

# The Psychology of Judicial Decision Making

Edited by  
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While the book is grounded in psychological theory and research, the editors recognize that the study of the behavior of judges is complex, so both theory and research would be enhanced through debate and discussion by contributors from many professional backgrounds. To accomplish their goal, Klein and Mitchell assembled an impressive interdisciplinary group representing law, political science, and, of course, psychology. This group first came together at a conference in Virginia, where the participants had an opportunity to share and critique each other's ideas. Klein and Mitchell had a forward-looking perspective, as they wanted the book to provide an agenda for future research rather than a review of prior studies of judicial decision making. The contributors were asked to identify theories, concepts, or findings from psychology that could usefully be incorporated into thinking about how judges make decisions, and describe new research questions and the accompanying methodology to test hypotheses generated from this process. Having worked in an interdisciplinary faculty for a few years early in my career, I appreciate that bringing together an interdisciplinary group does not easily result in increased collaborations. Each discipline has its own traditions and approaches to scholarship, and the interdisciplinary boundaries often seem insurmountable. As the editors note in their introduction, examples of other disciplines drawing on psychology to inform the study of judicial decision making are rare. That the participants in the Klein and Mitchell project were able to overcome these interdisciplinary barriers is an impressive achievement. Klein and Mitchell wanted a book that would encourage students of judicial behavior to incorporate psychology into their work and also persuade psychologists and other students of decision making to pay more attention to the decision-making process used by judges. This book serves this purpose well.

Ronald Roesch  
Series Editor

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## Introduction

*David Klein*

Over the years, psychologists have devoted uncountable hours to learning how human beings make judgments and decisions. Legal scholars and political scientists have expended immeasurable intellectual energy trying to understand why those particular human beings who sit on courts act as they do in presiding over and deciding cases. It might seem obvious that fertile intellectual ground lies at the intersection of these disciplines, and certainly some scholars have seen it this way. As far back as 1930, Jerome Frank drew on contemporary psychology to explain judging in his *Law and the Modern Mind*. And yet, nearly eighty years on, the area under active cultivation is quite small. To be sure, psychological concepts crop up in studies of judicial behavior from time to time, but it would be difficult to name a score of published studies that have relied extensively on current ideas and evidence in psychology to generate major theoretical propositions about judging. This is partly because students of judicial behavior traditionally have not engaged deeply with scholarship in psychology, but only partly; it is also the case that psychologists have tended not to focus on the kinds of questions that would be most helpful for understanding what professional judges do. This volume of essays grows from a belief that students of both judges and psychology would benefit from a dramatic expansion of research into the psychology of judicial decision making and closely related behavior.

### 3

## Top-Down and Bottom-Up Models of Judicial Reasoning

*Brandon L. Bartels*

As is apparent from the other readings in this volume, the punchline of 50 years of behavioral research on Supreme Court decision making is that policy (or ideological) preferences<sup>1</sup> have a major, if not dominant, impact on justices' choices (Segal & Spaeth, 2002). Moreover, most perspectives assume that policy preferences—as well as other ingredients of decision making—exhibit generally uniform effects across all situations in which justices make decisions and between justices as well. While research focusing on the potent impact of policy preferences has increased our knowledge of judicial decision making, the work brings up nearly as many questions as it does answers. In other words, there is still a great deal we do not know about how judges make decisions.

In this essay, I offer a perspective on how social psychological insights on the cognitive processes of judgment can help enrich our understanding of judicial decision making. By highlighting a cognitive perspective of judicial reasoning, studies can move beyond “black box” models of decision making that ignore the crucial cognitive processes mediating the relationship between the judgmental considerations and the choices judges ultimately make. Such a focus can fill in the gaps regarding what we do not know about judicial decision making, namely, *when* ideology and legal considerations will exhibit greater or lesser effects on judges' choices. After reviewing some theories on cognitive processes of judgment and decision making, I posit a theoretical framework of judging focusing on top-down versus bottom-up reasoning processes. In providing one possible explanation for judges' reasoning processes, the theory suggests hypotheses specifying the conditions under which



law and ideology will exhibit greater or lesser impacts on judges' choices. The theoretical perspective—and this essay in general—is primarily aimed toward explaining decision making by justices on the U.S. Supreme Court. However, the ideas have implications for judges at other levels of the judiciary.

