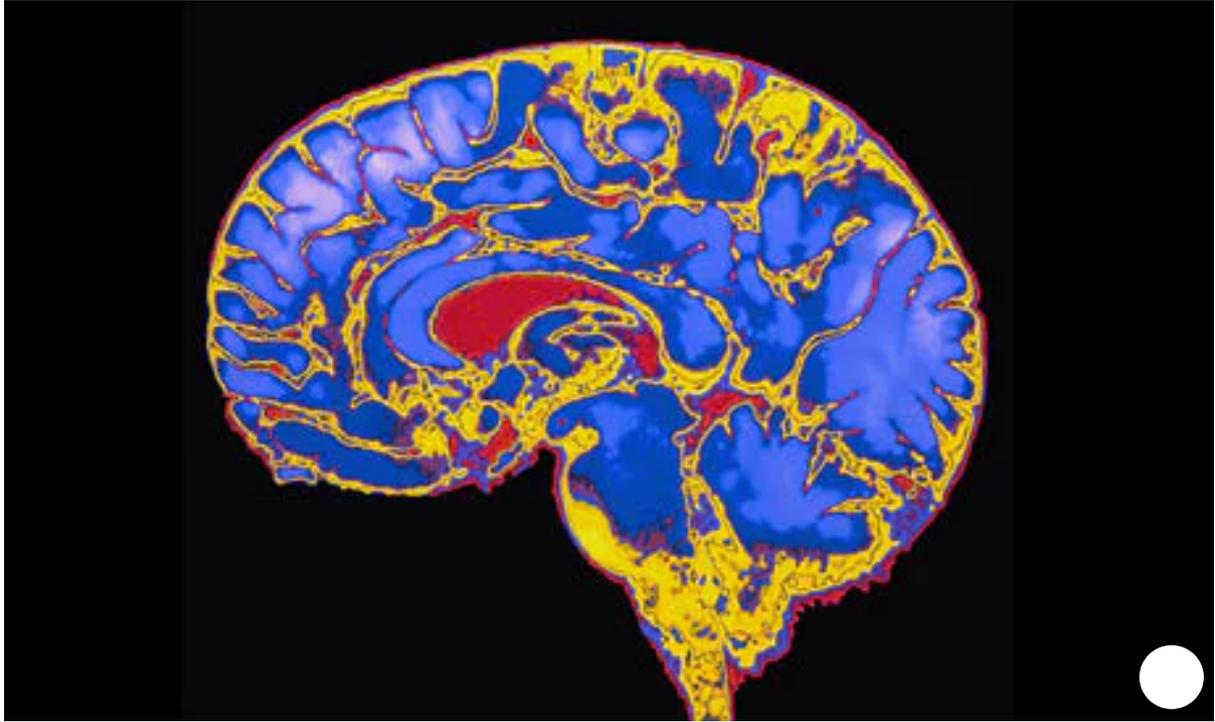# The Guardian

Thinking, Fast and Slow by Daniel Kahneman – review

An outstandingly clear and precise study of the 'dual-process' model of the brain and our embedded self-delusions

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A human being "is a dark and veiled thing; and whereas the hare has seven skins, the human being can shed seven times seventy skins and still not be able to say: This is really you, this is no longer outer shell." So said Nietzsche, and Freud agreed: we are ignorant of ourselves. The idea surged in the 20th century and became a commonplace, a "whole climate of opinion", in Auden's phrase.

It's still a commonplace, but it's changing shape. It used to be thought that the things we didn't know about ourselves were dark – emotionally fetid, sexually charged. This was supposed to be why we were ignorant of them: we couldn't face them, so we repressed them. The deep explanation of our astonishing ability to be unaware of our true motives, and of what was really good for us, lay in our hidden hang-ups.

These days, the bulk of the explanation is done by something else: the "dual-process" model of the brain. We now know that we apprehend the world in two radically opposed ways, employing two fundamentally different modes of thought: "System 1" and "System 2". System 1 is fast; it's intuitive, associative,

metaphorical, automatic, impressionistic, and it can't be switched off. Its operations involve no sense of intentional control, but it's the "secret author of many of the choices and judgments you make" and it's the hero of Daniel Kahneman's alarming, intellectually aerobic book *Thinking, Fast and Slow*.

System 2 is slow, deliberate, effortful. Its operations require attention. (To set it going now, ask yourself the question "What is 13 x 27?" And to see how it hogs attention, go to theinvisiblegorilla.com/videos.html and follow the instructions faithfully.) System 2 takes over, rather unwillingly, when things get difficult. It's "the conscious being you call 'I'", and one of Kahneman's main points is that this is a mistake. You're wrong to identify with System 2, for you are also and equally and profoundly System 1. Kahneman compares System 2 to a supporting character who believes herself to be the lead actor and often has little idea of what's going on.

