

中国英语学习者 心理词汇的连接模式研究

李 黎·著

Lexical Linking Patterns in
Chinese EFL Learners' Mental Lexicon



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序

李黎博士撰写的专著《中国英语学习者心理词汇的连接模式研究》即将由东南大学出版社出版。付梓之际,我欣然接受了为其撰写序言的邀请。

李黎在 1994 - 1999 年间,就读于西安交通大学外国语学院(原西安医科大学)的医学英语专业(本科)。西安医科大学是“专门用途英语:医学英语(ESP: EMP; English for Specific Purposes: English for Medical Purposes)”研究的摇篮。由医学英语研究泰斗邵循道教授创建的科技英语系,拥有全国唯一的医学英语硕士学位授权点(1992 年)。李黎于 2002 年考入东南大学外国语学院,攻读硕士学位,师从李霄翔教授。读研期间,在李霄翔教授的指导下,致力于应用功能磁共振(fMRI)探讨二语习得者神经认知机制的研究。其间,发表的期刊论文《功能磁共振(fMRI)与脑语言功能研究综述》和撰写的硕士学位论文《感官型学习风格对词汇学习效果影响的神经机制实验研究》,属于国内神经认知语言学领域基于 fMRI 的早期研究成果,具有较高的被引率。2009 年,李黎考入南京师范大学外国语学院,由我指导其博士论文的撰写。在李黎博士论文选题之初,我曾建议她继续应用 fMRI 开展二语习得者的认知机制研究,但她考虑到:所任职的东南大学外国语学院,当时的研究重点是“中国英语学习者的心理词库”,因此希望从事中国英语学习者心理词汇的机制研究,以便保证博士毕业后研究工作的可持续性。为了查阅心理词库研究的相关资料和学习新的研究手段,李黎在博士就读期间(2011 年)还专程奔赴英国坎特伯雷基督大学访学两个月。

《中国英语学习者心理词汇的连接模式研究》一书主要基于李黎博士期间的研究成果撰写而成。该专著共七章。第一至三章,基于心理词汇连接研究的文献回顾,梳理了以往研究的不足,提出了该专著拟研究的问题和采用的研究方法;第四章基于词频效应(frequency effect)和具体性效应(concreteness effect),分别探讨了二语词汇属性对双语词汇表征和处理的影响;第五章从语形与语义两个层面,分析了二语词汇的语言效应(language effect);第六章揭示了二语水平

对二语者心理词汇连接模式的影响;第七章是该专著研究成果的总结与对未来研究的展望。

该专著的特色有三:一是依托以拼音文字研究为主流的理论模型,如:BIA (Bilingual Interactive Activation)和 RHM(Revised Hierarchical Model)模型,构建了适合于汉语为母语者研究的 BFML 模型(双语形/义连接模型:Bilingual Form/Meaning Linking Model),拓展了双语理论模型的应用领域;二是基于二语水平的发展和词形与语义间交互作用的分析,勾画出了二语与一语词汇连接的动态发展过程;三是从二语与一语的正向与反向连接两个维度的综合分析,完整地展现了二语者心理词汇的连接模式。

今天,10月16日,是南京举行2016年国际马拉松赛的日子。南京国际马拉松组委会发来消息:李黎(参赛号:C9772;半程马拉松),以2:36:54的成绩顺利跑完全程,在其年龄组的成绩排名为:194。

愿李黎博士的学术马拉松之路捷报频传!

是为序。

倪传斌

2016年10月16日于茶苑

中文摘要

词汇知识是阅读能力的重要指标,在二语习得中占据极其重要的地位。二语词汇知识研究的中心议题是词汇深度知识的习得。从注重二语词汇量的积累到探索心理词汇网络的构建特征,从词汇多维度解构到借用其他学科的研究方法多视角地探究词汇知识的表征和加工,二语词汇深度知识习得的研究在近半个世纪经历了质的飞跃。其中,热点研究领域是二语与一语心理词汇的关系。在双语心理词汇的诸多研究方法中,由于研究者无法直接观测到学习者二语心理词汇的存储、提取及其与一语词汇的具体连接,故基于反应时的实验逐渐成为众多心理学家和语言学家的最佳选择。在这一研究背景下,本书拟基于翻译识别任务中反应时的测量,从词汇变量、目标语言和二语水平三个层面探讨中国英语学习者心理词汇的连接模式。

本书应用翻译识别任务,开展了两项反应时的实验。两项实验的被试均为江苏某高校在校大学生。实验一的被试共计 84 人;其中,高水平 49 人,低水平 35 人。实验二的被试共 68 人;其中,高水平 33 人,低水平 35 人。实验材料为 576 组英—汉词对,包括 384 个实验词对和 192 个填充词对。实验材料按照拉丁方分配为四组。每组按照一语和二语词语的关系分为三个关键条件(翻译词对、词形干扰词对和语义干扰词对)和一个基线条件(无关词对)。每个条件内按照二语词汇变量,即词频(高频/低频)和具体性(具体/抽象),进一步分为高频具体、低频具体和高频抽象三组。被试执行的翻译识别任务为判断目标词是否为前一词的翻译词。应用 E-prime 呈现刺激材料并收集其行为学数据(反应时和准确率),所得结果应用 SPSS 进行重复测量方差分析。