## Cognitive Processes of Decision Making

### Motivational and Behavioral Heterogeneity

As Lawrence Baum's essay in this volume (ch. 1) highlights, political scientists of various theoretical persuasions have posited theoretical frameworks specifying justices as motivated primarily by policy goals, that is, as "single-minded seekers of legal policy" (George & Epstein, 1992). Yet it is possible that under certain conditions justices may be motivated by policy goals, under other conditions they may be motivated by legal goals, and under a third set of conditions they may be motivated concurrently by both goals—a desire to make both "good law and good policy" (Baum, 1997; Hausegger & Baum, 1999). A focus on judgmental reasoning processes makes one think more intently about what might be called "motivational heterogeneity," or the idea that under certain conditions justices might be motivated by something other than policy, or ideological, goals (Baum, 1994, 1997, 2006). Attitudinal and strategic perspectives of Supreme Court decision making have neglected such nuanced, multiple-goal frameworks and the broader notion of motivational heterogeneity. But it seems reasonable to think that context, case type, issue area, or other factors may determine which goals are operative in a given case for a given justice.

Social cognition theorists place an explicit focus on motivational heterogeneity (e.g., Fazio, 1986, 1990; Petty & Cacioppo, 1986; Fazio & Towles-Schwen, 1999; Kunda, 1990; Fiske & Taylor, 1991). Many social cognition theorists are first interested in what types of motivations may be at play. Then, one's motivation determines the nature of the cognitive process that produces a decision or judgment. In short, if we want more nuanced and realistic explanations of justices' behavior, we should think more broadly about justices' goal structures, and the conditions under which certain goals might become operative.

Behavioral heterogeneity is linked to motivational heterogeneity in that the types of motivations that are operative determine the nature of one's cognitive processes that will dictate the decision process, which in turn establishes the extent to which particular considerations will influence decisions. In the judicial context, Pritchett (1969, p. 42) alludes to a need to confront this particular type of heterogeneity, arguing that "[a]ny accurate analysis of judicial behavior must have as a major purpose a full clarification of the unique limiting conditions under which judicial policy making proceeds."

In the following section, I demonstrate how insights from theories of social cognition can illuminate the study of Supreme Court decision making. In particular, these theories are capable of explicating a more nuanced portrait of decision making addressing the following issues: (1) the multiple motivations that might be at play in the judicial context; (2) thinking about the relationship between policy preferences and behavior as a process of judgment as opposed to a stimulus-response relationship with an unexplained "black box"; and (3) specifying the conditions under which policy preferences or legal considerations influence behavior with greater or lesser force.

### Top-Down and Bottom-Up Models of Reasoning and Judgment

Here, I describe and discuss two models of reasoning and judgment—*top-down* and *bottom-up* processes—that are prominent in various social cognition perspectives (Chaiken, 1980; Fazio & Towles-Schwen, 1999; Fiske & Taylor, 1991; Petty & Cacioppo, 1986). These models lay the theoretical foundation for my application of social cognition to the judicial domain. For both processes, I assume that reasoning is systematic as opposed to heuristic (Chaiken, 1980; Petty & Cacioppo, 1986). Systematic processing occurs when individuals engage in active and effortful processing of relevant stimuli and information in a decision context. On the other hand, heuristic processing is low-effort, passive processing, where individuals may skim over important stimuli and information and rely on more peripheral decision cues. In the context of judging, it is reasonable to assume that judges engage in systematic processing of the facts, briefs, oral arguments, and so forth, when making decisions (though see Guthrie et al., 2001, 2002). While both top-down and bottom-up processes involve systematic processing, the key difference between the two models relates to the extent to which ideological predispositions will bias the entire reasoning process. The two processes can be treated as a continuum of biased processing, where top-down processing represents the most biased reasoning process, and bottom-up processing represents the most unbiased process.<sup>2</sup>

In a top-down reasoning process, the generic predispositions, perceptions, or theories people bring to a judgment context dictate how they process the new information in front of them. Top-down processing is biased processing, and can be thought of as deductive—it is theory driven. In other words, the theories and predispositions people bring to a judgment context produce a biasing influence on how they process the relevant facts and information. These predispositions, then, dominate the final judgment by providing a lens through which the facts and evidence are evaluated and assessed. I use the term "theory" to mean a set of beliefs, based on a directional predisposition, that becomes an individual's "story of how the world works or ought to work." It is separate from the facts and evidence at hand. An example of top-down, or theory-driven, processing involves a police investigation of a

murder case. The police may develop a theory early on about who the murderer is, based on their prior knowledge about the particular type of murder. For instance, if a child is killed inside the home, parents are typically suspects. The police may develop a theory about how and why the parents killed their child. In a top-down reasoning process, this theory would dominate the investigation process, leading to a biased search for the truth. The police will zone in on the parents, give less weight to alternative evidence suggesting a different suspect, and exclude other suspects. They view all evidence through the lens of the parent-centered theory they develop.

