

This book is highly original, and it sets off to explore a style of modeling of language that has seemed to a number of people as highly promising, myself included. By this I mean that a number of people have had the feeling that the mathematical tools Tilsen uses should be considered in the context of modeling syntax and other aspects of human language. But Tilsen has taken a number of important steps to flesh out a real model. He's done real work to bring this idea to a much more concrete stage.

As anyone who begins the manuscript can see, the difficulty that it poses is that it makes some mathematical and scientific demands on the reader. A small amount of harmonic analysis to start with, and some knowledge of how neural nets have been developed to deal with rhythmic behavior and entrainment. Tilsen keeps things in the domain of the real numbers, when he might very well want to do the work in the complex numbers, which allow a more elegant formulation, but which might well scare away too many readers. A person who knows quantum mechanics, on the other hand, can breeze through a lot of the material, saying Yes, I get it, how are you making the links to linguistics?

I believe that Tilsen has done a remarkably good job at making this material accessible to many people who don't have quite the background that they really ought to if they want to understand this material. His graphics – which he has poured a lot of work into -- are terrific. I suggest that the color be maintained in this book if at all possible.

Throughout Tilsen makes good faith efforts to take phenomena that linguists know and then show how his approach could model them better than current perspectives do. This aspect may be less interesting for some (in some ways it seems parochial, since he has to choose which perspectives – minimalism, for example – that he is going to compare his to). But he absolutely has to do it, so that the reader can understand why he is doing what he does.

This work will intrigue scholars who have read the work of Hermann Haken, whose publications have been developed by many people over the last 30 years, including the American Scott Kelso, who published an MIT book on this 20 years ago. This is spun from the same wool as Tilsen's book, in the very best of senses.

In the end, I think this is a brilliant manuscript, and I hope it attains the strong readership that it deserves.