matter of knowing language rules rather than memorizing surface structures; learner as an active and creative participant rather than a passive recipient of language stimulus

Representative work: Corder (1967) The Significance of learners' errors

- Significance of errors

a) Corder (1967) learners' errors were invaluable to the study of the language-learning process; by classifying the errors that learners made, researchers could learn a great deal about the SLA process by inferring the strategies that SLA learners were adopting.

b) Provided the teacher with information about how much the learner had learnt

c) Provided the researcher with evidence of how language was learnt

d) Served as device by which the learner discovered the rules of the TL

- Issues in EA

Corder 1967: the five steps in doing EA research (P49-70 Ellis 1994)

a) Collection of a sample of learner language. Most samples of learner language which have been used in EA include data collected from many speakers who are responding to the same kind of task or test (as in Morpheme Order Studies, which are discussed below). Some studies use samples from a few learners that are collected over a period of weeks, months, or even years in order to determine patterns of change in error occurrence with increasing L2 exposure and proficiency.

b) Identification of errors. This first step in the analysis requires determination of elements in the sample of learner language which deviate from the target L2 in some way. Corder (1967) distinguishes between systematic errors (which result from learners' lack of L2 knowledge) and mistakes (the results from some kind of processing failure such as a lapse in memory), which he excludes from the analysis.

c) Description of errors. For purposes of analysis, errors are usually classified according to language level (whether an error is phonological, morphological, syntactic, etc.), general linguistic category (e.g. auxiliary system, passive sentences, negative constructions), or more specific linguistic elements (e.g. articles, prepositions, verb forms).

d) Explanation of errors. Accounting for why an error was made is the most important step in trying to understand the processes of SLA. Two of the most likely causes of L2 errors are interlingual ("between languages") factors, resulting from negative transfer or interference from L1 and intralingual ("within language") factors, not attributable to cross-linguistic influence. Intralingual errors are also considered developmental errors and often represent incomplete learning of L2 rules or overgeneralization of them. Distinguishing between interlingual and intralingual errors implicitly builds upon CA procedures, since the distinction requires comparative knowledge of L1 and L2. For example, the following passage was in a letter written to me by a native Korean speaker. I have underlined and numbered the errors.

The weather is been[1] *very hot in the*[2] *Washington D.C. There climate*[3] *last week warm*[4].

(1) Use of *is* instead of *has* with *been* (intralingual/developmental error). This is evidence that the speaker/writer is learning the English auxiliary verb system, but hasn't yet mastered the distinction between forms of *be* and *have*, which doesn't exist in Korean.

(2) Use of *the* with a place name (intralingual/developmental error). This is evidence that the speaker/writer is learning to use articles in front of nouns (no articles are used in Korean) but hasn't yet learned that they don't occur before most place names.

(3) *There climate* is a direct translation of the Korean phrase which would be used in this context (interlingual/interference error).

(4) In Korean the word for 'warm' is a verb itself, so no additional verb corresponding to English *was* would be used (interlingual/interference error).

e) Evaluation of errors. This step involves analysis of what effect the error has on whoever is being addressed: e.g. how "serious" it is, or to what extent it affects intelligibility, or social acceptability (such as qualifying for a job). In the example I gave of the Korean L1 speaker making errors in a letter to me, the errors are not serious at all. We are friends, and the ungrammaticality of many of her sentences has no bearing on the social relationship; furthermore, there is noresulting misinterpretation of meaning.

- Practical issues in EA

1) Identification of errors

(a) What constitutes an error?

Definition: a deviation from the norms of the target language

Q: any questions with this definition?

