Don't Overthink It

A new book wants us to navigate life's crossroads with the precision of a military exercise. But personal decisions are more difficult than even the most consequential political decisions.

Agnes Callard

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Farsighted: How We Make the Decisions that Matter the Most

Steven Johnson

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What does the "resting brain" look like? If you want to map mental activities to regions of the brain, you need this answer to serve as a baseline. Yet when researchers in the 1990s instructed people to think about nothing in particular, their brains lit up in a regular pattern on PET and fMRI to a surprising degree. Moreover, they were using the parts of their brains least developed in nonhuman primates. Apparently, when nothing is happening, we engage in especially sophisticated forms of thinking—namely, thinking about what is *not* happening: daydreaming, strategizing, or solving hypothetical problems.

This sort of fact—a counterintuitive mini-narrative in the history of science—is the mainstay of Steven Johnson's *Farsighted.* More generally, Johnson's attention is on the human being as deliberative creature, one who has resources of what Daniel Kahneman called "slow thinking" at her disposal. Such thinking is insulated both from what is happening in the thinker's immediate environment and from the task of directing bodily movement. Quoting psychologist Martin Seligman, Johnson writes that "a more apt name for our species would be *homo prospectus*, because we thrive by considering our prospects."

The book's historical—though not chronologically presented—treatment of the improvements to human deliberation over the past eighty years revolve around technological advances: weather prediction; the advent of randomized controlled trials in medicine (dating only to 1948!); software that allows us to run environmental simulations; the manifold forms of expert calculation, simulation, model-construction, and adversarial collaboration ("red-teaming") that go into modern military planning (such as the raid on Osama bin Laden's complex). We now entertain larger sets of options, factor in longer-term consequences, calibrate levels of (un)certainty more precisely, and incorporate uncertainty into our plans. This allows us to make better military decisions, better medical decisions, and better environmental decisions.

Indeed, Johnson makes the point that in the last case our new knowledge opened up the area for decision-making: in the past the only restraint on human damage to the natural environment was lacking the technology to produce it; now we employ technology for the explicit purpose of modulating the long-term environmental effects of our actions. Johnson's book is thus optimistic about the ways these increases in predictive power and technical expertise can improve and transform deliberative mechanics.

When it comes to group decisions, for instance, Johnson argues that such progress has allowed us to counteract some of our individual biases and limitations, such as our inclination to cut off our reasoning prematurely, to be overconfident in our predictions, and to focus on short-term consequences. As individuals, we seem to use a lot of our rational efforts to *justify* the way we already want to go rather than to *investigate* which

of many possible ways we should go. As a remedy against our habit of telling ourselves pleasing stories of how our favored option will work out, Johnson emphasizes the importance of diversity in maximizing the breadth of the option-space: he cites evidence to the effect that groups of deliberators who are (demographically and otherwise) diverse seem also to yield more diversity in the options they are willing to consider, especially when each has been instructed to focus her deliberative contribution on information she thinks is unique to herself, rather than gravitate to what she takes to be shared knowledge. (Johnson does not address a possible trade-off between a group's facility in generating options and potential difficulties in settling collaboratively and harmoniously on a final plan.)

Johnson's style of exposition is to indicate trends by extrapolating lessons from a few telling anecdotes; this makes his book quite readable, though it doesn't give his sweeping historical claims the firmest footing. But the truth is his book is as much an exhortation as it is a description, and it concerns personal decision-making as much as decision-making at the group level. Indeed, these two points are connected: Johnson hopes that reflection on how far we have come with respect to medical, military, and environmental decisions will spur each of us to try to navigate life's major crossroads—such as marriage, careers, relocations, and childraising—in a way that is less biased, better thought-out, and less focused on the short term. Moreover, he offers concrete suggestions for how we might effect such improvement.

I am skeptical of the general claim that we can draw conclusions about progress in intrapersonal deliberation from the technological advances that have furthered interpersonal deliberation. But before explaining why, let me present and discuss Johnson's specific proposals for deliberative improvement:

1. We should read (more) novels, so as to become better at understanding the way other people think, and thereby incorporate some of the diversity of alternative perspectives into our own decision-making.

2. We should add "moral algebra" and its relatives to our toolkit of decision-making skills. "Moral algebra" refers to the explicit construction of "cost-benefit" charts, with entries weighted by both importance and likelihood.

3. We should offer decision-making classes in school. Johnson imagines the syllabus for such a class as interdisciplinary, drawing on the fields canvassed in his book: history, psychology, computer science, and literature. He also imagines that it would teach tools for decision-making (e.g., the "moral algebra" described above).