In contrast to top-down processing, bottom-up processing involves objective scrutiny of the information, facts, or evidence at hand. It involves objectively assessing the relevant information and making a judgment based solely on the facts, as opposed to predispositional biases. Bottom-up processing is usually referred to as inductive—it is “data driven.” The theories or predispositions people bring to the judgment context do not dominate the decision process. Returning to the police investigation example, police would engage in bottom-up reasoning if they are able to suppress the biasing influence of a particular theory that may develop during a murder investigation. They engage in an objective search for the truth, considering all the relevant facts and evidence.

Fazio’s MODE model (1990; Fazio & Towles-Schwen, 1999), which explains the processes by which and extent to which attitudes guide behavior, sheds further light on top-down versus bottom-up processing. MODE stands for Motivation and Opportunity as DETERminants, and these determinants regulate whether people will enter into one of two attitude-behavior processes: a deliberative process or a spontaneous process. The deliberative process is a data-driven, bottom-up process, in which an individual closely and systematically scrutinizes information, or the “data,” that is, the “the attributes of the behavioral alternative” (Fazio & Towles-Schwen, 1999, p. 99; see also Ajzen & Fishbein, 1980). Thus, it is an objective form of processing, where attitudes may play a role in guiding behavior, but their influence is diminished in the presence of the other attribute-based considerations.

A spontaneous attitude-behavior process is a top-down, theory-driven process, where an automatically activated attitude is triggered, which then biases how the individual processes the data and the attributes of the alternatives. In short, the attitude triggered by the immediate appraisal of the decision context biases how one processes and perceives subsequent information in an automatic, unconscious fashion. This strong attitude functions like a theory, discussed above. The stronger the attitude, the more likely that attitude will dominate the decision process at the expense of objectively assessing the facts and evidence at hand.

Importantly, a mixed, controlled process may also occur whereby people can “overcome the potential biasing influences of even a relatively accessible attitude when they [are] properly motivated”; they can objectively process the attributes of the alternatives “instead of readily accepting the interpretation implied by their attitudes” (Fazio & Towles-Schwen, 1999, p. 102). Petty and

Wegener’s (1993; see also Wegener & Petty, 1995) “flexible correction model” is akin to this mixed model. Upon entering a judgment context, an attitude may be automatically activated, but “the activation of knowledge regarding the normative requirements induces an individual to define the event as one in which he or she needs to control and monitor impulsive behavior carefully” (Fazio & Towles-Schwen, 1999, p. 103). This controlled process means that people will recognize their biases and, if motivated, will correct for those biases, inducing one to engage in more data-driven processing, which will “attenuate the impact of the automatically activated attitude” (Fazio & Towles-Schwen, 1999, p. 103).

### Conditions Under Which People Engage in Top-Down or Bottom-Up Reasoning

Social cognition theorists have specified the conditions under which we might expect people to engage in top-down or bottom-up processing, and the issue of “motivational heterogeneity” is directly implicated. That is, the motivations, or goals, of the actor determine which type of processing the decision maker will engage in. First, when a *fear of invalidity* motivation is operative, people will tend to process information more objectively, in a bottom-up fashion, and rely less on their predispositions (Fazio & Towles-Schwen, 1999; Fiske & Taylor, 1991). Related to this motivation, when people feel *accountable* for their decisions, they are more likely to be objective, bottom-up processors (Lerner & Tetlock, 1999; Fiske & Taylor, 1991). The possibility of having to justify one’s decision to another person or group leads to more careful scrutinizing of the attributes and information specific to the context, and less of a reliance on the potentially biasing predisposition one brings to the case.

The motivated reasoning perspective also highlights conditions under which people will engage in different reasoning processes. As Kunda (1990, p. 480) states, “People rely on cognitive processes and representations to arrive at their desired conclusions, but motivation plays a role in determining which of these will be used on a given occasion.” Motivation is defined as “any wish, desire, or preference that concerns the outcome of a given reasoning task” (Kunda, 1990, p. 480). The motivations one possesses entering the decision context bias the reasoning process toward achieving the end state specified in that motivation. Kunda discusses two motivations in particular: *accuracy* and *directional* goals. The core theoretical contention is that “goals affect reasoning by influencing the choice of beliefs and strategies applied to a given problem” (Kunda, 1990, p. 481). Braman and Nelson (2007) use the motivated reasoning framework to explain when biases will occur in legal decision making.