关于词汇变量对双语心理词汇连接产生的效应,本书发现:二语词频与具体性对二语与一语的反向连接和一语与二语的正向连接,分别产生了明显的词频效应和具体性效应,即国英语学习者分别对高频词、具体词反应更快、更准确。此外,本书还发现,正向连接的词频效应和具体性效应均明显大于反向连接;与

高频词和具体词相比,低频词和抽象词的反向连接受词形干扰更大,其正向连接受语义干扰更大。

针对目标语言对双语心理词汇连接形成的目标语言效应,本书的主要发现为:目标语言对二语与一语的反向连接和一语与二语的正向连接均产生了明显的语言效应。此外,还发现中国英语学习者心理词汇连接的基本特征表现为:反向和正向的词形连接和语义连接虽然共存,但反向以词形连接为主,而正向以语义连接为主。

就二语水平对心理词汇连接带来的二语水平效应,本书的发现为:二语水平对二语与一语的反向连接和一语与二语的正向连接均带来了较为明显的水平效应,而对词汇变量效应总体上影响不明显。该效应主要体现在“形/义”连接和正/反方向的连接强度上。对于“形/义”连接的影响,二语水平效应表现为:(1)低水平学习者的语义连接在习得早期业已存在,而词形连接更强;高水平学习者的语义连接较强,但词形连接并未随二语水平的提高而逐渐消失。对于这一发现,应用现有基于双语均为拼音文字的理论模型难以较好地解释,因为这些理论低估了习得早期二语语义表征的建立和一语词形对习得晚期的影响。(2)二语与一语的词汇连接构建是一个动态的过程,而且词形与语义间存在明显的交互作用。低水平学习者的双语词汇连接模式表现为对词形连接的依赖大于语义连接;而高水平学习者的连接模式正好相反,他们对语义连接依赖大于词形连接。值得注意的是,本书还发现词汇连接的动态变化为量变,并不是基于双语均为拼音文字构建的 RHM (Revised Hierarchical Model) 模型中所述“由词形依赖到语义直接提取的”的质变。(3)基于双语均为拼音文字的 RHM 和 BIA (Bilingual Interactive Activation) 等双语心理词汇连接的主流理论模型难以解释中国英语学习者的心理词汇连接特征。对于词汇连接强度的作用,二语水平效应的表现包括:(1)高水平学习者在二语与一语的反向连接和一语与二语的正向连接上的词形和语义连接强度均大于低水平学习者。(2)高、低水平学习者的词汇连接均出现明显的非对称性,即二语与一语的反向连接强度明显大于一语与二语的正向连接强度。这一表现与 RHM 预期“心理词汇连接随二语水平的提高而呈显著对称的趋势”不符。此外,二语水平对词汇变量效应总体上影响不明显。高、低水平学习者在二语与一语的反向连接和一语与二语的正向连接上不存在词频效应量的差异。这一发现与 Weaker Links 假说不符。高、低水平学习者在二语与一语的反向连接和一语与二语的正向连接上亦不存在具体性效应量的差异。该发现与分布概念特征模型 (Distributed Conceptual Feature Model) 的预测

一致。

开展本书研究的意义主要体现在以下三个方面:(1)在理论创新上,基于双语均为拼音文字构建的主流理论模型,建立了双语形/义连接模型[Bilingual Form/Meaning Linking (BFML) model]。该模型可以用于解释汉-英双语者心理词汇连接的特点。此外,本书的研究是从“形/义连接”模式的角度出发,丰富了二语词汇深度知识的研究维度。(2)在研究方法上,通过控制无关因素而制备的英-汉刺激词表,因其取材范围广、提取参数严格和可操作性强,对于基于词汇探讨两种语言关系的相关研究,具有较大的推广价值和借鉴意义。(3)对于我国二语教学实践,本书研究所得的结论也具有指导意义,比如:二语词汇教学与习得应该重视建立和细化二语词汇的语义网,加强语义连接;词典的编撰、教材词表的制备均应以有效优化二语词汇形/义连接为目标。

关键词:英语学习者 词汇连接 反应时

ABSTRACT

LEXICAL LINKING PATTERNS IN CHINESE EFL LEARNERS' MENTAL LEXICON

Lexical knowledge is a meaningful indicator of reading skills, and plays an essential role in the second language acquisition. Research on lexical knowledge basically focuses on the acquisition of the deep lexical knowledge, and the research in this field has been changed radically for the recent fifty years, whose focus has moved from the increase of vocabulary size to the organization features of mental lexical network, and from multidimensional decomposition of a word to the exploration of lexical representation and processing with research methods employed mainly in the other disciplines. Of all the research topics on mental lexicon, the relationship between the two languages has been a heated one. Since the access and the linking patterns of the lexical representations cannot be directly visualized, the studies based on RT gradually become the one of the best choices for both psychologists and linguists. Therefore, the present study investigates the linking patterns of Chinese EFL learners' mental lexicon by means of the translation-recognition task with two RT experiments, from the perspectives of lexical variable effect, language effect and proficiency effect.

