

---

# *Review Essay*

## Rethinking Decision Making

*Michael Wheeler*

**Sheena Iyengar.** *The Art of Choosing*. New York: Twelve, 2010. 352 pages. \$25.00 (hardcover), ISBN: 0446504106.

**Gary Klein.** *Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making*. Cambridge, MA: Bradford Books/MIT Press, 2009. 336 pages. \$27.95 (hardcover), ISBN: 0262013398.

### **Too Many Choices**

I used to think I was indecisive, but now I'm not so sure.  
—Anonymous

Two recent books on decision making present a healthy challenge both to our understanding of negotiations and to how we conduct them. Neither book deals with the negotiation field explicitly — rather, they are relevant because decision analysis lies at the core of so much of our theory. What is BATNA analysis (assessing one's best alternative to a negotiated agreement) if not the mental crafting of decision trees? A deeper understanding of how people make choices therefore necessarily enhances our understanding of the negotiation process.

Sheena Iyengar's *The Art of Choosing* reads like two books, each of which complements the other. One synthesizes her work on the problem of choice overload and its impact. In one well-known study, for example, she observed the behavior of shoppers in a gourmet market. When two dozen fancy jams were set out for display, somewhat more people stopped to sample them than when only six were on the table. But far fewer of that

---

**Michael Wheeler** is the Class of 1952 Professor of Management at the Harvard Business School. His e-mail address is [mwheeler@hbs.edu](mailto:mwheeler@hbs.edu).

---

larger group actually purchased any jam. Facing a cornucopia of choices, most walked away empty-handed.

Many factors contribute to our indecision. The process of comparing a large number of items is cognitively complex. As Iyengar convincingly argues, it is also emotionally taxing because having more options amplifies self-doubt. When we wonder if we are making the right choice, the greater the number of roads not taken, the greater the potential regret.

If mental paralysis merely results in missing out on discounted jam, it is no great matter. But when the stakes are higher, decision overload can be costly. Analyzing huge data sets, Iyengar has shown that when well-meaning companies have increased the number of retirement plans employees can choose from, they drove down overall participation rates: the more plans offered, the fewer employees pick any one of them. Because most companies match their employees' contributions, that means that those who do not participate have forfeited free money, pure and simple.

This line of research has important implications for negotiation theory and practice. Specifically, the familiar negotiation advice "invent options for mutual gain" needs a caveat: *but not too many*. We need to discover what "too many" means operationally in different negotiation contexts.

Creative problem solving requires bold leaps of the imagination. Iyengar quotes Albert Einstein: "There is no logical way to the discovery of these elemental laws. There is only the way of intuition which is helped by a feeling for the order lying behind the appearance" (p. 128). But as practitioners, we also need to be mindful of both our own capacity to compare alternatives and the ability of our counterparts to decide intelligently among whatever choices we put to them. As theorists, we need to think through the potential benefits — and costs — of chunking, that is, breaking down complex problems into more digestible parts. Seeking a perfect, Pareto-optimal exchange may be the enemy of a good-enough solution that parties can intelligently grasp.

The heart of *The Art of Choosing* explores another, less familiar aspect of decision making, namely, how culture shapes our fundamental views of choice. In a charming and compelling style, Iyengar anchors this theme by telling the story of her parents, who met for the first time on the day that they wed. In the West, arranged marriage seems strange, a threat to an individual's right to make his or her own fundamental choices. But as Iyengar gently reminds us, such a reaction is itself culturally generated, no less a product of the society in which we happen to live than is acceptance of the practice in the places where it is a long-established tradition.

In the West — maybe especially in the United States — choice is seen as essential to liberty and individualism. Iyengar quotes poet and policy adviser Archibald MacLeish: "What is freedom? Freedom is the right to choose: the right to create for oneself the alternatives of choice. Without

---

the possibility of choice a man is not a man but a member, an instrument, a thing” (p. xvii).

Other cultures view choice from quite different angles, notably in Asia where identity is more closely entwined with community. Studies by Iyengar and others have shown that culturally based attitudes toward choice go well beyond family institutions, appear at an early age, and have profound impact on how people later perform in the workplace.