System 2 is slothful, and tires easily (a process called "ego depletion") – so it usually accepts what System 1 tells it. It's often right to do so, because System 1 is for the most part pretty good at what it does; it's highly sensitive to subtle environmental cues, signs of danger, and so on. It kept our remote ancestors alive. *Système 1 a ses raisons que Système 2 ne connaît point*, as Pascal might have said. It does, however, pay a high price for speed. It loves to simplify, to assume WYSIATI ("what you see is all there is"), even as it gossips and embroiders and confabulates. It's hopelessly bad at the kind of statistical thinking often required for good decisions, it jumps wildly to conclusions and it's subject to a fantastic suite of irrational biases and interference effects (the halo effect, the "Florida effect", framing effects, anchoring effects, the confirmation bias, outcome bias, hindsight bias, availability bias, the focusing illusion, and so on).

The general point about the size of our self-ignorance extends beyond the details of Systems 1 and 2. We're astonishingly susceptible to being influenced – puppeted – by features of our surroundings in ways we don't suspect. One famous (pre-mobile phone) experiment centred on a New York City phone booth. Each time a person came out of the booth after having made a call, an accident was staged – someone dropped all her papers on the pavement. Sometimes a dime had been placed in the phone booth, sometimes not (a dime was then enough to make a call). If there was no dime in the phone booth, only 4% of the exiting callers helped to pick up the papers. If there was a dime, no fewer than 88% helped.

Since then, thousands of other experiments have been conducted, right across the broad board of human life, all to the same general effect. We don't know who we are or what we're like, we don't know what we're really doing and we don't know why we're doing it. That's a System-1 exaggeration, for sure, but there's more truth in it than you can easily imagine. Judges think they make considered decisions about parole based strictly on the facts of the case. It turns out (to simplify only slightly) that it is their blood-sugar levels really sitting in judgment. If you hold a pencil between your teeth, forcing your mouth into the shape of a smile, you'll find a cartoon funnier than if you hold the pencil pointing forward, by pursing your lips round it in a frown-inducing way. And so it goes. One of the best books on this subject, a 2002 effort by the psychologist Timothy D Wilson, is appropriately called *Strangers to Ourselves*.

We also hugely underestimate the role of chance in life (this is System 1's work). Analysis of the performance of fund managers over the longer term proves conclusively that you'd do just as well if you entrusted your financial decisions to a monkey throwing darts at a board. There is a tremendously powerful illusion that sustains managers in their belief their results, when good, are the result of skill; Kahneman explains how the illusion works. The fact remains that "performance bonuses" are awarded for luck, not skill. They might as well be handed out on the roll of a die: they're completely unjustified. This may be why some banks now speak of "retention bonuses" rather than performance bonuses, but the idea that retention bonuses are needed depends on the shared myth of skill, and since the myth is known to be a myth, the system is profoundly dishonest - unless the dart-throwing monkeys are going to be cut in.

In an experiment designed to test the "anchoring effect", highly experienced judges were given a description of a shoplifting offence. They were then "anchored" to different numbers by being asked to roll a pair of dice that had been secretly loaded to produce only two totals - three or nine. Finally, they were asked whether the prison sentence for the shoplifting offence should be greater or fewer, in months, than the total showing on the dice. Normally the judges would have made extremely similar judgments, but those who had just rolled nine proposed an average of eight months while those who had rolled three proposed an average of only five months. All were unaware of the anchoring effect.

The same goes for all of us, almost all the time. We think we're smart; we're confident we won't be unconsciously swayed by the high list price of a house. We're wrong. (Kahneman admits his own inability to counter some of these effects.) We're also hopelessly subject to the "focusing illusion", which can be conveyed in one sentence: "Nothing in life is as important as you think it is when you're thinking about it." Whatever we focus on, it bulges in the heat of our attention until we assume its role in our life as a whole is greater than it is. Another systematic error involves "duration neglect" and the "peak-end rule". Looking back on our experience of pain, we prefer a larger, longer amount to a shorter, smaller amount, just so long as the closing stages of the greater pain were easier to bear than the closing stages of the lesser one.

Daniel Kahneman won a Nobel prize for economics in 2002 and he is, with Amos Tversky, one of a famous pair. For many in the humanities, their names are fused together, like Laurel and Hardy or Crick and Watson. *Thinking, Fast and Slow* has its roots in their joint work, and is dedicated to Tversky, who died in 1996. It is an outstanding book, distinguished by beauty and clarity of detail, precision of presentation and gentleness of manner. Its truths are open to all those whose System 2 is not completely defunct; I have hardly touched on its richness. Some chapters are more taxing than others, but all are gratefully short, and none requires any special learning.

● . Galen Strawson's *Selves: An Essay in Revisionary Metaphysics* is published by Oxford University Press.

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