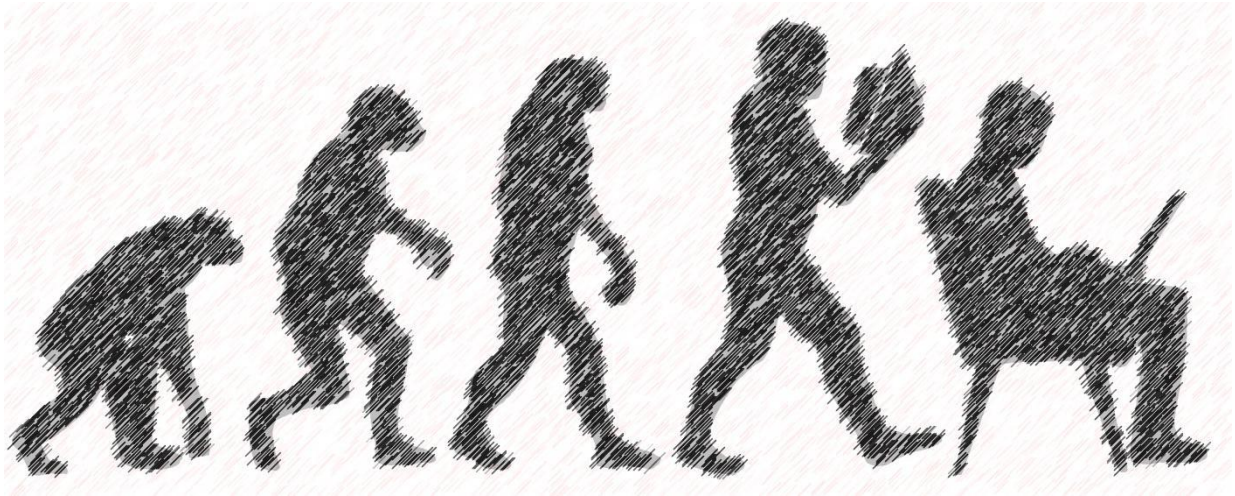
Please, not another bias! An evolutionary take on behavioural economics



Picture: Johanna Pung

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List of cognitive biases

From Wikipedia, the free encyclopedia

Cognitive biases are tendencies to think in certain ways that can lead to systematic deviations from a standard of rationality or good judgment, and are often studied in psychology and behavioral economics.

Although the reality of these biases is confirmed by replicable research, there are often controversies about how to classify these biases or how to explain them.[1] Some are effects of information-processing rules (i.e. mental shortcuts), called *heuristics*, that the brain uses to produce decisions or judgments. Such effects are called *cognitive biases*.[2][3] Biases in judgment or decision-making can also result from motivation, such as when beliefs are distorted by wishful thinking. Some biases have a variety of cognitive ("cold") or motivational ("hot") explanations. Both effects can be present at the same time.[4][5]

There are also controversies as to whether some of these biases count as truly irrational or whether they result in useful attitudes or behavior. For example, when getting to know others, people tend to ask leading questions which seem biased towards confirming their assumptions about the person. This kind of confirmation bias has been argued to be an example of social skill: a way to establish a connection with the other person.[6]

The research on these biases overwhelmingly involves human subjects. However, some of the findings have appeared in non-human animals as well. For example, hyperbolic discounting has also been observed in rats, pigeons, and monkeys.[7]

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Decision-making, belief, and behavioral biases [edit]

Many of these biases affect belief formation, business and economic decisions, and human behavior in general. They arise as a replicable result to a specific condition: when confronted with a specific situation, the deviation from what is normally expected can be characterized by:

Name	Description
Ambiguity effect	The tendency to avoid options for which missing information makes the probability seem "unknown".[8]

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Name	Description
Ambiguity effect	The tendency to avoid options for which missing information makes the probability seem "unknown".[8]
Anchoring or **focalism**	The tendency to rely too heavily, or "anchor", on one trait or piece of information when making decisions (usually the first piece of information that we acquire on that subject)[9][10]
Attentional bias	The tendency of our perception to be affected by our recurring thoughts.[11]
Automation bias	The tendency to excessively depend on automated systems which can lead to erroneous automated information overriding correct decisions.[12]
Availability heuristic	The tendency to overestimate the likelihood of events with greater "availability" in memory, which can be influenced by how recent the memories are or how unusual or emotionally charged they may be.[13]
Availability cascade	A self-reinforcing process in which a collective belief gains more and more plausibility through its increasing repetition in public discourse (or "repeat something long enough and it will become true").[14]
Backfire effect	When people react to disconfirming evidence by strengthening their beliefs.[15]
Bandwagon effect	The tendency to do (or believe) things because many other people do (or believe) the same. Related to groupthink and herd behavior.[16]
Base rate fallacy or **base rate neglect**	The tendency to ignore base rate information (generic, general information) and focus on specific information (information only pertaining to a certain case).[17]
Belief bias	An effect where someone's evaluation of the logical strength of an argument is biased by the believability of the conclusion.[18]
Bias blind spot	The tendency to see oneself as less biased than other people, or to be able to identify more cognitive biases in others than in oneself.[19]
Cheerleader effect	The tendency for people to appear more attractive in a group than in isolation.[20]
Choice-supportive bias	The tendency to remember one's choices as better than they actually were.[21]
Clustering illusion	The tendency to overestimate the importance of small runs, streaks, or clusters in large samples of random data (that is, seeing phantom patterns).[10]
Confirmation bias	The tendency to search for, interpret, focus on and remember information in a way that confirms one's preconceptions.[22]
Congruence bias	The tendency to test hypotheses exclusively through direct testing, instead of testing possible alternative hypotheses.[10]
Conjunction fallacy	The tendency to assume that specific conditions are more probable than general ones.[23]

