

The Limitations of Individual Rationality

Quote of the Day:

Don't Believe Everything You Think, the title of a book by
accounting professor Thomas Kida

Don't Believe Everything You Say, a book title somebody
should use while it's still available

Readings for next time

Paper due Monday, Nov. 22

A folk model of the processes leading to beliefs and actions:

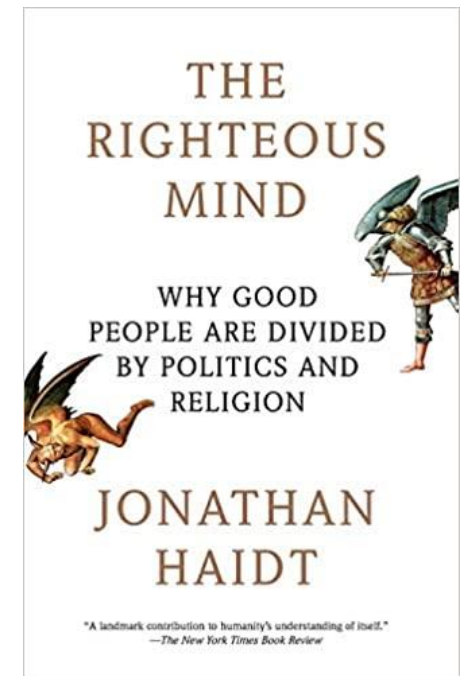


- 1. People absorb and evaluate information.**
- 2. Then they form beliefs and engage in actions.**
- 3. If the situation calls for it, they articulate the reasons for their beliefs and actions.**

The folk model implies that people are truth seekers, to the best of their abilities. Is the folk model accurate?

Let's examine several research projects suggesting no.

Jonathan Haidt, "The Emotional Dog and its Rationalist Tail"



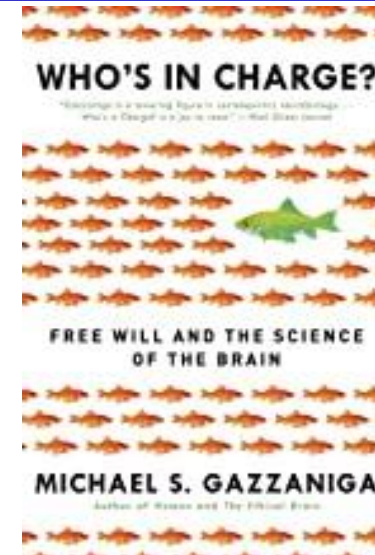
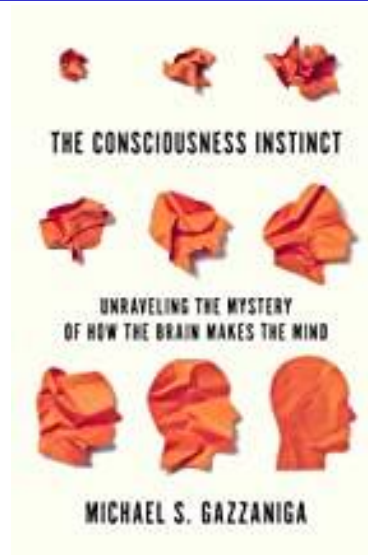
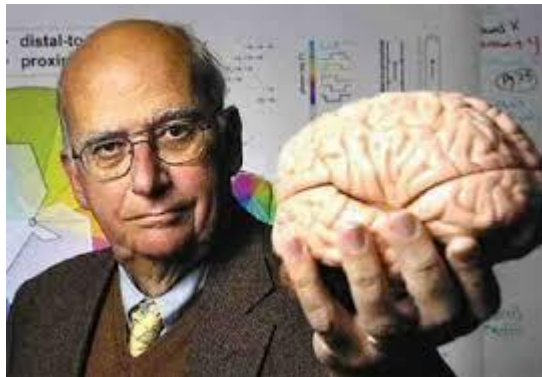
Haidt: People have moral instincts but construct post-hoc reasons to justify them. In situations where people's reasons don't apply, they nevertheless cling to their beliefs.

An example. People have a strong aversion to incest but sometimes struggle to explain why they think it's immoral.



From that and other lines of research, Haidt concludes that people engage in post-hoc reasoning for their moral beliefs.

Michael Gazzaniga



People with extreme epilepsy sometimes have surgery to cut their corpus callosum, a nerve tract connecting the left and right hemispheres. Known as “split brain” patients.

One of Gazzaniga’s studies: expose right side of brain to pictures or words unaware to the speech region on the left side.

Through their speech, split brain patients nevertheless confabulated reasons for their actions that could not be the real reasons.

