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Insights from Cognitive Psychology

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My goal in this paper is to explore cognitive psychology's place in the dispute resolution field. To do so, I first look back and then look forward. Looking back, I identify the five insights from cognitive psychology that have had the biggest impact on my own dispute resolution teaching and scholarship. Looking forward, I identify my five hopes for the future of cognitive psychology in the dispute resolution field.

Top Five Insights

The five concepts from cognitive (and, to a lesser extent, social) psychology that have had the biggest influence on my thinking about dispute resolution are prospect theory, the heuristics and biases program, Cialdini's principles of influence, hedonic psychology, and finally multiple-option or multiattribute decision making. Though my list may be somewhat idiosyncratic, I think these are among the most important psychological insights for the dispute resolution field as a whole.

Prospect Theory

Developed by Daniel Kahneman and Amos Tversky, prospect theory is a positive theory of decision making that challenges the descriptive claims made by proponents of rational choice theory.[1] Prospect theory includes four components,[2] but two are of particular relevance to the dispute resolution community.

The first of these is *framing*.[3] When we make risky or uncertain decisions—like deciding whether to settle a case or to go forward to trial—we tend to perceive our decision options as either gains or losses from some neutral reference point, commonly the status quo.[4] This framing of options has a rather predictable impact on the way we make decisions. When choosing

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1. Prospect Theory: An Analysis of Decision Under Risk, 47 Econometrica 263 (1979).
2. For a brief, nontechnical account, see Chris Guthrie, Prospect Theory, Risk Preference and the Law, 97 Nw. U. L. Rev. 1115 (2003).
3. See Amos Tversky & Daniel Kahneman, Rational Choice and the Framing of Decisions, 59 J. Bus. 251 (1986).
4. See, e.g., Daniel Kahneman & Amos Tversky, Choices, Values, and Frames, 39 Am. Psychol. 341, 342 (1984).

between options that appear to be gains relative to this reference point, we have a tendency to behave in a risk-averse fashion. But when choosing between options that appear to be losses, we have a tendency to take some risks.[5]

Suppose, for example, that I offer you a choice between a certain $100 gain or a coin flip in which you will receive $200 if the coin lands on heads but not a penny if it lands on tails. In this case, prospect theory tells us that you are likely to choose the certain $100 gain, i.e., to make the risk-averse choice. Suppose, instead, that I offer you a choice between a certain $100 loss or a coin flip in which you will lose $200 if the coin lands on heads but nothing if it lands on tails. In this case, prospect theory tells us that you are likely to choose the coin flip, i.e., to make the risk-seeking choice. In short, prospect theory predicts that you will be willing to take risks to avoid losses that you are unwilling to take to accumulate gains.

This has obvious application to disputes, particularly to the settlement of litigation. In many litigated disputes, *plaintiffs* confront options that are likely to appear to them to be gains. They can accept a certain settlement offer or go to trial, where they might do better or worse. By contrast, *defendants* typically confront options that are likely to appear to them to be losses. They can make a certain settlement payment to the plaintiff or go forward to trial, where there is some possibility of avoiding the loss altogether (as well as some possibility of doing worse). Prospect theory predicts—and legal scholars have subsequently demonstrated in experimental settings—that plaintiffs are more likely than defendants to find settlement attractive.[6] This gives us insight into whether, how, and on what terms litigated disputes will be settled.

A second component of prospect theory that is highly relevant to dispute resolution is *loss aversion.*[7] Psychologists have discovered that we tend to find losses more aversive than we find gains of the same magnitude attractive. The displeasure we associate with a $500 loss is much greater than the pleasure we associate with a $500 gain. Research suggests, in fact, that we find losses at least twice as distasteful as we find comparable gains attractive.[8]

Loss aversion is applicable to dispute resolution in two ways. The first is *concession aversion.* When we make reciprocal concessions in a negotiation, we have a tendency to value those that we make more heavily than those we receive because we perceive our own concessions as losses but our counterpart's concessions as gains.[9] The second is the *endowment effect.* When negotiating over a good, we are likely to place a higher value on it if we own it than if we are trying to acquire it in the first instance.[10] Both concession aversion and the

5. See, e.g., *id.* at 341–42.

6. See, e.g., Jeffrey J. Rachlinski, Gains, Losses, and the Psychology of Litigation, 70 S. Cal. L. Rev. 113 (1996). The opposite is true in frivolous or low-probability litigation. See Chris Guthrie, Framing Frivolous Litigation: A Psychological Theory, 67 U. Chi. L. Rev. 163 (2000).

