Grammatical gender has been a topic of interest for researchers of different areas of Linguistics, Psycholinguistics, Neurolinguistics and other related fields. This multidisciplinary approach has allowed scholars to explore grammatical gender acquisition and processing in great depth. The volume *The Acquisition of Gender: Crosslinguistic Perspectives* (2022), edited by Dalila Ayoun, provides a vast collection of previously unpublished critical reviews and original empirical works focused on grammatical gender. The volume covers gender acquisition by bilinguals, adult L2 and L3 learners and heritage speakers of different languages.

The book is structured in two parts. After the introduction (Chapter 1), part I includes three critical review chapters focusing on three issues: gender assignment in mixed noun phrases, subtle gender biases in language and gender acquisition in children and adult heritage speakers of Spanish. The more extensive part II, contains six chapters of original empirical studies covering grammatical gender acquisition by children, L2 and L3 adult learners and heritage speakers, e.g., grammatical gender and article use in beginner learners of German or cross-linguistic influence in bilingual grammars.

In Chapter 1, "Introduction: Gender, *geslag*, *Geschlecht*, *γένος*, □□□□, *性別*," the editor Dalila Ayoun starts with the revision of the term "gender" which has been described as "an endlessly fascinating linguistic category" (Corbett 1). This chapter also gives a brief description of gender systems pertaining to a few languages (e.g., Swedish and Nigerian Fula), including those represented in the present volume (e.g., Turkish, Mandarin Chinese, Papiamento, Italian, Spanish, French, German). Following that, the editor provides a summary of the works included in the volume.

Part I, "Review Chapters," includes three review chapters. Chapter 2, "Gender Assignment in Mixed Noun Phrases: State of the Art," by Kate Bellamy and M. Carmen Parafita Couto, provides a comprehensive overview of research focused on grammatical gender assignment in mixed noun phrases (NPs) which are one of the most frequent constructions for code-switching by

bilinguals. Mixed NPs are composed by at least two elements: a noun in one language and a determiner in another language (e.g., *la* house: 'the.SPANISH (FEM) house.ENGLISH'). Three main gender assignment strategies in mixed NPs are mentioned: 1) translation equivalent strategy, also known as rhyme analogy, synonymic gender, gender copy or analogical gender; 2) shape-based or phonological analogy; 3) default strategy. The authors also mention different—both linguist and non-linguistic—factors that modulate gender assignment references, providing examples from different language pairs. The chapter concludes with some suggestions for future research, such as to include different language pairs, especially those exhibiting different gender systems.

Chapter 3, "Empirical Evidence for Subtle Gender Biases in Language," by Yulia Esaulova and Lisa von Stockhausen, explores some social psychological and psycholinguistic studies that uncover subtle gender biases in a variety of linguistic phenomena (e.g., linguistic manifestation of gender and gender stereotypes). The authors provide an overview of linguistic intergroup and expectancy bias, negation bias, irony bias, male bias in generic masculine and gender-fair alternatives, gender mismatch effect, verbs as markers of agency, case syncretism, and thematic agents. In conclusion, Esaulova and von Stockhausen argue that uncovering gender biases in language is not an easy task and their analysis requires different empirical approaches. The authors also suggest a few future directions towards the factors that may determine the strength of a bias in gender-related contexts and a wider variety of language.

In Chapter 4, "The Acquisition of Grammatical Gender in Child and Adult Heritage Speakers of Spanish," Alejandro Cuza and Liliana Sánchez analyse previous works on the acquisition of grammatical gender in child and adult heritage speakers of Spanish (minority language) in contact with English (majority language), who tend to overgeneralize masculine gender in those contexts where feminine is required (e.g., *un*.MASC *nube*.FEM *rojo*.MASC: 'a red cloud'). The authors discuss to what extent crosslinguistic influence from the majority language, the age of onset of bilingualism and patterns of language activation and use can explain the variability in heritage language grammars. Cuza and Sánchez argue that the variability that heritage speakers present with gender agreement in Spanish can be explained following the Bilingual Alignment Approach (Sánchez), according to which specific patterns of language activation and use, lexical frequency and linguistic proficiency should be taken into consideration. The authors conclude the chapter with

some ideas for future research; for instance, they suggest exploring other heritage speaker grammars.

Part II, "Child, Adult and Heritage Speakers," includes six chapters that report on the results of original empirical studies on the acquisition of grammatical gender by L1, L2/L3 and heritage speakers. More specifically, Chapter 5, "The Second Language Acquisition of Grammatical Gender and Number in Italian," by Dalila Ayoun and Stefano Maranzana, presents a cross-sectional empirical study that is focused on the ability of English-speaking learners of Italian as L2 to assign correct grammatical gender and number to nouns in a written computerized task. The authors provide a description of how grammatical gender is expressed in Italian and how it is accounted for from a Minimalist perspective, and also provide some issues regarding L2 acquisition. Results show that L2 learners perform poorly in comparison with native speakers who perform as expected and show strong effects for transparency, gender and number. In light of the results of their study, Ayoun and Maranzana discuss some implications on L2 learnability and propose future studies with more L2 learners at more advanced proficiency levels and different elicitation tasks.

