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## Reviewed work:

Reading in a Second Language: Cognitive and Psycholinguistic Issues (2015). Becky Xi Chen, Vedran Dronjic & Rena Helms-Park (Eds.). New York, NY: Routledge. Pp. 340. ISBN 978-0415893930. \$44.95

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Second Language Reading: Cognitive and Psycholinguistic Perspectives is an edited volume, describing the phenomena and processes of reading in second language (L2) and development of L2 reading skills from distinct but interrelated cognitive neuroscience and psycholinguistic perspectives. It is a comprehensive and multidisciplinary book, edited by Xi Chen, Vedran Dronjic and Rena Helms-Park, intended as "a primary text for graduate and upper-level undergraduate courses in L2 reading" (p. XV). This book is comprised of nine chapters, providing readers with a well-organized overview of the primary factors in L2 reading developments and processes. First, in Chapters 1-2, the book presents an overview of writing systems and their development, as well as an introduction of the neurocognitive underpinnings of reading as a foundation for L2 readings. Second, based on recent empirical studies, Chapters 3-6 discuss the key issues in L2 reading, including the development of L2 word recognition, crosslanguage interactions and transfer, the role of lexical knowledge in L2 reading, and the contribution of higher-level cognitive processes to L2 reading comprehension. Finally, Chapters 7-9 explore the role of social and cultural factors in L2 literacy, reading difficulties, and influences of digital media on L2 reading instruction from social and educational perspectives.

Chapter 1 mainly introduces background knowledge of scripts and orthographies. It begins with a history of writing systems and an introduction about two broad script categories in the world: phonographic and morphographic systems. Then, to investigate first language (L1) reading and the L1 influence on L2 reading, the authors of this chapter provide concepts of the orthographic depth hypothesis (Katz & Frost, 1992) and the grain size theory (Ziegler & Goswami, 2005). This chapter ends with two interesting case studies regarding Serbian digraphia and Jamaican

Creole (Patois) to exemplify usages of certain scripts affected by sociolinguistic, political, and educational issues.

Similarly, Chapter 2 discusses foundational knowledge related to reading issues from different aspects of cognition and neural science. The authors of this chapter diagram basic anatomical and physiological facts relevant to the human visual system, and specifically discuss eye movements during reading such as neural bases and word fixations in different orthographies. Then, they discuss the issues of automaticity and fluency, and brain networks in L1 and L2 reading based on neuroscientific evidence such as fMRI (functional magnetic resonance imaging) studies (e.g., Bolger, Perfetti, & Schneider, 2005). The authors claim that "reading is a process that we are forced to perform with whatever cognitive resources are available" (p. 32).

After introducing reading knowledge in the first two chapters, the rest of the book explores specific skills and/or abilities in L2 reading. Chapter 3 investigates how L2 word recognition subskills develop. This chapter begins with a description of interactions between word recognition and text meaning construction. Then, the author describes four component operations of word recognition and their subskills, including orthographic, phonological, morphological and semantic processes. The author further investigates contributions of metalinguistic awareness as a cross-linguistically shareable resource to the development of L2 word recognition, and variations in L2 word recognition. The findings show that phonological and morphological processing skills directly relate to reading ability, and L2 word recognition development is jointly impacted by the language-specific demands of L1 and L2 properties.

Building on Chapter 3, Chapter 4 further investigates cross-language transfer, particularly focusing on metalinguistic and cognitive skills in L2 learning. After introducing theoretical frameworks of cross-language transfer (cf. Geva, 2014), the authors of the chapter provide plenty of empirical evidence to explore four metalinguistic competencies (phonological awareness, morphological awareness, orthographic processing, cognate awareness) and two cognitive competencies (working memory and reading fluency). They also compare performance of cross-language transfer among L1 groups, construct levels, and reading outcomes across languages, respectively. Finally, the authors conclude that cross-language transfer is universally relevant to reading.

