

Notes on *The Signal and the Noise*

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1. Chaotic processes are nonlinear and dynamic, while complex processes are sometimes simple and stable, except for sometimes when they do crazy things. You might say, well, we can treat complex processes like SS processes, and take the crazy times as errors. Except the crazy times are things like a 9.2 magnitude earthquake that kills hundreds of thousands of people. So, you care a lot about those times.

2. If a is binary, the prior probability of a is x , $Pr(b|a) = y$, and $Pr(b|\sim a) = z$, then:

$$Pr(a|b) = \frac{Pr(a)Pr(b|a)}{Pr(b)} = \frac{Pr(a)Pr(b|a)}{Pr(a)Pr(b|a) + (1 - Pr(a))Pr(b|\sim a)} = \frac{xy}{xy + (1 - x)z}$$

The bottom is integrating a out of the joint density, which in this case means summing since the distribution is discrete.

3. You do well where there are lots of suckers. Find low hanging fruit, where the “water level” is low. The stock market, for example, has a lot of non-suckers, and you have to beat them all to make money (maybe).
4. Very few can make money in stocks, but it’s probably not because the market is super rational and efficient. It’s probably because the market is so difficult to predict. People often think “the market is inefficient so I can make money.” They should think “the market is inefficient, but hard to predict, so I probably can’t make money.”
5. Start simple and add complexity as necessary, like you would add salt when cooking.