

Linguistic Relativity in SLA

Thinking for Speaking

Edited by ZhaoHong Han and Teresa Cadierno

SECOND LANGUAGE ACQUISITION

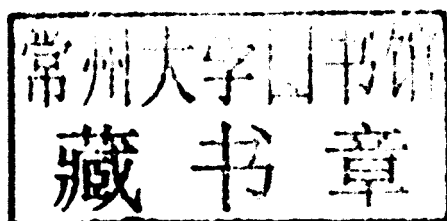
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Linguistic Relativity in SLA

SECOND LANGUAGE ACQUISITION

Series Editor: Professor David Singleton, *Trinity College, Dublin, Ireland*

This series brings together titles dealing with a variety of aspects of language acquisition and processing in situations where a language or languages other than the native language is involved. Second language is thus interpreted in its broadest possible sense. The volumes included in the series all offer in their different ways, on the one hand, exposition and discussion of empirical findings and, on the other, some degree of theoretical reflection. In this latter connection, no particular theoretical stance is privileged in the series; nor is any relevant perspective – sociolinguistic, psycholinguistic, neurolinguistic, etc. – deemed out of place. The intended readership of the series includes final-year undergraduates working on second language acquisition projects, postgraduate students involved in second language acquisition research, and researchers and teachers in general whose interests include a second language acquisition component.

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Preface

As we were putting finishing touches on this volume, the news broke that Flight 1549 crashed in the Hudson River, New York. Our attention was instantly diverted by an outpouring of online and offline news reports and commentaries to the breath-taking drama that had unfolded, in particular, the pilot's miraculous landing of the aircraft on the river, saving 154 lives. As we glanced over the reports, our eyes halted on the following lines and the similar wording:

Many on board and watching from the shores were shocked that the aircraft did not sink immediately. Instead, *it floated, twisting and drifting south in strong currents*, as three New York Waterway commuter ferries moved in. Moments later, *terrified passengers began swarming out the emergency exits and into brutally cold air and onto the submerged wings of the bobbing jetliner*, which began taking in water. (*New York Times*, January 16; emphasis added)

Piqued by our interest in linguistic relativity, we turned to *El País*, a Spanish newspaper, and found several descriptions, and much as expected, none with the level of detail with respect to manner of motion or with such elaborate and compact path description as the above (see italics). The Spanish descriptions tend to contain a greater number of path verbs than manner verbs and abound in static descriptions of the scene rather than descriptions of the trajectories per se. The two paragraphs below illustrate these tendencies. The first paragraph includes several path verbs (*dirigirse* 'head', *volver* 'return', *amerizar* 'land on water') and one cause-of-motion verb (*evacuar* 'evacuate'), with manner information provided only by means of the periphrastic construction *quedó flotando* 'remained floating'. The second paragraph illustrates the tendency to provide static descriptions:

La nave, un Airbus A320 que se *dirigía* a Carolina del Norte *volvía* al aeropuerto de La Guardia (Nueva York-USA) tras golpearse con unos pájaros, según las primeras versiones, *amerizó* de forma controlada y *quedó flotando* sobre las aguas. – Los pasajeros *han sido evacuados* por las salidas de emergencia. – Todos han sobrevivido, según la autoridad aeroportuaria (*El País*, January 15, emphasis added)

(‘The plane, an Airbus A320 that was *headed* to North Carolina *returned* to LaGuardia Airport (New York-USA) after crashing against some birds, according to early versions, *landed on water* in a controlled way and *remained floating* on the water. – Passengers were evacuated via emergency exits. – All have survived, according to airport authority’)

Las imágenes emitidas en directo por canales de EEUU han mostrado a varias personas con chalecos salvavidas *sobre las alas del avión*, esperando a ser rescatadas por barcos que han rodeado enseguida el aparato (*El País*, January 15, emphasis added)

(‘The images broadcast live on US channels showed several people with life jackets *on the wings of the plane*, waiting to be rescued by boats that have surrounded the plane’)

Apparently, the linguistic effects are pervasive: As we see from the above examples and also as has been amply documented elsewhere (e.g. Slobin, 1996a),¹ different languages predispose their speakers to view and talk about events differently. An obvious question, then, for us and indeed, for the entire second language acquisition (SLA) field, has been this double-barreled question: To what extent does a prior language (L1) affect the acquisition and use of a second language, and more profoundly, to what extent does the conceptual system that comes with the L1 affect the development of another compatible with the L2?