4. We should spend more time revisiting our decisions: "the two things we will almost always benefit from are time and a fresh perspective."

Given the book's emphasis on the value of randomized controlled trials, cautious, empirically-informed predictions, and simulations fleshing out possible consequences in advance, it is striking that Johnson offers no empirical support for the value of implementing these changes. He cites no evidence to the effect that people who make cost-benefit charts, or spend more time on a decision, or read novels, either make

objectively better decisions or are subjectively more satisfied with the decisions they made.

We should also consider the rationale behind these suggestions. Johnson's thought is that reading novels will allow us to incorporate new, alien perspectives—those of fictional characters—into our reasoning. But both steps here seem dubious. First, does reading novels make you better at accessing perspectives other your own? Scientifically speaking, Johnson grants that the jury seems to be out: there is some correlation between reading novels and improved "theory of mind," but the one study purporting to show a causal link could not be replicated. And even if novels *did* have this effect, there is the further question of whether people ever make deliberative use of such knowledge. I find it odd to think that understanding the outlook of a character very different from myself—say, Charles Dickens's Scrooge—would lead me to see my decisions from his point of view.

As for whether schools should offer decision-making classes, let's consider the question in a Johnsonian spirit: what might be the long-term consequences of having such courses become a standard part of high-school education in the United States? If these classes are efficacious in shaping how people deliberate, they are likely to shape them in the direction of increased uniformity—a dangerous prospect for the group deliberations to which those people will subsequently contribute. Johnson repeatedly emphasizes the value of heterogenous perspectives and diverse modes of thought in group deliberation, yet here he is suggesting a standardizing intervention at a young age. Johnson's failure to consider this—or any other—potential downside of his proposal makes it difficult to take seriously his suggestion for decision-making classes as a deliberative contribution.

Now consider cost-benefit charts. Johnson promotes them on the grounds that they offer a new, impartial perspective on your choice. But couldn't they just as readily serve to entrench your old one? Johnson does not seem to notice that his most in-depth example of "moral algebra"—Darwin's deliberation about whether or not to get married—is in fact a striking example of the latter possibility.

Admittedly, Darwin's list of cons displays the appropriate rational detachment. It included: Conversation of clever men in clubs . . . Less money for books . . . Perhaps quarreling."

The pros begin along the same lines: "Children (if it Please God) . . . Constant companion (and friend in old age) who will feel interested in one . . . Object to be beloved and played with. Better than a dog anyhow . . . Home, & someone to take care of house."

At a certain point, however, the "pro" entries become longer, impassioned, and interconnected:

> —My God, it is intolerable to think of spending one's whole life like a neuter bee, working, working, and nothing after all. No, no, won't do.
>
> —Imagine living all one's day solitary in smoky dirty London House.

—Only picture to yourself a nice soft wife on a sofa with good fire and music and books perhaps.

—Compare this vision with the dingy reality of Great Market Street, London.

What began as a list morphs into an impassioned plea to himself to make the choice that his "fast-thinking" self has, apparently, already settled on. Notice, for instance, how "nice soft wife on a sofa with good fire" revisits, but in a more emotional vein, the territory already covered in "Home, and someone to take care of house." Notice, also, that "No, no, won't do," is an attempt to cut the deliberative process short. I wouldn't be surprised to see an ink blot on the page at this point—the writing style is expressive of a desire to stop writing.

Johnson repeatedly cautions against "rigidly" or "narrowly" or "slavishly" adhering to any single decision-making algorithm, but he doesn't spell out the relevant danger. I believe it is important to try to understand what the problem might be. Why, in the case of an activity as important as decision-making, would we want to prescind from specialization and optimization? In manufacturing cars or performing medical procedures, rigidly adhering to established procedures is of benefit. Why isn't this true for decision-making? And why is it even *less true* for personal decisions than political ones?

There is something eminently humane about the image of Darwin throwing down his pen in frustration with "moral algebra." I believe this fact is itself one of the most interesting facts about decision-making, and my own—somewhat counterintuitive—suggestion is that personal decisions are, in a certain sense, more difficult than even the most complicated or consequential political decisions.

When President Barack Obama and his advisors were deliberating about whether and how to attack the compound near Abbottabad, they had a clear objective: capture Osama bin Laden. Their pursuit of this objective was subject to many constraints: there were political mandates to avoid violating (e.g., do not invade Pakistani airspace), and the operation was fraught with uncertainty (e.g., was bin Laden even there?). But these difficulties are precisely the sort that benefit from prediction, scientific knowledge, ingenuity, model-building, physical strength, military expertise, and sheer manpower. There is a problem to be figured out, a kind of multi-variable practical equation.