Questions raised by this definition:

Which variety of target language?

e.g.

the question regarding which variety of the target language should serve as the norm. The general practice, especially where classroom learners are concerned, is to select the standard written dialect as the norm. This, of course, is fundamentally wrong if the goal is to describe learners' oral production. Nor is it always possible to adopt the standard spoken variety as the norm. Some learners are exposed to varieties of the language which differ from the standard dialect. For example, in comparison with the norms of British or American standard written English the utterance

*She coped up with her problem very well.

is erroneous, but in comparison with norms of educated Zambian English such an utterance can be considered correct.[5]

(b) Distinction between errors and mistakes

"deviation"?

Error: lack of knowledge/competence

Mistake: fail to perform the competence/performance failures; also common for native speakers due to processing failures that arise a sa result of competing plans, memory limitations, and lack of automaticity

This leads to: variability in learner language (learners sometimes use a target language form correctly, sometimes incorrectly)

Q: in this case, can we say that learner already knows the target form?

Not! The learner may know the target form partially, may not have learnt all the contexts in which the form is used.

e.g.: My sisters are older than me.

* My three sister are older than me.

Whether the error is overt or covert

e.g. *I runned all the way.

* It was stopped.

2) Explanation of errors

Establishing the source of the error; accounting for why it was made; involves an attempt to establish the processes responsible for L2 acquisition

Taylor 1986

The error source may be psycholinguistic, sociolinguistic, epistemic, or may reside in the discourse structure.

psycholinguistic	Concerning the nature of the L2 knowledge system and the difficulties learners have in using it in production
sociolinguistic	Concerning learners' ability to adjust their language in accordance with the social context
epistemic	Concerning learners lack of world knowledge
discourse structure	Concerning problems in organization of the information into coherent text

Mostly research on psycholinguistic sources

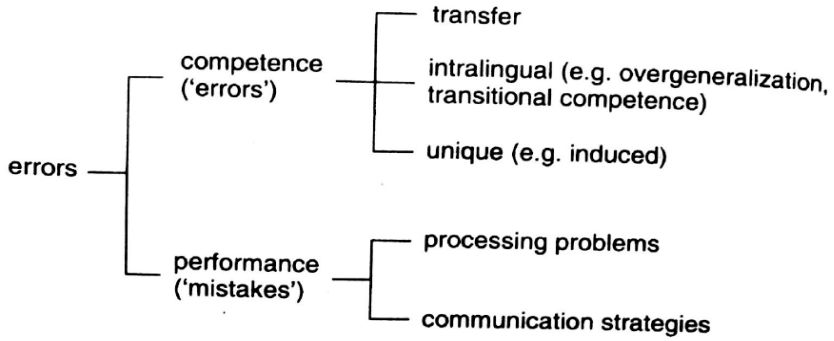

Figure 2.2: Psycholinguistic sources of errors

- Limitation of EA

Schachter (1974); Schachter & Celce-Murcia (1977)

Reasons for its fall:

Weaknesses in methodological procedures

Limitation in scope

Focusing on errors denied access to the whole picture

Difficult to identify the unitary source of an error

- Conclusion for EA

First serious attempt to investigate learner language

Continues to be practiced as a means for investigating a specific research question rather than for providing a comprehensive account of learners' idiosyncratic forms

4. Besides L1

"runned" in both child L1 and adult L2

such forms must be interim systematic solutions that both children and adults independently invent

the notion of interlanguage (Selinker, 1972)

this notion enables the documentation of natural sequences, orders of acquisition and other rule-governed patterns of development across areas of L2

a new question: what is the role of L1 in L2 development, vis a vis the role of other universal developmental forces?

5. L1 influence vis a vis development

- Claim based on robust evidence:

L1 transfer cannot radically alter the route of L2 acquisition but it can impact the rate of learners' progress along their natural development paths (Zobl, 1982)

Specifically:

He proposed that L1–L2 differences account for the pace or rate at which certain morphosyntactic structures will be learned by different L1 groups. All L1 groups will traverse the same series of approximations to the target L2 system, and will be challenged, broadly speaking, by the same aspects of the L2. However, certain L1 groups may stay longer in a given stage, add some extra sub-stage, or find it more difficult than other L1 groups to learn some aspect of the L2 system in question.

