

CHINESE-ENGLISH BILINGUAL READING:
FACTORS, DIFFICULTY PREDICTION AND INTERVENTION

汉英双语者的阅读研究 影响因素、困难预测和教学干预

薛 锦◎著

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导　　读

我国英语的学习从小学贯穿到大学。根据我国教育部推出的《义务教育英语课程标准》和《大学英语课程教学要求》，阅读是英语学习者应掌握的一种基本技能，阅读能力也成为衡量英语水平的一个重要指标。汉语母语背景下，将有相当比例的英语阅读困难者产生。阅读困难对学习者的学业成绩和日常生活交流均会产生一定影响。大学英语阅读困难将同时影响语言技能和专业知识的获得。可以说，汉英双语的跨语言性质更易导致汉语母语者英语阅读困难的多样性。因而，在英语教学中，根据阅读困难的成因进行针对性训练就显得尤为重要。

本书首先梳理前人对双语阅读和发展的相关文献；在此基础上，整合前期研究成果和国际上阅读困难的筛查工具，筛选出具有鉴别力的汉英两种语言的阅读及阅读相关的认知和元认知加工技能的测查工具；对各测查进行预实验，最终生成实证研究使用的阅读、认知、元认知技能测查工具，对我国大学生的汉语母语者的英语阅读发展和阅读加工进行系列的实验研究，考察汉语母语者阅读及阅读困难的影响因素、表现形式、困难根源以及相应的教学干预的有效性。

一、研究内容及研究思路

（一）研究问题

字词阅读、阅读流畅性和阅读理解是阅读的三个重要成分。汉语阅读与许多认知技能，比如，语音意识、语素意识、正字法意识、工作记忆及快速命名等存在很强的相关（Anderson, Ku, Li, Chen, Wu. & Shu, 2004; Ho, Chan, Lee, Tsang & Luan, 2004; Li, Anderson, Nagy & Zhang, 2002; McBride-Chang, Shu, Zhou, Wat & Wagner, 2003; McBride-Chang et al., 2005; Shu, Chen, Anderson, Wu & Xuan, 2003; Shu & Anderson , 1999; Shu, McBride-Chang, Wu & Liu , 2006）。这些因素对阅读的贡献作用在拼音语言的研究中也得到了证实（如，Adams, 1990; Arnabak & Elbro, 2000; Bradley & Bryant, 1983; Brittain, 1970; Carlisle & Fleming, 2003; Carlisle & Nomanbhoy, 1993; Carlisle, 1995,

2000; Casalis & Louis-Alexandre, 2000; Cassar & Treiman, 1997; Cunningham, Perry & Stanovich, 2001; Ehri, 1997; Ehri, 2005; Goswami & Bryant, 1990 ; Mahony, Singson & Mann, 2000; Mattingly, 1984）。在阅读（含三个成分：字词阅读、阅读流畅性和理解）的预测上，除了上述认知层面的因素（如工作记忆）（如，Xue, Shu, Li, Li. & Tian, 2013）外，还有语言学层面的（如词汇、语法）（如，Cain, 2007; Carlisle, 1995）和元认知层面的因素（如杨小虎，张文鹏，2002；张庆宗，刘晓燕，2009）对阅读起重要作用。同时，阅读障碍者在上述因素上存在缺陷（如，刘文理，刘翔平，张婧乔，2006; Shu, McBride-Chang, Wu, 2006）。然而，汉语母语背景下，英语阅读及阅读障碍的研究尚存三个方面的不足：大多数研究局限于理论探讨，因此缺乏有力的实证的研究证据；英语学习者阅读困难的研究大多针对小学阶段儿童，而成人阅读的认知机制将在某种程度上有别于儿童；更重要的是，针对汉语母语成人的英语阅读的大多数研究都仅探讨元认知加工层面的问题，并在此基础上探讨元认知技能对阅读的贡献，从而忽略了低层认知技能对阅读机制的重要作用，而对第二语言阅读困难的研究仅限于理论解释或者语言层面的词汇或语法问题。因此，本书首先探讨：汉英双语阅读技能之间存在的关系；认知因素和元认知因素的英语学习者阅读发展和阅读加工中的贡献或影响作用；汉英双语者在字词通达、句法加工和语义整合在线加工的神经机制存在跨语言的普遍性。