Precisely, this book investigates linguistic relativity in SLA. The essential idea of linguistic relativity, that is the idea that language affects the way people think, has been around for centuries, dating from the work of Roger Bacon in the 13th century and of the German 18th-century philosophers Machaelis, Herder and Leibniz, but it gained prominence in the work of the German Romantic philosophers of the 19th century, especially in the writings of the German educator, linguist and philosopher von Humboldt (1767–1835). In the 20th century, the main line of research into this hypothesis moved to America with the development of Boasian anthropology and the work of Sapir (1884–1939) and Whorf (1897–1941). (For detailed information about the historical background of the hypothesis, the interested reader can consult Gentner & Goldin-Meadow, 2003; Gumperz & Levinson, 1996; Lucy, 1992a.) The modern-day version of the idea is the so-called Sapir–Whorf hypothesis. This hypothesis has a strong and a weak version. The strong version stipulates that language *determines* cognition; that is, it assumes that speakers’ thoughts can never be free from the constraints imposed by the language they speak. The weak version stipulates that language *influences* cognition; that is, it claims that the specific structure of a language influences its speakers’ non-verbal habitual thought, routine ways of attending to, categorizing, and remembering objects and events (Lucy, 1992a).

The notion of linguistic relativism has fascinated scholars from a variety of disciplines, including, but not limited to, philosophers, psychologists, linguists and anthropologists. Over the centuries, the strong version of the hypothesis has lost ground to the weak version. As Pinker states, 'there is no scientific evidence that languages *dramatically* shape their speakers' ways of thinking' (Pinker, 1994: 58). The weak version has, in the last decade and a half, incited a great deal of empirical research by linguists, cognitive psychologists, psycholinguists and anthropologists (e.g. Boroditsky, 2001; Gentner & Goldin-Meadow, 2003; Gumperz & Levinson, 1996; Levinson, 2003a; Lucy, 1992b; Lucy & Gaskins, 2001; Pederson *et al.*, 1998). According to Gentner and Goldin-Meadow (2003), recent interest in the hypothesis can be traced to three major themes: (1) the work carried out by prominent cognitive linguists such as Talmy, Langacker and Bowerman, who have demonstrated the important differences in how languages partition the world; (2) the development of a series of theoretical arguments, which include the revival of Vygotsky's (1962) claim of the important role of language in children's cognitive development and Lucy's (1992b, 1994) influential empirical research on the cognitive effects of classifier grammars; and (3) the move from a focus on color to the study of new domains such as space, motion, time, number, gender, theory of mind and the nature and function of objects versus substances.

Research along these lines has provided compelling evidence of the effects of language on thought. As Hunt and Agnoli have noted:

Models of cognition developed after Whorf's day indicate ways in which thought can be influenced by cultural variations in the lexical, syntactic, and pragmatic aspects of language. Although much work remains to be done, there appears to be a great deal of truth to the linguistic relativity hypothesis. In many ways, the language people speak is a guide to the language in which they think. (Hunt & Agnoli, 1991: 377)

Similarly, Slobin (2000) asserts that there are 'non-dramatic' influences that deserve scientific attention.

The field of SLA has seen some work on linguistic relativity, conceptual and empirical, on and off over the last 30 years and the work has concerned target languages such as German, Russian, Spanish and English by learners from a variety of L1 backgrounds (e.g. Kaplan, 1966; Kellerman, 1995; Lado, 1956; von Stutterheim & Klein, 1987; Weinreich, 1953). The last few years, however, have witnessed a notable increase of interest in linguistic relativity; more studies have invoked, or framed themselves along the lines of, the Sapir-Whorf hypothesis, and have specially based their work on Slobin's thinking-for-speaking hypothesis (for reviews, see Cadierno, 2008; Odlin 2003, 2005, 2008a).²

The purpose of this volume is to capture and substantiate an emerging interest among SLA researchers in Slobin's thinking-for-speaking hypothesis (1987, 1996a), a weak form of linguistic relativism, which suggests that the extant language system may operate online to influence articulation of experience. The hypothesis has received extensive support in first language, crosslinguistic research (for brief reviews, see Cadierno, this volume; Hasko, this volume; Stam, this volume), but its relevance for second language research has not been explored until recently (Kellerman, 1995; see also Cadierno, 2004; Cadierno & Lund, 2004; Cadierno & Ruiz, 2006; Han, 1998, 2004). This volume assembles seven studies, all employing the thinking-for-speaking hypothesis as (part of) their conceptual framework, although the acquisition issues dealt with herein vary from study to study.

