Linguistic Relativity and its Implications for Second Language Acquisition

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**Introduction**

The Piraha, a small indigenous tribe in the forests of Brazil, is noted for its unusual language. The Piraha language lacks features present in most languages, such as relative clauses, color terms, and numbers (although the total absence of these features is debated by some scholars). Daniel Everett, a British ethnologist, lived with and studied this tribe for several decades. He spent eight months attempting to teach the tribe members the numbers through ten. At the end of this time, none of the Piraha could count to ten. The story of the Piraha’s inability to grasp numbers is often used to find support for the theory of linguistic relativity. More relevant to this paper, however, is the question of how to learn numbers (or another concept) in a culture/language in which that concept does not exist. In other words, can the knowledge of linguistic relativity be applied to Second Language Acquisition (SLA) and if so how? This paper attempts to address this question from a cognitive perspective, briefly addressing other perspectives on this issue as well.

**Background**

Linguistic relativity is a term generally associated with Edward Sapir and his student Benjamin Lee Whorf. The Sapir-Whorf Hypothesis relates that language shapes the way people think. Various degrees of strength of this hypothesis have been proposed, ranging from a strong form known as determinism (language determines thought) to a weak form in which language has some influence on thought. However, the idea can be traced back a century before to Wilhelm von Humboldt, who, in 1836 stated that “one always more or less carries over one’s own world- indeed one’s own language-view when learning a new language.” (1836/1999, p. 60)

An example of the ways in which people think differently in different languages is that of Satellite- and Verb-framed languages (S- and V- languages, respectively). In S-languages like English, manner is encoded on the verb. Speakers must pay attention to the manner in which a verb occurs and include that in their articulation of the thought, such as in the sentence, “The dog ran into the house.” In V-languages like French, however, manner is optional and therefore does not receive as much attention, as in the sentence: “The dog entered the house (by running).” (Slobin, 2003, p. 162) Because speakers articulate this same idea in two different manners, they conceptualize the event in two different ways as well. The transfer between an S-language and an S-langauge or a V-language and another V-language is more straightforward than the transfer from a V-language to an S-language. When an L1 speaker of a V-language learns an S-language, the speaker must learn to pay attention to manner as they have not done in their L1.

**Research**

Besides *linguistic relativity*, other terms have arisen to describe the relationship between thinking and language. Slobin’s (1987) hypothesis, known as thinking-for-speaking, is often considered a weak form of linguistic relativity. The thinking-for-speaking hypothesis states that language affects the way in which thought is expressed at the moment it is expressed. In other words, language does not influence thought, but rather the way in which thought is articulated. Slobin’s hypothesis focused more on first language acquisition than second language learning, but some researchers have extended thinking-for-speaking to SLA as well (e.g. Stam, 2010).

Stam examined patterns of speech and gesture in second language learners, and whether these patterns could change to be more similar to those of native speakers. She compared the patterns of gestures used by L2 speakers with those used by L1 speakers to determine whether the L2 learners were thinking in their L1, L2, or a mixture of the two (interlanguage). She did a longitudinal study following an L1 Spanish speaker who was an advanced L2 English learner. At the beginning of the study, the participant’s gestures were more depictive of thinking-for-speaking in her L1 than her L2. After a period of nine years, the participant’s gestures for path were more like those used by native English speakers, but her gestures for manner verbs showed no change. This indicates that patterns of thinking-for-speaking in a second language may change, depending upon the nature of the concept. Interestingly, the participant’s gestures for path in Spanish became more like her English path gestures, suggesting a mixing of her thinking-for-speaking in Spanish and English, and a potential L2 influence on L1.

Han (2010) did a longitudinal case study on the acquisition of English plural morphemes and articles by a native Chinese speaker. The participant was an advanced learner of English who had lived and worked in an English-speaking country over a decade at the time of the research. Data was collected in 2003 and again four years later in 2007. Han found that, based on the structure of his sentences and use of articles and plural markings, the participant was thinking-for-speaking mainly in his L1, with some interlanguage thinking-for-speaking as well. She concludes that complete acquisition of the target language would require “conceptual restructuring” of the way the learner engages in thinking-for-speaking. In this particular case, however, Han believes her findings show that “such a conceptual restructuring may not be possible” (at least with regard to the features examined in the study) (p. 178). This failure to restructure concepts in the L2 leads to the learner’s fossilization.

