

CHINA PERSPECTIVES

# The Use of L1 Cognitive Resources in L2 Reading by Chinese EFL Learners

Shiyu Wu



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ROUTLEDGE



# **The Use of L1 Cognitive Resources in L2 Reading by Chinese EFL Learners**

This book focuses on the effects of L1 cognitive resources on L2 reading e.g. the effects of L1 reading ability, the ability in L1 mental-structure building, L1 cognitive use in L2 reading, and other related cognitive mechanisms and capacities of EFL learners in China. It integrates test-based and product-oriented as well as VPA-based (verbal protocol analysis) and process-oriented experiments to address the problems of reading in a second language. This book provides several theoretical, methodological and pedagogical insights, including the multidimensional nature of L2 reading and Vygotskian sociocultural theory as a suitable L2 reading framework, combined approaches on L2 studies, and the rewarding active use of L1 cognitive resources in L2 learning.

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# Abbreviations

BMR	Building of Mental Representations
CET 4/6	College English Test Band 4/6
CH/EL	Chinese Reading is High and English Proficiency is Low
CH/EM	Chinese Reading is High and English Proficiency is Middle
CL/EH	Chinese Reading is Low and English Proficiency is High
CL/EL	Chinese Reading is Low and English Proficiency is Low
CL/EM	Chinese Reading is Low and English Proficiency is Middle
CM/EH	Chinese Reading is Middle and English Proficiency is High
CM/EL	Chinese Reading is Middle and English Proficiency is Low
CM/EM	Chinese Reading is Middle and English Proficiency is Middle
CR	Chinese Reading
EFL	English as a Foreign Language
ELT	English Language Teaching
EP	English Proficiency
ER	English Reading
ESL	English as a Second Language
FL	Foreign Language
HiL2	High L2 Proficiency Group
InL2	Intermediate L2 Proficiency Group
L1	First Language
L2	Second Language
LIH	Linguistic Interdependence Hypothesis
LoL2	Low L2 Proficiency Group
LP	Language Proficiency
LTH	Linguistic Threshold Hypothesis
MS	Mechanism of Suppression
NEEA	National Entrance Examination for Adult Education
PFL	Preparation for Future Learning
RUH	Reading Universal Hypothesis
SA	Study Abroad
SBT	Structure Building Theory
SD	Standard Deviation
SLA	Second Language Acquisition

SPSS	Statistical Program for Social Sciences
TL	Target Language
VPA	Verbal Protocol Analysis
WM	Working Memory

# 1 Introducing the study

## 1.1 Introduction

This book studies the use of first language (L1) cognitive resources in English (second language or L2) reading. It integrates both “test-based and product-oriented” as well as “verbal protocol analysis (VPA)-based and process-oriented” experiments. Research questions are addressed both from linguistic and psycho-cognitive perspectives. Further, multivariate analyses are conducted to illustrate the complex links and associations of the variables involved.

## 1.2 Need for the study

The present study is motivated by three concerns: (1) the importance of L2 reading for Chinese learners of English as a foreign language (EFL); (2) the investigation of the psycho-cognitive nature of transfer and “the threshold effect” in L2 reading; and (3) the clarification of controversies on the role of L1 use in L2 learning and reading.

### *1.2.1 Importance of L2 reading for Chinese EFL learners*

English is becoming the world’s first truly universal language. It has become the language of the information age and international business. More than 80 percent of all the information stored in more than 100 million computers around the world is in English (Aburdence & Naisbitt, 1999). Learning to read has become necessary to master this vast and vital source of information.

Meanwhile, people of different nations are communicating with each other more than ever before. Learning another language in addition to one’s native tongue is increasingly important around the world. People whose native language is not English frequently choose to learn English as a second language (ESL). In China, English is the first foreign language taught in middle schools and universities. Besides, millions of other people, including workers, soldiers, businessmen, and government officials, are taking English classes in their free time (Guo, 2001).

L2 reading is the keystone for these Chinese EFL learners. They are learning English in a target language “poor-input environment” (Zhang, 2000,



## 2 *Introducing the study*

pp. 83–96). These learners have few opportunities to communicate directly with native English speakers. Reading thus provides a source of input for them, which is a causative variable promoting advancement in the level of L2 proficiency through either conscious or unconscious processes (Elley & Mangubhai, 1983; Krashen, 1985). As Anderson (1999, p. 1) has put it, “reading is an essential skill for English as a foreign language (EFL) students; . . . and the most important skill to master. With strengthened reading skills, ESL/EFL readers will make greater progress and attain greater development in all academic areas.”

In China, students are encouraged to learn to read English before they can make effective use of the language. In practical terms, reading skills often have advantages over productive skills, both cognitively and affectively, because asking students who are not yet ready to speak too early will provoke interference from a first language, anxiety, and loss of motivation (Gary & Gary, 1981).

However, research and instruction in L2 reading in China are problematic. Most previous research on Chinese speakers’ ESL reading was undertaken either in Hong Kong or in Taiwan, where the social and economic environments are very different from those in mainland China. Important studies focusing on Chinese reading of English have been carried out or are being carried out in English-speaking countries such as the United States, Canada, and Great Britain, using overseas Chinese speakers as research subjects (see review by Guo, 2001). Yet, considering the differences in economic and sociopolitical contexts, these studies may not truly reflect the psycholinguistic and cognitive models used by EFL learners in mainland China. It is necessary that more research be undertaken in order to have a more complete understanding of the comprehension of written English by mainland Chinese EFL learners. Such research should improve our understanding of the comprehension process involved in a situation where two languages are very different from each other in script, and help in understanding the effects of the learning environment on text comprehension. Further, most previous studies on L2 reading by Chinese learners have focused on the transfer of lower-level processes or skills such as decoding, without further addressing additional basic issues (Chikamatsu, 1996; Hayes, 1988; Koda, 1989; Leong & Hsia, 1996).

For the above reasons, the present study is both worthwhile and necessary to provide further information about Chinese EFL reading.

### ***1.2.2 Investigation of the psycho-cognitive nature of transfer and the threshold effect in L2 reading***

The relationship between L1 and L2 reading has been discussed under the frameworks of two hypotheses: the reading universal hypothesis (RUH) (Alderson, 1984) and the linguistic threshold hypothesis (LTH) (Clarke, 1980). Both hypotheses suggest that L1 reading ability transfers to L2 reading, and the latter study also suggests the importance of a threshold level in such transfer. Many studies conducted by L2 reading researchers (Bernhardt & Kamil,