行政院國家科學委員會補助專題研究計畫成果報告

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姿勢動作與口語溝通 2/3 & 3/3

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計畫類別：∨個別型計畫　□整合型計畫

計畫編號：NSC89-2411-H-004-042；NSC 90-2411-H-004-018

執行期間：89 年 8 月 1 日至 90 年 7 月 31 日；90 年 8 月 1 日至 91 年 7 月 31 日

計畫主持人：徐嘉慧

共同主持人：

計畫參與人員：

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執行單位：國立政治大學英語系

中　華　民　國　91 年　9　月　19　日

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1. Abstract

中文摘要

這是為期三年的計劃，探討在會話裡，說話者自然產生的手勢如何在語意和語用方面，結合所對應的語句以表達說話者所要傳達的訊息。「姿勢動作」指的是說話時說話者手與臂自然產生的動作。計劃第一年已經完成手勢的分類。根據這些分類，第二和第三年分析在會話中，手勢的語意和語用功能。
關鍵詞：姿勢動作，會話，姿勢種類，姿勢的語意，姿勢的語用。

Abstract

This was a three-year project that studied how gesture cooperates with speech temporally, semantically, and pragmatically in managing information for communication. Gesticulation refers to the idiosyncratic spontaneous movements of the hands and arms, which accompany speech with context-dependent meaning and use. In the first year, five types of gestures had been identified and categorized. Based on the categories, the semantic and pragmatic relationship between speech and gesture in conversation was examined in the second and the third year.
Keywords: gesticulation, conversation, gesture types, semantic aspect of gesticulation, pragmatic aspect of gesticulation.

2. Introduction

This was a three-year project that studied gesticulation in association with speech in face-to-face interaction. When people talk, they often make spontaneous gestures that are associated with speech and have identical or different meanings and functions. Gesticulation here refers to the idiosyncratic spontaneous movements of hands and arms, which accompany the speech event with context-dependent meaning and use. In the first year, five types of gestures have been identified and categorized. Based on the categories, this report focuses on how different types of spontaneous synchronized gestures cooperate with speech semantically and functionally in managing communicational information.

Section 3 introduces the methodology and the database for the study. The gesture types will be mentioned in

section 4. Section 5 presents the analyses concerning the semantic and pragmatic relationship between speech and gesture. Concluding remarks will be given in the last section.

3. Methodology and database

Transcribing the speech-associated gestures in conversation was the preliminary and major work in the project. Compared to the verbal part of the conversation, transcribing gestures was even more time-consuming and laborious, since the movements of hands and arms, the head and face, and even the visual orientation of eye gaze are too elaborate and intricate. The gesture analysis was done on computer using MediaStudio Pro which has frame-by-frame advance and varying slow-motion capabilities without muting so that sound could be heard as the images were advanced. Thus, movement at a given moment in time can be matched with the simultaneously uttered syllable or silence.

Gestures had been transcribed for three years. The data included four casual unpremeditated, multi-party conversations which took place in 1994 and 1995 among college students who knew each other. The students were free to find topics of common interest. They were filmed for approximately an hour with a visible camera for full-body shot. One section from each conversation, about twenty minutes in length, was then selected in which students were more comfortable in front of the camera.

4. Categories of gestures

Five types of gestures were categorized in the first year. *Iconic gestures* 'bear a close formal relationship to the semantic content of speech' (McNeill 1992:12). Their meanings and functions correspond to the attendant spoken language. The second type of speech-accompanying gesticulation is *metaphoric gestures* which, 'like iconic gestures, are pictorial, but the pictorial content presents an abstract idea rather than a concrete object or event' (McNeill 1992:14). *Deictic gestures* indicate referents in the immediate speech environment. *Spatial gestures* are defined as the hand movements primarily manipulating the gesture space symbolically to depict a spatial relationship between the linguistic constituents, or between the speaker and the linguistic referent. The last category is the *beats*, as 'the hand moves along with the rhythmical pulsation of speech' (McNeill 1992:16). Gestural beats are typically small up and down or back and forth flicks of one or both hands (McClave 1994)

5. Semantic and pragmatic relationship between speech and gesture

Based on the five gestural types, this section presents the analyses concerning the semantic and pragmatic relationship between speech and gesture.

First, beats are mainly used to accent or emphasize portions of co-occurring speech. Second, spatial gestures function to indicate the location, direction, or the source of a linguistic referent in relation to the other linguistic constituents or to the speaker. Third, deictic gestures are chiefly performed for disambiguation by pointing at the referent in the speech environment. Without ambiguation, gestures of this type can strengthen the co-expressive constituents. Fourth, some metaphoric gestures indicate a boundary or a spatial area for the abstract ideas. Some perform the shape or the action based on the original literal, non-metaphoric meaning of the word.

Iconic gestures have numerous functions. For verbal referents, this kind of hand movements indicates the real concrete actions. As to nominal referents, iconic hand shapes provide information concerning their shape, size, length, and function. Those accompanying adverbs suggest the attitude of the speaker, the manner, the aspect, and the direction of the action. Finally, iconic gestures also function to clarify and specify the meaning of the accompanied word, be it a noun, a verb, an adverb, or a determiner, which carries vague, general interpretation.

The gestures discussed so far are all accompanied by speech. There is still a kind which is still related to the speech event, yet the information the gesture carries is not realized in speech. In other words, gesture and speech bear different aspects of information of the same speech event. Gestures of this type are all iconic, indicating the action and the instrument of the event, the attitude of the speaker, as well as the shape, length, width of the nominal referents.

6. Conclusion

This three-year project has set up a database with gesture analysis. We also categorized gestures into five types, and discussed how gesture cooperates with speech temporally, semantically, and functionally in communication.

'The conversationalists have available to them a repertoire of gestural forms, just as they have lexical and syntactic forms, which can be mobilized in particular ways for particular expressive purposes. Gestures are *a part of language* and that, together with lexico-syntactic constructions, they participate in the process of expression as it is finally shaped by the speaker (Kendon 1995: 249)'. The role of gesture is, thus, pertinent in linguistic events. Despite the fact that gesticulation has received little systematic research in Chinese discourse, the results of this project have laid the groundwork for future research on the relationship between gesture and speech.

7. References

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