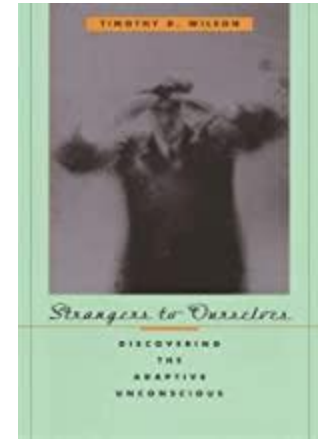


The upshot for the rest of us: lacking knowledge of one's choices and actions does not impede a person from constructing seemingly plausible justifications.

Timothy Wilson and Richard Nisbett (1977)

- **Shoppers at a mall were asked to choose from four pairs of pantyhose, and explain their preference.**
- **Unknown to the shoppers, all four pairs were identical.**
- **People had no trouble confabulating a reason for their choices.**

Timothy Wilson, *Strangers to Ourselves*



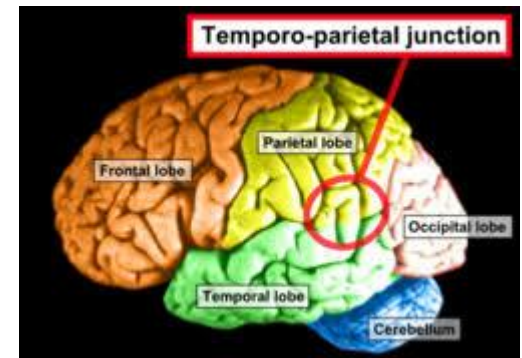
According to the research Wilson cites, people aren't very good at understanding their past, present, and future beliefs and behaviors.

Consistent with Haidt, Gazzaniga, Wilson, and other researchers, people are also influenced (usually without their awareness) by their genes, hormones, brain chemistry, and hidden features of the environment.

Rebecca Saxe, “How We Read Each Other’s Minds”

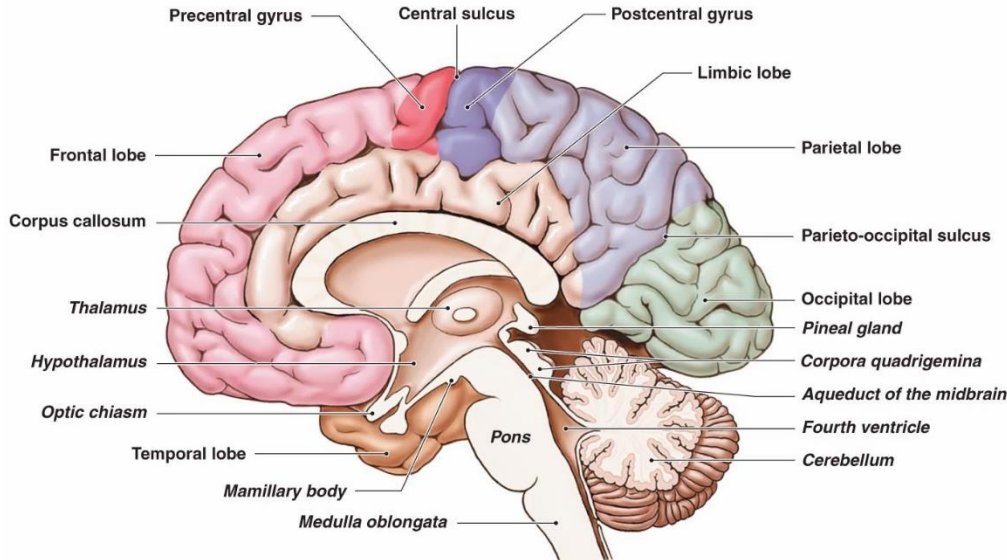


Differences in the structure and functioning of the Right Temporoparietal Junction (RTPJ) affect how people assess somebody’s else’s culpability for accidents.



Ordinarily, people have no access to the ways their RTPJ (or other brain regions, genes, hormones, and hidden features of the environment) affect them. Thus, they don't invoke those phenomena as causal factors for why they think and act as they do.

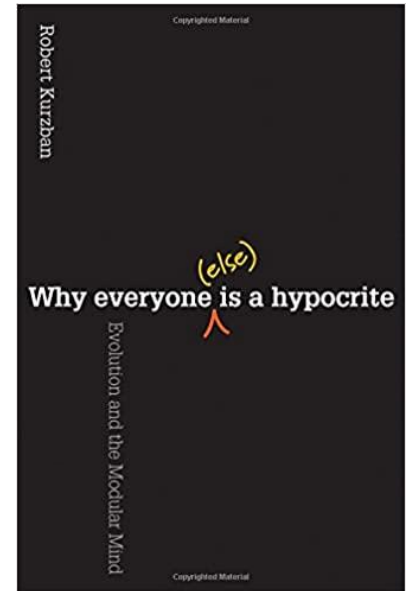
A midsagittal view showing the inner boundaries of the lobes of the cerebral cortex
(Structures outside of the cerebrum are labeled in italics.)



