

NOTES FROM: *Thinking, Fast and Slow*, by Daniel Kahneman

SUMMARY: Daniel Kahneman was a Nobel Prize winner in Economics, and *Thinking, Fast and Slow* is easily his most influential book. Many of the concepts he first introduced here have made their way into popular usage, including the division of the human mind into two separate *systems* that he called System 1 and System 2.

System 1 is fast, intuitive, and emotional, whereas System 2 is slower, more deliberative, and more logical. These aren't discrete systems within the brain, however, but rather a helpful way of thinking about what's going *on* up there! When you have to make snap judgements or fast decisions, you're engaging System 1, and when you're engaged in slow deliberation or prolonged, conscious thought, you're using System 2.

Another distinction he makes is between the "experiencing" self and the "remembering" self, drawing the conclusion that they're almost like two different people! There's what you're experiencing *now*, reading these words, wherever you are, and what you'll *remember* about this experience *later*. And spoiler alert: people are *way* too trusting of the productions of their own minds!

"Loss aversion" is something you'll hear lots of psychologists and researchers talk about, and that's something Kahneman discusses quite thoroughly too. Basically, we feel that losses *hurt* more than winning feels *good*. *Losing* \$100 will be more psychologically painful than *winning* \$100 would be psychologically pleasurable, and those are just a *few* of the hidden secrets and surprises he unearths throughout the book.

It's a fascinating book, and very well worth reading, especially if you're in business or want to protect yourself against some of the cognitive biases that lead us to make our most disastrous mistakes, but Kahneman himself would caution that just *knowing* about these cognitive biases doesn't necessarily mean you'll always escape them. He literally wrote the book on this stuff, and he's said in interviews that he *still* falls for some of these cognitive biases and traps of thinking. And again, he's a Nobel Prize winner!

"The premise of this book is that it is easier to recognize other people's mistakes than our own."

"The world makes much less sense than you think. The coherence comes mostly from the way your mind works."

"We are prone to overestimate how much we understand about the world and to underestimate the role of chance in events."

"We can be blind to the obvious, and we are also blind to our blindness."

"The confidence that individuals have in their beliefs depends mostly on the quality of the story they can tell about what they see, even if they see little."

“The availability heuristic is the mechanism by which news stories reported on frequently affect their perceived recurrence.”

“A reliable way to make people believe in falsehoods is frequent repetition, because familiarity is not easily distinguished from truth. Authoritarian institutions and marketers have always known this fact.”

“The world in our heads is not a precise replica of reality; our expectations about the frequency of events are distorted by the prevalence and emotional intensity of the messages to which we are exposed.”

“As cognitive scientists have emphasized in recent years, cognition is embodied; you think with your body, not only with your brain.”

“Nothing in life is as important as you think it is, while you are thinking about it.”

“If shown a word on a screen in a language you know, you will read it.”

“The experiencing self does not have a voice. The remembering self is sometimes wrong, but it is the one that keeps score and governs what we learn from living, and it is the one that makes decisions. What we learn from the past is to maximize the qualities of our future memories, not necessarily of our future experience. This is the tyranny of the remembering self.”

“Odd as it may seem, I am my remembering self, and the experiencing self, who does my living, is like a stranger to me.”

“Our comforting conviction that the world makes sense rests on a secure foundation: our almost unlimited ability to ignore our ignorance.”

You experience greater cognitive ease when reading words you've seen before, and cognitive ease also gives the impression of familiarity. Familiarity is not easily distinguished from the truth, and messages read with cognitive ease are more likely to be believed.

“If you care about being thought credible and intelligent, do not use complex language where simpler language will do.”

When you are uncomfortable and unhappy, you lose touch with your intuition, but you're also less prone to making logical errors.

“Good mood and cognitive ease are the human equivalents of assessments of safety and familiarity.”

Cognitive strain makes us focus more and arrive at the right answer more often.

“Intelligence is not only the ability to reason; it is also the ability to find relevant material in memory and to deploy attention when needed.”

“What we see is all there is.”

“The coherence of a set of known facts leads to greater belief.”

Quantity is often neglected in emotional situations: in research studies, people will pay the same amount to save 2000 birds as they will to save 200,000 birds.

“The present state of mind looms very large when people are asked to rate their happiness.”

“The easiest way to increase happiness is to control your use of time. Can you find more time to do the things you enjoy doing?”

“Higher income is associated with a reduced ability to enjoy the small pleasures of life.”

“The brain will instinctively find a coherent pattern where there is only randomness.”

Risk is not "out there," and it is formed by the judgements of the individual. Consequently, there is no real or objective risk, only subjective risk.

“Base rates matter, regardless of the specific evidence of the case at hand.”

“You are more likely to learn something by finding surprises in your own behavior than by learning surprising facts about people in general.”

“Remember this rule: intuition cannot be trusted in the absence of stable regularities in the environment.”

“A general limitation of the human mind is its imperfect ability to reconstruct past states of knowledge, or beliefs that have changed. Once you adopt a new view of the world (or of any part of it), you immediately lose much of your ability to recall what you used to believe before your mind changed.”

“Regression to the mean is a statistical fact of life.”

“The idea that you can predict long term trends and events is illusory.”

“The idea that the future is unpredictable is undermined every day by the ease with which the past is explained.”

“Experts are inferior to algorithms.”

“The difficulty of prediction is sometimes amplified by low-validity environments where what is being predicted is extremely variable and does not lend itself to long-term prediction.”

“If a strong predictive clue exists, half-decent human observers will most likely pick up on it.”

“It's unfair to blame people for being unable to predict things in an unpredictable world. It is equally fair to blame people for believing they can.”

“A huge number of people are supremely overconfident when estimating how long it will take them to finish tasks.”

“The baseline should be the anchor for future predictions.”

“Gaining the outside view about similar circumstances as they relate to your own helps avoid the planning fallacy.”

“If you were allowed one wish for your child, seriously consider wishing him or her optimism.”

“A stable relationship requires that good interactions outnumber bad interactions by at least 5 to 1.”

“Those who stand to lose will fight harder than those who stand to gain.”

“The idea of a large, sure loss is too painful to consider, so we opt instead for a large chance of an even bigger loss but also the small chance of complete relief.”

“The probability of a rare event is likely to be overestimated if the alternative is not clearly defined.”

“‘Denominator Neglect’ makes it so the chances that “.001 of children will disabled permanently from the vaccine” is viewed as a more acceptable risk than ‘1 child out of 1,000 will be disabled.’ And 75 out of 1,000 is worse than 15% being disabled.”

“You will believe the story you make up.”