A motivation to be accurate leads to a reasoning process akin to a bottom-up, data-driven process. Accuracy goals “lead to an elimination or reduction of cognitive biases” (Kunda, 1990, p. 481); they reduce top-down, biased processing and induce objective, data-driven processing. Accountability, self-presentation considerations, and fear of invalidity induce accuracy goals, which then

lead to more careful, objective processing of the information, evidence, and data. Directional goals lead people to "construct a justification of their desired conclusion that would persuade a dispassionate observer . . . . In other words, they maintain an illusion of objectivity" (Kunda, 1990, pp. 482–483). Unlike a bottom-up reasoning process, directional goals bias memory search and belief formation processes. One important constraint on the biasing role of directional goals is the presence of strong arguments. In the persuasion context, bottom-up processing involves yielding to strong and influential arguments, even if they promote a counterattitudinal position (Petty & Cacioppo, 1986; Kunda, 1990).

According to the MODE model, motivation and opportunity determine the type of attitude-behavior process one enters into. Fazio and Towles-Schwen (1999) specifically discuss fear of invalidity as an important motivation that induces a deliberative, bottom-up attitude-behavior process. Opportunity relates to the availability of time and resources. The more time and resources one has, the more likely one will engage in a deliberative process. The key variable that moderates the attitude-behavior relationship is attitude accessibility, which is the strength of the association in memory between an attitude object and its summary evaluation (Fazio et al., 1982; Fazio & Williams, 1986). Accessibility ranges from nonattitudes, where there is absolutely no association between an object and a summary evaluation, to complete accessibility, where attitudes are automatically activated when one encounters the object. According to Fazio, attitudes will guide behavior to the extent that they are accessible in memory.

Schuetz and Fazio (1995) report compelling experimental findings that make several connections to the judicial context. Their findings support a mixed, controlled process (see also Petty & Wegener, 1993; Wegener & Petty, 1995). They manipulate attitude accessibility and motivation (i.e., fear of invalidity) and examine how each factor influences how subjects assess the quality of a death penalty study. As expected, the low motivation (i.e., no fear of invalidity), high accessibility subjects were more likely to assess the studies in accord with their attitudes, evidence of attitudinally biased, top-down processing. Increases in accessibility enhanced this biasing effect. However, increasing fear of invalidity reduced this biasing effect, inducing more bottom-up reasoning, even for those with highly accessible attitudes. Importantly, the findings suggest that individuals are capable of controlling the potentially biasing role of attitudes and predispositions when they are properly motivated.

### Processes of Supreme Court Decision Making

Adopting insights from the work discussed above, I posit a cognitive model of judging specifying the reasoning processes—top-down and bottom-up processes—by which Supreme Court justices make decisions. The model posits conditions under which justices will engage in either type of process.

It also produces empirical implications suggesting when policy preferences and legal considerations will have greater or lesser impacts on justices' choices.

### Attitudes, Policy Preferences, and Ideological Values

Before launching into the theoretical framework, I discuss a conceptual issue regarding the concepts *attitudes*, *policy preferences*, *values*, and *predispositions*. Thus far, I have used these terms somewhat interchangeably, which follows the tradition in judicial behavior scholarship (e.g., Segal & Cover, 1989; Gibson, 1991; Segal & Spaeth, 2002). In general, all relate to a justice's ideological predispositions toward legal policy issues, and I will treat them—particularly attitudes and policy preferences—as synonymous. Many scholars tend to use these terms without providing explicit definitions. Referring to Eagly and Chaiken's (1993) definition of an "attitude," I will define justices' policy preferences/attitudes as evaluative tendencies—in terms of favoring or disfavoring—toward legal policy. Note that the attitude object is legal policy. Using Fazio's (1995) definition, we could refer to justices' policy preferences/attitudes as associations in memory between legal policy and evaluative orientations.

Judicial scholars tend to think of justices' policy preferences as global as opposed to issue-specific. That is, policy preferences are thought of as more global views toward broad legal policy areas, like civil liberties and economics (e.g., Segal & Spaeth, 2002; Segal & Cover, 1989). In this sense, ideological values may come closer to how scholars conceive of policy preferences both conceptually and operationally (see Segal & Cover, 1989). Values can be thought of as attitudes toward "relatively abstract goals" (Eagly & Chaiken, 1993, p. 270). The difference between attitudes and values, then, is in the specificity of the object toward which the evaluation is directed. Justices' global policy preferences resemble abstract formulations regarding their ideological tendencies toward broader issue areas, like civil liberties. Those with more liberal values on the civil liberties issue area favor the protection of individual liberties and rights, while conservatives favor the government's capacity to impose certain restrictions on those rights. For this essay, I will not distinguish between "values" and "attitudes" in terms of the attitude object's degree of specificity. Following in the tradition of judicial behavior scholarship (e.g., Segal & Spaeth, 2002), I will refer to policy preferences in more global terms—as an ideological orientation toward a broad legal policy area.

