Abstract

Two experiments employing the visual world paradigm were conducted to investigate whether morpheme is a valid processing unit in Chinese speech comprehension and how meanings are accessed when a single character can map onto different morphemes. Experiment 1 was conducted on 2-character words that start with an ambiguous character (e.g. "教師"; "教" can mean "education" or "religion"). Results showed that the dominant meaning of an ambiguous character was more activated than the subordinate meaning initially (though both were more activated than the unrelated control) and activation started well before its acoustic offset. This pattern was interpreted as reflecting an incremental speech processing in Chinese which maps the minimal acoustic features onto the morpheme with higher frequency. Experiment 2 attached a biasing context before the same set of 2-character words and found that the context-fit meaning was more highly activated relative to the control condition. Moreover, stronger contextual bias produced faster and higher target activation before target onset. Implications of prior context on meaning access in speech comprehension are discussed. Finally, results in the two experiments are related to more general issues of morpheme representation, ambiguity resolutions and the interactivity of language system. Briefly stated, the validity of a morpheme level of representation is confirmed and ambiguity resolution in processing spoken Chinese is accomplished through a highly interactive system that takes all information available into consideration.

摘要

本研究利用兩個「視覺世界」範式（Visual world paradigm）的實驗，探討了在中文言語理解中，詞素是否一個有效的加工單位之問題，以及歧義字（同一中文單字表達不同詞素）的意思存取之問題。實驗一的材料都是雙字詞，其首字為一歧義字（如"教師"，"教"本身可具"教育"或"宗教"的意思）。結果顯示歧義字的主要意思比其次要意思激活程度更高，而且激活早在歧義字的聲音完結前已經開始，表明在中文言語加工中，最小單位的聲音特徵很快便會激活較常用的詞素。實驗二發現，將偏向性的語境加到實驗一的雙字詞之前，和語境相符的意思激活程度較高。另外，語境偏向性越強，激活會更強更快，甚至早於播出歧義字的聲音。討論涉及言語理解中，前面的語境如何影響後面歧義字的意思存取。最後，我們把實驗結果連繫到更廣泛的問題，包括詞素表徵、歧義解決、和語言系統的互動；結果表明詞素表徵在中文的真確性，同時亦證實了歧義解決仰賴一高度互動的語言系統來完成。