

January 1998

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Recommended Citation

Stam, Gale, "Changes in patterns of thinking about motion with L2 acquisition" (1998). *Faculty Publications*. 34.
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Changes in Patterns of Thinking about Motion with L2 Acquisition

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Abstract

Within a framework that views speech and gesture as a single-integrated system (McNeill 1992), this paper discusses how patterns of thinking about motion change linguistically and gesturally for Spanish-speaking ESL learners in their process of acquiring English.

Introduction

A motion event is the movement of some entity through space and consists of the following components (Talmy 1985; Aske 1989): motion (the fact of motion), figure (the moving object), ground (the reference object(s) in relation to which the figure moves), path (the direction of the motion), and manner (the way the motion is performed). Languages differ in how they indicate path and manner. Based on where a language encodes path, Talmy has classified languages into two categories: verb-framed and satellite-framed languages.

Spanish is a verb-framed language, motion and path are indicated by the verb, and manner if present in speech is indicated outside the verb by an adjunct or adverbial. For example, in *y sale volando* 'and exits flying', the verb *sale* indicates path while the adverbial *volando* indicates manner.

English is a satellite-framed language, motion and manner are indicated by the verb, and path is indicated by a satellite, an adjunct or preposition. For example, in "and flies out of the cage," the verb "flies" indicates manner while the adverb "out" indicates path.

Second language acquisition can be defined as the acquisition of another language after the age of three or four (Klein 1986). In acquiring a

second language, learners progress from one level of proficiency to another with varying degrees. The process is complex, gradual, nonlinear, and dynamic (Larsen-Freeman 1991).

"Thinking for speaking" refers to thinking that occurs on-line in the process of speaking. A speaker acquiring a native language learns the grammatical constructions within that language. These constructions not only provide the speaker with a framework for the expression of events and thought, but also restrict how events and thought are expressed. In other words, a speaker learns a particular way of "thinking for speaking" (Slobin 1996a, 1996b; Berman and Slobin 1994), and learning another language involves learning another way of "thinking for speaking."

Speech and gesture are a single-integrated system and express two aspects of thought: the verbal and the imagistic (McNeill 1992). Looking at speech and gesture jointly gives us an enhanced window onto the mind of a speaker. I propose that examining speech and its accompanying gestures in the narrations of monolingual Spanish speakers, native-English speakers, and intermediate and advanced ESL learners provides us with a way to investigate how patterns of thinking about motion change both linguistically and gesturally as learners acquire a second language.

Methods

Subjects were shown the Sylvester and Tweety Bird cartoon, Canary Row, and asked to narrate what they saw to a listener. Monolingual Spanish-speakers and native-English speakers were shown the cartoon in its entirety while ESL learners were shown the cartoon in two segments and asked to narrate each segment of the cartoon to a listener in both English and Spanish. The order was counterbalanced.

Narrations were videotaped and subsequently coded using McNeill's coding scheme (1992) to determine how the elements of a motion event are expressed both verbally and gesturally in English and Spanish and how these elements are expressed in the narrations of the ESL learners in both English and Spanish.

Subjects

There were sixteen subjects. Four of these were monolingual Mexican-Spanish speakers¹; eight were Mexican-Spanish speaking learners of English as a second language at National-Louis University: four at the intermediate ESL proficiency level (from ESOL Levels 3 and 4) and four

¹ The subjects were limited to Mexican-Spanish speakers to control for "national" Spanish variety.

at the advanced ESL proficiency level (beyond ESOL Level 5 the last class in the ESOL program²); and four were native speakers of English.

Some Observed Differences in Spanish and English Speech and Gesture

Slobin (1996a, 1996b; Berman and Slobin 1994; Slobin and Hoiting 1994) has made the following observations about English and Spanish speech: English speakers describe processes and tend to accumulate path components whereas Spanish speakers describe states and tend to elaborate descriptions of settings.

McNeill and Duncan (in press) have made the following observations about English and Spanish speech and gesture: English speakers tend to accumulate path components, tend to focus their path gestures on the satellites or ground NPs, and almost never have manner in gesture when there is none in the accompanying speech while Spanish speakers tend to focus their path gestures on path verbs or ground NPs and may have manner in gesture when there is none in the accompanying speech.

Preliminary Results

The results of this study support McNeill's and Duncan's observations on the occurrence of path and manner gestures in the narrations of English speakers and Spanish speakers. In addition to their observations, ground gestures may occur with a ground NP in both Spanish and English, for example, with the word *tubo* 'tube' in Spanish or *bowling alley* in English.

The English narrations of ESL learners differ in several ways from the narrations of native English speakers and their own Spanish narrations:

- 1 The narrations of ESL learners at the intermediate level frequently contain translations of Spanish expressions into English, such as *get in* and *get into* from *se mete* and *for from por*: "he get into the drainpost" and "then decides to climb for a tube from the wall." This does not occur in the narrations of advanced ESL learners whose choice of words is similar to that of native-English speakers: "he went through the pipe."
- 2 Path gestures often occur with the verb in ESL learners' narrations following the Spanish tendency. This begins to change as proficiency level increases, and advanced ESL learners may have path gestures with the

² The ESOL program at National-Louis University has a grammatically based curriculum designed to provide ESL learners with the English necessary to succeed in undergraduate studies.

verb as well as with satellites: a path gesture on "went" in " I mean he went" and a path gesture on "out" and another on "from the" in "he came out from the pipe."

3 The ESL learners' gestures when speaking English are more segmented than their gestures when speaking Spanish. Gestures may occur with pauses without speech as the learners search for a word in English, for example, "through a ///"³, where a ground gesture occurs on the pauses.

4 Ground gestures may occur with ground NPs, but also with the subject of a clause, or unfilled speech pauses, particularly when there is a problem explaining what happened.

Conclusion

A learner's first language frequently has an influence on his/her acquisition of a second language. There may be both positive and negative transfer in the areas of morphology, phonology, syntax, semantics, and lexicon. Among the production errors that can occur in the second language are (1) substitutions, the use of native language forms in the target language; (2) calques, translations of native language structures or meanings into the target language; and (3) alternations of structures, use of various members of a class, such as he/she; /b/ and /p/ (Odlin 1989).

Looking at speech and gesture together in the narrations of ESL learners gives us a clearer picture of their proficiency in English than looking at speech alone. By comparing the narrations, we can see evidence of language transfer as well as the beginning of "thinking for speaking" in English. Intermediate ESL learners often translate from Spanish to English as is evidenced by both the speakers' choice of words and where their gestures occur. Advanced ESL learners, on the other hand, use the appropriate English verb; however, the verb may still be accompanied by a path gesture. This indicates that the learners are in a transition process: they are not translating completely from Spanish to English, but neither are they thinking completely about motion the way native-English speakers would. Rather they are in the process of beginning to "think for speaking" in English.

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³ Unfilled speech pauses

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