How Knowledge Propagates? A Fractal Model Justified on the Example of the Out of Eden Walk

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Most quantitative models of knowledge propagation use a system of differential equations. In such models, after a certain period of time, the number of new people getting a certain knowledge (or acquiring a certain skill) decreases exponentially with time. Some experiments show, however, that in many case, a slower "fractal" power law decrease better describes the actual knowledge propagation. In this talk, we analyze which model is better, on the example of responses to Out of Eden Walk dispatches -- a project in which a Pulitzer Prize-winning journalist Paul Salopek is reporting from different locations around the world. These observations confirm the fractal model.