

Book Review

Noise: A flaw in human judgment, by Kahneman, Sibony, & Sunstein

Egor V. Bronnikov^{1*}

Book details

Noise: A flaw in human judgment

Daniel Kahneman, Olivier Sibony and Cass R. Sunstein

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¹ Utrecht School of Economics, Utrecht University

*Corresponding author: e.bronnikov@uu.nl

Much Ado About Nothing? A book review of Kahneman's, Sibony's, & Sunstein's *Noise*.

*Humans making decisions, at large, are not strictly rational, but sensitive to many external circumstances, or contexts. Examples of these include weather conditions, successes or failures of their favoured sports teams or even the time that has passed since lunch. Anyone who has been exposed to popular results from Behavioural Economics will not be really surprised by these instances. However, such context sensitivity also applies to university admission officers who have to judge candidates' academic merits on cloudy or sunny days; to medical doctors who tend to be much more willing to prescribe opioids to patients in their last working hours; or even to federal judges who are significantly more condescending to the accused person in nasty weather conditions outside. Are these cases problematic indeed? Many might guess that on average these errors may cancel out. However, the authors of *Noise* argue this conjecture is neither correct nor harmless from the social viewpoint.*

The recent book by Daniel Kahneman, Oliver Sibony and Cass Sunstein aim to highlight the importance of noise. Noise – or system noise, as the authors put it, is an unwanted variability in humans' judgments that should ideally be identical for the same case or problem.

It starts with a continuum of explicit articulations that such discrepancies across individual decision-making can become extreme indeed. For instance, being independently presented with the same case, one judge can sentence the accused to a

fine while the other one can put a person to imprisonment for several years. For another example, suppose two underwriters are randomly chosen from the same investment company in charge of an IPO. Which difference should we expect in the premium they set? Most CEOs expect the difference to be about ten per cent (median and mode answer), which seems acceptable. However, what authors discover from their study is fifty-five per cent.

Even for a general audience, it is obvious that these variations in the outcomes are neither desirable nor fair. Nevertheless, an intuitive and pretty common belief is that this vicious phenomenon would on average be cancelled. This is one of the misconceptions – far detached from the reality – that Kahneman, Sibony and Sunstein argue with: such random errors do not cancel each other out, rather they add up.

To deepen the understanding of noise, the authors deconstruct it into a combination of two major components: level noise and pattern noise. To be specific, let us consider the case of judges. For them, level noise – that is, systematic variability in the average level of judgments by different individuals (Kahneman et al., 2021) – will be the variability of individual characteristics of judges driven by both personal and professional experience, personality, etc. Pattern noise – that is variability within individuals' responses to particular cases (Kahneman et al., 2021) – for judges will be the ad hoc deviations from their average level of severity.

Varying across individuals exposed to decision-making the ground of noise is constituted by cognitive biases. The first of Kahneman's book – *Thinking, fast and slow* (Kahneman, 2011) – introduces a large variety of different cognitive biases

that humans are prone to. In *Noise* the authors specify bias as an average error (the majority of which are in one direction) in judgments, elimination of which leaves noise per se. Whereas the variation in (at least some) judgments is not detrimental (or even benevolent), system noise is definitely a problem and can be a disaster. However, noise does not have the capturing story-telling narrative that biases have. This makes the problem of noise hidden and invisible to the naked eye: while biases are usually prominent, noise is not, and can become so in the perspective of statistical procedures only. Remarkably, a large number of names for cognitive biases – that have accumulated and have begun to create duplication and sometimes even redundancy – are pinned down in *Noise* to a two-page-long (though not exhaustive) list.

Showing in their book to which extent system noise can be costly from a purely monetary position and unfair from a societal perspective, Kahneman, Sibony Sunstein suggest sticking to decision hygiene that can be reached by adhering to six core principles. First, making a judgement should be as separate from personal, subjective experience or preferences as possible (special professional guidelines or algorithms can be helpful to reduce noise). Second, the application of statistical thinking (instead of deepening the easy-to-construct narrative of the uniqueness of the case) enables us to have a less prejudiced view. Third, deconstruction of the problem into a larger number of smaller (better if independent) tasks will liberate the decision-maker from excessive coherence that can easily shade a piece of important information. For the fourth, the authors suggest restricting blind reliance on intuition. Having a pull of independent judgments as large as possible constitutes the fifth rule. Finally, giving a preference to a relative judgment rather than to an absolute one creates judgment scales that are less noisy.

The normative aspect of dealing with noise is a trade-off between habitual time costs and psychological convenience, on the one hand, and quality, fairness, and robustness of the decisions made as well as increasing cost of it, on the other. Although in general the reduction of the amount of noise is favourable, excessive-decision hygiene can easily become disadvantageous in terms of bureaucratic costs (both monetary and time) and professional independence suppression.

At a larger scope, this book is partly a development of an important issue of narrative construction. This concept was touched upon in many papers and books, the most recent and famous among which are, probably, *21 Lessons for the 21st Century* (Harari, 2018) and *Narrative economics* (Shiller, 2020).

Narrative construction is a process of connecting disjointed facts into a line of reasoning, creating a coherent story. However, this is not an innocent phenomenon as a coherent story can easily become a contagious one that can affect the perception of reality and the decision-making. The concept of adhering to socially-constructed definitions (say, of partnership) can be a very seducing strategy, however, an blinded and non-reflexive compliance with formalities might lead to

being in an artificial construction dramatically detached from reality.

While at the individual level, experiencing a diverse range of emotions can be valuable (though not always at all), at the level of public decision-making, such things lead to larger noise and stronger narrative obsession. Besides purely professional skills, the sweetness of narrative coherence as well as its deep emotional involvement is Scylla and Charybdis of decision-making. Liberating ourselves from storytelling contagion is an underappreciated virtue that opposes intrusive advertising, fake news and propaganda. Eventually, it yields a deeper and more objective understanding, more cool-headed and harmonious decision-making, stronger forecasts, and a more prosperous future.

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