

# Functions of Gesticulation in L2 Users' Self-Talk

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## I. Introduction

This study examines how gestural forms of mediation operate in a dialogic capacity, based on Vygotskian perspective that language has inherent dialogic aspects and McNeill's (1992) description on gesticulation. The main aim of the present study, therefore, is to explore the dialogic aspects of gesticulation and their self-regulatory functions in the private speech of L2 learners.

## II. Literature review

Vygotsky (1978) noted the resemblance between social speech and private speech in that private speech is a dialogue with the self, i. e., intrapersonal communication. Vygotsky referred to inner speech as a "unique form of internal collaboration with oneself"(p. 273) and described private and inner speech as socially originated dialogic speech addressed to the self (Wertsch, 1985). Based on this conceptualization of language and thought, Vygotsky, neo-Vygotskians (Shotter, 1993 Wertsch, 1979, 1985), and L2 researchers (Frawley & Lantolf, 1986) have adapted Bakhtin' notion of dialogism or dialogicity to interpret speech activities—including private speech—through a dialogic perspective. Thus, social speech is viewed as a dialogue with others, whereas private speech and inner speech are types of dialogues with the self (Kohlberg, Yaeger, & Hiertholm, 1968; Lantolf & Thorne, 2006; Lee, 2006a, 2006b).

In studies of social interaction (Goodwin, 1986), gestures such as nodding, eye contact, facial expression, and various body movements were found to help co-construct interactional discourse and to provide important communicative cues (see also Goffman, 1981). Consequently, both the cognitive aspects and the communicative functions of gesticulation—regulatory functions of language—should be considered in interpersonal and intrapersonal communication. McNeill (1992) distinguished four major categories of manual gestures—gesticulations: (i) Iconics describe the content of speech in concrete depictions, (ii) metaphors depict abstract entities in concrete form, (iii) deictics are largely pointing gestures, and (iv) beats are movements that occur in conjunction with prosodic prominence patterns in speech and mainly serve discourse functions.

## III. The Method

The analysis focuses in particular on gesticulations that accompany interactional cues (i. e., all of the positionings that a speaker and listener might deploy in appropriating footings in conversation) as these appear in private speech. Seven Korean students in their early to mid-twenties studying full time at a university in the American Midwest participated in this study. All participants were native speakers of Korean enrolled in an intermediate biology class in

an English as a second language (ESL) environment.

#### **IV. Analysis & Discussion**

In terms of the analysis of gesture with private speech, McNeill's (2005) dimensional interpretation of gesture form and Goffman's (1981) notion of footing in conversation are adopted. Single gestures or combinations of gestures are analyzed to uncover how gesticulations during private speech might display both cognitive and communicative functions insofar as they resemble interactive actions. For example, self-teaching actions might exhibit a structure parallel to that of teacher-student social speech activities. Also, gesticulation is investigated with speech to examine the coexpression in both modalities, speech and gesture coming together in sync. The combined features are believed to demonstrate the unity of speech, gesture, and thought as part of the same underlying psycholinguistic process, called the growth point hypothesis by McNeill (1992, 2005).

##### **1. Simple Types of Gesticulations**

- Nodding
- Beats
- Deictics (Pointing)

##### **2. Functions of Gesticulation**

- The Process of Memorization.
- Self-Teaching Actions: Gesture and Private Speech.

##### **Gestures with private writing and drawing**

The participants in this study all actively engaged in intrapersonal activities by deploying various actions, such as reading the text aloud or silently, and explaining and reviewing biological terms and concepts to themselves. The self-regulatory functions observed were achieved by participants establishing meanings for themselves, memorizing, and organizing their own activities. These actions in the solitary exam preparation activity appeared mainly in the form of dynamic reading comprehension. The meaning-making actions of dynamic reading comprehension deployed interactional dynamics through reading aloud and self-teaching.

The types of self-teaching actions observed nevertheless have communicative or dialogic aspects that involve the self and text materials. The interactional features of meaning-making activities can easily be observed in conversations between experts and novices in interpersonal teaching and learning activities. In this respect, the discourse structure of private speech in the data looks very similar to social speech in the way that the turn-taking-like sequences appear in private speech. The observed gesticulations in the private speech data were nodding, beats, pointing, and other kinetic movements used to illustrate abstract concepts and processes in biology. These gesticulations function as communication with the self. Participants also deployed self-teaching actions in the form of drawing biological figures with accompanying gesticulation while producing both written and oral production of private speech. As such, these interactional structures demonstrate the dialogic aspects of private speech.

From the point of view of SLA, English was not only a tool of mediation but also a learning object that is, the participants were learning the subject matter (biology) by using English as a tool to understand the written texts and organize thought. Concurrently, they were learning new vocabulary in English—mainly technical terms in biology—via self-teaching. As shown throughout the examples, gesticulation helped scaffold the readers' understanding of the texts in the form of self-teaching that resembles teachers' gesticulations. Existing notions of gesticulation, however, are not adequate to explain the actions of drawing. As mentioned earlier, Keller and Keller (1996) indicated that thinking occurs in diverse modes and stated the developmental interaction between the modes—in the case of this study, between language and imagery. They also discussed how imagery helps to unfold the linguistic mode as a graphic or pictorial mode of thinking. If we relate this pictorial mode of thinking and gesture, we find a common denominator between gesture and drawing that is, gesture can be seen as spatial images, whereas drawing is written images. Furthermore, gesticulation refers to a three-dimensional pictorial mode that accompanies speech production, whereas the actions of drawing can be interpreted as a two-dimensional pictorial mode. Therefore, a deeper understanding of the connection between diverse types of pictorial modes might be needed to explore the relationship between gesture and drawing as it appears in learners' private speech.

## **V. Conclusion**

To conclude, this study analyzed the gesticulations that occurred with forms of private speech for L2 learners studying by themselves, finding that such gestures performed self-regulatory functions, helping the participants to both learn the target language and to study.

### **About the Presenter**

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