Chapter 1 (Cadierno) addresses the impact of L1 inter- and intra-typological proximity on the way L2 learners of Danish talk about motion events, in particular, boundary-crossing events. Chapter 2 (Hasko) is driven by a similar concern. More specifically, it examines the question of whether it is possible for advanced L2 learners of Russian to fully acquire the target language thinking for speaking, as it relates to the obligatory marking of unidirectionality and non-unidirectionality of motion in motion talk. Chapter 3 (Stam) assesses the extent to which long-term experience with the target language leads to restructuring of the L1-based thinking-for-speaking pattern in L2 English verbal description and gesturing vis-à-vis motion events. Chapter 4 (Coventry, Valdés & Guijarro-Fuentes) investigates whether language (Spanish versus English) affects implicit recognition of spatial relations. Chapter 5 (Stringer) raises and examines the issues surrounding glossing in crosslinguistic syntactic analyses, as a result of lexical relativity, and their implications for SLA. Reporting findings from a small-scale study, Chapter 6 (Ekiert) tackles the problem of consistent omission of articles in certain discourse environments among native speakers of Polish learning English as the L2. Chapter 7 (Han) provides an in-depth investigation, by virtue of a longitudinal case study, a prevalent problem in adult SLA, namely, inadequate command of grammatical morphemes and its oft-manifested persistency and variability. Chapter 8 (Odlin) concludes the volume by reflecting on the studies in relation to conceptual transfer, contemplating definitional issues and providing an outlook for the linguistic relativity research in SLA.

Disparate as they are for their samples and methodology, the studies overwhelmingly claim to have found artifacts of L1-based thinking for speaking in L2 production (including gesturing). From these studies it appears that Slobin's thinking-for-speaking hypothesis not only has validity for SLA, but it also holds the promise of offering a parsimonious account for a number of SLA conundrums, such as the recalcitrant nature of select influences of native language, inter- and intra-learner variable

acquisitional outcomes, fossilization and even seemingly random alternation of target-like and non-target-like behaviors (see e.g. Han, this volume). For the latter, extant accounts have been many, yet piecemeal and incongruent.

A paramount gain from the present collection of studies is that it has driven home the tasks confronting future research: in order to establish the thinking-for-speaking hypothesis as a contending theoretical approach to resolving outstanding acquisitional problems, it is imperative to form a consensus among researchers on the operationalization of the construct of 'thinking for speaking', to ascertain the types of data that are the most pertinent and, by the same token, the kinds of measures that are the most sensitive to tapping thinking for speaking (see Coventry *et al.*, this volume, for an insightful discussion), and last but not least, to tease out thinking for speaking from potentially confounding factors such as learner proficiency, context and +/- language-mediated cognition.

The studies reported in this volume raise numerous interesting questions for future research, of which five are particularly worth noting:

- (1) To what extent is restructuring of L1-based thinking for speaking possible in SLA?
- (2) What learning conditions, including pedagogy, are likely to spur changes?
- (3) Given the right conditions, what changes are inevitable and what are not?
- (4) What contributions do individual difference variables (e.g. aptitude, memory, motivation and personality) make to the extent of restructuring possible?
- (5) How does L1-based thinking for speaking influence L2 input perception and comprehension?

Due to its pioneering nature, this book is best suited for use as a textbook for theme-based graduate seminars in SLA, as a reference for bilingualism and SLA researchers, especially those whose work is concerned with crosslinguistic influence, and as a general reader for those interested in language acquisition, the relationship between cognition and behavior, and the second language production process.

This volume would not have been possible without the dedication and hard work of its contributors, to whom we owe our respect and gratitude. We also want to take this opportunity to thank Vera Regan for her insightful and constructive comments on an earlier version of the manuscript. And finally, we wish to acknowledge Carly Tam for her assistance with the index.

ZhaoHong Han
Teresa Cadierno

Notes

1. As noted by Slobin (1996a), Sapir took sometimes the strong view associated with Whorf, whereas at other times he embraced a weaker version of the hypothesis, which is more similar to Slobin's own view of the role of language in the expression of thought.
2. A related type of research within SLA has been framed within the framework of conceptual transfer (e.g. Jarvis, 1998; Jarvis & Pavlenko, 2008; Odlin, 2005, 2008a; Pavlenko & Jarvis, 2001). According to Jarvis and Pavlenko (2008), the basic distinction between research on linguistic relativity and conceptual transfer is that whereas the former starts with language and ends with cognition, the latter begins with language and ends, via cognition, with language, and thus examines the influence of language-mediated conceptual categories of one language on the learner's *verbal performance* in another language. A slightly different notion of conceptual transfer is offered by Odlin (e.g. Odlin, 2008a) who sees the assessment of learners' *non-verbal performance* as a prerequisite for work under this framework. For a detailed review of the historical background of work on conceptual transfer, the interested reader can consult Jarvis (2007).

