

How do people make decision? One view is that they arrive at their decisions by reasoning, using as premises their beliefs and desires. Another view is that people's beliefs, desires, and decisions are largely determined by internalized cultural patterns. Particularly relevant to both approaches are judicial decisions, since judges are supposed to make decisions that apply cultural patterns, viz. laws, to specific cases. How much are their decisions really a matter of reasoning? How much are they quasi-automatic applications of internalized patterns? Or do yet other factors, that are neither a matter of rational choice nor a matter of internalized patterns, affect judicial decisions?

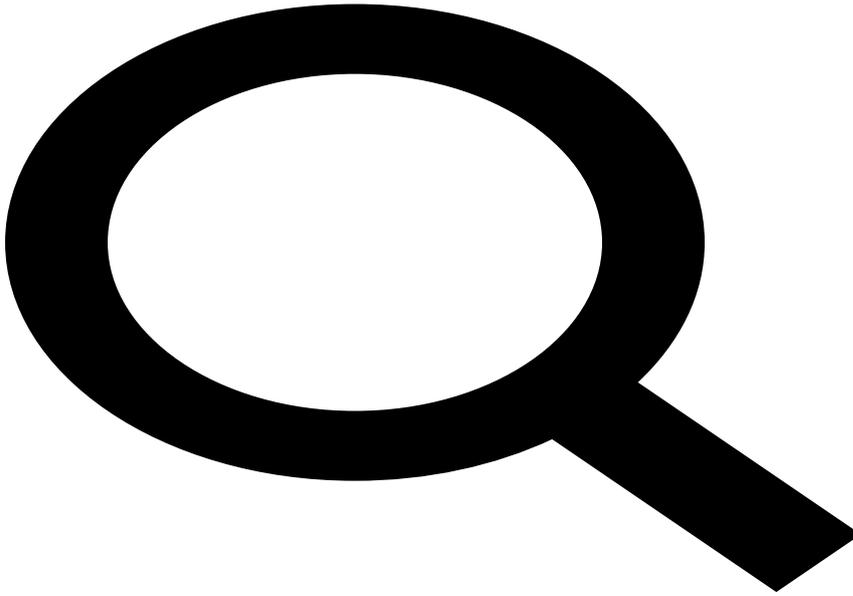


In an article forthcoming in [PNAS](#), "Extraneous factors in judicial decisions" (available [here](#)), Shai Danziger, Jonathan Levav, and Liora Avnaim-Pesso present evidence highly relevant to answering this question. They begin:

"Does the outcome of legal cases depend solely on laws and facts? Legal formalism holds that judges apply legal reasons to the facts of a case in a rational, mechanical, and deliberative manner. An alternative view of the law — encapsulated in the highly influential 20th century legal realist movement — is rooted in the observation of US Supreme Court Justice Oliver Wendell Holmes that "the life of the law has not been logic; it has been experience". Realists argue that the rational application of legal reasons does not sufficiently explain judicial decisions and that psychological, political, and social factors influence rulings as well. The realist view is commonly caricatured by the trope that justice is "what the judge ate for breakfast". We empirically test this caricature in the context of sequences of parole decisions made by experienced judges..."

Well, here are the striking results:

"the likelihood of a favorable ruling is greater at the very beginning of the work day or after a food break than later in the sequence of cases. ... the likelihood of a ruling in favor of a prisoner spikes at the beginning of each session — the probability of a favorable ruling steadily declines from  $\approx 0.65$  to nearly zero and jumps back up to  $\approx 0.65$  after a break for a meal." (see the figure)



The authors conclude:

“We have presented evidence suggesting that when judges make repeated rulings, they show an increased tendency to rule in favor of the status quo. This tendency can be overcome by taking a break to eat a meal, consistent with previous research demonstrating the effects of a short rest, positive mood, and glucose on mental resource replenishment [...] Although our focus has been on expert legal decisions, we suspect the presence of other forms of decision simplification strategies for experts in other important sequential decisions or judgments, such as legislative decisions, medical decisions, financial decisions, and university admissions decisions. Our findings add to the literature that documents how experts are not immune to the influence of extraneous irrelevant information. Indeed, the caricature that justice is what the judge ate for breakfast might be an appropriate caricature for human decision making in general.”

I guess all readers, who may suffer from arbitrary decision by various expert bodies, will have had an immediate reaction of dismay, indignation, or discouragement. Hopefully, they will also have made a mental note to be aware of their own susceptibility to this kind of arbitrariness if they ever find themselves in the position to make expert decision of this kind (even though it is dubious that having made such a mental note would make any difference).

There is also, I feel, a cognitive question to raise, and a more general lesson to be drawn from this research. The question is this: What is changing between the moment judges start making decisions, at the beginning of a session or just after a food break, and the moment when they decide to take such a break? Is their moral disposition changing: are they more lenient initially and more severe when they are tired and hungry? Is the mental availability or saliency of relevant background information changing over time, with information relevant to individual’s rehabilitation more salient at the beginning, and that relevant to public order more relevant at the end? Or a mix of the two?

The general lesson, I would argue, is this. Our beliefs and decisions are to a large extent determined by the saliency of background information and by mood, which are essentially beyond our conscious control. Understanding the sub-personal or infra-individual processes involved is no less important than understanding ‘internalized cultural patterns’ — not a good description, but let’s go with it today — and rational choice. This is true when we try to explain not only individual thought and

behaviour, but also social and cultural patterns. Many of these infra-individual patterns are recurrent across individuals and population, and many of these recurrent pattern recur in part because of interindividual transmission.