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Regressive bias	A certain state of mind wherein high values and high likelihoods are overestimated while low values and low likelihoods are underestimated.[24][25][26][*unreliable source?*]
Conservatism (Bayesian)	The tendency to revise one's belief insufficiently when presented with new evidence.[24][27][28]
Contrast effect	The enhancement or reduction of a certain perception's stimuli when compared with a recently observed, contrasting object.[29]
Curse of knowledge	When better-informed people find it extremely difficult to think about problems from the perspective of lesser-informed people.[30]
Decoy effect	Preferences for either option A or B changes in favor of option B when option C is presented, which is similar to option B but in no way better.
Denomination effect	The tendency to spend more money when it is denominated in small amounts (e.g. coins) rather than large amounts (e.g. bills).[31]
Distinction bias	The tendency to view two options as more dissimilar when evaluating them simultaneously than when evaluating them separately.[32]
Dunning-Kruger effect	The tendency for unskilled individuals to overestimate their ability and the tendency for experts to underestimate their ability.[33]
Duration neglect	The neglect of the duration of an episode in determining its value
Empathy gap	The tendency to underestimate the influence or strength of feelings, in either oneself or others.
Endowment effect	The fact that people often demand much more to give up an object than they would be willing to pay to acquire it.[34]
Essentialism	Categorizing people and things according to their essential nature, in spite of variations.[*dubious – discuss*][35]
Exaggerated expectation	Based on the estimates, real-world evidence turns out to be less extreme than our expectations (conditionally inverse of the conservatism bias).[*unreliable source?*][24][36]
Experimenter's or expectation bias	The tendency for experimenters to believe, certify, and publish data that agree with their expectations for the outcome of an experiment, and to disbelieve, discard, or downgrade the corresponding weightings for data that appear to conflict with those expectations.[37]
Focusing effect	The tendency to place too much importance on one aspect of an event.[38]
Forer effect or **Barnum effect**	The observation that individuals will give high accuracy ratings to descriptions of their personality that supposedly are tailored specifically for them, but are in fact vague and general enough to apply to a wide range of people. This effect can provide a partial explanation for the widespread acceptance of some beliefs and practices, such as astrology, fortune telling, graphology, and some types of personality tests.

