

Laurentian French is also the topic of JEFF TENNANT's survey of Hearst, a majority franco-phone city in largely anglophone Ottawa. The phonological description of French in Hearst is not markedly different from that described in this volume for Quebec. This chapter, however, is distinct from all of the others for the attention that Tennant devotes to the question of rhythm. Despite differing degrees of contact with English, he finds that all of the Laurentian varieties that have been measured according to a pairwise variability index (PVI) fall into the 'syllable-timed' classification.

In the final survey of the volume, DOUGLAS C. WALKER reports on the PFC results for Alberta and finds that for most features, the French spoken in Alberta does not differ substantially from Popular Canadian French. Many of the features that occur in the other North American varieties of French surface in Alberta as well. In a final section of his survey, Walker acknowledges the highly bilingual nature of Alberta francophones, and he overviews the coexistence of the assimilated and unassimilated English loanwords that occur in his corpus.

The editors conclude the volume with a review of the major findings, over-viewing common trends and unique features of the varieties of French surveyed. The commonalities across varieties appear to reside in the treatment of schwa, which is more resistant to elision word-initially than it is in other contexts, and in the nearly uniform treatment of liaison. With respect to the latter, there is very little deviation across survey points; obligatory liaison is consistently released in contrast to optional liaison, which is only sporadically manifested among individual speakers. Not surprisingly, the locus of variation resides in the vowel system of French. Prosody also appears to be susceptible to local variation (for instance, in Belgium and Africa), but this topic is not consistently addressed across survey points.

This beautifully edited volume should appeal to a wide audience, since the collection, in its entirety, is distinguished by its close attention to documenting phonological diversity. The authors of the various chapters have approached the analysis of their surveys using very different methodologies, but the result is a coherent and focused portrait of variation in French. This collection will be indispensable for scholars with interests in French, in particular, and in phonological variation, in general. It is replete with insightful and relevant observations about areas of stability and indeterminacy in French phonology that should spawn numerous follow-up studies.

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The psycholinguistics of bilingualism. Ed. by FRANÇOIS GROSJEAN and PING LI.
Malden, MA: Wiley-Blackwell, 2013. Pp. 256. ISBN 9781444332797. \$34.95.

Reviewed by ARTURO E. HERNANDEZ, *University of Houston*

The importance of bilingualism has taken on a new meaning in the last few years. Gone are the days when people wondered if speaking two languages doomed people to be confused or unable to express themselves. Instead, researchers have come to suggest that switching between two languages benefits individuals by allowing them to exercise their mental control muscles in a significant way. Whereas the current focus of attention on bilingualism undoubtedly benefits all researchers in the area, it also draws attention away from a long tradition of research in this field. It is here that Grosjean and Li's edited volume on the psycholinguistics of bilingualism serves to update those interested in understanding the latest findings in this field while still covering the importance of control in bilingual language processing. The introduction lays the foundation for the rest of the book by informing the reader of its main goals. It accomplishes this by providing a targeted overview of the field by melding the expertise of the editors together with the contributions of additional experts in the field. What results is a volume that covers many different areas

of bilingualism across development. As such it is a must-read for anyone who is looking to become acquainted with this field for the first time as well as those who would like a more recent update.

What is a bilingual? The seemingly simple question can generate many answers. For some, bilingual means that one speaks both languages from a young age with equal proficiency. For others, it is knowledge that counts. Long known for his important views such as ‘a bilingual is not two monolinguals in one head’, FRANÇOIS GROSJEAN begins the first chapter, ‘Bilingualism: A short introduction’, with a simple definition of bilingualism: ‘the use of two or more languages (or dialects) in everyday life’ (5). The portrait he paints is a nuanced one that helps to overcome many misconceptions. He shows that bilinguals are not necessarily good translators and that many speakers of a language have accents. In further supporting this view, Grosjean shows us how dynamic bilingualism can be by considering how bilinguals may interact differently with monolinguals and bilinguals, and how two languages can wax and wane. What emerges from this first chapter is clearly a complex, multidimensional view of what bilingualism is.