### Top-Down and Bottom-Up Processes of Judicial Decision Making

The top-down and bottom-up reasoning processes I have discussed above distinguish between *theory* and *data* in a judgment process. The "theory" a justice brings to a decision setting can be thought of as a set of beliefs on a given legal issue, rooted in one's general ideological predispositions. These predispositions, or policy preferences, have the potential to bias the reasoning process. The "data" in a decision setting are the facts of the case, past



precedent(s) and legal doctrine, the arguments in the briefs, oral arguments, and other legal considerations.

The top-down model is a theory-driven reasoning process whereby the policy predispositions a justice brings to a decision context determine how the justice will both process the information at hand and make the judgment. In this process, predispositions, in the form of policy preferences, dictate how the data will be processed. For a top-down processor, one's predisposition provide a lens through which one views the data, therefore biasing the reasoning process. Instead of letting the data guide the decision-maker, the decision-maker finds the data that best supports his or her desired conclusion (à la Segal & Spaeth, 2002). Akin to the MODE model's spontaneous attitude-behavior process, ideological predispositions condition the entire reasoning process by determining how one appraises the cases, how one processes relevant information, and ultimately, how one makes a decision.

The bottom-up model is a data-driven reasoning process whereby the evidence, information, facts, and legal considerations objectively guide the decision maker. Bottom-up processing is objective, unbiased processing of the information and facts, untainted by the ideological predispositions one may possess about the attributes in the decision context. Accuracy, fear of invalidity, and accountability motivations drive one to engage in bottom-up reasoning, to let the data determine how the decision is made, as opposed to finding the evidence that best supports an ideological predisposition. Therefore, given sufficient motivation, the impact of even a relatively accessible attitude will be attenuated throughout the reasoning process, with the justice instead focused on the facts and legal considerations.

Before moving on, a few caveats are in order. First, legal scholars and political scientists recognize that facts, legal rules, and precedent are never completely self-evident. The discovery of these factors can often involve subjective choices based on differences of interpretation. Braman and Nelson (2007), for example, report how the ascertainment of case similarity—choosing which precedent most closely resembles the current case—in legal reasoning can be biased by policy preferences. Thus, rarely would we ever witness a judge engaging in pure bottom-up reasoning. This leads directly to the second caveat. I do not mean to depict judicial reasoning processes as either strictly top-down or strictly bottom-up. Instead, I view these two processes as endpoints of a reasoning continuum, with various hybrid processes falling in between. Social cognition perspectives, and my own perspective, tend to focus on factors that serve to reduce the amount of top-down processing or increase the amount of bottom-up processing. These perspectives recognize that under certain conditions, bias may not be completely eliminated, but instead reduced, with one's predispositions *and* the data guiding the decision process. I recognize this nuance and do not necessarily examine the conditions under which the effects of policy preferences in the decision making process are completely eliminated, which would suggest a purely bottom-up process, or are completely determinant, which would suggest a purely top-down process.

Thus, while a pure bottom-up process would suggest that facts and legal doctrine are essentially self-evident, recall that it represents an endpoint on a continuum. Processes that move away from that endpoint can more realistically capture the subjectivity of interpretation that is inherent in legal reasoning. It is helpful, however, to depict and describe the full range of variation in order to proffer a comprehensive explanation of judicial reasoning.

### Sequence of Justices' Decision Processes

To understand justices' reasoning processes, it is instructive to describe first the sequence of processes justices go through when they are confronted with a case. The sequence, depicted in Figure 3.1, begins at the merits stage. Upon

