SOCIAL PSYCHOLOGY, INFORMATION PROCESSING, AND PLEA BARGAINING

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I. INTRODUCTION

There has never been a shortage of critics of our system of negotiated justice. Whether it is too harsh or too lenient, whether it is unduly coercive or the natural and reasonable outgrowth of a free-market system, whether it overprotects the guilty or underprotects the innocent, plea bargaining is controversial. But from all angles, critics

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* Associate Professor, Washington University School of Law. Many thanks to Sam Bagenstos, Matt Bodie, Sam Buell, Emily Hughes, and Peter Joy for their helpful suggestions and comments. Thanks also to Andrea Schneider, Michael O’Hear, and all of the participants in the Marquette Symposium on Criminal Law and Dispute Resolution held at Marquette University Law School in April 2007.


7. The questions of whether plea bargaining should be abolished or permitted, or whether it is constitutional or unconstitutional, are outside the scope of this article. See, e.g., Stephen J. Schulhofer, A Wake-Up Call from the Plea-Bargaining Trenches, 19 LAW & SOC. INQUIRY 135, 144 (1994) (“Plea bargaining can be, and should be, abolished.”); Easterbrook,
Marquette Law Review

Decry the problems that inhere in a criminal justice system where, although it may be where we might most aspire to the rule of law, we have largely a rule of man instead.  

In keeping with a system of negotiated justice, a large body of legal scholarship on plea bargaining has suggested that plea bargains are a form of contract—a negotiated bargain between two parties—that takes place in a specialized setting, but still shares many of the same features of contract and contract negotiation, writ broadly. Economic theory about bargaining has been one prominent framework guiding the conversation about plea negotiation. The economic model of plea bargaining relies on the availability and exchange of information that provides the basis for assessment of probable outcomes. In the economic model, parties are able to make assessments of probable trial outcomes, compare them to potential plea agreements, and make a rational choice about whether to accept or reject a plea agreement as opposed to going to trial (defendant) or whether to offer a particular plea bargain or go to trial (prosecutor).  


8. See David Lynch, The Impropriety of Plea Agreements: A Tale of Two Counties, 19 Law & Soc. Inquiry 115, 131 (1994) (“[T]he institution of plea bargaining has turned our criminal courts into centers of hustling, more worthy of an open-air market than a courthouse, and far distanced from the ideal versions of the rule or practice of law.”).  


10. See id.; Bar-Gill & Ayal, supra note 6; Easterbrook, Criminal Procedure, supra note 4.  

11. It is not clear that all parties engaged in plea bargaining have access to all relevant information. Defendants presumably have information about their participation or lack thereof in particular criminal activity, although of course, there may be complex cases where the legal posture makes it hard for a defendant to know if he or she engaged in prohibited conduct. Prosecutors presumably begin their work by gathering information about the proof available against a particular defendant, and defense attorneys presumably develop, over time, information that comes from both defendant-clients and prosecutors. There is no requirement that the individuals involved in the plea bargaining process exchange all relevant information with one another. The defendant, of course, has no responsibility to provide his or her information to anyone else; it might be prudent to divulge this information to defense counsel, but certainly much of that information is unlikely to be provided to the prosecutor. Prosecutors, on the other hand, are bound by law to provide certain materials about the proof they or other law enforcement officials have gathered, but this is not always required prior to plea bargaining. See Mary Prosser, Reforming Criminal Discovery: Why Old Objections Must Yield to New Realities, 2006 Wis. L. Rev. 541, 558. The normative implications of imperfect information and information asymmetries are beyond the scope of this essay, however.  

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Psychology research in the last three decades has devoted a good deal of attention to an examination of how individuals process information. One of the most influential approaches, pioneered by Kahneman and Tversky, has identified significant ways in which human behavior deviates from prediction because of cognitive biases and heuristics in processing data. The implications of cognitive biases and heuristics have been explored in a vast number of socio-legal settings, including plea bargaining, to challenge the assumption that individuals can properly assess the likelihood of various outcomes so that they can make the utility-maximizing choice among those outcomes. However, some scholars have suggested that lawyers may be in a good position to better approximate the rational actor than their clients, and that, in the plea bargaining context, lawyers may be effective debiasers.

