

What Daniel said...

"...my mother was right: people are endlessly complicated and interesting." Daniel Kahneman

We're inspired to write this because it's important to bear in mind that your audiences will be biased in some way. So will you. Thus we want to share here some of the main types of bias and developments you can make.

Drs. Daniel Kahneman (K) and Amos Tversky (T) are mostly famous for their **Prospect Theory**, which won the Nobel Prize for Economics in 2002. The biggest surprise was that neither of them were economists; they were psychologists. Their theory describes how people make decisions, especially when facing risk and in particular financial risk. It turns out (a) that being rational and logical isn't really how it's done, although we'd like to think it is, and (b) there are two 'Systems' in our brains that share the decision-making.

Most people refer now to this field as 'Behavioural **Economics**' to take account of how we actually make decisions, rather than how we say we do. In finance and investment, this field has explained many of the mistakes humans have made, and continue to make.

We are also interested in how people make decisions, or as we would say, acts of persuasion. So with deep gratitude, here we share some of that theory.

Every day people typically make between 2 and 10 thousand decisions, big and small. That's about one per breath. Behind them is a battle in their minds, pitting **intuition** against **logic**. This conflict affects every aspect of our lives and leads to mistakes - from what we eat to what we believe, and especially to how we spend our money.

K & T worked out that the intuitive part of a mind is a lot more powerful than we may realise.: *"You have an opinion immediately, whether you like it, or not. Later, when you're asked for reasons, you'll invent reasons... rationalisations that are not necessarily the real reasons."* (K). Your audience will form

that opinion of you too. The BBC produced a documentary about this, available from our [YouTube channel](#)¹ (and elsewhere).

Here are some of the flaws they mention; whether you are a persuader or persuadee:

Cognitive Biases

There are several types. They are not mistakes, but systematic errors that are predictable. More than 150 cognitive biases have been identified. *"There are lots of ways to get things wrong and one way to get things right. We are capable of many of them."* Professor Dan Ariely, Duke University.

One example is the **Halo effect**, where if we like one thing or a person, we like many other related things. Ditto for dislikes. *"People really are uncomfortable by the idea that Hitler loved children. He did... we feel uncomfortable to see an attractive trait in a person that we consider the epitome of evil"* (DK)

Inattention Blindness: *"We glide through the world, blissfully unaware of most of what we do, and of how little we know our minds"* - a BBC narrator.¹

A US police officer, whilst chasing a suspect, supposedly ran past some colleagues beating up a member of the public. He claimed not to have noticed them, and was convicted by a jury that didn't believe him. Later scientific experiments showed that nearly half of participants doing a similar action didn't see a fight happening right beside them. When we are focussed on a detailed task ahead of us, we don't see what's beside us (both literally and metaphorically).

Development: look around more (literally and metaphorically).

Confirmation bias: the tendency to interpret new information as confirmation of existing ideas, e.g. pinning the blame on 'The Usual Suspects'. We tend to attach more credence to supportive - and less to

Advice *squeezed*
straight from the
experts



What Daniel said...(cont.)

contradictory - information.

Development: Be critical of thoughts that seem to confirm, be clear what is hypothesis and fact.

Present bias: We focus on the 'now' rather than thinking ahead. This helps to explain over-eating and smoking. We tend to attach more credence to supportive - and less to contradictory - information.

Development: look forwards and backwards more (literally and metaphorically).

Priming bias: If we are primed (e.g. with a low or high number), we will use that number as a reference for the next decision we will take. Negotiators take note! In an experiment, buyers paid more for champagne when they had discussed higher numbers in a game, less where lower numbers were discussed.

Development: try to ignore irrelevant prior references.

The IKEA effect is the attachment to things we have created, and attach less value to things we've not created. This can lead to internal ideas of products being considered superior, when really an external one is better.

Development: Try to balance your views rationally, on purely objective bases.

Risk aversion bias: Our appetite for risk is very different between outcomes when we may lose money vs when we might win, even when the odds are the same. We're more cautious (risk averse) when we have an opportunity to win, and are willing to take greater risks when faced with making a loss.

Development: Calculate risk mathematically, instead of guessing; invert the argument to see what your appetite would be the other way round.

Spotlight effect is when we think others are evaluating you when in fact they aren't. This can increase our nerves and stress as speakers, even to the level of Glossophobia - the fear of Public Speaking.

Development: look around to see if that's what they're doing; consider what you're doing when in an audience;

practice the presentation/pitch/speech until you can say 'I know I can deliver this well'. Build virtuous feedback circles by celebrating when it goes well.

