An excerpt from

HOW NATURE WORKS
The Science of Self-Organized Criticality

by Per Bak

Oxford University Press, 1997

[. . .]

We were ambitious, and sent an account of our earthquake ideas to the world's most prestigious journals, first to *Nature* and then to *Science*. Our article was rejected by both journals, by geophysicists who did not understand what it was all about. The idea of having a general theory of the phenomena of earthquakes was unacceptable. However, the referees should be given credit for revealing their identity, which is not required in the normally anonymous refereeing process. To appreciate the pain and annoyance that one might feel because of such a decision, it should be pointed out that essentially anything can be published, no matter how insignificant—even in *Nature.* Most published material sinks like a rock and never surfaces again. It is precisely when you have something potentially new and interesting that you get in trouble. Ironically, dozens of articles applying our ideas to various natural phenomena have since appeared with great regularity in those same journals.

Soon after, I presented our ideas at a conference on earthquakes in Monterey, California, a place with a spectacular view on the surf of the Pacific Ocean. I couldn't help noting in my talk that our article had been rejected for publication in *Nature* by Professor X who is sitting to the left, and for *Science* by Dr. Y who is sitting to the right. Both flushed. But at least everyone became aware of our ideas at that point. At the same conference, Jim Langer presented calculations on the more detailed Carlson-Langer one-dimensional block-spring models.

Eventually, our article was published in the *Journal of Geophysical Research* by its editor, Albert Tarantola, who took the matter in his own hands and published the article despite its rejection by his referees. By 1995 there were more than 100 articles in the literature supporting the view of earthquakes as an SOC phenomenon.

[. . .]