In this essay, I take a broader tack to suggest why the rational actor paradigm in plea bargaining may not capture the reality of the negotiation between prosecutor and defense counsel, and why lawyers may not be likely to lessen the effects of cognitive bias and heuristics. Cognitive biases and heuristics that interfere with accurate information processing are certainly one threat to a rational economic model of plea bargaining. But modern psychology has recognized that cognitive biases and heuristics do not exist in a vacuum and are not the only systematic predictors of how individuals process information. An exclusive focus on cognitive biases and heuristics, indeed, suggests a "but for" mentality—but for the psychological "quirks" of cognitive bias, individuals could be rational, utility-maximizing actors. However, research in social psychology offers a different picture: rather than suggesting that certain factors act as an impediment to rational decision making, the social psychological approach seeks to explain perception and decision making as a function of myriad individual and social factors. An individual with complex motives is embedded in a complex social landscape, and both motivational and social factors have strong effects on information processing and perception of processed


15. See Bibas, supra note 14, at 2527.
information.

This essay begins to explore psychological research on how motivation and the effects of social factors can affect information processing to shed light on such processing in the plea bargaining setting. In particular, I consider the effects of two factors, epistemic motivation and group identity and membership, on information processing as it may relate to plea negotiation. I begin by briefly reviewing the literature on how cognitive bias may affect plea bargaining. I then explore how epistemic motivation and group identity and membership affect information processing and the use of biases and heuristics more broadly, looking particularly at potential effects in the plea bargaining setting.

II. COGNITIVE BIASES AND HEURISTICS IN PLEA BARGAINING

A. Cognitive Bias and the Rational Actor Model

In the field of legal negotiation, economic theory tells us that with complete information, rational parties will always prefer to reach a negotiated agreement rather than proceed to trial. So, too, economic theory predicts that with complete information, a rational prosecutor and rational defendant will always prefer to reach an agreement than go to trial. The rational actor has been a stock figure that law and economics scholars have relied on for years to make predictions about human decision making in the legal context. The rational actor model presupposes that an individual can accurately perceive the information that is essential to making an assessment about the utility of various options. Once this information has been accurately processed, and utility properly assessed, it is easy to make a choice that will maximize utility.

Two main features of the real world cause this not to happen: first, individuals rarely have access to complete information, and second,


17. For a guilty defendant, a plea agreement would be the rational outcome; if we assume complete information, we need not concern ourselves with the innocent defendant. The enormous scholarly debate about the problem of the innocent defendant is outside the scope of this article. See, e.g., Schulhofer, supra note 5, at 1981; Robert E. Scott & William J. Stuntz, A Reply: Imperfect Bargains, Imperfect Trials, and Innocent Defendants, 101 YALE L.J. 2011, 2013 (1992). The social psychological research on information processing that I am discussing is not dependent on an assumption of guilt or innocence.

18. Issues about the asymmetry of information in criminal proceedings are, of course, critical to an understanding of the plea bargaining process in actual practice, see, e.g.,
individuals are not information processing “machines” that perceive information neutrally and accurately. In recent years, law and economics has incorporated social science insights to develop the field of behavioral law and economics, which considers the impact of how individuals actually behave. And so the rational actor model of law and economics has been supplemented by what I call the irrational actor model—the model of a rational actor led astray by certain predictable and observable cognitive biases—and what some call “psychological quirks and irrationalities.” Behavioral law and economics reflects the long-held beliefs of social psychologists that human behavior is complex and deviates systematically from predictions based on an economic model.

Research on the deviations from the rational actor model proves useful in thinking about decision making because it provides more realistic models of how individuals are likely to make decisions than the economic model. So, for instance, in thinking about why individuals might choose a particular settlement offer versus pursuing an adjudicated outcome, research on cognitive biases and heuristics help to make sense of seemingly “irrational” decisions to proceed with a course of action whose expected utility is not—and here, as always, we must presume some objective reality—as good as the expected utility of the rejected course of action.

It is not always clear in which direction irrationality takes us. The most prominent treatment has been given to the ways in which “deviations from rationality” produce “suboptimality” in negotiated outcomes. And the literature typically suggests that the most likely case of suboptimality is when individuals refuse to accept settlements that are in fact better than the alternative course of action. But Kahneman and Tversky offer the wise counsel that “[i]t would be inappropriate to conclude . . . that departures from rationality always inhibit the resolution of conflict,” pointing out that “[t]here are many situations in which less-than-rational agents may reach agreement while

POSNER, supra note 16, at 549, but are not a crucial element of the project I am undertaking here.
21. Robert H. Mnookin & Lee Ross, Introduction to BARRIERS TO CONFLICT RESOLUTION 3, 10 (Kenneth J. Arrow et al. eds., 1995). (“[P]arties are subject to psychological processes that render them unable to recognize as advantageous (or unwilling to accept despite their advantages) settlement terms that seemingly meet the requirements of rational self-interest.”).
perfectly rational agents do not.\textsuperscript{22}