Contents

Contributors.	vii
Preface.	xi
1 Motion in Danish as a Second Language: Does the Learner's L1 Make a Difference?	1
<i>Teresa Cadierno</i>	
2 The Role of Thinking for Speaking in Adult L2 Speech: The Case of (Non)unidirectionality Encoding by American Learners of Russian	34
<i>Victoria Hasko</i>	
3 Can an L2 Speaker's Patterns of Thinking for Speaking Change?	59
<i>Gale A. Stam</i>	
4 Thinking for Speaking and Immediate Memory for Spatial Relations.	84
<i>Kenny R. Coventry, Berenice Valdés and Pedro Guijarro-Fuentes</i>	
5 The Gloss Trap	102
<i>David Stringer</i>	
6 Linguistic Effects on Thinking for Writing: The Case of Articles in L2 English.	125
<i>Monika Ekiert</i>	
7 Grammatical Morpheme Inadequacy as a Function of Linguistic Relativity: A Longitudinal Case Study.	154
<i>ZhaoHong Han</i>	
8 Conclusion: On the Interdependence of Conceptual Transfer and Relativity Studies	183
<i>Terence Odlin</i>	
References.	195
Index	212

Chapter 1

Motion in Danish as a Second Language: Does the Learner's L1 Make a Difference?

TERESA CADIerno

Introduction

The linguistic relativity hypothesis, that is, the possibility that language can influence thought, has constituted an important part of Western intellectual and philosophical discussions over the centuries (see Gumperz & Levinson, 1996; Lucy, 1992a, for some historical background on the hypothesis).¹ The hypothesis, however, is best associated with the work of Benjamin Whorf (1956), whose ideas can be traced back to Sapir and Boas, as well as to the German linguist and philosopher von Humboldt. Even though the hypothesis fell into disfavor in the 1960s with the predominant view in linguistics of language as separate from cognition, and the emphasis in cognitive psychology on the universality of human conceptual structures, the last decade and a half has witnessed a renewed interest in this important issue, as evidenced by the methodologically rigorous empirical work developed by Lucy (1992a, 1992b) and the influential volumes edited by Gumperz and Levinson (1996) and Gentner and Goldin-Meadow (2003).

One important outcome of this renewed interest in the linguistic relativity hypothesis has been Slobin's (1996a) thinking-for-speaking hypothesis, which focuses on the influence of language on the kind of thinking that goes on, online, while we are using the language. According to this hypothesis, the language that we speak directs our attention, while speaking, to particular ways of filtering our experiences of the world. In other words, our experiences of the world are filtered into verbalized events not only through the choice of the individual speaker's perspective, but critically through the particular set of options provided by the language that we speak as well. Thinking for speaking thus entails 'picking those characteristics of objects and events that (a) fit some conceptualization of the event, and (b) are readily encodable in the language' (Slobin, 1996a: 76).

Slobin's thinking-for-speaking hypothesis has received empirical support in research showing that native speakers (NSs) of typologically different languages (Talmy, 1985, 1991, 2000b) tend to pay different kinds of attention to particular details of motion events when talking about them (e.g. Berman & Slobin, 1994; Slobin, 1996a, 1996b, 1997, 1998, 2000, 2003, 2004, 2006). This empirical research as well as Slobin's thinking-for-speaking hypothesis have important implications for second language acquisition. Under such a perspective, learning another language entails learning another way of thinking for speaking (Cadierno & Lund, 2004; Han, 1998, 2004, 2008; Stam, 1998), a hypothesis that has been investigated in a number of studies on how adult L2 learners with typologically different L1s and L2s come to talk about motion in an L2 (see Cadierno, 2008; Stam, this volume, for a detailed review). The present chapter contributes to this line of inquiry by reporting an investigation that takes into account both inter- and intra-typological differences between the learners' L1 and L2 with respect to (a) the description of one particular type of motion event, namely motion events involving boundary-crossing situations, and (b) the productive and receptive vocabulary of L2 motion verbs, in general, and of manner-of-motion verbs, in particular, of the L2 learners examined.

Thinking for Speaking and the L1 Expression of Motion Events

Empirical research into the expression of motion in L1 acquisition and use has been inspired by Talmy's (1985, 1991, 2000b) typological work, which describes the characteristic lexicalization patterns involved in the expression of motion events in different languages of the world. In satellite-framed languages (S-languages), such as Chinese and all branches of the Indo-European languages except Romance languages, the core schema of a motion event, that is the Path, is characteristically coded in a satellite, whereas Motion and Manner are expressed in the verb root. In verb-framed languages (V-languages), on the other hand, Motion and Path are typically expressed in the verb, whereas Manner and Cause tend to be coded in a separate constituent such as an adverbial or a gerund. This pattern is characteristic of Romance, Semitic and Polynesian languages. The following English and Spanish examples taken from Talmy (1985) illustrate the contrast between the two types of languages: *The bottle floated into the cave* versus *La botella entró a la cueva flotando* ('The bottle entered the cave floating').

However, in order to fully account for the lexicalization patterns of the two types of language, we need to take into account the so-called boundary-crossing constraint (Aske, 1989; Slobin & Hoiting, 1994), that is whether or not a Path involves the crossing of a spatial boundary (motion into/out of/over a bounded region). Thus, whereas in S-languages the conflation of