In the next two chapters, Grosjean goes on to tackle another contradiction in bilingual language research—speech recognition and production. He begins by noting that a lot of attention has been paid to how bilinguals recognize visual words and the ways in which bilinguals read. Relatively less work has focused on speech recognition and production. Grosjean does an admirable job of covering this field. Speech perception, which he covers in Ch. 2, presents a particularly complex and fluid conundrum for the bilingual speaker. First of all, a bilingual has to deal with two different sets of sounds in two different languages. As such, the typical bilingual would need two duplicate systems, one for each language. This becomes more complex when one considers how bilinguals handle bilingual speech, especially in conditions of code-switching or mixing. This can add another layer of complexity: for example, when spoken language contains linguistic constructions that differ across languages, language-specific elements are likely to activate only the corresponding language system. Grosjean considers the base-language effect and several studies on the recognition of code-mixing in bilingual speech. The chapter concludes by presenting the bilingual model of lexical access (BIMOLA), which seeks to address many of the issues that are presented in the chapter.

Ch. 3, ‘Speech production’, also written by Grosjean, helps to finish up the first section of the book. The central issue surrounding this chapter is whether bilinguals must select a language while producing words in that language. The chapter first considers how thought is transformed into language in a monolingual. Much like speech recognition, speech production provides a complex set of circumstances in bilinguals. Bilinguals could be faced with communicating with other monolinguals, or alternatively they may be communicating with other bilinguals. Because of this range of interaction in which each language may or may not be activated, Grosjean argues that speech production in bilinguals is a dynamic process. He concludes by presenting an account of spoken code-switching phenomena, including discussion about speed during switching in bilingual speech.

The second section of the book begins with ANNETTE M. B. DE GROOT’s chapter on reading. Discussing reading would not be possible without introducing the basic components that make up the conversion of print to word to sound. To state it more technically, the chapter describes the processing of orthography and phonology. The author continues by presenting the results from word-recognition experiments conducted with bilinguals. These include the use of words that vary in orthographic and semantic relatedness such as homographs and neighbors as well as cognates. Based on these results, she suggests that bilinguals may activate both languages when reading single words. To explain these findings she presents three different models: the bilingual interactive activation (BIA), the semantic, orthographic, and phonological interactive activation (SOPHIA), and BIA+. De Groot concludes the chapter by discussing a number of studies that have investigated the role of language proficiency and age of acquisition on sentence processing, and then discusses the role of language history and proficiency on sentence processing on the basis of those results.

The second R in bilingual psycholinguistics is covered very eloquently by ROSA M. MANCHÓN in Ch. 5, ‘Writing’. Her goal is to ‘explore the defining characteristics of bilingual text production

processes' (100), and she pursues it by initially explaining the general process of writing (condensed into three phases: planning, formulation, and revision). Later, she compares the writing processes and strategies of monolinguals and bilinguals, highlighting the results of several studies. Generally speaking, bilingual writers appear to rely on their first language and its specific 'higher-order' strategies to a greater extent, even when writing in another language. This role of an L1 as a base seems to hold even at advanced levels of L2 proficiency. Manchón closes by discussing how writing skills transfer across the bilingual's languages. She agrees with others who see these skills as being transferable, but she advises the reader that such analyses of writing performance need to be combined with further variables, like language proficiency, general writing expertise, and education.

VIRGINIA YIP begins the third section of the book on language acquisition by discussing early simultaneous bilingualism. Yip begins by clarifying that the concept of a first language makes little sense for infants and young children who are exposed to two languages from birth. Yip explores theoretical and methodological issues, such as the quantity of input and its effects on the child's language acquisition; the nature of unbalanced development; crosslinguistic influences; language pairs, mode, choice, and dominance; and data collection. The author continues by exploring the ways in which simultaneous bilinguals differentiate between their two languages early in life both in terms of speech perception and babbling. She also discusses code-mixing extensively. She concludes by extending beyond bilingualism to consider trilinguals.

PING LI, both contributor and editor of the book, concludes the third section by considering successive or sequential bilingualism. Li notes that, unlike simultaneous bilingualism, sequential bilingualism involves a first language that is higher in proficiency than a second language. The author also reviews the effect of age on the acquisition of a second language. He questions the strict view of a critical period and describes a number of results that support a view in which 'age of acquisition' (AoA) plays a role. L2 AoA does provide a better explanatory concept when comparing early bilinguals to adult language learners. One clear example is in the perception and production of speech sounds. Li then discusses the influences that L1 and L2 exert on each other in adult learners, in lexical acquisition and its relationship with preexisting concepts, cross-language interactions, and the acquisition of grammar. He concludes by reiterating the main premise of the book: that the interplay between the two languages is dynamic, even when they are learned during distinct periods of life.