In plea bargaining, the insights from cognitive research have helped to amplify and deepen the economic model of plea bargaining.\textsuperscript{23} In plea bargaining, in order for a rational agreement to be reached by both parties, the plea bargain must be no worse, and probably slightly better, than the projected outcome at trial.\textsuperscript{24} In a world of complete information, a negotiated outcome would always be reached because the prosecutor and the defense attorney could calculate the probable outcome at trial and reach an agreement that offered some—however slight—discount in punishment to the defendant. One way of explaining why this does not occur is to look to the ways in which cognitive biases affect the processing of information so that individuals make inaccurate assessments of probable outcomes \textit{and} make inaccurate comparisons between those assessments and the plea bargain offer.

In the plea bargaining field, then, there are two categories of irrational cases from the defense perspective and two categories of irrational cases from the prosecution perspective. From the defense side, there are cases where a defendant accepts a plea bargain that is too high in light of the probable trial outcome and cases where a defendant refuses a plea bargain that is better than the probable trial outcome. From the prosecution side, there are cases where a prosecutor offers a deal that is worse than the probable outcome at trial or cases where a prosecutor offers a deal that is much better—too much better—than the probable outcome at trial.

Professor Stephanos Bibas has made an important contribution in this area by exploring the relevance of several cognitive biases in defendants’ decisions about whether to accept a particular plea bargain or reject it in favor of proceeding to trial.\textsuperscript{25} Professor Alafair Burke, likewise, has described the ways in which cognitive bias may affect prosecutorial decision making.\textsuperscript{26} And these are terribly useful insights:

\begin{itemize}
\item \textsuperscript{22} Daniel Kahneman & Amos Tversky, \textit{Conflict Resolution: A Cognitve Perspective, in BARRIERS TO CONFLICT RESOLUTION} 45, 45–46 (Kenneth J. Arrow et al eds., 1995).
\item \textsuperscript{23} See Easterbrook, \textit{Criminal Procedure, supra note 4; Scott & Stuntz, supra note 9, at 1920.}
\item \textsuperscript{24} I leave aside, for the purposes of this discussion, the complex issues surrounding the existence and assessment of a “trial tax”—what some have described as the extra punishment a defendant may face merely by virtue of exercising his right to trial. See, e.g., STEVE BOGIRA, COURTROOM 302: A YEAR BEHIND THE SCENES IN AN AMERICAN CRIMINAL COURTHOUSE 38 (2005).
\item \textsuperscript{25} Bibas, supra note 14, at 2496–2519.
\item \textsuperscript{26} Burke, supra note 14; Alafair S. Burke, \textit{Prosecutorial Passion, Cognitive Bias, and Plea Bargaining, 91 MARQ. L. REV. 183 (2007) [hereinafter Burke, Prosecutorial Passion].}
\end{itemize}
the paradigm of the rational decision maker who compares the deal on
the table to the potential outcome at trial and coolly chooses the
alternative that has the greatest utility is, simply put, often wrong, both
within and beyond the context of plea bargaining. Research on human
behavior reveals that individuals are not that good, first, at making the
assessment about the potential outcome at trial, and second, at making
an effective comparison between the two choices.

From prospect theory and behavioral decision theory have come
some of the most influential findings about individuals' decision-making
processes. Kahneman and Tversky showed that people are typically loss
averse, which means that they are more worried about losing than they
are happy about gaining. This means that a graph of utility is not a
straight line with a constant slope; instead, the classic utility graph of
prospect theory shows that the utility line curves, so that as one's loss
increases, one's utility decreases disproportionately more, and as one's
gain increases, one's utility increases disproportionately less. So, too,
framing the same facts in different terms, either as a gain or as a loss,
has significant effects on how people perceive those facts. This means
that the same outcomes are processed differently if they are coded as
losses versus gains, meaning that parties will make different decisions
when they consider what are, mathematically, the same options.

