

## Book Review

**Alan Juffs** and **Guillermo A. Rodríguez**: *Second Language Sentence Processing*, 2015, pp. 278, Hardback ISBN: 978-0-415-63119-0, \$150.00; Paperback ISBN: 978-0-415-63200-3, \$49.95.

---

Reviewed by Yanqin YANG: Minjiang University, China, E-mail: yanqin416@126.com

The new book *Second Language Sentence Processing* by Alan Juffs and Guillermo A. Rodríguez “is intended to be a broad overview of research from a generative perspective” on second language sentence processing. Given that current SLA research makes heavy demands on online investigations, and that sentence processing is a procedure closest to the truth of the real time performance of natural language, this is no doubt a timely and important topic. To address the main issues involved in the specific area from a specific perspective in eight chapters is a difficult feat. The text, though not without its flaws, does an admirable job of building a conclusive review.

The book, containing eight chapters, overviews research on the well-known issues arising from the formalism approach to sentence processing, for example, the influence of verb argument on processing. Its topics run from the relationship between parsing and grammar to the processing of ambiguous relative clause attachment or the related research fields such as morphological processing and sentence processing from the perspective of cognitive neuroscience. And it would be a useful text for “advanced undergraduates, graduate students, and researchers in SLA, linguistics, and cognitive psychology”.

**Chapter 1**, the introduction, makes clear that the purpose of this book is to provide an overview of research on adult users’ second language sentence processing from the perspective of generative formal theories so as to detect whether and how learners deploy their knowledge of grammar to develop native-like sentence representations. It “is consistent with the views of first language development that see processing breakdown as a trigger for acquisition” (p. 1). The author of this chapter points out that compared to other models of language processing, the formal approach can provide explicit details in the analysis of language and help formulate testable and falsifiable hypotheses about how language comprehension proceeds. The

research presented in this book is “couched in the well-known formalism of Principles and Parameters Theory” (p. 3).

**Chapter 2** considers the difference between parser and grammar by listing some well-known difficulties in sentence comprehension. Moreover, it discusses the nature of parsing, characterizing it as a process based on grammar but also involving other factors such as plausibility and reviewing processing paradigms such as the Garden Path Model, Principle-based parsing, and Gibson’s Model. After introducing some methods frequently used for second language processing, the author claims that the psychological reality of empty categories is significant for studying the nature of L2 competence and parsing performance and that individual working memory capacity is an important factor in online parsing.

**Chapter 3** addresses how learners use their knowledge of verb argument structure in sentence processing. It is concluded that despite cross-linguistic and individual difference, both L2 learners and native speakers use argument structure, “good-enough” processing, and plausibility as needed. Although L2 learners seem to rely more on nonsyntactic knowledge than do L1 learners, and the time and extent to which it is applied are still disputed, research finds that it is still possible for proficient L2 learners to reach native-like performance. The author also suggests that eye-tracking methodology and comparisons between L2 and L1 learners’ language development is necessary in future studies.

**Chapter 4** explores the role of abstract categories in second language learners’ processing of long-distance wh-dependencies, indicating three stages of research: in early research it is hypothesized that principles such as subjacency are accessible to learners but there is a processing deficit “when a wh-filler-gap relationship had to be reanalyzed” (p. 135); later, the shallow structure hypothesis (Clahsen & Felser, 2006) is proposed for L2 learners’ sentence processing, which claims that L2 learners have access only to declarative knowledge, and thus have no access to UG; recent evidence suggests that adult L2 learners with sufficient exposure to L2 are able to grasp abstract grammatical properties and perform deeper structural processing.

**Chapter 5** is concerned with the issue of how L2 learners process both full and reduced relative clauses (RRCs), suggesting that L2 learners, especially learners who study English as a second language, are sensitive to the difference between subject and object relative clauses and the Accessibility Hierarchy. Crosslinguistic studies in this chapter find that animacy, the RC’s typology, and L1 influence may affect the processing of

RCs in SLA. Refined psycholinguistic techniques and L1 research on RCs are of great significance for L2 studies in the future.