- Three examples:

1) Development of negation (Hyltenstam, 1977; Cancino et al., 1978; Ravem, 1968; Zobl, 1982)

when the rules for negation in the L1 are incongruent with the L2 rules, L2 development in this given area is slowed down

2) English question formation (Pienemann et al., 1988; Spada & Lightbown, 1999)

3) English article system (Master, 1997; Jarvis, 2002)

English articles are notoriously difficult to learn for all L1 groups alike. However, the nature and magnitude of difficulties that learners face depends on their L1.

6. Markedness and L1 transfer

- Markedness

In SLA, it has been used to denote a closed set of possibilities within a linguistic system, where the given possibilities rank from simplest and most frequent across languages of the world, or unmarked, to most complex and most rare, or marked. In addition, a special characteristic of many but not all markedness sets is that each marked member presupposes the existence of the less marked members, and never the other way around (in other words, the markedness relationship is implicational and unidirectional).

- Examples:

Relative clauses

Voiced and voiceless final stops

All languages of the world have some voiceless stops, but only some have voiceless and voiced ones, and no language exists that has only voiced stops without also having voiceless ones. Children learning an L1 that has both voiceless and voiced stops will acquire the former before the latter. There is also a natural phonetic process operating in human languages called devoicing, by which voiced stops can be pronounced as voiceless in certain positions, so that a marked feature (voiced) becomes neutralized and the unmarked one (voiceless) is used instead.

- Markedness and SLA

the markedness principle is particularly successful in explaining well attested directionality effects in the transfer of L1 features (Eckman, 2004)

example: word-final stops

English: both voiced and voiceless stops

German: only voiceless stops

What does this mean for L1 German learners of English with words like *wave* and *tab*?

They will often devoice the final consonant and pronounce these two words as *wafe* and *tap*, in what is a direct transfer of the devoicing rule from their L1. No such difficulty has ever been observed in L1 English learners of L2 German (Eckman, 2004, p. 531), who will quickly learn they need to pronounce Tag with a final /k/ if they want to sound 'more German'. This is because their L1 English is more marked and they are learning an unmarked situation in their L2 German. By comparison, L1 German learners of L2 English find themselves in a situation where they have to learn the more marked case coming from a less marked rule in their L1.

- Markedness Differential Hypothesis (Eckman, 1977)

For L2 development, the general implication is that marked forms tend to be more difficult to learn and therefore cause more interlanguage solutions. Moreover, a form that is more marked in the L2 than the L1 will lead to difficulty, whereas a form that is less marked in the L2 than the L1 will present no particular learning challenge. In addition, a form that is more marked in the L1 (as in the case of English word-final voiced stops) is less likely to be transferred than a form that is less marked (as in the case of the German word-final devoiced stop).

7. transferability

The term: Transferability refers to the claim that L1 transfer is partly a function of learners' (conscious or subconscious) intuitions about how transferable certain phenomena are. Choices in the L1 that are perceived to be marked or more 'language specific' are less likely to be transferred to the L2 than choices that are perceived to be unmarked or more 'universal' by learners. (Kellerman, 1979; 1983; 1985)

Example: Kellerman (1979)

L1 Dutch, L2 English

a. He broke his leg→hij brak zijn been (transitive)

b. The cup broke→ het kopje brak (intransitive)

acceptance of transitive and intransitive use of *break* in L2 English

	beginner	intermediate	advanced
Transitive	100%	100%	100%
Intransitive	100%	60%	80%

Kellerman (1985) speculated, '[y]ounger learners, who have had less instruction and are less sophisticated metalinguistically, seem to be unconcerned about these distinctions' (p. 349). They rely on their L1 knowledge and successful arrive at a fully target-like response. For the other two groups, It is as if the intransitive meaning were perceived as too 'marked' or too Dutch-sounding' to be judged as transferable material

8. avoidance

negative L1 transfer does not always lead to noticeable errors of commission or to ungrammaticalities in the L2. This is the case of avoidance, or errors of omission.