Another type of linguistic relativity, conceptual transfer, was first defined by Jarvis in 1998. Conceptual transfer is similar to Slobin’s thinking-for-speaking, but takes the idea further, stating that “the concepts and patterns of conceptualization that a person has acquired as a speaker of one language will have an effect on how the person uses all of the languages that he or she knows” (Jarvis, 2007, p. 21). These “concepts and patterns of conceptualization” include not only language but also pragmatic and cultural influences, broadening the scope of the perspective to include sociocultural influences on thought. However, the main focus of this model remains on the cognitive processes of conceptual transfer from L1 to L2.

Many of these models, Slobin’s thinking-for-speaking in particular, acknowledge the difficulty of changing one’s ways of thinking conceptually in an L2. Slobin (1996) alleged that the first language trains a person to pay attention to certain details when articulating ideas. Furthermore, “…once our minds have been trained in taking particular points of view for the purposes of speaking, it is exceptionally difficult for us to be retrained” (p. 60). Retraining one’s mind requires learning news ways of thinking conceptually and applying these concepts to the new language. Taken broadly, this is a challenge any language teacher or language learner would find daunting.

To break down this process, Lee (1997) discusses the importance of patterns in the way people learn. People constantly seek and notice patterns in the world around them. These patterns form habits of attention and observation to details in a first language, leading to a pattern of thinking. In learning a new language, patterns of the second language may overlap, complement, or conflict with those of the first language. Lee suggests that the way teachers and learners approach these new patterns can affect the success of their acquisition. If patterns are viewed as enhancing or adding to the learner’s repertoire of patterns rather than subtracting from them, the conceptual aspects of the language may be acquired more effectively.

This relates to another way of addressing linguistic relativity in SLA known as the ethno-lingual relativity hypothesis. Citron (1993) describes the ethno-lingual relativity hypothesis as the idea that being aware of and receptive towards the conceptual ways of thinking of other cultures/languages can allow one to be more successful in learning another language. In addition a person needs to be able to recognize the cultural-boundedness of their own L1. This is the reverse of the common assumption that learning a new language expands one’s ways of thinking and openness towards other cultures.

Other scholars support this notion. Lee discusses how noticing and paying attention to conceptual differences between two languages improves the learner’s understanding of a different worldview constructed by the L2. Understanding this difference can then lead to the learner being more able to operationalize the new concepts in their utterances. Guiora (in Citron, 1995) proposed the hypothesis of language ego permeability. Children develop language egos in their L1, and these egos are permeable when a person is young, and become less permeable as one ages. Having a permeable language ego means that one’s language identity is more open to change, and thus gives one an advantage in learning a second language. Citron asserts that, “when the ethno-lingual ties to one’s own culture are weakened…his or her language skills show the most improvement” (1995, p. 109). He also discusses the significance of being able to perceive one’s own language from an outsider’s viewpoint. These ideas all connect to relate the importance of openness to other concepts, cultures, and languages.

In order to develop such an openness, Whorf (1941/1956) considered the teaching of contrastive grammar essential to creating a “multilingual awareness” (p. 241). Catford (1969) has suggested the benefits of motivation in becoming more open to another culture/language, particularly in relation to preparing to study abroad. Before one travels abroad, a language orientation course should include some cultural differences in addition to teaching the language. He also mentions the advantages of an awareness of cultural differences and having empathy towards this new culture. Upon immersion into this new culture, the learner should take the initiative and observe differences in language, concepts, and culture in order to create a deeper understanding of the second language.

Kramsch (1993) adopts a more socio-cultural perspective. She believes that in order to fully understand another culture, we should not view it from our perspective or the perspective of that culture, but rather from a third view that takes both perspectives into account. This third view is known as cross-cultural understanding. The teaching of cross-cultural understanding would include first examining the foreign culture, then comparing this to the first culture, followed by exploring how each culture views the other, and finally trying to find a middle ground that leads to change. Kramsch claims that this cross-cultural understanding would make clear the conceptual framework of both cultures and lead to an understanding of the other culture’s worldview.