While Chapter 3, Chapter 4, and Chapter 5 are concerned mainly with “the processing of information related to verbs” (p. 191), **Chapter 6** focuses more on noun phrases, reviewing data supporting the availability of Binding Principles (Chomsky, 1981) in second language parsing as well as gender and adjective agreement. The chapter presents evidence showing that proficient L2 learners are able to perform like natives but are slower, and that proficiency is a key factor influencing L2 learners’ development of processing ability.

**Chapter 7** pays special attention to research on the resolution of ambiguity in relative clause attachment, where prosody, argument structure and number agreement, working memory, frequency, and recency are discussed as possible explanatory factors. The controversial results suggest that “the attachment of ambiguous RCs may not be the ideal phenomenon with which to answer the question about structureless parsing in second language acquisition” (p. 239).

**Chapter 8** concludes the monograph. Two related areas of research – morphological processing and cognitive neuroscience of SLA – are introduced in comparison and in relation to second language sentence processing. The authors review the findings and claim “the relationship between second language grammatical competence and parsing performance is complex and is dependent on stages of interlanguage development” (p. 247), thus providing suggestions for further research. Moreover, it is confirmed that although many learners have difficulties in second language sentence online processing, evidence shows that some learners are able to achieve native-like performance even though their parsing is sometimes slower. The authors also suggest that future research should focus more on proficiency, working memory, lexical access capacity, participants’ background, methodologies, cognitive difference, and interventions.

### **General Comment**

In general (but see below), the authors of the book under review rely on a rich set of empirical data in their investigation into whether and how L2 learners deploy their grammatical knowledge in sentence processing, covering a wide range of phenomena and offering convincing evidence for their analyses. In addition to (partly unpublished) research on SLA, the

monograph contains many findings on L1 acquisition, which help the reader to gain a deeper understanding of the specific characteristics of SLA.

A laudable feature of the book is that it is structured in a reader-friendly way. In each chapter, the authors provide some background knowledge of the subject matter, before proceeding to the presentation and discussion of early and contemporary research, its strengths and deficiencies, and offering possible solutions to research topics and formulating desiderata for future research. Another welcome reader-friendly feature of the monograph is that each chapter concludes with a table that summarizes its content, including relevant information about researchers, their works, years of publication, theoretical and methodological issues, and main research findings.

However, perhaps due to the fact that the book has two authors, viz. Alan Juffs (principally responsible for Chapters 1–5 and 8) and G. A. Rodríguez (Chapters 6 and 7), there is a clear asymmetry among chapters with regard to their length. On the one hand, while Chapters 1–5 have at least 30 pages, Chapters 6 and 7 have only 21 and 15 pages, respectively. In contrast, the summaries in chapters 1–5 are much less detailed than those in chapters 6 and 7. This raises the question whether chapters 6 and 7 really cover enough material.

For example – and this may be a matter of personal bias – I was surprised by the fact that in Chapter 6 research on Principle A and Principle C is presented, but there is no discussion of Principle B. As the Delay of Principle B Effect is a well-known phenomenon, I believe that Principle B is a highly relevant topic. Even if there does not exist much research on how Principle B affects adults' L2 learning, the author should at least give a brief introduction to this issue, especially since he lists the three principles as the theoretical background of his chapter.

Despite the above-mentioned caveats, by and large this book presents a rich and highly informed discussion of research on second language sentence processing from a generative perspective. It is an excellent and important contribution to the study of SLA, which should stimulate continued work in this field.

## References

- Chomsky, N. (1981). *Lectures on government and binding*. Dordrecht, The Netherlands: Foris.
- Clahsen, H., & Felser, C. (2006). Grammatical processing in language learners. *Applied Psycholinguistics*, 27, 107–126.