Information bias: There are various types of this bias, such as Recall, Research, Observer, Performance and Regression-to-mean bias. In general it's a bias that seeks or uses information that does not affect, or is irrelevant to, action. Sometimes that additional information can be expensive, take time, or both, but would not change the decision.

Development: get comfortable using the 80/20 rule, i.e. enough information is better than all information. Ask yourself if you have enough information to make a decision, and whether more information would change the decision.

Overconfidence bias: Some 70% of car drivers in the UK believe they are 'above average'. We overestimate our own abilities, we are biased towards our own performance over others', and we are over-precise in measuring our own abilities. "Yes I'm sure" is wrong 20% of the time².

Development: instead of relying on subjective opinion, look for rational, external and objective assessments and measurements.

Loss aversion bias: The tendency to think that a loss is more severe than an equivalent gain.

From the BBC documentary¹: New York cab drivers' work patterns seem illogical. They don't do extra hours on rainy days, when income would be the greatest; instead they set a target daily income, and when they have that, they go home, which is earlier on rainy days. They don't seek to maximise annual income and instead see below daily target as a loss and above it as a gain, i.e. they are risk averse in being more interested in avoiding losses than making gains.

Development: Being aware of your loss aversion bias is a good start. Then aim to measure the probabilities instead of using intuition based on this bias.

There is an evolutionary basis of our biases - Rhesus monkey research

Advice *squeezed*
straight from the
experts



What Daniel said...(cont.)

showed that they frame their decisions in the exact same way we do, suggesting it's a bias etched into our DNA¹. (Prof. Laurie Santos, Yale Univ.)

Systems 1 and 2

To get through every day, we use two thinking 'Systems'. Fast (System 1) is automatic, instinctive, and emotional. It relies on mental shortcuts that generate intuitive answers to problems as they arise. Most people call fast decisions 'subconscious habits', such as walking, eating and driving (note they are not *unconscious*). System 2, is slow, logical, and deliberate⁴.

We tend to believe our first decision was sensible and correct, and build later decisions on the preceding ones. You can see why we can go well off course! Thankfully, System 1 IS right MOST of the time, e.g. what's 2x2? 4. It's "an automatic, effortless mode we're in most of the time... it's almost like a reflex" (K).

Sometimes System 2 will be used deliberately. It's slow, logical and rational: "the voice in your head" and "It's slow, limited and lazy" (BBC narrator¹). "It's the minor character who thinks he is the star" (K).

Examples of System 2 include: what's 22 x 17? and... Try counting back from 100 in 7s whilst running fast. "That involves work, it involves effort, it involves concentration. There will be physiological symptoms" (K¹) such as increased heart rate, and production of stress hormones.

Sadly, System 2 is often used to backfill decisions taken under System 1 with logical reasons; sometimes these are invented to suit, i.e. not the truth.

Kahneman describes a question that requires thought (System 2). Instead we consult System 1 for a similar but easier question and often will answer that one, sometimes without even noticing that we didn't answer the question asked!

The presence of many cognitive biases seem to have been a significant factor

in the scale of the global financial crisis of 2008 – "in a part of the economy where serious mistakes could be made – and were!" (Shefrin, on Wall Street and global financial structures)

"If the regulators had listened to Behavioural Economists early on, we would have designed a very different financial system, and we wouldn't have had the incredible increase in the housing market and we wouldn't have had this financial catastrophe"
Professor Dan Ariely.

"We have a deliberative system. We can reflect on our biases... System 2 has realised, for the first time, that there IS a System 1... We can allow ourselves to make better decisions. This is the first time in evolution this has happened" - Prof. Laurie Santos. "If we think we have reasons for what we believe, that is often a mistake¹." (K)

People often make poor decisions just because of the way the human brain is wired - because of cognitive biases. This helps explain why people underestimate how long it will take to finish projects, are overconfident about their ability to implement strategies, why they don't choose the optimal health or retirement benefits.

By the GPB Team

References:

1. 'The Battle Between Intuition and Logic' from the BBC Horizon documentary, 'How You Really Make Decisions'.
<https://www.youtube.com/watch?v=DQX8I6pNCKA>

2. Lichtenstein, Sarah; Fischhoff, Baruch; Phillips, Lawrence D. (1982). "Calibration of probabilities: The state of the art to 1980". In Kahneman, Daniel; Slovic, Paul; Tversky, Amos (eds.). *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge University Press. pp. 306–334. ISBN 978-0-521-28414-1.

3. Test Yourself: Are You Being Tricked by Intuition? by John Beshears, Shane Frederick, and Francesca Gino - HBR, May 2015.

4. Daniel Kahneman's book: *Thinking, Fast and Slow*. ISBN 978-0141033570

Advice *squeezed*
straight from the
experts