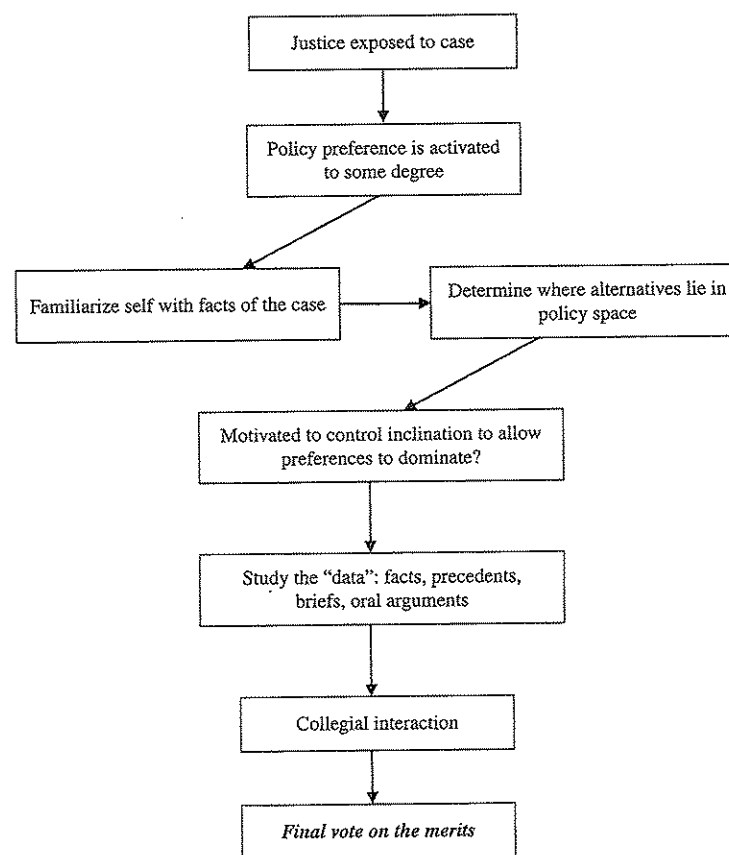


Figure 3.1 Sequence of justices' processes of judgment.

exposure to a case, a justice's policy preference is activated to a certain extent. What I refer to as degree of "activation" is akin to Fazio's conception of attitude accessibility. I do not necessarily assume that a justice's policy preference is automatically activated upon confronting a case. In a death penalty case, for instance, we might assume that a justice's policy preferences toward this issue are highly accessible, and therefore, automatically activated. However, in a case that involves a new, emerging issue area on which the Court has not frequently decided, we might expect less accessible policy preferences. For these latter cases, a policy preference is not strongly activated because the justice has not had much experience with the issue. Since judges are legal experts, though, and have seen a wide variety of cases, they can probably access a policy preference on just about every case that comes before them. But this does not mean that the degree of preference activation is uniform across all cases.

After the policy preference is activated to a certain degree, a justice becomes familiar with the facts of the case. This contributes to the determination of where the alternatives (i.e., potential outcomes) lie in an ideological issue space. Note that this stage is at the heart of the attitudinal model (Segal & Spaeth, 1993, p. 65), which states that justices "decide disputes in light of the facts of the case vis-à-vis [their] ideological attitudes and values." Modern conceptions of the attitudinal model are akin to a proximity spatial model, where a justice possesses an ideal point in an issue space, determines where the two alternatives are in the issue space, and votes for the alternative closest to his or her ideal point. My perspective thus far subscribes to the process by which justices come to realize the location of their policy preference relative to the alternatives; they attain this information by consuming the case facts, relevant precedents, and the arguments made by the parties.

In a cognitive account, the next stage in justices' decision processes is crucial. What justices do at this stage depends on the extent to which they are motivated to control an inclination to allow their personal policy preferences to dominate and bias the remainder of their decision processes. This stage may occur either consciously or unconsciously.<sup>3</sup> Fear of invalidity, accountability, or accuracy goals help motivate justices to control these predispositional biases, whatever their strength. Note the similarities to the mixed, controlled processes discussed earlier (Petty & Wegener, 1993; Schuette & Fazio, 1995; Wegener & Petty, 1995). This is both an original and controversial way of thinking about motivations in the judicial context. To clarify, when I talk about motivations, I am referring to the goals that push a justice to reason in one way or another. Recall that typical treatments of Supreme Court decision making have posited a one-goal framework assuming at the outset that justices are "single-minded seekers of legal policy." Adopting Baum's (1994, 1997, 2006) multiple goals framework, a cognitive approach can more easily incorporate the idea of motivational heterogeneity. The motivation a justice possesses under a particular condition will determine the relative impact of predispositional biases versus "data." In Supreme Court decision

making, this has implications for explaining the relative impact of policy preferences versus legal considerations.