Schachter (1974): the Chinese and Japanese writers might have consciously or unconsciously avoided relative clauses in their English essays, thereby making few mistakes.

Factors to explain avoidance behaviours
Dagut and Laufer (1985); Laufer and Eliasson (1993); Hulstijn and Marchena (1989)

Conclusion: The results of the three phrasal verb studies, if taken together, once again show that predictions of positive or negative transfer, including predictions of avoidance cannot be made solely on the basis of external similarities or differences between the L1 and the L2. As Odlin (2003) points out, crosslinguistic influences will always be probabilistic, and they will always be shaped by mutually interacting forces that come from learners' psychological judgement of transferability, learners' current proficiency level in the L2 and the nature and relative complexity of the given L2 subsystem at hand.

9. Underuse and overuse

The hypothesis is that L1 knowledge can inhibit certain L2 choices and prime others, thus resulting in the underuse or overuse of certain L2 forms in spoken and written learner production

Jarvis and Odlin (2000)

Recent development:

Underuse and overuse patterns in L2 learner language have attracted attention in recent SLA research that draws on corpus linguistic techniques. This type of research involves quantitative comparisons of parallel corpora produced by L2 learners from different L1 groups, often also compared to a baseline of the same tasks by native speakers of the target language. A volume edited by Belgium-based SLA researcher Sylvianne Granger and colleagues (Granger et al., 2002; see also Cobb, 2003) features several such studies. The findings typically suggest that there are noticeable differences in the frequency of use for the forms investigated across L1 groups, and that the L1-induced underuse or overuse of certain forms may be typical at different stages of L2 development for certain L1–L2 learner groups.

10. positive L1 influences on L2 learning rate

The facilitative effects of L1 knowledge can be all too easily ignored, perhaps because instances of positive transfer are difficult to identify.

Knowledge of the L1 can often have a positive impact on the rate of L2 learning— Ringbom (1987, 1992, 2007):

The rate advantages afforded by knowledge of the L1 have been documented across diverse areas of L2 learning

Jarvis (2002): article system

Bialystok (1997): grammatical gender

Wayland and Guion (2004): phonology

11. L1 INFLUENCE BENEATH THE SURFACE

inaccurate to imagine that L1 transfer, whether positive or negative, always leads to a direct translation of an L1 form into the L2 or to a glaring absence or excess of a form

knowledge of an L1 results in subtle influences that remain beneath the surface and are easy to miss or can be readily misinterpreted or misdiagnosed.

A case study: information structure

L1 topic-prominent language to L2 subject-prominent language(Rutherford, 1983; Schachter and Rutherford 1979)

There are so many Taiwan people live around the lake.

What is the problem?

L1 subject-prominent language to L2 topic-prominent language (Jin, 1994; Jung, 2004)

Longitudinal evidence: the process can be slow (Duff, 1993)

The effect of L1-induced preference to structure information may continue to very advanced stages of proficiency (Carroll et al., 2000)

12. crosslinguistic influences across all layers of language

L1 knowledge across all layers of language can influence L2 solutions at the levels of form, meaning and function.

Case study: pragmatic competence

Sometimes the L1 influence on L2 pragmatic choices is obvious and rather local.

Takahashi (1996): perceptions of transferability of requests

Other times, however, what gets transferred is more subtle and holistic, for example, sociopragmatic valuations of what is socially offensive, face threatening and so on.

Olshtain (1983): what situations and offenses warrant an apology

Yu (2003): responses to complimenting

Case study: semantic-functional ways of expressing thought or what Slobin (1996) called thinking-for-speaking.

