

One of the things I love about reading and researching for this blog is finding brain quirks that I would describe as “hidden in the open.” When Jules and I write about heuristics in this space, they often strike me as patently obvious brain traits. Something I might have discovered on my own if I had a little more mental horsepower. This’s month heuristic-of-choice is one of those. For this month, I’m going to dust off an old heuristic that is new to the blog. The “representativeness heuristic.” But, first, let’s refresh, if needed, on what a heuristic is. Loosely defined, it’s a scientifically demonstrated mental shortcut that is prevalent in human thinking or decision making. Heuristic short-cuts help us think and react quickly, but they can also lead us to wildly inaccurate conclusions.

Let’s start with this scenario. Let’s say I gave you the following description of a person: “Susan is 39 years old and is successful in her career. She’s articulate, friendly, detail-oriented, and analyzes problems thoroughly. She opened her own office 3 years ago.” Now, let’s suppose that I said, “Susan is either a lawyer or an engineer. Which career does Susan have?” First, go ahead and blurt out an answer based on the description. Now, as you think through it after the fact, take note of what your thought processes are actually doing here; what they’re focusing on. Suppose I add this twist into the experiment: “Susan is one person in a room of 100 professionals. 75% of these people are engineers and 25% of them are lawyers. Based on how I’ve described Susan above, is she an engineer or is she a lawyer?”<sup>1</sup>

In the representativeness heuristic, we are making predictive decisions based on “the degree to which A is representative of B, that is, by the degree to which A resembles B.”<sup>2</sup> It’s worth thinking for a second how prevalent this breed of analysis is in courthouse decision-making. The authors of the article I’m writing on here frame the kinds of questions where we employ this heuristic as follows: “What is the probability that object A belongs to class B? What is the probability that event A originates from process B? What is the probability that process B will generate event A?”<sup>3</sup> Can you frame those as trial-process questions? Surely. “What is the probability that A is the kind of person to commit this B-type crime? What is the probability that crash A originated from driving-behavior B?”

Let’s go back for a moment to the example above where we know how we describe Susan and we also know the number of engineers and lawyers in the room. It’s a very clear fact of math that if you have 75 engineers in a room and add in 25 lawyers, the probability that one randomly chosen person in the room will be an engineer is pretty high. However, experiments on this same kind of scenario I have given you have shown that most people ignore the rock-solid percentages in favor of predicting from some mushy notion of representativeness.<sup>4</sup> If you have picked apart your own thinking about Susan, you’ve likely uncovered a fundamental truth of the representativeness heuristic: we largely answer these questions by resorting to stereotypes.<sup>5</sup> We’ll get stereotypical ideas in our head about lawyers and engineers and then will see if the things we know about Susan match those representations. “Articulate? Gotta be a lawyer because engineers are quiet, awkward types and lawyers are wordsmiths. Friendly? You better be if you want to keep your clients! Working for herself? She started her own law firm to be free from toxic office politics! You go, Susan.” Let’s be honest. Perhaps you also whispered to yourself at some point, “Didn’t

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<sup>1</sup> The hypothetical presented in the text is adapted from experimental data discussed in Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 *Science* 1124, 1124–25 (1974), although certain facts and numerical values have been modified for illustration in this forum and for this audience.

<sup>2</sup> *Id.* at 1124.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 1125.

<sup>5</sup> *Id.*

my brother's first college roommate once say that most engineers are men?"<sup>6</sup> You have no actual hard data, but the stereotype is accessible.

We might benignly hang fast to the idea that Susan is a lawyer from what we know of her. No harm comes to us via our Susan-decision today. However, the fact that we will often ignore the relevant predictive criteria, such as the high percentage of all the engineers in the room could, in some other context, be rather devastating. Just the other day, my wife was telling me about a statement another juror kept repeating to the other jury members while they all deliberated after a rape trial: "I know he's guilty just by the way he was looking at [so-and-so]." In other words, "People who look at other people the way he was looking are the kind of people who would commit a rape." Thankfully, other jurors put that representativeness heuristic in check, and the jury couldn't otherwise reach a verdict on the real pieces of evidence in front of them. That juror, however, never abandoned his guilty vote.

Well, lawyer family, Susan is an engineer. At least in my head and for the purposes of this blog post. She's very well spoken, is kind to kids and little old ladies, and her firm has designed every bridge this side of the Ozarks. Were she real, she'd be susceptible to heuristic errors too. All this talk of lawyers and mental short-cuts makes me think of one very notable legal-version of the representativeness heuristic. An example of wild stereotyping that lives rent-free in my head. I've mentioned it once already in this space. It's Clarence Darrow's 1936 state-of-the-art (or so it was believed to be at the time) work on picking a winning jury during *voir dire*. He was trying to answer the question, "Will person A be in the class of persons likely to produce verdict B?" It's hard to believe the following answers were ever considered state-of-the-art: "The Englishman is not so good as an Irishman...The German is not so keen about individual rights except where they concern his own way of life...Beware of the Lutherans, especially the Scandinavians..."<sup>7</sup> It's an old cautionary tale, for sure, but modern experiments have proven our thinking to be similarly susceptible.

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<sup>6</sup> If you are protesting that I have also used other tricks here, like anchoring or priming, because I'm writing for a group of lawyers and posting to a listserv that was just recently filled with lovely memories of and tributes to our dear Susan Poehls, then you have caught me red handed.

<sup>7</sup> Clarence Darrow, *Attorney for the Defense*, *ESQUIRE*, May, 1936 at 36 *reprinted in* JAMES W. JEANS, SR., *TRIAL ADVOCACY* 277-278 (2d ed. 1993).