27. For a discussion of how prosecutors and defense attorneys perceive these
calculations (often called BATNA, or "best alternative to a negotiated agreement" in the
negotiation literature), see Rebecca Hollander-Blumoff, Note, Getting to "Guilty": Plea

28. It is interesting that the predictions one might make based on the cognitive biases
and heuristics research suggest that parties might systematically but irrationally fail to reach
agreement. See Bibas, supra note 14, at 2519; Russell Covey, Reconsidering the Relationship
course, because the vast majority of criminal cases are resolved by plea, there is a question
about how powerful these cognitive biases are in the plea bargaining setting. Covey has
suggested that the structural features of the criminal justice system are designed to induce
defendants to plead guilty, regardless of the directionality of the cognitive bias. Id. at 223.

29. Daniel Kahneman & Amos Tversky, Choices, Values, and Frames, 39 AM.

30. Consider the classic Asian disease experiment. Participants were presented with one
of two pairs of mathematically identical options in the face of a deadly disease: the first pair
was a choice between (A) 200 people will be saved and (B) one-third probability that all will
be saved and two-thirds probability that no one will be saved; the second pair was a choice
between (C) 400 people will die and (D) one-third probability that no one will die and two-
third probability that all will die. Despite the fact that A and B are mathematically identical
each other in terms of their expected value, as well as mathematically identical to the
options presented by C and D, participants overwhelmingly chose A in the first pair but D in
the second pair, which is contrary to the predictions of utility theory in economics, which
possits that individuals will always choose the option with greater utility regardless of the
Behavioral decision theory has identified other cognitive biases and
heuristics that can play an important role in individuals’ assessments of
valuation and of the utility of their various choices, such as anchoring
and adjustment, availability, and overconfidence.

Professors Bibas, Burke, Birke, and Covey have examined the ways
these heuristics and biases may alter the assessment of trial outcome
from both the prosecution and defense sides. Time discounting may
work to make defendants devalue consequences occurring far in the
future, making defendants more indifferent to additional years on the
tail end of a sentence. Optimistic overconfidence is likely to skew
perceptions of alternatives on both sides, such that both sides inflate
their chances of success at trial. Selective perception similarly makes
individuals less open to disconfirming information that might exist.
Risk preferences, too, may alter the calculus of plea bargaining—many
defendants have probably already demonstrated their risk preference
(that is, risk-seeking) through their criminal behavior; others may have
competing risk preferences that make them more averse to risk.
Anchoring, a robust effect throughout the psychological literature, gives
strong effect to the first offer put on the table, and as Professor Burke
has suggested, cases involving strong prosecutorial emotion are likely to
involve extreme first offers by prosecutors.

B. Biased Information Processing in a Broader Context

These cognitive biases and heuristics can be situated in the broader
field of social psychology by thinking about them as one form of
automatic versus effortful information processing. “Dual process”
theories in psychology suggest that people process information one of
two ways: either through “mental shortcuts” that process information
quickly and automatically, without much cognitive effort, or through
careful, effortful, and cognitively laborious review of relevant data.
The broadest form of mental shortcut is a schema, an organizational structure for knowledge and information. Schemas guide the way that new information is processed and also guide the way that information is selectively retrieved from memory. Schemas can relate to anything—others, the self, events, objects, relationships. Schematic information processing is the broadest kind of automatic processing; one might think of cognitive biases and heuristics as a subset of narrow, specific, schematic and automatic information processing.

Individuals engage in automatic information processing rather than effortful information processing much of the time. We take these shortcuts because, as one psychologist explains in the context of meeting new people, "[t]aking the time to assess each new person in his or her full complexity is simply too taxing of mental resources to allow us to perform other tasks." In a world that consists of astronomical bits of data, humans are "cognitive misers" who save their effortful processing for only a few tasks.

The use of automatic rather than effortful processing has the potential to affect plea negotiation more broadly than just in the ways that cognitive bias and heuristics might. Automatic processing means that information is processed in light of an existing theory of the world, while effortful processing means that information is processed more "neutrally" and then forms the basis of a judgment or theory about the world. Thus perceptual models of situations can drive the way in which information is processed. And, in turn, the way that information is processed according to a particular perceptual model can affect behavior. For instance, people behave very differently in negotiations when they are labeled the "Wall Street Game" versus the "Community Game." So, then, information that is processed in a negotiation that is quite self-consciously labeled "criminal justice" might likely be perceived as more adversarial, and thus produce, in turn, more adversarial behavior and more polarized outcomes, than a negotiation

38. Id.
41. Moskowitz, supra note 39, at 201-02.
that does not have that label.

Negotiators use different perceptual "frames" for negotiation that affect the ways in which they process information and then behave. For example, Pinkley identified three distinct categories of frames that had an effect on negotiation outcomes: task versus relationship, emotional versus intellectual, and cooperation versus win. She found that when negotiators adopted a task frame rather than a relationship frame, they got better numerical outcomes. When they viewed the negotiation as emotional rather than intellectual, they made more apologies and talked more about negative feelings. And finally, when negotiators viewed negotiation through a perceptual frame of cooperation rather than win, they had better outcomes as well.

