Your Brain Is Not as Rational as You May Think It Is

A theoretical physicist explains why what we think of as “rational” behavior actually comes from powerful, submerged cognitive forces, writes Jesse Singal.

by Jesse Singal  |  April 28, 2012 4:45 AM EDT

In 1954, a team of psychologists undertook a social-science experiment that would never pass muster in today's world of ethics committees. For a nominal fee, they offered 22 sets of parents three weeks of summer activities for their kids at an isolated camp in southeastern Oklahoma. The children, all boys, were divided into two groups of 11. The groups were initially sequestered from each other, and the boys in each group were led to believe theirs was the only group at the camp.

The boys had been carefully screened for uniformity—all were white, middle-class, and Protestant. None were particularly smart or dumb, and none knew any of the others. But both groups quickly formed tight-knit identities. The Rattlers and the Eagles, as they called themselves, each came up with their own flags, as well as "preferred songs, practices, and peculiar norms," as the researchers put it. Despite their similarities, when each group was finally informed of the other's existence, a fierce rivalry took hold, resulting in fighting, sabotage, and endless insults.

And yet, once the "counselors" (in actuality, the researchers) presented them with challenges that affected all of them—for example, restoring the camp's water supply, or starting a stalled truck that was going to acquire food for the camp—the groups quickly set their hostilities aside and worked as a cohesive unit.

What could explain this? Why would young boys quickly bond together, develop an instant dislike for a rival group, and then set it all aside to work with that group when presented with common goals?

In Subliminal: How Your Unconscious Mind Rules Your Behavior, Leonard Mlodinow argues that this and countless other peculiarities of human nature can only be explained by understanding that our rational brains aren't really calling the shots. Most of the time, subtle cues—a flag, for instance—have a powerful, discomfiting pull on our behavior.
Indeed, as our models of the brain progress, rationality finds itself with less and less breathing room. That’s not to say we aren’t capable of rational thought, of coolly weighing the pros and cons of a purchase or a relationship or a trip abroad. But when we try to employ the most logic-bound parts of our brain, psychologists and neuroscientists are discovering, it’s incredibly easy for us to fool ourselves into thinking that we’re being rational when in reality there are powerful, submerged cognitive forces actually guiding us.

Throughout Subliminal, Mlodinow, a theoretical physicist and the author of The Drunkard’s Walk, among several other books on science, launches an assault against the idea that we control our decisions and our beliefs in the way that we think we do.

To the contrary, Mlodinow argues, evolution has led us to a schizophrenic state of affairs: “We have an unconscious mind and, superimposed upon it, a conscious brain,” he writes. As a result, it can be very hard to know why we do what we do, since there is no unitary thing called “my brain” or “my mind” calling the shots. Rather, there is a constant back-and-forth between the conscious and the unconscious, between the rational and the instinctual.

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“Once attention is called to them, it is easy to accept many of our simple behaviors … as being automatic,” Mlodinow writes. “The real issue is the extent to which more complex and substantive behaviors, with the potential to have a much greater impact on our lives, are also automatic—even though we may feel sure that they are carefully thought out and totally rational.”
This applies to everything we think or do. We think we’re voting for politicians because we agree with their policy positions, but there’s strong evidence to suggest that we’re swayed by their looks. We think we choose our friends solely because of their sterling personal qualities, but research shows that we treat people better when we discover even the most superficial “in-group” connection with them—as demonstrated by the boys’-camp experiment.

Subliminal ends up surveying a wide expanse of the psychology landscape, some parts of it more interesting than others. Some of the most fascinating parts come toward the end, when Mlodinow tackles feelings and the self.

“Evolution created the human brain not so it could accurately understand itself but to help us survive,” he writes. So even the most basic, personal sorts of thoughts—why we’re feeling the way we feel, or how we perform at this or that—are inevitably skewed by a variety of subliminal mechanisms.

But if we aren’t good at reaching rational decisions on these issues, we’re great at justifying whatever conclusion we do reach, however questionable our vehicle for getting there.

“As it turns out, Mlodinow writes, “the brain is a decent scientist but an absolutely outstanding lawyer.” In other words, we’re experts at spinning out elaborate stories for why we believe what we believe—or about why we’re special. It’s no wonder that every psychological study that asks a large group to self-report about a given skill always elicits the same result: everyone considers himself or herself above average. (It’s an important self-defense mechanism, argues Mlodinow, since happy people simply do better than unhappy people on just about every metric.)

“Our internal computations, which we believe to be objective, are not really the computations that a detached computer would make but, rather, are implicitly colored by who we are and what we are after.”

A fair bit of Subliminal overlaps with other recent popular treatments of our biased, easily confused brains, namely Daniel Kahneman’s Thinking, Fast and Slow and Jonathan Haidt’s The Righteous Mind: Why Good People Are Divided by Politics and Religion. If you’ve already read one or both of these books, you’ll find a lot of rehashing in Subliminal.

Mlodinow’s book is, however, a quicker read—he doesn’t go quite into as much depth as Kahneman or Haidt—and might be a better entry point for those who are less familiar with the subject. Overall, it’s a useful addition to the growing body of work arguing convincingly against the idea of the rational human brain. It may be discomfiting, but it’s true.