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Some brain functions:
working memory
emotion regulation
attention
motor skills
visual processing
auditory processing
sleep
sexual arousal
speech
understanding language
homeostasis
etc.

Robert Kurzban, *Why Everybody (Else) Is a Hypocrite*



The brain has modules, overlapping somewhat with different regions, for its various functions. Key point for Kurzban: the parts involved in processing information and making decisions are separate from those involved in speech.



Building now to the press secretary model of the mind. The president and his or her closest advisors make decisions. The press secretary, who wasn't involved, justifies those decisions for the media and public.

Robert Kurzban and other researchers in this area: We are social primates, and our speech is for explaining ourselves and managing relationships. What a person says has varying degrees of connection to the actual reasons for their beliefs and behaviors.

Hence the press secretary model of the mind.

Assuming the press secretary model of the mind is accurate, beliefs and behaviors follow a course something like the following (and note the differences from our earlier folk model):



- 1. People absorb and evaluate information through processes that often lie outside their conscious awareness.**
- 2. People form beliefs and engage in behaviors.**
- 3. If the situation calls for it, people defend their beliefs and behaviors through reasons constructed on the spot for public consumption.**

Note that whereas people are truth seekers within the folk model, the press secretary model of the mind is far less flattering.

Questions on the press secretary model of the mind?

The many limitations of individual rationality (a partial list):

- **fallacies and biases**
- **errors in intuition**
- **errors in perception and judgment**
- **errors in memory**
- **tribalism**
- **post-hoc reasoning**

Everyone (including you and me) is vulnerable to these limitations. When seeking truth, we're all flawed as individuals.

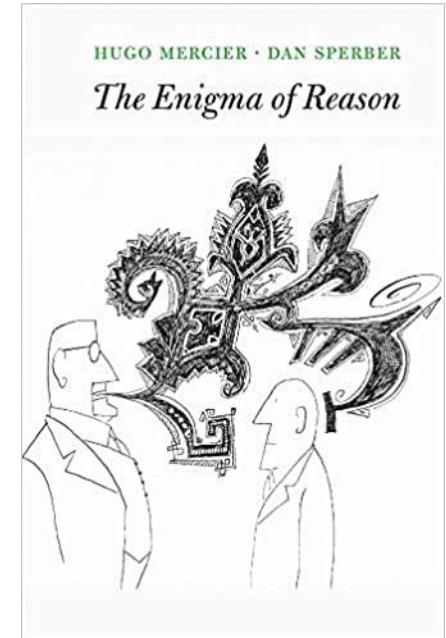
**Can someone overcome these problems, at least to some extent?
Maybe, hopefully.**



Ideally, this and other classes will enhance skills of critical thinking, allowing each of us to arrive at positions closer to truth.

Alternatively, we could conceive of truth as something that emerges from collectives rather than individuals.

Drawing from Hugo Mercier and Dan Sperber, *The Enigma of Reason*



- **Suppose the press secretary model of the mind is accurate.**
- **Suppose furthermore that a person expresses their views within a small group containing members with diverse backgrounds and viewpoints.**

- **Each person's claims become an input into other people's processes of belief formation.**



- **It would be irrational to reject someone else's claims merely because the reasons they offer aren't the real reasons (origin fallacy). Once somebody makes a claim, other people should evaluate the claim on its own terms.**

- **Some people will agree with what a person says and others will disagree. These other people engage the initial speaker and offer their own perspectives.**

- **Meanwhile, some group members do not hold prior beliefs on the subject and could potentially be swayed by persuasive arguments and evidence.**



- **Through dialogue, the group could shift in the direction of whoever has the better case on the subject at hand.**

- **The group position could thus end up closer to truth than what the initial speaker said.**

Let's try to formalize this process. Imagine institutions where:

- 1. People make claims and offer evidence for them.**
- 2. People evaluate these claims from a variety of standpoints and communicate their conclusions to other members of the community.**
- 3. Truth emerges from the collective process of discovery, dialogue, critique, sifting, and transmission.**

Several kinds of institutions could serve as a forum for these investigations. In upcoming classes, we'll focus on five such institutions:

expert communities

universities

science

the media

courts