Two RT experiments recruited 84 and 68 undergraduates in Jiangsu Province as participants respectively. These participants were of two English proficiency levels. Experiment 1 involved 49 participants of high level and 35 of low level, while experiment 2 included 33 and 35 participants, respectively. The experimental materials were made up of 576 English-Chinese word pairs, with 384 as test word pairs and 192 as fillers. These word pairs were ordered using Latin-Square design into four lists, with 144 word pairs per list. Each list contained word pairs of translation equivalent, form distracter, and meaning distracter as critical conditions, and unrelated word pairs as a baseline. Word pairs of each condition were further classified into three groups (high-

frequency concrete, low-frequency concrete, and high-frequency abstract) according to the two lexical variables, frequency (high and low) and concreteness (concrete and abstract). The participants were asked to decide if the target words were the translation equivalents of the prior words. The software E-prime was used for presenting stimuli and collecting of behavioral data, accuracy and response time (RT). Repeated measure ANOVA was performed with SPSS for analyzing the results obtained.

For the lexical variable effects on bilingual lexical links, it was found that both L2-L1 and L1-L2 links varied with word frequency and concreteness, that is, there were frequency effects and concreteness effects on these links. Chinese EFL learners generally responded to high-frequency and concrete words faster and more accurately than to low-frequency and abstract words. It was also found that frequency effect and concreteness effect were greater in L1-L2 links than in L2-L1 links; compared with high-frequency and concrete words, low-frequency and abstract words were to a larger extent influenced by form distracters in L2-L1 translation recognition, and were more likely to be influenced by meaning distracters in L1-L2 translation recognition.

In terms of language effects, it was obtained that L2-L1 and L1-L2 links varied with the target language. Additionally, the basic feature of lexical links of Chinese EFL learners was that orthography dominated L2-L1 links, and semantics dominated L1-L2 links, although L2 words were represented in a way in which orthographic and semantic links co-existed in two directions.

For the proficiency effects on bilingual lexical links, it was observed that there were proficiency effects on L2-L1 and L1-L2 links in terms of both proficiency effects on orthographic/semantic levels and the linking strength.

There were robust proficiency effects on orthographic/semantic levels, namely, (1) for low-proficiency L2 learners, semantic representation emerged at a very early stage, but the orthographic links were stronger; for high-proficiency learners, semantic links were stronger, but orthographic links did not disappear with the increase of proficiency. These findings were unexplainable within the existing frameworks which were mainly based on alphabetic bilinguals, because these models underestimated the early emergence of L2 semantic representations and late reliance on the L1 orthography. (2) Organization of bilingual lexical links was a dynamic process, where lexical and conceptual representations interacted. For the low-proficiency learners, orthographic

links were stronger than semantic links. For the high-proficiency learners, the pattern was the opposite, that is, they had a much stronger semantic link as compared with an orthographic link. More importantly, the dynamic change was quantitative, and there was no qualitative shift from lexical reliance to conceptual mediation, as described in RHM modeled with alphabetic bilinguals. (3) Such mainstream models as RHM and BIA, modeled mainly with alphabetic bilinguals, were unable to account for some features of lexical links of Chinese EFL learners.

There were also robust proficiency effects on L2-L1 and L1-L2 linking strength, that is, (1) High-proficiency learners showed stronger links than the low-proficiency group in both directions at both orthographic and semantic levels. (2) Both groups showed asymmetry in the linking strength, which meant their L2-L1 links were stronger than the L1-L2 links. This was contradictory to the prediction of RHM, which expected a trend of symmetry with the improvement of proficiency. Despite the proficiency effects on form-meaning links and the linking strength, there were no significant proficiency effects on lexical variables. Specifically, there was no significant difference in the magnitude of frequency effects between the two groups in either direction, which was contradictory to the Weaker Links Hypothesis. There was no significant difference in the magnitude of concreteness effects between the two groups in either direction, which was consistent with Distributed Conceptual Feature Model (DCFM).

The findings of the present study shared theoretical, methodological and pedagogical significance. Theoretically, a Bilingual Form/Meaning Linking (BFML) model was established to accommodate the findings on the lexical links for the Chinese English learners. The present study also highlighted orthographic-semantic (or form-meaning) links, which enriched the dimension of deep lexical knowledge. Methodologically, the strictly constrained word pairs used in the present study were of referential significance, for their database-wide sampling, strict parameter settings and high operability. Pedagogically, it was indicated that L2 word teaching and acquisition should focus on establishing and refining L2 semantic network; and we should consider efficiently optimizing the organization of L2 word form/meaning links when compiling dictionaries and textbook word lists.

Key words: Chinese EFL learners; linking patterns; RT study

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