台灣大學語言學研究碩士

Psycholinguistic Processing of Chinese Polysemy
中文多義詞的心理語言學處理

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Abstract

This thesis aims to investigate the psychological reality of Chinese polysemous words. By manipulating part of speech of the stimuli, and by distinguishing number of senses and number of meaning facets in the stimuli, this research will be able to answer the questions of (1) whether multiple-sense words are recognized faster than one-sense words, (2) whether words with many meaning facets are recognized faster than words with one meaning facet, and (3) whether part of speech plays an influencing role in lexical processing. This study follows theories on Chinese lexical semantics (Ahrens et al., 1998, 2003; Huang, 2005a, 2005b) in defining senses and meaning facets of Chinese words. It replicates and extends Lin's research on processing of multiple senses of Chinese words by examining three semantic effects on word recognition, including number-of-sense (NOS) effect, number-of-facet (NOF) effect, and number-of-category (NOC) effect. The NOS effect predicts that words with more senses are recognized faster than words with fewer senses. The NOF effect predicts that words with more meaning facet are recognized faster than those with fewer meaning facets. The NOC effect predicts that words that can be used as different parts of speech (i.e., different syntactic categories) are recognized faster than words that are used as only one syntactic category. Two experiments using lexical decision task were carried out in order to examine the three predictions above. Each experiment had 40 subjects who were undergraduate students of National Taiwan University. The experimental stimuli were controlled for syllable length, part of speech, printed word frequency, and experiential familiarity. The results confirmed predictions of the NOS effect on verbs, the NOF effect on nouns, and prediction of the NOC effect. However, the results showed that the time needed for recognizing multiple-sense nouns was longer than the time needed for one-sense nouns, and the time for recognizing multiple-facet verbs was longer than the time needed for one-facet verbs. Based on the findings, this thesis sheds light on the experimental methodology, indicating the necessity to separate stimuli by their parts of speech. The thesis also supports the work discussed in Ahrens et al. (1998), which argues for the need to separate meaning facet from word sense. Finally, this study contributes to the discussion on the representation of mental lexicon, suggesting

modification of a random access model (Rubenstein et al., 1970, 1971) and a connectionist model (McClelland & Rumelhart, 1981).

中文摘要

　　本論文目的在於調查中文多義詞的心理真實性。藉由操弄刺激詞的詞類以及區分刺激詞的詞義與義面，本研究希望回答三個問題：(1)多義詞是否比單義詞容易辨識？(2)多義面的詞是否比單義面的詞容易辨識？(3)詞類是否影響詞彙處理？本研究依據中文詞彙語意學的理論 (Ahrens et al., 1998, 2003; Huang, 2005a, 2005b)定義中文詞的詞義(sense)與義面(meaning facet)。本論文複製並延伸Lin (1999)對中文多義名詞處理的研究，檢視三種語意效應，包括：詞義數目效應(number of sense effect)、義面數目效應(number of facet effect)，及詞類數目效應(number of category effect)。詞義數目效應預測詞義多的詞，其辨識速度會比詞義數目少的詞快。義面數目效應預測義面多的詞，其辨識速度會比義面數目少的詞快。詞類數目效應預測可以跨詞類使用的詞，其辨識速度會比只能作為單一詞類使用的詞快。為了檢驗以上三種預測，本研究以詞彙判斷作業(lexical decision task)作了兩個實驗。每個實驗各有四十位國立台灣大學的大學部學生參加。實驗的刺激詞皆已控制音節長度、詞類、書面詞頻，以及詞彙熟悉度。實驗結果應證了詞類數目效應，作用在動詞上的詞義數目效應，以及作用在名詞上的義面數目效應。實驗結果卻也顯示，多詞義的名詞需要比單詞義的名詞更長的辨識時間，而多義面的動詞則比單義面的動詞需要更長的時間來辨識。基於本研究的發現，本論文的貢獻在於指出實驗方法上分開刺激字詞類的必要性。本論文亦支持 Ahrens et al. (1998)的看法，認為有必要在詞的意義中區分詞的詞義與義面。最後，對於有關心理詞彙表徵的討論，本研究提出修正隨機觸接模型(random access model, Rubenstein et al., 1970, 1971)與連結觸接模型(connectionist model, McClelland & Rumelhart, 1981)的看法。

關鍵字：詞彙語意學; 詞彙提取; 詞義數目效應; 義面數目效應; 詞類數目效應; 詞類