

Gießener Abendgespräche Kognition und Gehirn

18:15 bis 19:45 Uhr, Philosophikum I, Raum F005

Mittwoch, 05. Juli 2023

Reason and Less: A Model of Tethered Rationality

Prof. Dr. Vinod Goel

A few years ago, it dawned upon me that despite studying human rationality for 20+ years there is actually very little real-world human behavior that I (or my colleagues) can actually explain. In response to this sobering realization, I have spent the last few years reconceptualizing much of what I know about reasoning and human behavior. I propose a model of tethered rationality that gets us closer to explaining teenage daughters, Trump neighbors, and vaccine deniers.

The basic idea I advocate is that, while we have a reasoning mind that sets us apart from bats and baboons, this reasoning mind does not float above the biology. It is not powered by angel dust. It evolved on top of, and is integrated into, the neurobiology we inherited from our common ancestors with bats and baboons. That is, our reasoning mind is tethered to evolutionary older systems such as the autonomic, instinctive, and associative systems.

Taking this idea seriously leads to a model of tethered rationality whereby the autonomic, the instinctive, associative, and reasoning systems all have an input into behavior. The response generated by each system is in the common currency of feelings, with valence, arousal, and duration components. This allows for communication across systems and the generation of a blended response. The control structure is set up to maximize pleasure and minimize pain or displeasure. There is no central executive in charge. The reasoning system has an input into the response, but so do the other systems. Individual differences in behavior are explained not just in terms of individual differences at the level of beliefs and desires, but also individual differences at the level of the autonomic, instinctive, and associative systems.

Such an account drives human behavior back into the biology, where it belongs, and provides a richer set of tools to understand how we pursue food, sex, and politics.

This model is developed in a recent book entitled "Reason and Less: Pursuing Food, Sex, and Politics" (The MIT Press, 2022).