7. Kahneman & Tversky, *supra* note 1, at 279.

8. See Chip Heath et al., Goals as Reference Points, 38 Cognitive Psychol. 79, 87 (1999).

9. Daniel Kahneman & Amos Tversky, Conflict Resolution: A Cognitive Perspective, *in* Barriers to Conflict Resolution, eds. Kenneth Arrow et al., 44, 56–57 (1995).

10. See Richard Thaler, Toward a Positive Theory of Consumer Choice, 1 J. Econ. Behav. & Org. 39 (1980).

endowment effect suggest that we are less likely to make trades than we might previously have imagined.[11]

Heuristics and Biases

The so-called heuristics and biases program also owes its existence (at least in part) to Kahneman and Tversky.[12] The basic idea is that people tend to use heuristics or rules of thumb when making decisions. For the most part, these heuristics are adaptive and lead us to make good decisions. But the problem is that they sometimes cause cognitive illusions—akin to optical illusions in the visual world—that can lead our decision making astray.

There are a number of heuristics and biases in the literature. Let me offer one example: anchoring and adjustment.[13] When we attempt to estimate the value of something—as we often do in a conflict setting—we tend to be heavily influenced by the first number we encounter.[14] This is often appropriate because the first number we encounter generally contains relevant information about the value of the item. So, for example, the list price of a house often, though certainly not always, contains relevant information about its actual market value.

The problem, however, is that our estimates tend to be influenced by irrelevant and even absurd anchors. For example, researchers asked subjects to estimate the average annual temperature in San Francisco.[15] Unbeknownst to the subjects, the researchers randomly assigned them to one of two groups. The researchers asked the subjects in the control group simply to provide an estimate. The researchers also asked the subjects in the experimental group for their estimates, but first they asked them whether they thought the average annual temperature in San Francisco was greater or less than 558 degrees! Happily, all of these subjects said no. Not so happily, however, they gave significantly higher estimates of San Francisco's average annual temperature than the control group. This completely absurd number, 558 degrees, influenced their estimates.

Likewise, anchoring can have an impact in the dispute setting. There is evidence, for example, that a negotiator can use an extreme opening offer to anchor her counterpart.[16] There is also evidence suggesting that policy limits

11. For more on prospect theory, see Choices, Values, and Frames, eds. Daniel Kahneman & Amos Tversky (New York, 2000).

12. For the classic treatment, see Judgment Under Uncertainty: Heuristics and Biases, eds. Daniel Kahneman et al. (New York, 1982). See also Heuristics and Biases: The Psychology of Intuitive Judgment, eds. Thomas Gilovich et al. (New York, 2002) [hereinafter Heuristics and Biases].

13. But see Daniel Kahneman & Shane Frederick, Representativeness Revisited: Attribute Substitution in Intuitive Judgment, *in* Heuristics and Biases, *supra* note 12, at 49, 56.

14. Amos Tversky & Daniel Kahneman, Judgment Under Uncertainty: Heuristics and Biases, 185 Science 1124, 1128–30 (1974).

15. Scott Plous, The Psychology of Judgment and Decision Making 146 (Philadelphia, 1993) (alluding to an unpublished study by George Quattrone and colleagues).

16. See, e.g., Adam D. Galinsky & Thomas Mussweiler, First Offers as Anchors: The Role of Perspective-Taking and Negotiator Focus, 81 J. Pers. & Soc. Psychol. 657 (2001); Russell Korobkin & Chris Guthrie, Opening Offers and Out-of-Court Settlement: A Little Moderation May Not Go a Long Way, 10 Ohio St. J. on Disp. Resol. 1, 12–13 (1994).

can influence the way claims adjusters and insurance professionals evaluate settlement offers.[17] Finally, researchers have conducted fascinating studies showing that plaintiffs' requests for damages at trial can have a significant impact on what mock jurors deem to be appropriate damage awards.[18]

