

Estes, 1964

Some very good analogies in the first few paragraphs that point toward a mathematical modeling approach rather than just endlessly piling up experimental results without an underlying theoretical framework that involves formal models.

“When our purpose is to understand a complex system, sheer quantity of information may obstruct more than it illuminates.”

Many other interesting takes throughout.

Discusses Bower’s (1961) all or none model and how it can predict several different patterns in the data. Discusses how all or none processes may be a mechanism underlying much of cognition.

Ends by noting that he still finds linear operator models, that don’t assume all or none processes, to still be useful “time tested theoretical devices.”

Another great part:

“According to the conventional view, a model is chosen to represent a theoretical position; then the representatives of different positions are pitted against each other in crucial experiments, the winner being “accepted” and the losers fading gracefully into oblivion, *all much in the spirit of a Miss America contest.*” ...read on at the bottom of the first column of page 18.