In broad terms, for example, young American students perform better when they have freedom to choose how to complete an assignment. Their performance suffers if they are given specific direction. The opposite is true for Japanese students of the same age. Similar effects have been shown for adult workers. American workers are more likely to choose autonomy, while Japanese workers are generally happier when their superiors decide how a job is to be carried out.

Iyengar’s findings and analysis are far more nuanced than these broad statements, of course, but they consistently remind us that our taste for making decisions is not just a matter of individual personality. Culture weighs heavily, and it can even determine what we regard as negotiable and how we negotiate.

A recent profile of the Dalai Lama noted how some of his advisers have urged him to demand Tibetan independence from China. They acknowledge that it will never be granted but believe it could serve as a bargaining chip to gain other concessions. The Dalai Lama has rejected that approach on moral grounds: “They [my advisers] are saying something,” he observes, “but their real hope is for something different. It is wrong” (Osno 2010: 71). For him, right action is not the result of a utilitarian weighing of means and ends, costs, and benefits. If a choice is morally wrong, it offers him no option in the first place.

## Seeing the Patterns

Gary Klein, author of *Streetlights and Shadow: Searching for the Keys to Adaptive Decision Making*, has long studied situations in which people deny facing choices or making decisions. In his early research, Klein asked firefighters how they choose to attack a blaze when they first arrive at the scene. Specifically, how do they calculate the pros and cons of bursting through the front door with hoses or starting by soaking down the roof? Most of his initial interviewees were baffled by his questions. We do not decide, they claimed. We just act.

Digging deeper, however, Klein got them to explain their reactions. The color of the smoke, the shape of the building, and the kind of material on the roof were all parts of a puzzle that the firefighters would put together — not through formal analysis, but by a process of matching what they were seeing with other situations they had encountered over the years. This tacit decision making is light-years away from micro-analysis of

---

probabilities and outcomes. Rather, it is a matter of pattern recognition, a holistic understanding of what is appropriate in a given situation. Klein calls it “recognition primed decision making.”

Klein and others have documented similar pattern recognition across different fields. It is what distinguishes a novice chess player from a master. As he notes, someone first learning the game is taught that a knight is worth three points and a rook five, and then trades pieces accordingly. The master thinks in entirely different terms, weighing position, lines of attack, defenses, and not incidentally, his or her opponent’s style of play.

Recognizing those elements and understanding their significance takes experience. The master truly sees things that the novice does not. In one clever experiment, beginners and accomplished players were given a quick look at a chess board on which pieces had been randomly placed and then were asked to reproduce it from memory. Neither the novices nor the veterans performed very well.

When both groups were given a glimpse of a board where the pieces were midway in an actual game, however, masters came close to reproducing it perfectly. Why? Because now the pieces were in relation to one another. The white queen was potentially vulnerable to an opposing bishop. The black king was well protected by its pawns. Experts could relate the board to countless games they had seen or studied before. They could infer how the game had gotten to that point, and by seeing the board as a whole, they could visualize how best to go from there (p. 193).<sup>1</sup>

Much of what experts know — be they firefighters, chess players, or negotiators — is tacit. Patient interviewers may artfully ask why they made a decision in a particular case and what variation in circumstances might have prompted them to decide otherwise, but teasing out key factors is only part of the story. The process of how experts make sense of those factors, how they construct a picture that is more than the sum of its parts, is often opaque. “Sensemaking is not just a matter of connecting the dots,” says Klein. “Sensemaking determines what counts as a dot. Jumping to conclusions is sometimes the right thing to do even before all the dots have been collected” (p. 127).

Calling this process “intuition” is not very satisfactory, as it does not really answer the question. We admire the person who somehow knows how to say the right thing at the right time, but how do we find out how she does it? As Klein notes, she may not be able to tell us. “[W]e know a lot of important things that don’t boil down to facts and rules. Tacit knowledge is being able to do things without being able to explain how. We can’t learn tacit knowledge, from a textbook. We know more than we can tell” (p. 33).

For many years Klein’s work was largely ignored by traditional decision theorists, in part because the problems that he explores really cannot be replicated in the laboratory. His interest is in complex, fluid situations, in

---

which it is hard to precisely track cause and effect. To the extent his work was noted, it was usually dismissed as not sufficiently scientific, and, indeed, when it comes to intuition, some initial skepticism is warranted. We hear anecdotes about people who trusted their gut, made a bold move, and succeeded spectacularly, but how can we be sure they were astute and not simply lucky? After all, we are less likely to hear about people who trusted their gut and failed miserably.

