Toivonen, I., P. Csúri & E. van der Zee: *Structures in the mind: Essay on language, music, and cognition in honor of Ray Jackendoff.* **Cambridge, MA: MIT Press 2015, xxxiv pp. 403.**

It is an insurmountable task to pay homage to the impact that Ray Jackendoff has had on the fields of cognitive science and linguistics more generally. The numerous publications and prestigious accolades alone (such as being the recipient of the Rumelhart Prize in Cognitive Science in 2014) signal his unique place in the field. Ida Toivonen, Piroska Csúri, and Emile van der Zee (TCV) have compiled an edited volume that contains essays from the various academic domains that Ray Jackendoff has contributed to over the course of his career. The introduction contains laudatory remarks from renowned scholars such as Paul Bloom, Noam Chomsky, Barbara Partee, and Steven Pinker, which together provide an impressive reflection on Jackendoff's impact on these related disciplines.

The volume is partitioned into three subsection; one devoted to linguistics, with a focus on Jackendoff's theories of parallel architectures in language and cognition and conceptual semantics (which make up the bulk of this volume), a second extending studies in linguistics to psycholinguistics and cognitive neuroscience, and a third and final one that goes beyond these first two subsection by including works on the evolution of linguistics, consciousness, and the connection between music theory and general linguistics.

As noted above, contributions that concentrate on aspects of linguistic theory predominantly point out the potential advantages of the concept of a parallel architecture or conceptual semantics. Jackendoff's long-standing collaborator, Peter Culicover, begins the volume by addressing some of the virtues of the *Simpler Syntax* (Culicover & Jackendoff, 2005) model and how its core claims corroborate with recent work in other areas of cognitive science. Urpo Nikanne adopts a similar tone, outlining the virtues of conceptual semantics. The remaining chapters in this section apply Jackendoff's parallel architecture and/or conceptual semantics. Topics addressed include semantic and syntactic coordination (Daniel Büring & Katharina Hartmann), the syntax-semantic interface pertaining to prepositional phrases (Joost Zwarts), the light verb-esque behavior of *say*-verbs (Jane Grimshaw), non-promotional passives and unspecified subject constructions (Joan Maling & Catherine O'Connor), agentive subjects and semantic case in Korean (Max Soowon Kim), and lexical aspect (Henk Verkuyl).

The sections on psycholinguistics and 'language and beyond' complete the volume. Speaking first on the psycholinguistic contributions, María Mercedes Piñango and Edgar B. Zurif takes a closer look at the neurolinguistic and psycholinguistic properties of syntax-independent of enriched semantic composition ('An evolving view of enriched semantic composition'). Barbara Landau and Lila R. Gleitman's chapter ('Height matters') complements the previous one in demonstrating that, in some instances, syntax alone can also determine semantic interpretation. In their contribution ('Accessability and linear order in phrasal conjuncts'), Bhuvana Narasimhan, Cecily Jill Duffield, and Albert Kim explore the differences that adults and children employ when presenting new and old information in syntactic structure, with the latter (adults) commonly presenting old information before new information in a linguistic representation, while the former (children) often employ the opposite strategy (i.e., placing new before old information). In their study, these authors attempt to tease apart cognitive factors such as ease of production, ease of comprehension, working memory, frequency, and priming effects. They anchor their empirical findings in a version of Jackendoff's conceptual semantics. Finally, Willem Levelt's note ('Sleeping beauties') discusses how some unique ideas in Western science or discovered, forgotten, and later on, rediscovered. This essay addresses how novel scientific ideas can often be 'sleeping beauties'. The third and final section of this volume consists of essays that touch upon Ray Jackendoff's contributions in cognitive science and music theory that extended beyond the common domains of linguistic theory. Topics such as the evolution of the speech code (Daniel Silverman), the notions of arbitrariness and iconicity at the syntax-semantics interface (Heike Wiese & Eva Wittenberg), the biology and evolution of rhythm (W. Tecumseh Fitch), neural substrates for linguistic and musical abilities (Yosef Grodzinsky), the structure and ambiguity in a song by the composer, Robert Schumann (Fred Lerdahl), and an essay debunking the Cartesian *Theater of the Mind* interpretation cognition in favor of a view of cognition serving a monitoring function (Daniel Dennett). This section, and the volume as a whole, concludes with Neil Cohen's comic illustration ('Climbing trees and seeing stars: Combinatorial structure in comics and diverse domains') which shows that studies in linguistics will ultimately reach their full maturity and reach the widest audience when they include and encompass related domains in cognitive science.

The volume is bold in design in its attempt to be inclusive to the domains of linguistic theory and cognitive science that Ray Jackendoff's research has

made strong contributions to over the course of many decades. Linguists will find the first two sections of this volume and first two contributions of the final section most relevant and enjoyable. Perhaps what is most impressive is the way the editors were able to harness the various related strands of Jackendoff's influences into a coherent volume. In my opinion, this volume is a fitting tribute to Ray Jackendoff's work and continued inspiration to the fields of cognitive science and linguistics proper.

References

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