In the plea bargaining setting, the use of automatic processing—or theory-driven, rather than data-driven, information processing—might mean that if defendants, defense counsel, and prosecutors begin with pre-formed, possibly ideological theories of guilt and innocence, and pre-formed theories about the kind of behavior that will occur during the negotiation (adversarial versus cooperative, for example), they are likely to end up with different negotiations, and different negotiation outcomes, than negotiations in which the parties process new information without relying on these perceptual frames.

Because the economic model of plea bargaining depends on rational information processing, the extent to which real plea bargaining may deviate from this model is important in understanding whether the legal literature that relies on this model is useful. Professors Bibas, Burke, and Birke have suggested that the economic model does not fully capture the reality of plea bargaining because of what these cognitive biases and heuristics tell us about how people really process information. However, the literature still regards the rational economic model as the ultimate best goal.

To that end, Professors Bibas and Covey, among others, have suggested that defense lawyers may be in a good position to act as

43. Note that these are distinct from the frames identified in prospect theory, above.
45. Id. at 119–21.
46. Id. at 120–21.
47. Id.
48. See Bibas, supra note 14, at 2527.
49. Covey, supra note 28, at 235.
Specifically, Professor Bibas has suggested that, in the plea bargaining context, attorneys might be good debiasers—individuals whose expertise and agency put them in a good position to engage in the effortful processing that could counteract the biases and heuristics that defendants are likely to use. Although Professor Bibas acknowledges that lawyers are human too, he has optimism about the professional expertise that lawyers may bring to bear in curbing some of the more egregious biases that defendants may bring to the table. Indeed, some research does suggest that lawyers may be less susceptible to certain biases, such as framing. And other research suggests, in a more attenuated way, that lawyers might be able to learn from their past experience and formulate more realistic views of potential outcomes. But other research suggests that attorneys are not systematically free from bias. Indeed, there is no body of social science research that suggests that attorneys are free from cognitive bias and heuristic processing. Even researchers who report findings that support the hypothesis that “lawyers are likely to be more inclined than their clients to adhere to the principles of expected financial value analysis” acknowledge in the same breath that “everyone’s decisions are affected by psychological phenomena and aided by heuristics.”

In the next part of this essay, I suggest that relying on lawyers as primary debiasers in the plea negotiation context, with an expectation that this behavior will bring plea bargaining more in line with the economic model of plea bargaining, may not be an approach that social science data warrants. As noted above, the data about the degree to which lawyers are bias-free analysts is not conclusive; more importantly, though, defense attorneys and prosecutors do not exist in a vacuum.

50. Bibas asserts, “Lawyers, though they suffer from many of the same biases, may be less susceptible to a number of them. Lawyers can therefore at least moderate some of these biases.” Bibas, supra note 14, at 2520.
51. Id. at 2521.
52. Id.
55. Even Korobkin and Guthrie are unable to claim statistically significant results for their test of whether lawyer and litigant subjects differed in the degree to which they were affected by anchoring. Korobkin & Guthrie, supra note 53, at 107.
56. Id. at 135.
Data suggests that the use of automatic information processing, including biases and heuristics, can be affected by both situational and individual dispositional features that, I posit, are likely to be present in the plea bargaining setting and to exacerbate or encourage the use of such biases.

Because there is no empirical data on the way that the particular factors I consider below actually affect the behavior of prosecutors and defense attorneys in the plea bargaining setting, what follows are hypotheses that prior literature supports, but that no data has verified. It is not my project here to definitively state that lawyers cannot be debiasers, or that lawyers are, indeed, biased in the particular ways that I suggest. Rather, in light of social science data about how individuals process information, and in light of what we know about our criminal justice system and its prosecutors and defense attorneys, I offer some hypotheses about the way that lawyers are likely to behave in the plea bargaining setting and suggest that their behavior may not be likely to reflect the rational actor paradigm.