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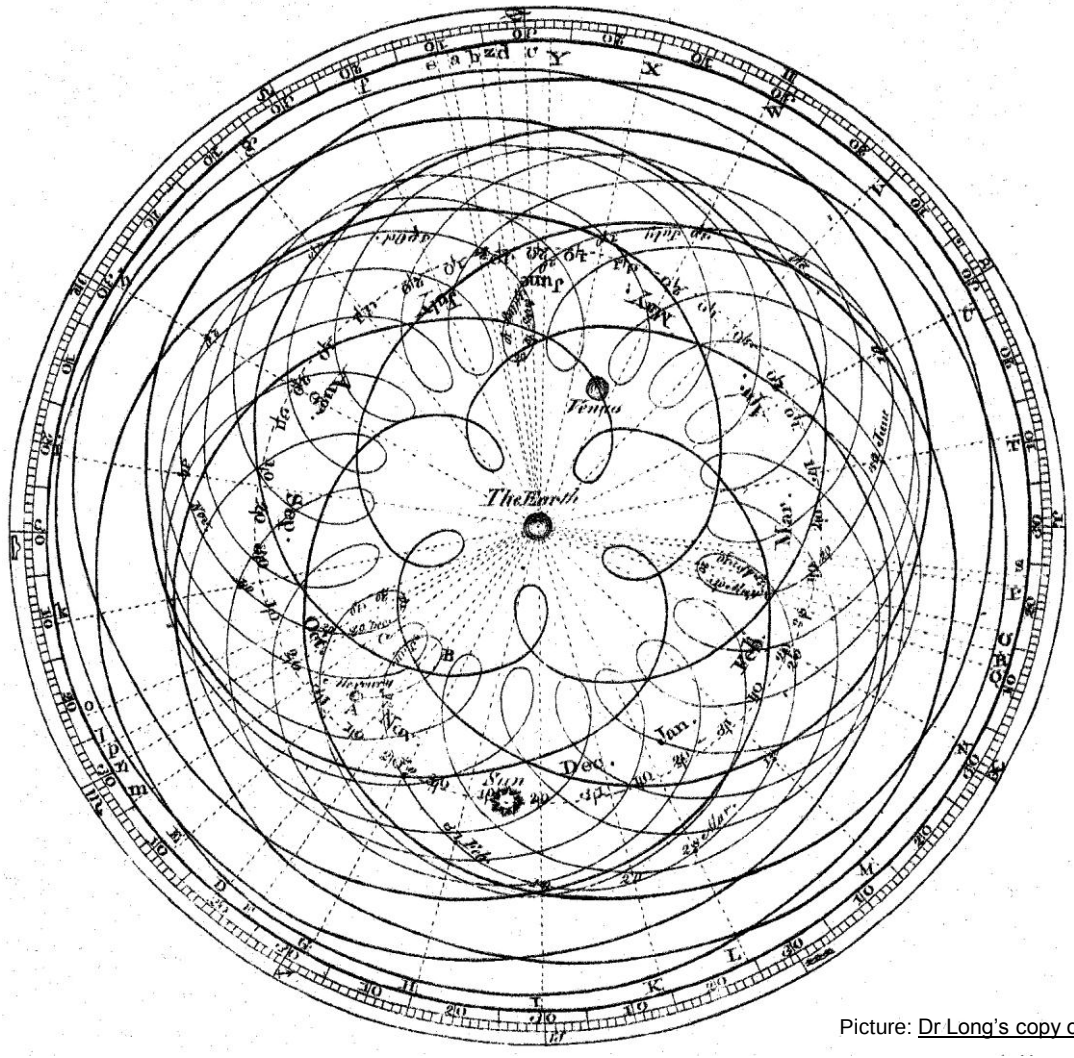
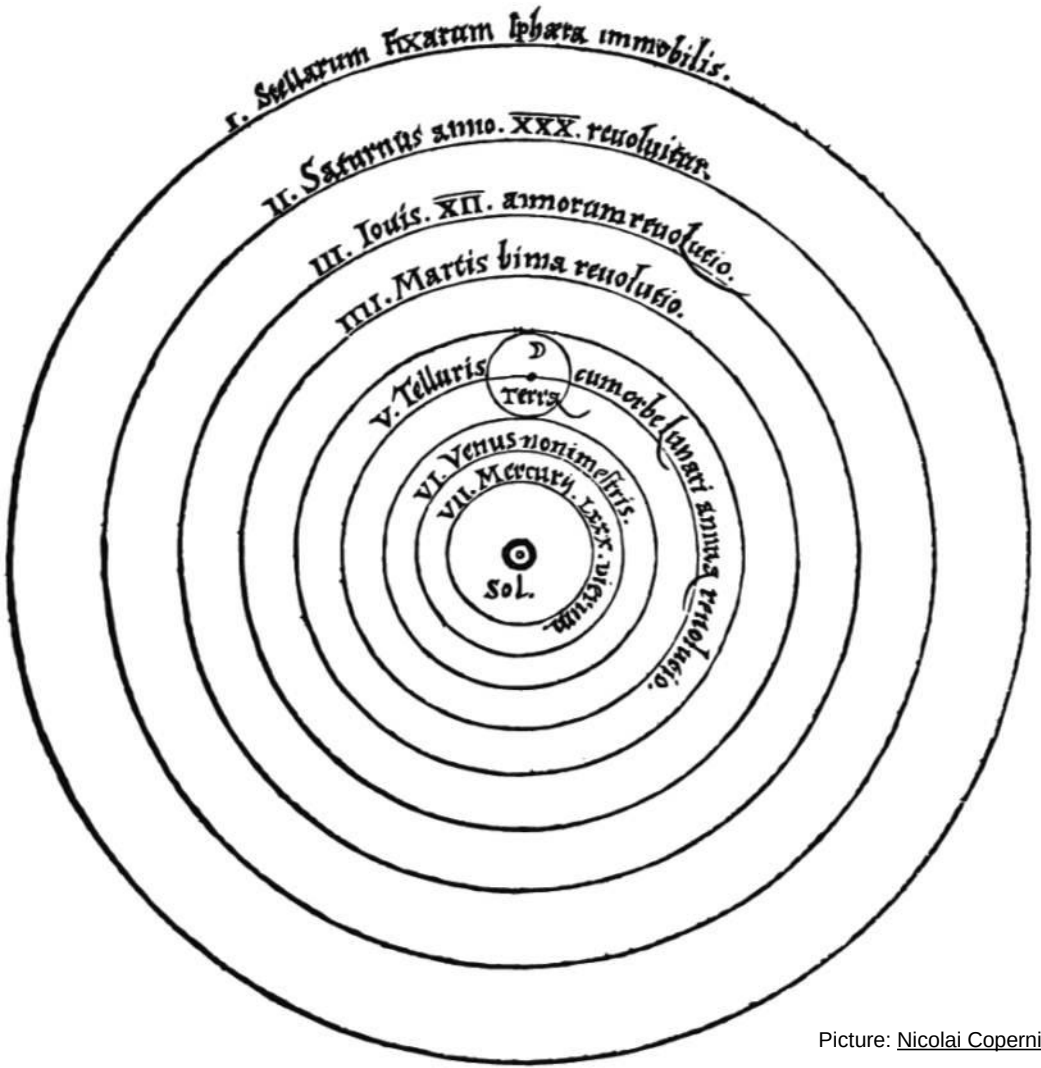
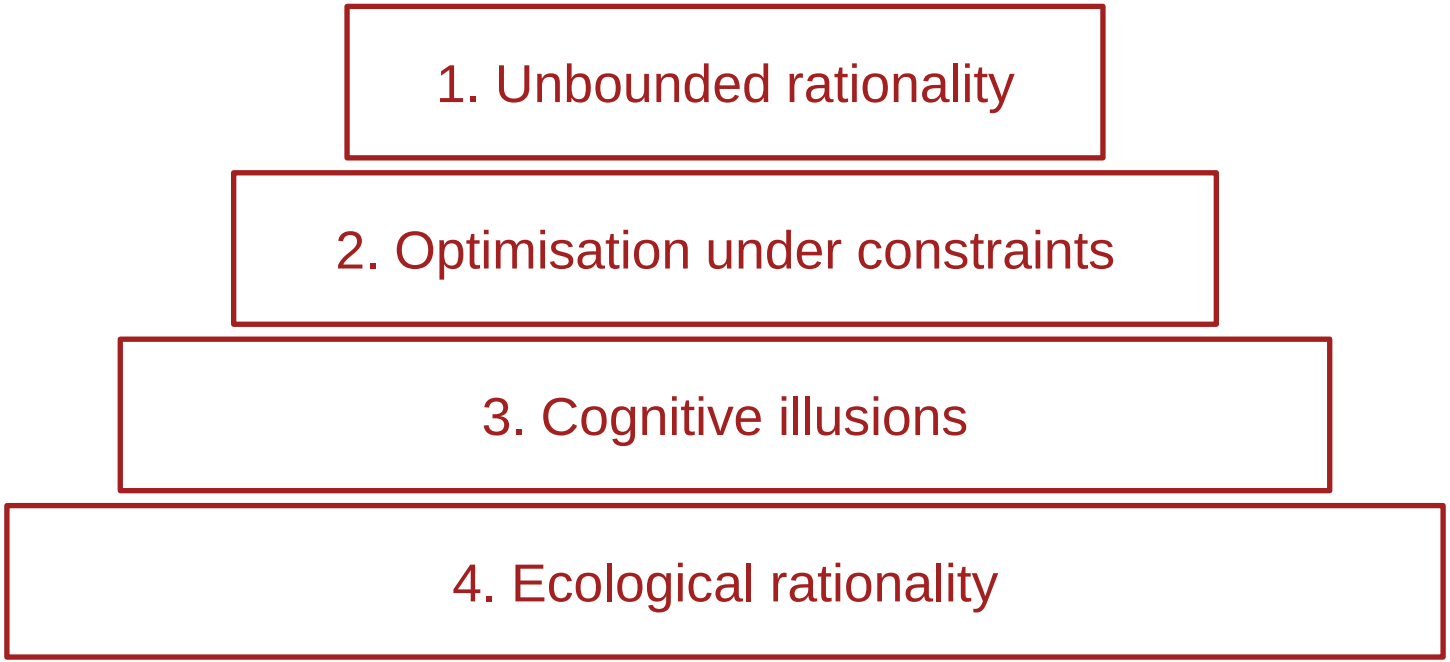
Framing effect	Drawing different conclusions from the same information, depending on how that information is presented.
Frequency illusion	The illusion in which a word, a name or other thing that has recently come to one's attention suddenly seems to appear with improbable frequency shortly afterwards (not to be confused with the recency illusion or selection bias).[39] Colloquially, this illusion is known as the Baader-Meinhof Phenomenon.[40]
Functional fixedness	Limits a person to using an object only in the way it is traditionally used.
Gambler's fallacy	The tendency to think that future probabilities are altered by past events, when in reality they are unchanged. Results from an erroneous conceptualization of the law of large numbers. For example, "I've flipped heads with this coin five times consecutively, so the chance of tails coming out on the sixth flip is much greater than heads."
Hard–easy effect	Based on a specific level of task difficulty, the confidence in judgments is too conservative and not extreme enough[24][41][42][43]
Hindsight bias	Sometimes called the "I-knew-it-all-along" effect, the tendency to see past events as being predictable[44] at the time those events happened.
Hot-hand fallacy	The "hot-hand fallacy" (also known as the "hot hand phenomenon" or "hot hand") is the fallacious belief that a person who has experienced success has a greater chance of further success in additional attempts.
Hyperbolic discounting	Discounting is the tendency for people to have a stronger preference for more immediate payoffs relative to later payoffs. Hyperbolic discounting leads to choices that are inconsistent over time – people make choices today that their future selves would prefer not to have made, despite using the same reasoning.[45] Also known as current moment bias, present-bias, and related to Dynamic inconsistency.
Identifiable victim effect	The tendency to respond more strongly to a single identified person at risk than to a large group of people at risk.[46]
IKEA effect	The tendency for people to place a disproportionately high value on objects that they partially assembled themselves, such as furniture from IKEA, regardless of the quality of the end result.
Illusion of control	The tendency to overestimate one's degree of influence over other external events.[47]
Illusion of validity	Belief that furtherly acquired information generates additional relevant data for predictions, even when it evidently does not.[48]
Illusory correlation	Inaccurately perceiving a relationship between two unrelated events.[49][50]
Impact bias	The tendency to overestimate the length or the intensity of the impact of future feeling states.[51]
Information bias	The tendency to seek information even when it cannot affect action.[52]
Insensitivity to	



