

Firstly, before I begin the review, I would like to consent to making my comments public. I want my strong support for this book to go on the record.

The proposed volume, '*Syntax with oscillators and energy levels*', presents an innovative theoretical framework for syntax in which the author focuses on two main pitfalls with previous structuralist, generative and minimalist approaches: atemporality and multiplicity. The volume is exceptionally well written, well argued, easy to read (without being too simplified), and grounded in solid linguistic, cognitive and computational science. There are few works I have read which demonstrate such a strong command of scientific theory, technical skill and philosophical insight (maybe the only two I can think of which contend on this level are: *Dynamic Patterns: The Self-Organization of Brain and Behavior* (Complex Adaptive Systems) by J. A. Scott Kelso, and Browman & Goldstein's seminal work 'Articulatory Phonology: an overview'). I highly recommend this book for publication for the reasons I list below.

Firstly, the incorporation of a temporal component in the theoretical framework proposed by the author has very solid precedence in other areas of speech science, specifically phonology. This is important for, and strengthens, both the syntactical as well as phonological frameworks. This temporal element also opens the playing field for new experimental research. Additionally, the addition of a temporal component allows the author to posit the syntactical system in dynamical terms, which forges a strong bond with phonological theoretical frameworks such as Articulatory Phonology. This is a real strength in my opinion because the same (or similar) dynamic laws, principles and functions can explain a multitude of linguistic phenomena. The author goes on to explain that even though traditional syntactic objects have been considered atemporal, they are, in reality, not. This is a key insight because it debunks many of the underlying metaphors of traditional syntax.

Additionally, the volume is extremely well organized into chapters that are complete, without being dense. I find it admirable that the author states from the beginning of the volume (p. 7, end of third paragraph) that 'I accept the possibility that invalidation of the assumptions may compromise the framework.' This shows real academic maturity, and reflects the author's deep understanding of how good scientific theories should work.

The subject matter is quite difficult in itself, but the author's style of writing makes the volume seem accessible to a varied public. My favorite chapter is the third 'Deconstructing syntactic theory', where the author clearly and unequivocally outlines the problems (both metaphorical as well as technical) with traditional models of syntax. This was especially enlightening for me as a phonologist because they're not questions that I contemplate every day. However, the author shows great academic and intellectual maturity by dealing with these problems and in his capacity to understand the material (and attempt to resolve these fundamental problems with traditional models of syntax).

Over the next few chapters (fourth through seventh) the author lays out his model of the syntax. These chapters are very technical, but that does not detract from the volume's attractiveness. I cannot assess some of the math on which the model is based, but the author gives enough detail for this to be questioned and refined in future research. These chapters are also meticulously explained, so the reader does not feel challenged or overwhelmed.

The final chapter 'The physical linguistics program' explains the underlying assumptions in which this model (and other physicalist theories) is couched. The author clearly positions his model as part

of a nested, bottom-up system in which macroscopic phenomena of language derive from microscopic phenomena, which remedies the mind-body schism plaguing traditional models. This of course has support from a lot of different fields in today's academic landscape such as neuroscience, cognitive science, psychology and linguistics. This chapter also lays way for possible tangential studies in other areas of linguistics. For example, the first thing that came to my mind when reading this chapter is that the Physical Linguistics program provides an exciting (and perhaps fun, as the author states) new theoretical space (with empirically guided support) in which to readdress the old philosophical theme of semantic vagueness, which I have always contended derives from interaction between humans and the world, and is distributed/encoded over the lexicon. This is just one example, an observant reader will surely find many more.

Finally, I would be remiss if I only focused on the book's strengths without addressing at least one weakness. Although I don't think the book is 'missing' any major topics, for me, I would have liked to see a special section/chapter on 'learning'. This is not so much of a weakness, as I say the volume is not 'missing' anything, but it would round the book out. That being said, the model is thoroughly enough explained such that, if a reader were so inclined, he/she could find plenty of material to address this in future work.