III. TWO FACTORS THAT MAY INCREASE RELIANCE ON COGNITIVE BIAS

The cognitive biases discussed above do not function mechanically and systematically in every decision making and negotiation setting. Rather, the role of bias and the use of heuristics and mental shortcuts in information processing are lessened in some settings and increased in other settings. In this section I describe some of the research on two motivational and situational factors that can alter individuals’ manner of information processing and decision making and begin the work of mapping these factors onto the plea bargaining setting. I suggest that the features of the plea bargaining system are likely to increase rather than decrease reliance on these shortcuts.

A. Epistemic Motivation

Psychological literature has identified “epistemic motivation” as the need to acquire and process information systematically. Epistemic motivation is the degree to which individuals need more or less information when making decisions; conversely, epistemic motivation’s flip side is “need for closure.” Individuals who need more information before making decisions are considered high in epistemic motivation and low in the need for cognitive closure; individuals who are comfortable making quicker decisions using less information are
considered low in epistemic motivation and high in the need for cognitive closure.

Psychologist Arie Kruglanski pioneered lay epistemic theory, which suggests that epistemic motivation and the need for cognitive closure affect not just the amount of information that is needed, but also how relevant information is processed. Research by Kruglanski and others has shown that individuals with a higher need for cognitive closure are more likely to rely on heuristics and stereotypes in processing information; this is faster than systematic information processing and therefore speeds the time in which cognitive closure occurs.\(^{57}\)

Differences in individuals' epistemic motivation and need for closure stem both from situational factors and individual differences in personality. With respect to individual differences, studies have shown that a high need for closure is associated with a desire for predictability, a preference for order and structure, discomfort with ambiguity, decisiveness, and close-mindedness.\(^{59}\) Research on lawyer personality suggests that lawyers generally tend to score high on personality measures that correlate with a desire for "structure, schedules, closure on decisions, planning, follow through, and a 'cut-to-the-chase' approach."\(^{60}\) And it may be that those who are drawn to the criminal justice system are particularly interested in or oriented towards closure: after all, they have taken jobs (especially prosecutors) that are driven by the need for resolution—the closure—of criminal cases.

Situational factors may also increase individuals' need for closure. Epistemic motivation can decrease when individuals are under time pressure\(^{61}\) or conditions of mental fatigue.\(^{62}\) "Of the many variables that

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58. See Kruglanski & Webster, supra note 57, at 265.


affect epistemic motivation, time pressure is one of the most well-known. Findings in psychology “strongly suggest that negotiators are less likely to engage in systematic information processing when there is high rather than low time pressure.” In contrast, high epistemic motivation can decrease the use of stereotypes and heuristics and reduce the selective use of information, as well as increase the tendency to engage in systematic information processing.

In one negotiation study about the effects of epistemic motivation and the need for closure, De Dreu asked participants to negotiate under one of two conditions, one of which was meant to provide the perception of high time pressure and one of which was meant to provide the perception of low time pressure. In this setting, De Dreu found that participants who felt that they were under high time pressure were more likely to base their judgments and decisions about their negotiation behavior on stereotypes and cognitive heuristics. Because “stereotypic cues were not used at all when time pressure was low,” individuals processed information more carefully and systematically in a low time pressure setting.

Prosecutors and defense attorneys are generally under a great deal of time pressure, in light of overloaded dockets and institutional pressures. Prosecutors, defense attorneys, and defendants all are in a setting where time pressure is an issue: prosecutors operate under a speedy trial clock in many jurisdictions, and defense lawyers, especially those whose clients are incarcerated or who have an indictment hanging

64. Id.
68. Id. at 285.
over them, may be eager to get charges resolved.\textsuperscript{70}

All of these factors taken together suggest that plea bargaining places individuals who are already likely to have a high need for closure in a setting that will exacerbate this need and decrease epistemic motivation. Research suggests that this, in turn, is likely to lead to greater reliance on heuristics and biases in information processing and decision making, rather than the more effortful and cognitively laborious information processing that is more consistent with the rational actor model.

\textit{B. Group Identity and Group Membership}

\textbf{1. Group Definition}

The cognitive bias and heuristics literature meshes well with the rational actor paradigm in that both view information processing as a solitary act, pursued by a human mind that works, on its own terms, disengaged from a greater social reality. And, indeed, social psychology for many years did not consider the role of the group as an explanatory concept for human behavior.\textsuperscript{71} Instead, the notion that group behavior, or the behavior of individuals within an identifiable group, might differ from the behavior of individuals was controversial, and the study of groups, intergroup behavior, the formation of groups, and the behavior of individuals within groups was almost nonexistent.\textsuperscript{72}