Picture: Dr Long's copy of Cassini



Picture: Nicolai Copernici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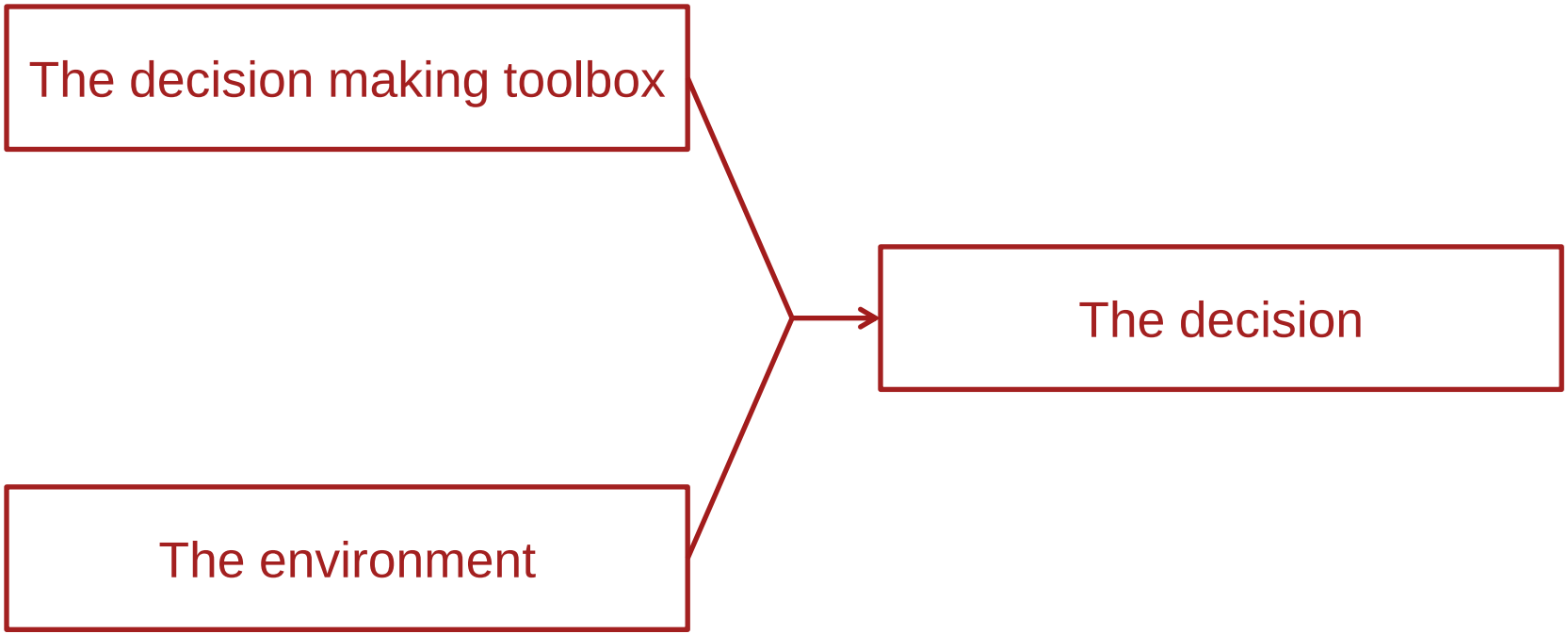
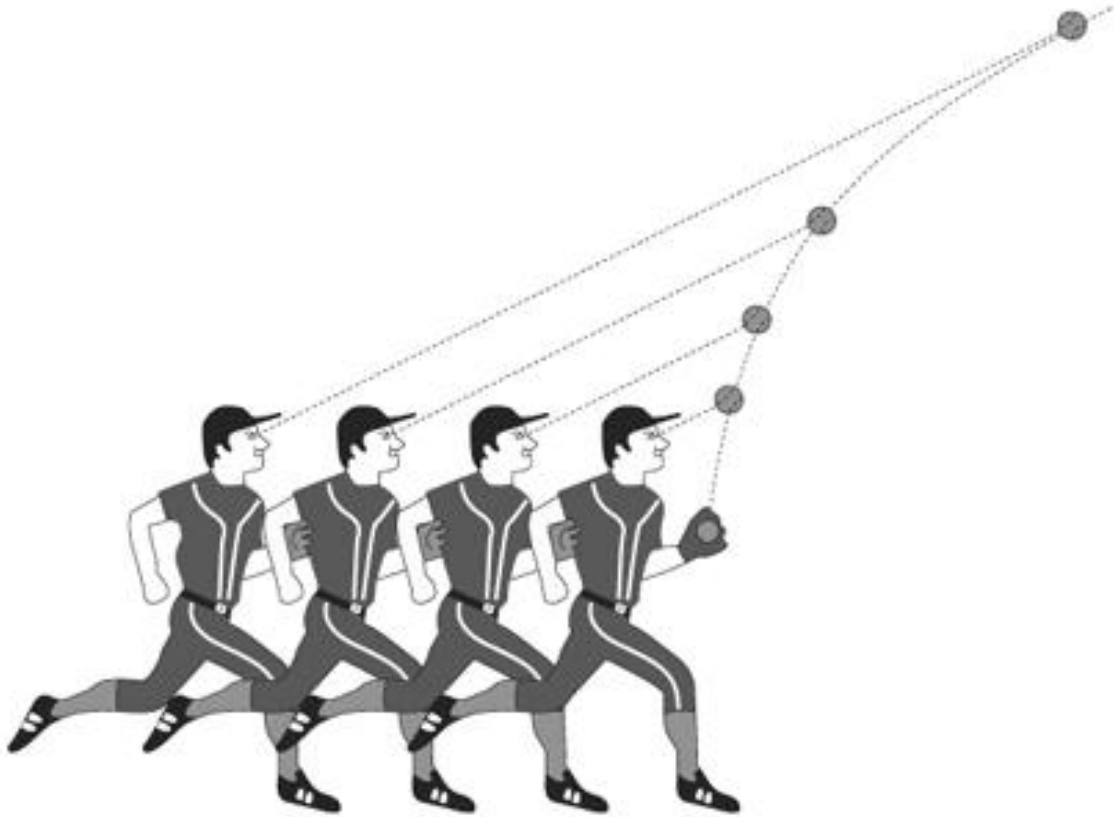
2. Optimisation under constraints
3. Cognitive illusions
4. Ecological rationality