Chapter 5 extends the discussion in Chapters 3 and 4 to the interactions between lexical knowledge and reading ability in L2 contexts. The chapter's authors examine lexical knowledge and visual word recognition in L1 and L2 reading. Compared with L1 reading, L2 learners have unique reading experiences due to two language systems involved. The authors assert that word decoding skills are particularly vital at elementary levels while the importance of vocabulary knowledge increases as learner's language proficiency based on the empirical studies. Noticeably, unlike previous chapters, Chapter 5 begins to supplement reading instructions from a pedagogical perspective. Specifically, the chapter suggests that direct L2 vocabulary learning strategies and extensive reading support each other in complementary ways, and both approaches can promote L2 vocabulary development.

Continuing the issue of L2 reading comprehension, Chapter 6 investigates how higher-level processes affect children's L2 reading. These processes include working memory, background

knowledge, inference-making, as well as textual coherence and cohesion (Cain & Oakhill, 2006). The chapter's authors first illustrate "how a reader constructs a mental representation of the text" (p. 161), and then they describe the four higher-level processes, and their individual relationships with L1 and L2 reading comprehension. The authors claim that impacts of higher-level skills on L1 and L2 reading comprehension are similar. However, in contrast to L1 learners, L2 learners may encounter difficulties in reading L2 texts if sociocultural gaps exist.

Unlike the previous chapters that focus on studies of language components in reading, Chapter 7 extends this area to explore the role of sociocultural contexts in L2 literacy acquisition, specifically in immigrant communities in North America. The chapter's authors mainly examine gaps between the children's own culture and identity, and the L2 community's culture. They claim that cooperation among families, communities, and schools interactively contribute to these children's development of L2 literacy and biliteracy. In addition, Chapter 7 continues Chapter 5's and Chapter 6's emphasis on literacy practices and instructions. To be exact, it suggests detailed instructional and curricular strategies to foster children's literacy development in bilingual contexts, and provides a specific list of resources containing learning tools for children's reading.

While previous chapters discuss a variety of L2 reading factors and literacy learning phenomena, Chapter 8 switches to a new issue: whether reading difficulties in L2 learners, children and adolescents in particular, are due to inadequate L2 proficiency or a specific learning disorder. The authors of the chapter mainly discuss how cognitive factors make reading difficult, and result in many categories of L2 learners experiencing these reading struggles. The chapter ends with two case studies of immigrated children that show poor reading comprehension. The cases indicate the authors' perspective that sometimes L2 learners have reading difficulties not merely because of their lack of learning opportunities, of cultural gaps, and of inadequate instruction.

The book closes with a novel topic in Chapter 9 with respect to how modern technological tools facilitate L2 reading instruction, and how they assist L2 learners with developing their reading skills. Many technological tools providing reading support are introduced, such as hypermedia annotation, text-to-speech, text reformatting and general Internet resources. The chapter authors argue that advanced technology changes our reading styles and methods, and integration of digital media into L2 reading instruction can improve learners' affective and cognitive activities from a pedagogical perspective. This last chapter indicates that research will incorporate more technology within L2 reading studies in the future.

This book consists of independent but interrelated chapters, among which many key constructs in L2 reading reoccur in different chapters, but these concepts address distinct questions. For instance, "cross-language transfer" is introduced in Chapters 3, 4 and 8 to illustrate issues of word recognition, metalinguistic competences and reading difficulties, respectively. The repetition for different purposes helps readers to further understand the underlying meanings of these important concepts in L2 reading. In addition, all conclusions in the book are reached based on the theoretical frameworks and a wealth of recent empirical studies including qualitative and quantitative evidence. Meanwhile, the book not only thoroughly investigates theoretical questions in L2 reading, but also connects findings in the studies to practical L2 reading learning and instruction. Admittedly, the transitions between each chapter, and the

coherence of writing styles in different chapters are not prefect, possibly because more than 10 scholars with different writing styles, were involved in this book. However, the merits of what different authors brought about outweigh these minor shortcomings.

Overall, this book provides in-depth insight into L2 reading acquisition and development from cognitive and psycholinguistic perspectives. It is highly recommended to readers who are interested in L2 reading studies, as well as graduate students and novice researchers in related areas, such as L2 acquisition and L2 pedagogy.

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## **About the Reviewer**

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