Following this stage, justices must go through the legal reasoning process: study the facts, read the parties' briefs and amicus curiae briefs, examine past precedents and legal doctrines, and engage in oral arguments. During this "data processing" stage the justices sort through the information and attributes associated with the case. The degree to which a justice is motivated to control predispositional biases will determine how the justice processes the data. It is at this stage that theory and data collide—a justice begins reasoning either in a more top-down, theory-driven process or a bottom-up, data-driven process. In a top-down process, a justice assesses the data through the biasing lens of his or her policy preferences. In a bottom-up process, a justice suppresses this bias and assesses the data through a more objective lens. In a hybrid process, a justice processes information via a mixed process—a weighted combination of top-down versus bottom-up processing, where the weights are determined by the operative motivation(s).<sup>4</sup>

#### Ideal Types of Justices' Decision Processes

To summarize, I posit that there are two key stages in the sequence of a justice's decision process where there is variation crucial to explaining the relative influence of policy preferences and legal considerations on justices' decisions. First, upon exposure to a particular case, a preference will be activated to a certain degree, such that less than complete preference accessibility will set the stage for a process where the biasing impact of policy preferences in the decision process will be attenuated and the impact of objective considerations will be elevated. At the second stage in the process, a justice's motivation to control bias is central. As this motivation increases, bottom-up processing is more likely to occur, and the impact of policy preferences in the decision process will be attenuated. Below, I construct ideal types of justices' decision processes based on combinations of these two key factors. These ideal types provide predictions about the type of reasoning process under various conditions, and predictions about the effects of policy preferences and legal considerations.

The four ideal types summarized in Table 3.1 consist of all combinations of whether or not a justice's preference accessibility is high or low and whether or not a justice is motivated to control an inclination to act solely on the basis of policy preferences. As ideal types, these four models focus on high and low values of both accessibility and motivation to control bias in order to explore the full theoretical spectrum of processes of behavior. I begin by discussing the two most extreme ideal types. The first ideal type encompasses a situation where a justice's policy preference is highly accessible, and moreover, the justice is not motivated to control bias—perhaps the justice does not feel accountable to another entity, possesses no fear of invalidity, and is driven primarily by ideological goals. This motivational type produces a

Table 3.1 Ideal Types of Justices' Decision Processes

| Preference Accessibility | Motivation to Control Predispositional Biases? | Type of Process   | Predictions                      |                                |
|--------------------------|--|-------------------|----------------------------------|--------------------------------|
|                          |  |                   | Preference-Behavior Relationship | Impact of Legal Considerations |
| High                     | No   | Top-Down          | Intensified                      | Minimal                        |
| Low                      | Yes  | Bottom-Up         | Significantly Attenuated         | Significantly Large            |
| High                     | Yes  | Mixed, Controlled | Attenuated                       | Moderate                       |
| Low                      | No   | Mixed             | Attenuated                       | Moderate                       |

strongly top-down reasoning process. It is akin to Fazio's spontaneous attitude-behavior process, where an attitude is highly accessible and hence dominates the information processing stage and serves as the predominant influence on reasoning and choice. This top-down ideal type of justices' judgment processes can be considered a cognitive analogue to the contemporary attitudinal model, where a justice possesses fixed preferences over policy issues and is uninhibited by legal, political, and normative constraints, leaving unbridled discretion to decide cases in an ideological fashion. The predictions that flow from this ideal type, then, are: (1) the preference-behavior relationship will be very potent, and (2) the impact of legal considerations will be minimal.

The second ideal type produces a polar opposite reasoning process from the first type. In this situation, a justice's policy preference is not highly accessible. Low accessibility means that a justice's preference will not dominate the decision process to the extent that it will in the spontaneous process. Moreover, the justice is motivated to control an inclination to act in a biased fashion. The situation in front of the justice induces a fear of invalidity, accountability, or accuracy motivation, whereby the justice suppresses predispositional biases and instead, processes the attributes of the case, legal doctrine, and other relevant information in an objective manner. This process strongly resembles a bottom-up reasoning process. The following predictions emerge from this ideal type: (1) the preference-behavior relationship will be significantly attenuated, and (2) the impact of legal considerations will be significantly large.

The next two ideal types represent reasoning processes somewhere in between top-down and bottom-up processes. First is a situation where a justice's policy preference is highly accessible upon exposure to a case. Thus, the justice's reasoning process is capable of being biased and dominated by the justice's policy preference. However, the justice simultaneously possesses a motivation to control such bias. As mentioned above, the decision

context could induce a fear of invalidity, accountability, or accuracy motivation that competes with a justice's highly accessible policy preference. This motivation causes a justice to suppress the inclination to engage in a pure top-down process, and instead to focus on the legal considerations and the particular attributes of the case in an optimally objective manner. This mixed, or controlled, process falls somewhere in between a top-down and bottom-up reasoning process since it is possible for a top-down process to take over, but a motivation to suppress this top-down inclination also exists, which increases the prospects for bottom-up type behavior. In the psychological literature, this process resembles both a controlled, mixed attitude-behavior process (Fazio & Towles-Schwen, 1999) and a flexible correction model (Petty & Wegener, 1993; Wegener & Petty, 1995). Recall that in both models, an individual recognizes his or her bias, is motivated to control that bias, and implements a mechanism that corrects for the bias. From this mixed, controlled process of a justice's reasoning process, a prediction emerges that the relationship between policy preferences and behavior will be attenuated. Also, the impact of legal considerations of various objective criteria will be accentuated.