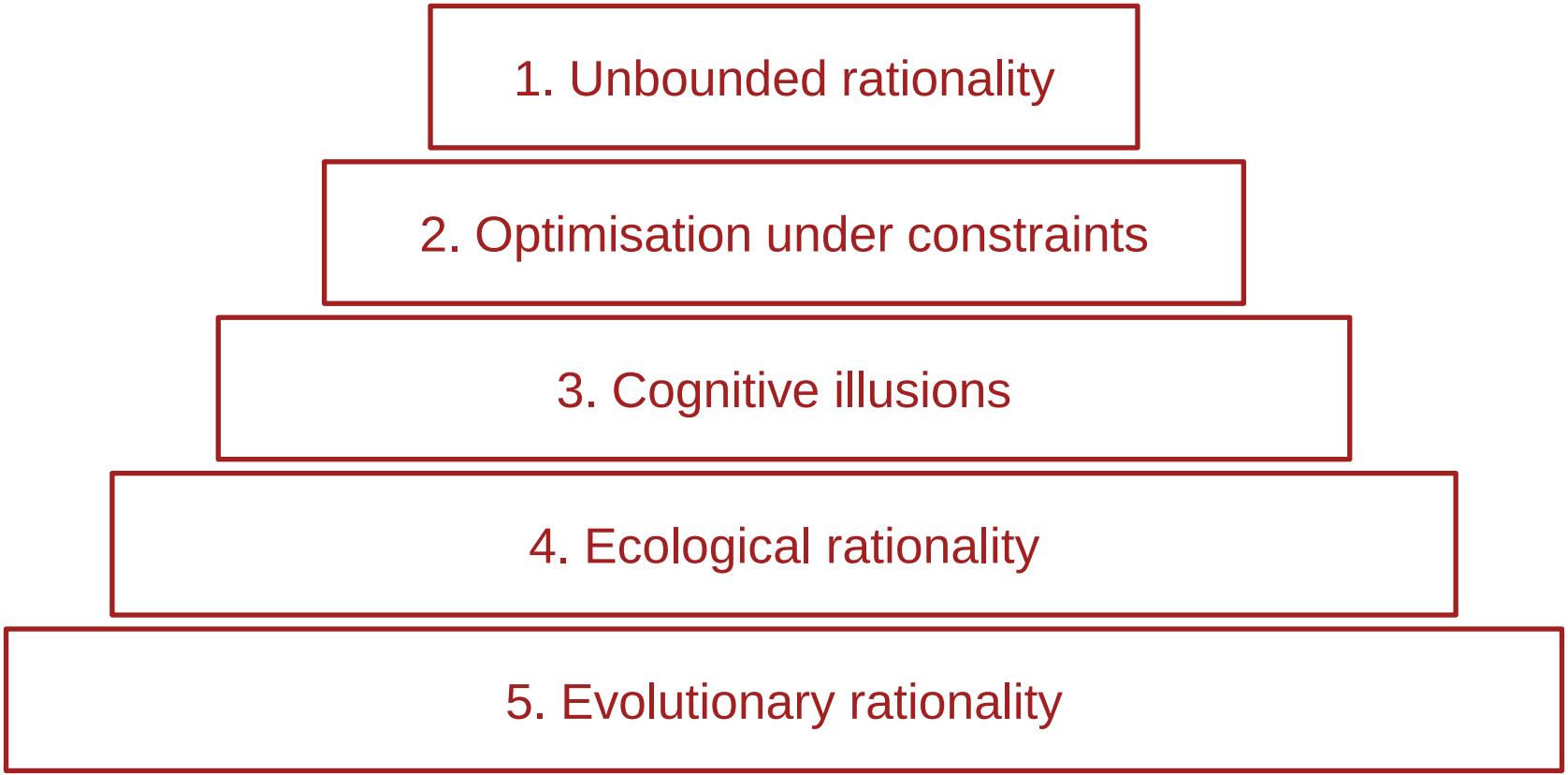

The decision making toolbox
The environment
The decision



Gigerenzer, G., 2008. Rationality for Mortals: How People Cope with Uncertainty. Oxford University Press, USA.