**Discussion**

In answer to the research question, the research thus far has shown that linguistic relativity does have implications for SLA. The better linguistic relativity is understood, the deeper the understanding researchers have of the way in which second languages are learned, processed, and articulated. The research discussed in this article only begins to touch the surface of this topic. There are many areas of SLA that remained to be explored when it comes to the influence of linguistic relativity.

From the varied research on the topic, it is evident that linguistic relativity (including similar models by different names) is a complex topic that requires further study. Studies like those of Stam and Han are beneficial in revealing how people think conceptually in their L2 and whether this may change over a period of time. However, these studies provide only observations of the way learners think conceptually. Future studies are needed to examine whether and how a learner’s thinking-for-speaking may change if instruction intervenes (i.e. the implications for language pedagogy). Many of the aforementioned scholars, for example, (e.g. Whorf, Lee, and Slobin) discuss the importance of language learners noticing and paying attention to the conceptual differences between their L1 and L2. Future research could study the effectiveness of these methods on changing the learner’s thinking-for-speaking to be more native-like in their L2.

In addition, much of the research at this point examines linguistic relativity from either a cognitive or a sociocultural perspective. A connection of these two perspectives would be beneficial to the application of this knowledge to SLA and second language pedagogy. Both perspectives have information that could benefit the other. Joining these two viewpoints is most likely to present a complete picture to aid in the understanding of the nature of linguistic relativity and provide more resources for second language learners.

One of the many questions that remains about linguistic relativity and SLA is whether the acquisition of new ways of conceptual thinking leads to native-like abilities in the L2. Some scholars (e.g. Lee) suggest that the ability to think in the conceptual reality of the L2 is required for true proficiency in the L2 and native-like communicative abilities. Likewise, the language ego permeability hypothesis indicates that being open to differences in other languages is also responsible for the ability of the learner to achieve native-like pronunciation.

One concern that seems to be little addressed in the present research is that of the identity of the second language learner. If the learner can engage in thinking-for-speaking in their L2, they have likely deviated from the conceptual thinking of their L1. In this case, it seems that the learner must disconnect from a part of their L1 identity or at least add an additional identity for the L2. The gestures of the participant in Stam’s study suggested that by the end of the study parts of L2 thinking had influenced thinking in the L1. Does the learner’s identity change as his or her conceptual thinking changes? The motivations and goals of language learners are varied, and while it is possible that some learners may desire a new identity in their L2, it is equally possible that other learners may wish to retain their identity regardless of the language they use to communicate. This idea is briefly addressed by Lee, who suggests that “some people may need to transfer non-native patterns of cognitive processing into their new languages in order to sustain the sense of who they are that developed as they grew up” (no page, heading “Under the New Whorfian Framework”).

My research question for this paper asked whether it is possible to apply the knowledge of linguistic relativity to SLA and if so, how. After reviewing the research, however, it seems that a question that first needs to be asked is not if it is possible but whether it should be done. Is it necessary or even advisable for the language learner to think in the second language? The language learners in Han and Stam’s respective case studies were highly advanced learners who lived and worked in L2 countries, yet failed to fully acquire thinking-for-speaking in the L2. Although these learners continued to think in their L1s, they were clearly proficient enough in the L2 to communicate and even work in an L2 environment. For these learners it did not seem necessary to think conceptually in the L2. If developing a new way of thinking-for-speaking in the L2 creates or changes the identity of the learner, it seems reasonable that some learners may embrace such a change, while many others would wish to resist a loss of their original identity. Citron claimed that one learns a language most effectively when one’s own cultural ties are the weakest. Weakening one’s cultural ties has serious implications for individual as well as group identity, particularly for endangered or less-widely used languages.

This is not to say that understanding or being open to other cultures should be avoided. Italian film director Federico Fellini said “A different language is a different vision of life.” Language learners can benefit from understanding different views of life, while not necessarily changing their own. In the future, scholars may consider whether language learners should change their thinking in the L2, and if so, then how they might begin to do so.

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