Cialdini's Principles of Influence

The third item on my list comes largely from the domain of social psychology rather than cognitive psychology. In his important and highly accessible book *Influence,* Robert B. Cialdini integrates several findings from social psychology into six principles of influence: reciprocity, commitment and consistency, social proof, liking, authority, and scarcity. Each of these principles is relevant to dispute resolution, but I'll focus on just a couple of them for purposes of illustration. First, consider the *reciprocity* rule. This is an apparently universal norm of behavior that says when people do things for us, we feel obligated to repay them in kind.[19] This is relevant to dispute resolution in that it is the mechanism that facilitates reciprocal concessions in negotiation and mediation. Second, consider both the *authority* principle and the *liking* principle. The former posits that we tend to defer to those whom we perceive to be authority figures,[20] and the latter posits that we tend to defer to those we like.[21] Together, these principles provide insight into how neutrals in mediation, arbitration, and other dispute resolution processes can use their reputation and interpersonal skills to enhance their credibility with disputants.

Hedonic Psychology

The fourth item on my list may be less familiar. Hedonics, or hedonic psychology, is a branch of psychology, or a movement within psychology, to study what brings us happiness or meaning in life.[22] There are significant theoretical and methodological issues with this work, but I think one of its basic findings will continue to withstand whatever criticism the field receives. Hedonics researchers have demonstrated that we tend to be fairly bad at predicting what we want.[23] (In more technical terms, our predicted utility is often quite different from our experienced utility.[24])

17. Data on file with the author.

18. See, e.g., Gretchen B. Chapman & Brian H. Bornstein, The More You Ask For, the More You Get: Anchoring in Personal Injury Verdicts, 10 Applied Cognitive Psychol. 519, 526–27 (1996); John Malouff & Nicola S. Schutte, Shaping Juror Attitudes: Effects of Requesting Different Damage Amounts in Personal Injury Trials, 129 J. Soc. Psychol. 491, 495 (1989).

19. Influence: Science and Practice, 4th ed., 20 (Boston, 2001).

20. *Id.* at 185.

21. *Id.* at 144.

22. Daniel Kahneman et al., Preface, *in* Well-Being: The Foundations of Hedonic Psychology, eds. Daniel Kahneman et al., ix (New York, 1999).

23. For a discussion, see Daniel Kahneman, New Challenges to the Rationality Assumption, 3 Legal Theory 105, 113–16 (1997).

24. See generally *id.* at 107–16.

This work—particularly this key finding—is relevant to interest-based dispute-resolution processes. The underlying assumption of interest-based theories of negotiation and mediation—like those promulgated in *Getting to Yes*[25] or Carrie Menkel-Meadow's early writing on problem-solving negotiation[26] or some of the recent work on facilitative mediation[27]—is that disputants are able to identify what it is they actually want to get out of a dispute. Disputants, in other words, can identify their underlying interests. This may in fact be true, but I think work from the field of hedonic psychology suggests that we should have some doubts. Moreover, I think this work has profound implications for attorney-client relations. If clients are not particularly adept at predicting what they want, should attorneys play a more paternalistic role in representing them?

Multiple-Option or Multiattribute Decision Making

Researchers drawn largely from business schools have investigated how consumers evaluate complicated purchasing decisions. Among other things, they have found that consumers are influenced in predictable and apparently irrational ways when irrelevant options are added to a set of choices.

One phenomenon that they have identified is *contrast:* the addition of an inferior option to a set of choices increases the likelihood that a consumer will be attracted to a superior similar option in the set.[28] For example, a consumer choosing between a fine red wine and a fine white wine is more likely to choose the fine white wine if an inferior white wine is added to the set.

Another phenomenon researchers have identified is *compromise* or *extremeness aversion:* when an extreme option is added to a choice set, a consumer will be drawn to the option that has now become intermediate in the set.[29] So a consumer choosing in the first instance between a low-priced wine and a medium-priced wine will become more likely to choose the medium-priced wine when a higher-priced wine is added to the set of choices.