Klein has attempted to bridge the gulf between what he terms naturalistic decision making and conventional frameworks by, among other activities, working with Daniel Kahneman, a Nobel Laureate and influential experimentalist. *Streetlights and Shadows* itself helpfully integrates findings and insights from both domains of research. He acknowledges, though, that he may have made little headway with colleagues in either camp. When he showed a draft chapter on so-called decision biases to two friends, “One of them, a leading heuristics-and-biases researcher, was outraged — he saw it as a polemic that unfairly attacked the heuristics-and-biases community. The other, a leading researcher in my own field of naturalistic decision making, was also outraged, and accused me of being a turncoat because I gave so much credence to cognitive limitations” (p. 65).

## Decision Making and Negotiation

That divide among decision researchers is unfortunate, but there is no reason why negotiation scholars and practitioners have to mimic it. As Klein notes, “We need both intuition and analysis. Either one alone can get us in trouble. Experts certainly aren’t perfect, but analyses can also fail” (p. 71). Indeed, the good news is that there is still important work that needs doing in our own field. Choice overload, culture, pattern recognition, intuition — all these are fertile areas for exploring more deeply how we recognize, frame, and make choices in negotiation.

Extending our understanding may require revising some of the fundamental assumptions on which negotiation theory rests. How do we judge our success as negotiators, for example, if our interests and priorities are subject to change? Dan Gilbert (2006) and other psychologists have shown that we are not very good at predicting our future emotional states. Struggling to achieve objectives that we think will bring us great happiness may end up yielding only modest pleasure. Outcomes that we dread sometimes turn out not to be quite so bad. Such research raises legitimate questions about the simple utilitarian assumptions on which our value-creating model of negotiation effectiveness rests.<sup>2</sup>

It is even more complicated than that. Admitting that our current tastes and goals may not match our long-term interests is one thing, but still our here-and-now selves must strike a bargain with our future selves so the latter are not left with heaps of regret or overdue bills.

---

Decades ago, economist Thomas Schelling wrote provocatively about how good intentions could be buttressed by tangible incentives (Schelling 1980). The example he chose was losing weight. Instead of going to a physician, he advised, check in with your lawyer. She can draw up an irrevocable trust in which you place all your worldly assets. If you drop the pounds in the allotted time, you get everything back. But if not, it all goes to an organization you deplore, let us say the American Nazi Party. You will be pretty sure to lose the weight.

Although Schelling framed this as an intertemporal exchange in which the momentary enjoyment of ice cream today is traded for good health tomorrow and beyond, any decision to bind oneself — to forego options — is always made in the present. We merely summon some virtuous part of ourselves to take part in that transaction. Novelist Ian McEwan (as quote in Surowiecki 2010: 112) has artfully captured the internal conversations that ensue:

At moments of important decision-making, the mind could be considered as a parliament, a debating chamber. Different factions contended, short- and long-term interests were entrenched in mutual loathing. Not only were motions tabled and opposed, certain proposals were aired in order to mask others. Sessions could be devious as well as stormy.<sup>3</sup>

This view of the mind is not just a literary device. Real people feel it too. Otto von Bismarck said, “Faust complained about having two souls in his breast, but I harbor a whole crowd of them and they quarrel. It is like being a republic” (as quoted in Surowiecki 2010).

Thus, before we can find agreement with others, our multiple selves must reach consensus over what we want and are willing to accept. That means constantly monitoring and resolving our own competing agendas. On top of that, we must recognize that the solitary figure sitting across the table may herself host multitudes. To succeed, we need to encourage the better angels of his or her nature to come to the fore.

This is especially true in dispute resolution. Attorney and mediator David Hoffman has seen families engage in bitter battles that destroy relationships and waste millions of dollars in legal fees. At one level, these may be fights over vast inheritances, but at their core lie old personal wounds and resentments. In one case, the mediation process dragged on and on. Hoffman finally floated a mediator’s proposal, but it was rejected by two angry siblings who felt exiled by the family. They threatened to end mediation and go back to court.

