

The Goldilocks Principle | Requisite Variety on WordPress.com

Every good solution to a problem must model the problem.

Ashby's law means that we need enough information to solve a problem or control a system. If we have too little our solution will not work.

Strangely, too much information can also prevent a solution. We get bogged down in the detail – information overload. Like Goldilocks and her porridge the solution needs to have just the right amount of information, detail, or data – and no more!

Ross Ashby and Roger Conant explain that a good solution depends on far more than just having enough of the right amount of data. The solution needs to model to problem.

So a clinical trial of a new drug should NOT compare two groups of patients using statistical tests. When medicine employs clinical trials it is making a big mistake. The trial needs to model the doctor-patient situation. We need to model a single doctor treating an individual patient who has a unique physiology. Compare groups of patients and the result will apply to populations – on average.

If you are a supporter of evidence-based medicine please feel free to comment and explain how the much hyped clinical trials, meta-analyses and the like overcome the Goldilocks Principle. That is, how do the aggregate statistics of clinical trials model the specific interaction between a doctor and the patient?

The Goldilocks Principle is usually described as Ashby and Conant's good regulator theorem. Links are given below to the original paper and other accounts.

Check out the Good Regulator Project. [Link](#)

Daniel L. Scholten (2010) A Primer For Conant & Ashby's "Good-Regulator Theorem. [Link](#)

Daniel L. Scholten (2009-2010) Every Good Key Must Be A Model Of The Lock It Opens (The Conant & Ashby Theorem Revisited) [Link](#)

Here is a the original paper for download: [GoodRegulator](#)