These and other findings are relevant not only to consumer behavior but also to dispute resolution. Many of us, and I am certainly speaking for myself here, are drawn to alternative methods of dispute resolution in part because disputants can consider more options and fashion more creative outcomes for themselves than would customarily be the case in litigation. I think the aforementioned work on multiple-option and multiattribute decision making

25. Roger Fisher et al., Getting to Yes: Negotiating Agreement Without Giving In, 2d ed. (Boston, 1981).

26. Toward Another View of Legal Negotiation: The Structure of Problem Solving, 31 UCLA L. Rev. 754 (1984).

27. See, e.g., Leonard L. Riskin, Understanding Mediators' Orientations, Strategies, and Techniques: A Grid for the Perplexed, 1 Harv. Negot. L. Rev. 7, 23–24 (1996).

28. Joel Huber et al., Adding Asymmetrically Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis, 9 J. Consumer Res. 90 (1982).

29. See, e.g., Itamar Simonson, Choice Based on Reasons: The Case of Attraction and Compromise Effects, 16 J. Consumer Res. 158 (1989); Itamar Simonson & Amos Tversky, Choice in Context: Tradeoff Contrast and Extremeness Aversion, 29 J. Marketing Res. 281 (1992).

can inform our understanding of how disputants might go about doing just that.[30]

Top Five Hopes

Those of us in the dispute resolution community have reason to pat ourselves on the back because we are more likely than many in the legal academy to have integrated some or all of these concepts into our teaching and research. I hope we continue to play a leadership role in the future. In particular, I would like to see the following five developments in the field.

First, I would like to see us explore how lesser-known phenomena—like hedonic psychology, the "affect heuristic," and others—influence disputing. Prospect theory and the heuristics and biases program are fairly well established in our field. But other phenomena have been largely ignored.

Second, with respect to those phenomena with which we are already acquainted, I hope we develop a deeper understanding of the way they operate and interact with one another. Let me give one quick example. Consider the reciprocity rule on one hand and concession aversion on the other. The reciprocity rule suggests that we feel an obligation to respond in kind when our counterpart gives us a concession; concession aversion suggests that we are likely to devalue our counterparts' concessions relative to those that we might make. Is one of these phenomena more potent? In what circumstances is one more persuasive than the other? Why? How do I use the reciprocity rule to induce a concession without triggering concession aversion in my counterpart?

Third, I would like to see us move from what I will call translation to creation. That is, I would like to see more original empirical work in law schools. I am confident this will happen, as law schools have recently hired a number of faculty in the dispute resolution field who have the requisite methodological skills and substantive knowledge.

Fourth, I hope that we continue to create texts that are highly accessible to our students and—let's be honest—to us as well. Some good examples of accessible works (with apologies to the authors of those that I overlook) include Bob Mnookin's piece on barriers to conflict resolution;[31] Baruch Bush's article on psychological barriers in mediation;[32] Rich Birke and Craig Fox's article on psychological principles in litigation;[33] and Russell Korobkin's recently published casebook on negotiation.[34]

30. See Chris Guthrie, Panacea or Pandora's Box: The Costs of Options in Negotiation, 88 Iowa L. Rev 601 (2003); Mark Kelman et al., Context-Dependence in Legal Decision Making, 25 J. Legal Stud. 287 (1996).

31. Robert H. Mnookin, Why Negotiations Fail: An Exploration of Barriers to the Resolution of Conflict, 8 Ohio St. J. on Disp. Resol. 235 (1993).

32. Robert A. Baruch Bush, "What Do We Need a Mediator For?" Mediation's "Value-Added" for Negotiators, 12 Ohio St. J. on Disp. Resol. 1 (1996).

33. Richard Birke & Craig R. Fox, Psychological Principles in Negotiating Civil Settlements, 4 Harv. Negot. L. Rev. 1 (1999).

34. Russell Korobkin, Negotiation Theory and Strategy (New York, 2002).

Finally, I would like to conclude on a positive note. I hope we move beyond "barriers." The barriers program[35]—in which I have played a very small role[36]—has been fruitful in our field, but it has focused primarily on the negative impact these phenomena can have in disputes. I hope to see us do more work focusing on how these phenomena can be helpful, rather than harmful, to disputants, counsel, and neutrals.

35. See, e.g., Barriers to Conflict Resolution, *supra* note 9.

36. See, e.g., Russell Korobkin & Chris Guthrie, Psychological Barriers to Litigation Settlement: An Experimental Approach, 93 Mich. L. Rev. 107 (1994).