De Groot begins the final section on cognition and the bilingual brain by considering the nature of semantic memory in bilinguals. To achieve this she describes historical views of bilingualism that provided more static views of bilingualism. She describes the changes that have occurred both in studies and in models on the organization of the bilingual mental lexicon. More importantly she discusses more recent models that conceptualize bilingual language processing as consisting of distributed representations. She concludes by considering bilingual autobiographical memory. Particularly fascinating is her description of studies that have found that a particular language is embedded in a memory trace for bilinguals.

ELLEN BIALYSTOK and RALUCA BARAC continue this fourth section by describing how bilingualism influences development and the preservation of important cognitive abilities. This begins with a description of the effects early in development such as those seen in metalinguistic skills. They also review the now growing literature on the benefits of bilingualism for tasks involving cognitive control across the lifespan.

The final chapter by Ping Li completes the journey by linking the work on the brain bases of bilingualism with the computational modeling approach. He begins by describing general topics in neurolinguistics and its debates on brain localization and organization. He also describes work done on the nature of language switching. Li does an admirable job of introducing the technologies that are used to study the bilingual brain such as fMRIs (functional magnetic resonance imaging) and ERPs (event-related potentials). He concludes by introducing computational models of bilingualism. Whereas these models are not real brains, they do exhibit interesting phenomena that shed light on the newly emerging brain sciences. This chapter suggests an important future avenue of research in which both computer simulations and brain imaging work together to uncover the dynamic nature of bilingual language processing.

The psycholinguistics of bilingualism is an absolute gem to read. It is concise and clear while not skimping at all on breadth and depth. Truthfully, this is a bit unsettling for those of us who have worked in this field. Capturing such a wide array of topics in a single volume is a gargantuan task. Grosjean and Li should be applauded for helping to shape such an excellent text. Most importantly, the editors and authors help to convince the reader of the importance of dynamic processing, whether it be in computer models that have to adapt to language input, brain images that capture how bilinguals switch between languages, or in the nature of speech that takes into account how bilinguals adapt to different linguistic situations. By bringing all of these pieces together, Grosjean and Li have provided a true gift for those who would like to learn more about this field.

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On the compositional nature of states. By E. MATTHEW HUSBAND. (Linguistik aktuell/Linguistics today 188.) Amsterdam: John Benjamins, 2012. Pp. xv, 170. ISBN 9789027255716. \$149 (Hb).

Reviewed by JONATHAN E. MACDONALD, *University of Illinois at Urbana-Champaign*

In *On the compositional nature of states*, Husband develops a theory of the stage- vs. individual-level distinction. What determines the stage- vs. individual-level status of a state is not a lexical property of the verb, it is argued, but a function of the combination of the verb and the QUANTIZATION properties of its arguments. A stative verb in combination with a QUANTIZED object gives rise to a stage-level predicate; a stative verb in combination with a HOMOGENOUS object gives rise to an individual-level predicate. This is a novel observation. As H points out, this fact is strikingly parallel to the compositionality of the (a)telicity of a predicate, where, depending on the quantization properties of the direct object, the verb phrase is telic or atelic. This parallel is extended to the scalar properties of adjectives as well, where H observes that if the head adjective is closed-scale, the predicate is interpreted as stage-level, and if the head adjective is open-scale, the predicate is interpreted as individual-level. He argues that the closed- vs. open-scale properties of adjectives themselves are just another manifestation of quantized vs. homogenous properties. Moreover, H argues that the existential interpretation of a subject, which arises in the context of a stage-level predicate, and the generic interpretation, which arises in the context of an individual-level predicate, are themselves fundamentally aspectual notions, the result of a mapping from the quantization properties of the predicate to the subject. An existentially interpreted subject is the result of a stage-level predicate predicating over a single (quantized) stage of an individual; a generically interpreted subject is the result of an individual-level predicate predicating over all (or homogeneous) stages of an individual, that is, over the individual itself. H provides a formal semantic account of the compositional nature of the stage- vs. individual-level alternation and the mapping from predicate to subjects by assimilating approaches from Krifka (1992, 1998), Kratzer (1995, 2004), and Borer (2005). These parallels between eventive and stative predicates as well as the observation that states are compositionally formed make this monograph a must-read for anyone interested in aspect.

My main goal in what follows is to provide a brief summary of the five chapters of this monograph. I focus on what, in my mind, makes this work a valuable contribution to the literature on aspect: the novel observations and connections that H makes regarding the parallels between the compositional nature of eventualities and states, and the critical role of quantization in their compositionality. In the end, I raise two questions about this parallel context of compositionality.