Hoffman then tried a novel approach. He wrote a long letter to one of the parties. It was full of empathy but also referenced social science research on protracted conflict in other contexts. Hoffman made an analogy

---

to the contested territorial claims of Israelis and Palestinians, for example. He even suggested that the person look at a website where a man who mediated urban gang wars described managing his own impulse for vengeance. Building on that foundation, Hoffman addressed this particular family member's own feelings:

We realize that there is a part of you, like there is a part of us, that feels strongly about justice (and even retribution) when we feel wronged, abused, or disrespected. . . . Even-even is not enough when we feel dissed.

We are mentioning this because a mediator's proposal could be viewed by each side as no better than even-even and maybe not even that. Each side may look at a mediator's proposal as being slightly less than half a loaf, for the following reason: it is difficult if not impossible to bring an objective measure to such assessments when we are embroiled in a conflict. For any of us who are immersed in conflict, our view of what would make us whole, or nearly whole, is influenced by the suffering we have experienced at the hands of the other side.

Finally, while all of us are hard-wired (so say the social scientists) to desire revenge when we feel wronged, there is another part of us that is equally powerful. That part is the one that cares about (a) rational, welfare-maximizing goals, like saving money, time, and effort where possible; (b) altruistic goals, such as using resources to help people most in need, as opposed to financially comfortable lawyers (and, yes, even mediators); and (c) emotional goals such as restoring some semblance of family feeling for the next generation to the extent that this is possible.

We recall one moment in the mediation where these two impulses — the revenge impulse and the desire to get things resolved inexpensively — came into conflict. We were talking about the idea of submitting [the "XYZ"] claims to arbitration for a final and binding decision. You thought about it and then decided that arbitration would not be painful enough for the other side and therefore was not a good idea.

As you think about it today, you may still feel that way. We have heard you describe the perspectives of those other parts of you that feel differently, and this may be true for [your sibling] as well. We also heard you articulate some of the emotional impulses that drive you to consider the relationships in the family for you and your children that you might be able to repair to some degree.

Those other parts may want a larger role at the negotiation table, and they may even argue that there has been enough retribution in the form of a court judgment, depositions, trial testimony, *Globe* articles, etc., and that now is the time for both sides to put down the swords, resolve the remaining disputes as cost-effectively as possible, and use the resources that remain for more useful and altruistic purposes.<sup>4</sup>

Hoffman's subtle and compassionate invitation suggests an attitude and approach we might bring to any negotiation. After all, it is in our own

---

interest that counterparts reflect on their decisions — not merely what to accept or whether to mediate or litigate, but more fundamentally who they want be in relation to us. The success of such appeals may depend on whether, from their perspective, we have engaged in the same kind of introspection ourselves.

## NOTES

1. It is telling that both Klein and Iyengar cite this experiment.
2. Some helpful work along these lines has already been undertaken. For example, see Guthrie and Sally (2006).
3. As I was finishing this piece, I came across this quotation from McEwan's novel, *Solar*, in a review of a new book about procrastination, *The Thief of Time*, edited by Chrisolula Andreou and Mark D. White.
4. Hoffman presented this material at a February 27, 2010 conference on "The Negotiation Within" organized by the *Harvard Negotiation Law Journal*. The bracketed "XYZ claims" is meant to mask the specific case. The emphasis is in the original, but more paragraph breaks have been added for readability. I am grateful for his permission to use it here.

## REFERENCES

- Andreou, C. and M. D. White (eds). 2010. *The thief of time: Philosophical essays on procrastination*. New York: Oxford.
- Gilbert, D. T. 2006. *Stumbling on happiness*. New York: Knopf.
- Guthrie, C. and D. F. Sally. 2006. Miswanting. In *The negotiators field book: The desk reference for the experienced negotiator*, edited by A. K. Schneider and C. Honeyman, pp. 277–282. Chicago: American Bar Association.
- McEwan, I. 2010. *Solar*. New York: Nan Talese/Doubleday.
- Osnos, E. 2010. The next incarnation. *The New Yorker*, October 4, 62–74.
- Schelling, T. 1980. The intimate contest for self-command. *Public Interest* 60: 94–118.
- Surowiecki, J. 2010. Later. *The New Yorker*, October 11, 110–113.