Rationale: This refers to the fact that languages offer specific sets of resources to frame meaning, or to schematize experience, and speakers are known to be constrained by such language-specific ways at the time when they are putting together their thoughts into language

e.g. motion verbs (Slobin, 1996; Cadierno, 2008)

satellite-framed languages
fly out (verb of manner + adverb of path)
verb-framed languages
salir volando (leave flying) (verb of path + element of manner)

13. beyond the L1: crosslinguistic influences across multiple languages

two new questions: How will knowledge of two (or more) preexisting languages influence acquisition of the L3 (or L4, and so on)? Will the L1 still play a privileged role in L3 acquisition?

General conclusion: bilingualism generally facilitates L3 acquisition rates; transfer does not always come from the L1.

The accumulating evidence suggests that knowledge of two (or more) languages can accelerate the learning of an additional one

E.g. lexical transfer
typological close languages: cognates (words that hae a common origin and therefore have similar form and meaning (Cenoz et al., 2001)
unrelated multiple languages: better vocabulary learning strategies have already been developed (Keshavarz and Astaneh, 2004)

e.g. morphosyntax
bilingualism generally facilitates L3 acquisition rates

Klein (1995)
not only the L1, but all previously learned languages, can influence additional language learning
typological closeness as the major factor (Odlin and Javis, 2004; Flynn et al., 2004)
conclusion: L1 does not hold a priviledged status in the acquisition of additonal languages

formal and surface transfer of words can come from L1 or L2, whichever is typologically closer to L3, but semantic transfer is likely to have the L1 as its source

- proficiency as another factor

L3 learners may be more prone to transferring aspects of whichever language they are more proficient in, and they will gradually show different crosslinguistic sources of influence as their L3 proficiency increases

- other additional factors

order of acquisition: The order of acquisition may
play a role, in the sense that perhaps the most recently learned language (especially if it is learned as a 'foreign' language) shows a stronger influence than the language learned earlier. In other words, perhaps the L3 is affected by the L2 more, other things being equal, because both conjure the same psychological mode of 'talking foreign' (Selinker and Baumgartner-Cohen, 1995)

formality of the context: informal communication favours the intrusion of lexical choices from the L1 or L2 alike in the L3 production (Dewaele, 2001).

Novel suggestion: bidirectional transfer

Vivian Cook (2003) and Pavlenko & Jarvis (2002) have called attention to bidirectional transfer, or the fact that 'crosslinguistic influence can simultaneously work both ways, from L1 to L2, and from L2 to L1'

14. the limits of crosslinguistics influence

Question 1: Can we explain errors in L2 as due to L1?

it is all too easy to conclude the L1 is a major explanatory factor in learner language. Thus, many errors that at first blush might be attributed to the influence of the mother tongue can be, in fact, unrelated to the L1 and instead reflect developmental universal processes that have been attested in the acquisition of human language in general (and often in L1 acquisition as well, where no pre-existing knowledge of a specific language can be assumed to influence the process).

e.g. How I do this?

Many interlanguage phenomena are motivated by simultaneous L1 transfer and linguistic universal influences that conspire together to promote certain L2 solutions.

Question 1: how to separate them?—— a key question of theoretical importance in L2 acquisition, especially for the UG approach.

Question 2: how much of learners' obvious errors in production (that is, errors of commission) might one be able to explain away as caused by L1 transfer?

Ellis (1985): 23% to 36% (3% at the lowest, 50% at the highest)

Too many variables that can affect the amount of L1 transfer that materializes for a given learner

Question 3: whether we can assume that L1 transfer effects are subtle and selective in some areas of language but more robust and prominent in other areas?

Odlin (2003): it may be futile to pose such questions because seeking to make such comparisons across subsystems of a language is to try to 'compar[e] the incomparable', because certain phenomena are of high frequency in any language (e.g. sounds and articles cannot be avoided for very long in production), whereas other features of the grammar maybe of very low frequency. Attempts at quantifying and comparing the amount of transfer observed across these areas and for different types of L1 knowledge would be difficult to interpret.