The raid on bin Laden was planned and executed with meticulous attention to detail, the level of which would manifest as neuroticism if it surfaced in a decision like Darwin's. Imagine, for instance, if he had tried to gauge precisely how many fewer books he would be able to buy as a married man, or if he had deployed teams of scientists to calculate the number of quarrels per year married. What if he had constructed elaborate models of each life and hired actors to play the role of family members so that he could "try out" living as a married man? Some activity of this kind (e.g., imaginative engagement with the future prospect) strikes us as appropriate, but

one way to interpret the "intrusion" of Darwin's emotions into his list of pros is as an impatient self-critique: stop overthinking!

It is, of course, possible to overthink military action: perhaps you spend so long pondering that the time for action passes, or you devote resources to the decision that would be better deployed elsewhere. But if Darwin had been accusing himself of overthinking, his critique wouldn't fall into either of those two kinds. His worry was not about the waste of deliberative resources so much as the inappropriateness of unleashing the hounds of deliberative rationality into this arena. Why might calculative thought seem too narrow to capture the scope of Darwin's decision?

I think the answer is that, unlike Obama and company, Darwin didn't know what his objective was. Darwin's deliberation was difficult because he was ignorant of its target. We can, of course, use a catch-all concept such as "happiness" to frame Darwin's decision, but happiness is not a concrete goal in the sense in which capturing Osama bin Laden is. The happiness of the single-minded, driven bachelor-scientist is very different from the happiness of married domesticity—moreover the rewards of each of these lives are different and distinctive enough that, arguably, the person who is really in a position to appreciate them is the full-fledged practitioner. Darwin's attempt to imaginatively invoke an experience of what married life will be like is charmingly cartoonish: "picture to yourself a nice soft wife on a sofa with good fire and music and books." What alternative does he have? The distinctively first-person joys of married life are all but invisible to the person who has not yet partaken of them.

This is true of all big personal decisions: we will know what is great about a college education once we have one; we will know what it is like to love our children only after they exist; we will know what living as an immigrant entails, for us, only after we have emigrated. In these cases, our grasp of the target and its value (e.g. married life) is a matter of living rather than thinking. Marriage is itself a learning experience, one that cannot be pre-empted by calculative reasoning, no matter how sophisticated. We cannot take the measure of our lives in advance.

We can illustrate the difference between the personal and the political with the "crystal ball test." Suppose Obama and his advisors could have looked into a crystal ball and seen what the results of the raid would be. They would then be able to definitively answer the question of whether they should undertake it, because they would know exactly what to look for as markers of success and failure. Now suppose that I could look into a crystal ball and see myself twenty or forty years after the decision to go to college or emigrate or get married or have children. What do I look for to check whether the undertaking was a success? Do I look to see if she is smiling? Or how wealthy my future self is? Those metrics won't do. Perhaps my future self does not care to smile all the time; and perhaps she's less interested in wealth than I currently am. These changes in her might have been connected to her finding some happiness that I can't (yet) fathom.

Looking into the crystal ball would be like watching a movie about someone who looks like me: she will take pleasures in things I don't now enjoy; she will put great

stock in things that are now of little significance to me; she will have knowledge about life generally, and, more specifically, what it is like to live as, say, a mother. I am in no position to assess her life as a success or failure—it is her prerogative to look back at me and think, "How little I knew back then!" What makes big decisions big is that they set into motion changes not only in the outside world, but in ourselves. Becoming a mother means having new desires, feelings, habits, knowledge, and even new decision-procedures.

Deliberative reasoning assesses the adequacy of means for achieving a given end. When there is a lot of complexity with respect to the means and a very firm grasp of what constitutes the end then deliberation is a powerful tool for figuring out the answer to the question, "What should I do?". This tool is, however, less well-suited to guiding the person who does not know what she wants. Detailed calculations about the effects of marriage on one's lifetime book purchases stand to the marriage decision as finding the perfect writing implement stands to penning the great American novel. Sometimes you need to step forward, with uncertainty, into a future you cannot rubber-stamp in advance.

Late in the book, Johnson details his own big decision—a move to California—and the tensions between himself and his wife that ensued in the period following the move. Johnson wonders whether he could have anticipated and pre-empted these later struggles by thinking more exhaustively in advance: "I have often looked back at the decision and wondered if we could have approached it in a way that would have done a better job of reconciling our different values from the beginning." But no matter how much we increase our investment at the front end—perfecting our minds with thinking classes, long ruminations, novel-reading, and moral algebra—we cannot spare ourselves the agony of learning by doing.

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