阅读障碍亚类型发生率在不同语言系统中也存在差异。粒度理论（Ziegler & Goswami, 2005）和粒度和透明度假设（Wydell & Butterworth, 1999）从理论的高度解释语言特性对阅读障碍亚类型发生率造成的影响。汉语和英语分属不用的语系。汉语本身的特点，汉字阅读依靠的形和音节之间的匹配，并不像拼音语言英语那样从形到音的直接应对。由于母语汉语和第二语言英语在类型距离相对较远。但是，汉语母语背景下英语阅读困难的研究尚处于探索阶段。因此，本书还探索汉语母语者在英语阅读中困难的表现形式。汉英双语者如果呈现英语阅读困难，那他们的母语汉语的阅读情况如何？二语英语认知、元认知上是否也存在缺陷？汉语母语者的第二语言英语阅读困难是否存在神经基础？

在语言学领域，第二语言阅读的研究大多数研究局限于理论探讨（如姚喜明，梅晓宇，2003）。英语阅读的认知诊断研究相对较少，此类研究发现，词汇量少、阅读速度慢、句法分析能力差等因素导致英语阅读理解困难（如 Cain, 2007; 刘丹丹, 2002; 徐锦芬等, 2010; 杨小虎, 张文鹏, 2002; 张庆宗, 刘晓燕, 2009）。因此，本书继续探讨如何结合语言变量和认知变量来有效识别汉语母语者的英语阅读困难。

（二）研究思路

本书主要解决理论问题如表 1 所示，研究分五大部分，共 17 个实验和研究。在

汉语母语背景下，英语学习大多是通过课堂教学。而课堂教学的质量，特别是国内英语语言输入的环境存在很大的变异，因此为了有效控制由阅读经验缺乏造成阅读困难这个干扰变量，研究中筛选的被试均为国内大学的英语专业学生。

第一部分的内容（第1—3章），使用文献法和元分析的方法，查阅双语阅读习得和加工相关文献，确定预测双语读写能力的相关因素。

(1) 第1章是对“双语发展和读写能力的影响因素”的书评，论文题为“A review on ‘Bilingual Development and Literacy Learning: East Asian and International Perspectives’”（双语发展和读写学习：东亚和国际视角），发表于*Language Problems and Language Planning*, 37 (3) : 298-300 (SCI索引)。

(2) 第2章是“An analysis on effects of language experience on bilingual neural representation”（双语经验对大脑表征的影响的分析），这是针对双语分属不同语种的双语者的阅读加工的研究结果进行分析，重点考察双语阅读加工机大脑表征的差异。

(3) 第3章使用文献法，总结并梳理前人文献，论文题为“A review and reflection on the study of bilingual reading difficulties”（双语者阅读困难研究：回顾与思考），为后续汉语母语背景下英语阅读和阅读困难的研究做理论铺垫。

Table 1 Theoretical and research questions in this book

研究	理论问题	具体问题
一 双语阅读文献综述	双语和读写能力发展特点 双语经验对大脑表征的影响 双语者阅读困难的鉴别方式	
二 英语学习者阅读困难评估工具的编制和修订		阅读相关的认知因素的测查工具 元认知技能的调查量表
三 汉英双语阅读加工和习得的影响因素		汉英双语字词通达机制 英语阅读理解和词汇语素之间的关系 第二语言英语的不同类型的句法加工的神经机制 第二语言句法加工脑电模式差异的根源 句子理解中不同虚拟世界信息的辨别：脑电研究 汉英双语语言特异性对大脑表征和神经机制的影响 汉语母语者英语阅读困难的表现形式
四 二语英语阅读困难特点、表现形式和困难的根源		英语阅读困难原因探析 工作记忆缺陷和汉英双语阅读的关系 阅读能力差异对字词加工的大脑神经机制的影响 二语英语阅读困难者和普通读者句子阅读中字词语义整合机制的差异
五 二语英语阅读困难者的有效鉴别和教学干预		汉语母语者的英语阅读困难者进行有效鉴别 阅读元认知的教学干预效果 教学干预和汉英双语语素意识的发展的关系