In the second half of the twentieth century, however, social psychologists made remarkable discoveries about how important group identification is to people, even when they are acting individually. Groups and group identification play a powerful role in how people perceive and make sense of the world around them. The development of the terminology of ingroup and outgroup to refer to one’s own group and some other group reflects the discovery in social psychology that even the most minimal of distinctions can be seized on to formulate group identities that, in turn, guide the ways in which people see the world and then, in turn, act towards others.\textsuperscript{73}

Groups may or may not be defined by outward nomenclature or constraints, but “the psychological reality of the group stems from

\begin{itemize}
\item \textsuperscript{70} \textit{Id.} at 679.
\item \textsuperscript{71} \textit{See, e.g.,} FLOYD HENRY ALLPORT, SOCIAL PSYCHOLOGY 4 (1924).
\item \textsuperscript{72} \textit{Id.}
\item \textsuperscript{73} \textit{See} Henri Tajfel, Social Psychology of Intergroup Relations, 33 ANN. REV. PSYCHOL. 1, 23–24 (1982).
\end{itemize}
people's common perceptions of themselves as members of the same social unit." 74 According to a definition by psychologist Sherif, a pioneer in the study of groups, "[w]henever individuals belonging to one group interact, collectively or individually, with another group or its members in terms of their group identification, we have an instance of intergroup behavior." 75

As an initial matter, of course, criminal defense lawyers and prosecutors are situated within an adversary system that makes the nature of the two groups distinct and oppositional. Even beyond that, however, a brief survey of some of the more ethnographic literature about prosecutors and defense attorneys suggests that the defense and prosecution bar perceive themselves and one another as members of a clearly defined ingroup and outgroup. For example, professor and criminal defense attorney Abbe Smith eloquently describes the group dimension of criminal defense lawyers:

Camaraderie undoubtedly plays an important role in drawing and sustaining defenders.

Many defenders report that the best part of the work is the feeling of community and shared purpose, of being in this together, of esprit de corps. . . . [One] career defender [says]: "There's something special about us and we're different from others—certainly other lawyers. There's this kinship among us. You can't put a price tag on that." There is an understanding that defenders had better stick together, because pretty much everyone else is against them.

The culture of public defender offices is one of mutual support, collegiality, and generosity. Defenders "attend each other's closing arguments, cross-examine one another's clients, handle court appearances for colleagues, commiserate, shoot the bull, and nibble at each other's food." If time allowed, defenders would do anything for their colleagues.

Camaraderie helps brace defenders for hostility from the rest of society. . . . As career defender Stu Glovin notes, "The camaraderie is almost like a sanctuary

75. Id.
Prosecutors, similarly, may identify strongly with a group identity. Gary Lowenthal suggests, in his account of life as both a former prosecutor and defense attorney, that there exists a divide between prosecutors and defense attorneys: "[t]here was a strong taboo against socializing with the enemy." His own experience led him to believe that "many prosecutors see the world divided between 'us and everyone else.'"

In thinking about groups, there are always many levels upon which categorization can be made, and there may indeed be superordinate classifications that include both groups, such as "criminal justice lawyers," or subordinate classifications within each group, such as "public defender" or "white-collar criminal lawyer," that may affect individual behavior. Nonetheless, it seems clear that prosecutors and defense attorneys tend to have strong identification with their "side" of the bar, and there are strong and salient cues that are likely to enhance the view that these groups are oppositional to one another. In the following section, I consider the potential effects of this group categorization on information processing in the plea bargaining context.

2. Effects of Group Categorization

Individuals who identify with an ingroup are more likely to process behavior and information from outgroup members using stereotypic and biased judgments. They are more likely to rely on heuristic-driven information processing than effortful, data-driven processing. Generally speaking, the broadest form of bias in groups is bias towards the members of the ingroup and against the members of the outgroup. Individuals in the ingroup are seen as multidimensional, while individuals in the outgroup are viewed as homogeneous. Members of outgroups are seen less as individuals and more as anonymous group members, while members of ingroups are viewed as more complex, differentiated, and individualistic.

78. Id. at 288.
79. Defendants themselves, of course, constitute another group that plays an important role in these negotiations.
A similarly broad bias stemming from ingroup/outgroup distinction is a group version of the "fundamental attribution error"—in psychology, a robust finding that an individual sees negative actions by herself and positive actions by others as highly dependent on the situation, but sees positive actions by herself and negative actions by others as reflective of some innate dispositional quality. The group version, sometimes called the "ultimate attribution error," is that ingroup members make situational attributions for negative behaviors engaged in by their own members and positive behaviors engaged in by the members of the outgroup, but make dispositional attributions for the positive behaviors engaged in by their own members and the negative behaviors engaged in by the members of the outgroup.