Picture: Benson Kua

Picture: Public Domain


1. Unbounded rationality
2. Optimisation under constraints
3. Cognitive illusions
4. Ecological rationality
5. Evolutionary rationality

Picture: Corinata

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Picture: Heinrich Harder

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Ferrari driver charged over Sydney crash

January 20, 2012

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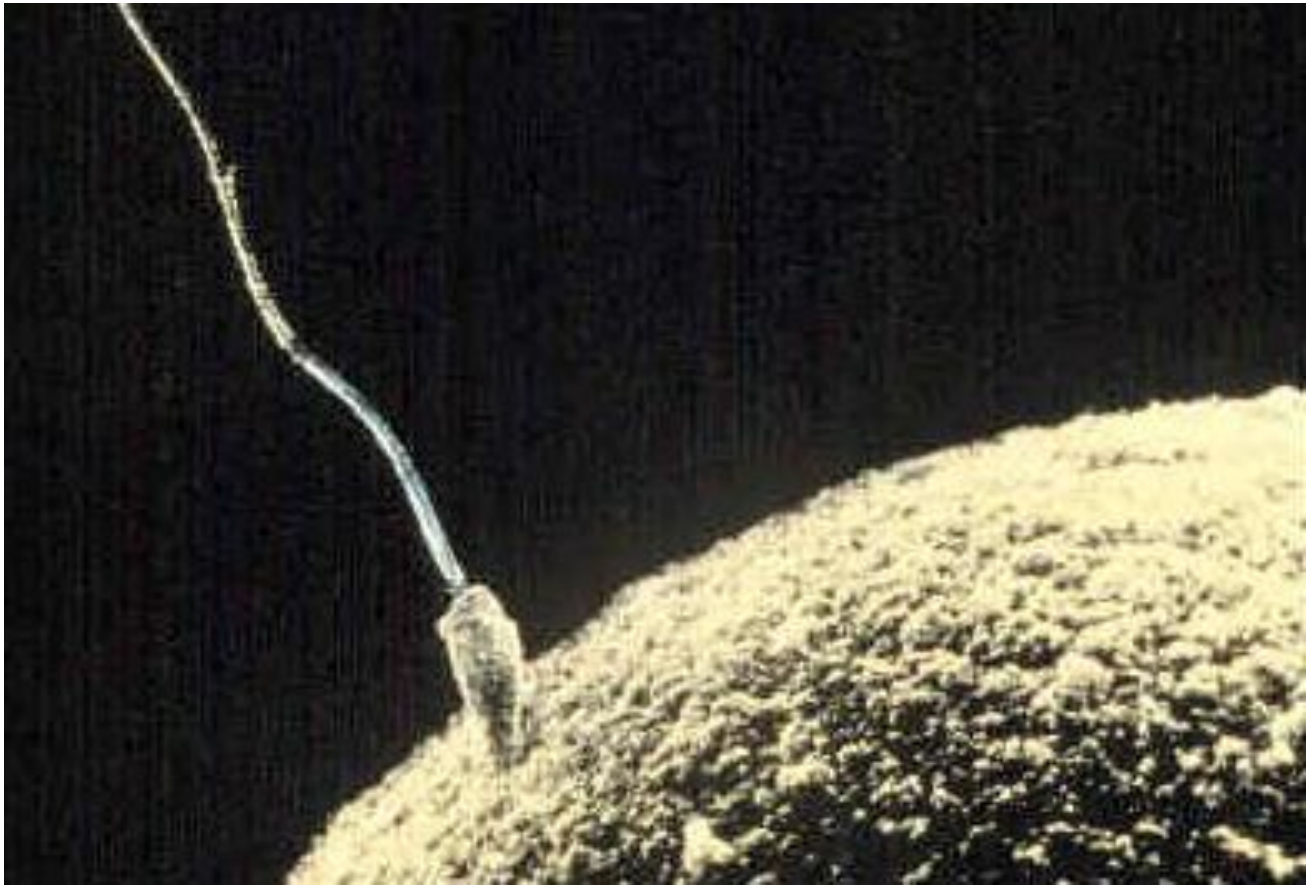
Kim Arlington

A Ferrari driver allegedly hit two pedestrians in Lidcombe. *Photo: Gordon McComiskie*

Picture: SMH



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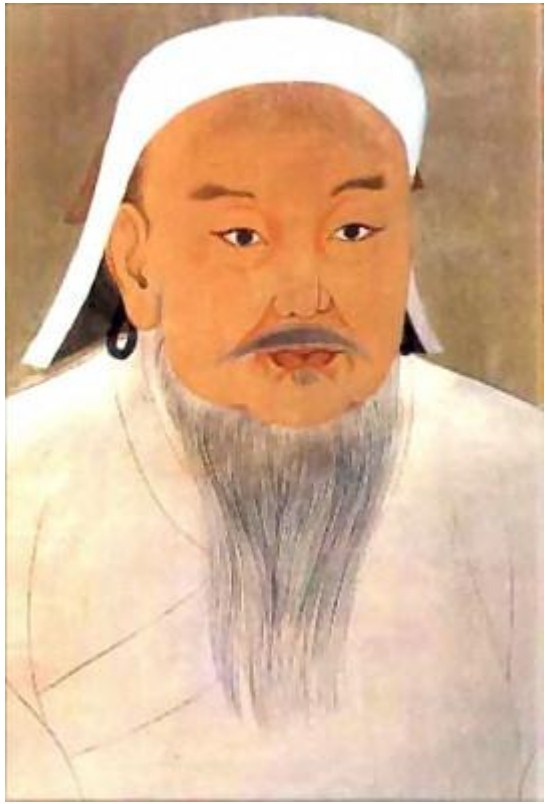

