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Dr. Edward Gibson
Editor
Open Mind

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Dear Dr. Gibson,

I would like to submit for your consideration the attached manuscript, entitled *Mparse: A new framework for self-organized, incremental sentence comprehension*.

The paper presents a computational model of word-by-word sentence parsing, called *mparse*, in which syntactic structures for whole sentences assemble themselves out of word-word dependency links. Self-organization as theory of parsing goes back at least to Kempen and Vosse (1989; *Connection Science* 1(3)), but previous implementations have faced a number of shortcomings. The new model seeks to alleviate these issues to make self-organized parsing a more easily and broadly testable theory in psycholinguistics. I test the model on garden path, local coherence, and ambiguity advantage effects and find that it reproduces human reading time behavior. I believe the manuscript will be of interest to the *Open Mind* readership as it provides a mathematically tractable implementation of self-organization that makes novel experimental predictions and can form the basis for future comparisons with other theories of sentence processing.

All the data and code relating to the paper are available from the following link: <https://osf.io/k6rnx/>.

Suggested reviewers:

- Lena Jäger: jaeger@cl.uzh.ch
- Emily Morgan: eimorgan@ucdavis.edu
- Lars Konieczny: lars@cognition.uni-freiburg.de
- Paul Smolensky: smolensky@jhu.edu
- Roger Levy: rplevy@mit.edu

I look forward to hearing from you.

Sincerely,

Dr. Garrett Smith