In Chapter 6, "Grammatical Gender and Article Use in Beginning Learners of German," Peter Ecke explores the production of determiner NPs by L3 learners that includes the correctly marked gender, the sensitivity to noun's formal gender cues, and the factors that help L3 learners cope with the complexity of the German system of articles and gender. The author provides a description of the grammatical gender system in German and summarize previous works on the acquisition and processing of gender and articles in L2/L3 German. The results of this study are discussed following Ecke's Parasitic Model of L2 and L3 vocabulary acquisition ("Parasitic Vocabulary Acquisition"), which claims that cross-linguistic influence (CLI) plays a role in the form of established lexical connections. That is, beginning L3 German learners tend to adopt a gender of the lexical equivalent rather than using formal grammatical gender cues. According to the results, the sensitivity to gender cues seems to emerge only for the most frequent cue type and is associated with the definite article use.

In Chapter 7, "The Non-default Gender Category in Additional-Language French," Amanda Elmonds, Aarnes Gudmestad and Thomas Metzger analyze the instances of the expression of grammatical gender on determiners and modifiers in oral longitudinal data. Specifically, the authors aim to explore linguistic and extralinguistic factors that may determine the use of feminine as opposed to masculine determiners and adjectives. The

chapter starts with a concise overview of the grammatical gender system in French. Following that, an overview of errors, defaults and targetlikeness is provided. Elmonds, Gudmestad and Metzger adopt a form-based approach within a variationist framework in order to explore what factors influence the use of modifiers marked for feminine (the non-default) *versus* masculine (the default) gender. Six factors were found to be significant: 1) noun gender; 2) noun initial phoneme; 3) noun frequency; 4) modifier type; 5) syllable distance; 6) noun class.

In Chapter 8, "Investigation Grammatical Gender Agreement in Spanish: A Methodological Exploration of Eye Tracking," LeAnne Spino reports on the results of an eye-tracking experiment with L2 Spanish learners and native speakers of Spanish. The study explores how sentences with grammatical gender agreement violations (e.g., *la almuerzo*: 'the.FEM lunch.MASC'; *el ensayo*.MASC *larga*.FEM) are processed. Spino provides a literature review on eye tracking and grammatical gender agreement and on knowledge implemented in the violation detection paradigm. The results of this study claim that both L2 learners and Spanish natives are sensitive to gender agreement violations, but only the latter group is sensitive to these violations of noun-adjective agreement. The author discusses the results in terms of methodological considerations suggesting, for instance, to implement the post-reading questionnaire in order to determine to what extent explicit knowledge is employed in the processing of gender violations.

Chapter 9, "Cross-linguistic Influence in Bilingual Grammars: Evidence from Gender Assignment in Unilingual Dutch and Mixed Speech," by Brechje van Osch, Ivo Boers, Janet Grijzenhout, M. Carmen Parafita Couto, Bo Sterken and Deniz Tat, presents a study that investigates the role of cross-linguistic influence from the heritage language onto the societal language by comparing three heritage languages (Turkish, Papiamento and Spanish) in the Netherlands. The authors provide an overview of the nominal domain in these languages, as well as a description of the representation of Dutch gender in bilinguals and gender in code-switching. The results of this research show the overgeneralization patterns in the unilingual mode and code-switching mode. The importance of the extra-linguistic variables (age of onset, amount of input and language use) is also argued.

The final chapter of this volume, "Prediction on the Basis of Gender and Number in Mandarin-Italian Bilingual Children," by Jasnijn E. Bosch, Mathildre Chailleux, Jian'en Yee, Maria Teresa Guasti and Fabrizio Arosio, reports on a study that examined the online processing of grammatical gender and number in Mandarin-Italian bilinguals and Italian monolinguals using a

visual world eye-tracking paradigm. The authors provide an overview of processing of the grammatical gender and number and discuss some discrepancies between these two grammatical features. The results of this study show that monolingual children used gendered articles to predict the upcoming noun in the sentence, whereas bilingual children were significantly slower in gender processing than in the number condition. Bosch et al. argue that L2 proficiency (particularly, the lexical knowledge) has a considerable effect on gender processing in the bilingual group. The authors explain that the discrepancy between gender and number may be due to transfer. More specifically, Mandarin does not have grammatical gender but it does have a notion of number.

To conclude, Ayoun's volume is a highly informative and accessible contribution on grammatical gender acquisition. It includes an extremely valuable collection of works. The first three chapters of this volume present critical reviews. The following six chapters provide new empirical evidence regarding gender acquisition by bilingual children and L2/L3 adult speakers, and heritage speakers. The research methods of the studies included in this volume are also various: semi-guided interviews, picture narration, corpus-based works and eye-tracking paradigm. All this makes the book a must-read for a wide range of readers, including researchers and students interested in grammatical gender acquisition.

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