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A Ferrari driver allegedly hit two pedestrians in Lidcombe. *Photo: Gordon McComiskie*

Picture: SMH

Choose between:

A. One apple today

B. Two apples tomorrow

Choose between:

A. One apple in one year

B. Two apples in one year and one day

Picture: Oliver Koemmerling

Picture: Maruyama Ōkyo


1989
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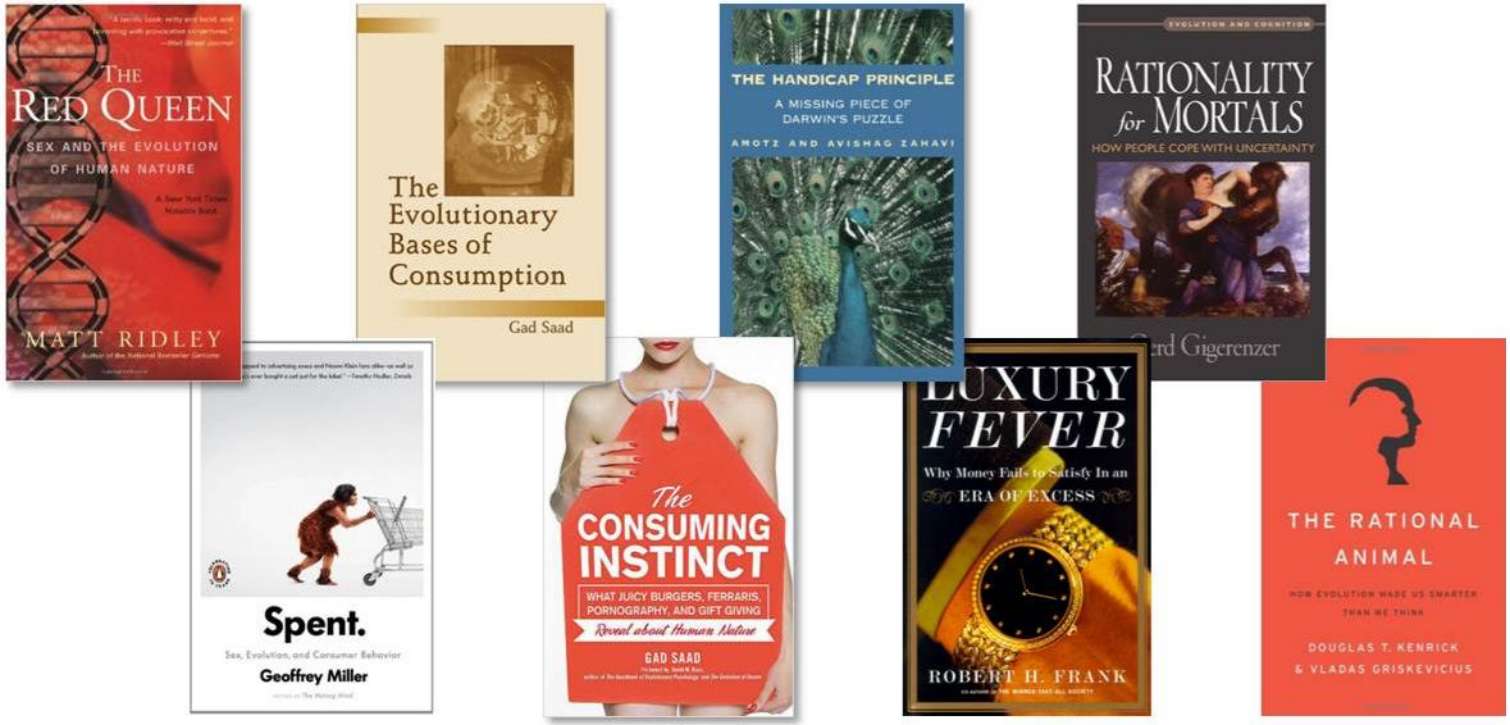
TEMPS SIDERAL

Dunn, M.J., Searle, R., 2010. Effect of manipulated prestige-car ownership on both sex attractiveness ratings. British Journal of Psychology 101, 69–80: http://dx.doi.org/10.1348/000712609X417319

Picture: Arturo de Albornoz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HOW EVOLUTION MADE US SMARTER THAN WE THINK
DOUGLAS T. KENRICK & VLADAS GRISKEVICIUS

Three thoughts to chew on

- To understand consumer behaviour you need to understand the objectives we are evolved to pursue
- Much of what consumers are trying to do though their product and brand purchases is signal their traits to others
- Our evolved preferences don’t always work toward our long-term interest in modern environments