More specifically, group membership and identity with a group has been found to increase biased information processing in a host of settings, mainly through the use of stereotypes. Stereotypes act as a filter through which we process information and then encode it in, and retrieve it from, memory. Group membership and stereotypes about outgroups can guide the way that information is processed so that the same information is understood differently depending on the group identities of the source of the information and the recipient of the information. In one famous study, Hastorf and Cantril asked Princeton and Dartmouth students to watch a football game between those schools and assess who was responsible for the rough behavior, as well as tally the number of rule infractions made by each team. The individuals in each group reported dramatically different results, all of which comported with a favorable assessment of their own group members' behavior and a negative assessment of the other group members' behavior.

Similarly, Darley and Gross asked subjects to assess the academic performance of an elementary school student, giving each subject


84. Id.
information about the socio-economic status of the student’s family. Although the student’s performance was identical, subjects who thought that the student was from a high socio-economic background consistently assessed the student as performing better than those who thought the student was from a low socio-economic background. Darley and Gross suggested that stereotypes create hypotheses of how people will behave, and then those hypotheses are tested on actual behavior in a biased way.

In plea bargaining, stereotypic processing based on group membership in the defense or the prosecution camp suggests that there would be a heightened perception of information received from the other side in a way consistent with stereotypes and stereotypic hypotheses. Alafair Burke has explored this idea, suggesting that prosecutors who are sometimes later viewed as overzealous are not unethical or bad people, but are just blinded by selective perception and optimistic overconfidence because they filter potential information about defendant innocence through a stereotypic lens that defendants, as a group, are guilty.

In light of the strong institutional group identity of the prosecutor and the defense attorney, and in light of social science data on the way in which group identity affects information processing, lawyers may not be paradigms of rational actors in the plea bargaining context. Because prosecutors and defense attorneys are not unaffiliated individuals who come to each case without any preconceived notions about the motivation and factual basis for the other party’s behavior, but instead are members of well-defined groups who are likely to have well-formed stereotypes, or hypotheses, about the other group’s behavior, they are more likely to process information in a biased manner that is likely to confirm their stereotypes about the other group. Especially in plea bargaining, where there is no neutral third party who can make more objective assessments, this biased information processing is likely to play an important role in determining the negotiation outcome.

IV. CONCLUSION

What better place than our system of negotiated justice to use the

86. Id. at 27.
87. Id. at 28.
88. Burke, supra note 14, at 1603.
insights of psychological research on human behavior to help us gain a better understanding of how the resolution of criminal cases both does, and should, work? The groundbreaking work of Kahneman and Tversky on cognitive bias and heuristic processing has begun to make a dent in the economic model of plea bargaining, suggesting that a rational decision-making picture of plea negotiation may not reflect reality. But relying on prosecutors and defense attorneys to put the rational back in rational decision making may be a misguided effort. Cognitive biases and heuristics are part of a broader class of social psychological decision making and information processing theories, which suggest that individuals sometimes engage in effortful processing and at other times rely on more automatic processing. Here, I have posited that some features of our criminal justice system may make it more, rather than less, likely that lawyers will engage in automatic, biased, and heuristics-based information processing.

Much more work remains to be done on the psychology of human behavior in plea bargaining. Especially in light of the advances in psychological research on negotiation in recent years, plea bargaining and psychological research on negotiation make a particularly choice pairing. The rich literature on biases and heuristics is a tremendous resource for those studying negotiation between a prosecutor and a defense attorney. But it is not the only resource that social psychology has to offer that sheds light on the question of how people behave in the plea bargaining context. In the negotiation context, for example, researchers in recent years have begun to make great inroads in understanding the role of emotion in negotiation. Outside of the negotiation context, per se, other insights from social psychology may prove useful. For example, research on the psychology of procedural justice may indicate that perceptions of the fairness of process play an important role in shaping perceptions about the legitimacy of plea bargaining. As we think critically about our system of negotiated justice, understanding more about the contours of the human behavior that comprises that system can only amplify our comprehension.

89. Kahneman & Tversky, supra note 13.
90. See, e.g., Van Kleef et al., supra note 63.
91. For an exploration of this idea, see Michael O’Hear, Plea Bargaining and Procedural Justice, 42 GA. L. REV. (forthcoming 2007).