The final ideal type is the case where a justice's policy preference is not highly accessible, but he or she also possesses no motivation to control the inclination for biased reasoning. This combination is probably the least likely to occur in reality, given the odd combination of low accessibility and a high likelihood for biased processing. Nevertheless, it is a mixed reasoning process since the justice's policy preference is something less than completely accessible, which suggests that a pure top-down reasoning process will not take hold. Thus, the justice is likely to focus more on the attributes of the case, including the legal aspects, in the absence of a strong policy predisposition. However, the justice is also not motivated to control an inclination to behave in a top-down manner, even though the capacity to do so is suppressed due to the low accessibility of preferences. Thus, the low accessibility pushes the justice to be more bottom-up, but the lack of a motivation to control bias pushes the justice to reason via a top-down process. The predictions flowing from this ideal type are similar to the previously discussed type: the preference-behavior relationship will be attenuated, and the impact of legal considerations will be elevated.

## Conclusion

In this essay, I have presented a broad cognitive perspective of judging. In this section, I touch on some more tangible issues and obstacles, particularly with respect to testing some of the empirical implications of the model. First, what factors are associated with preference accessibility and motivation to control predispositional biases? In other words, what situations or conditions would induce the accessibility of policy preferences and what situations would

induce accountability, fear of invalidity, or accuracy goals? In other work (Bartels, 2005, 2006), I suggest that certain case-level, situational factors are capable of shaping the degree of preference accessibility (or preference strength) and accountability. In particular, I posit that increases in issue salience and issue familiarity and decreases in case complexity activate strong policy preferences among the justices, leading to the possibility of more top-down processing and a stronger preference-behavior relationship. Pertaining to accountability, I posit that the interest group environment, participation by the solicitor general, and whether the case involves a statutory or constitutional question will trigger varying levels of accountability. Higher levels of accountability among the justices lead to a greater possibility of bottom-up processing and a weaker preference-behavior relationship. Another factor associated with preference accessibility relates to so-called "freshmen effects" (e.g., Hagle, 1993). Do new justices have less accessible preferences than veteran justices? Another factor associated with accountability includes the ideological configuration of Congress and the president (Bartels, 2006), which would relate to debates about whether and how the separation-of-powers structure constrains the justices (Epstein & Knight, 1998; Segal, 1997; Segal & Spaeth, 2002; Bergara et al., 2003).

The second empirically oriented issue pertains to the issue of observational, or behavioral, equivalence. In particular, one might find support for the empirical implications of a cognitive perspective of judging, but one could argue that these empirical implications are also consistent with implications emerging from a rational choice, attitudinal, or some type of legal perspective. If observational equivalence is an issue, as it almost certainly would be in this context, empirical evidence in favor of the cognitive model's empirical implications would not necessarily indicate support for the cognitive model itself—that is, the processes underlying the model—because this evidence might also support, for example, a rational choice approach. Since the predictions would not be unique to the cognitive model, it would be necessary to test empirically the processes underlying the cognitive model via experimental methods.

This last point transitions to the third and final empirical issue I discuss—how to test the cognitive processes of judging. If legal researchers had their way, we would recruit judges as experimental subjects, design an experiment that manipulates some factors (e.g., preference accessibility and motivation to control bias), randomly assign the judges to experimental conditions, and test for causal processes underlying judging. Guthrie et al.'s (2001, 2002, 2007a) innovative experiments on judges provide a valuable template for conducting such work. My theoretical framework requires an experimental approach that would allow researchers to "get inside the heads" of judges to explain how they reason about cases. Recruiting currently serving judges as experimental subjects for this type of study might be improbable, given judges' sensitivity to rendering judgments on hypothetical cases. This presents an obstacle for testing the cognitive processes of judging, but the

obstacles are not insurmountable, as Guthrie et al. show. Moreover, Braman and Nelson (2007) used law students as experimental subjects to explore biases in legal reasoning. To test a theoretical framework like the one I have proposed, one possibility is to recruit retired judges as experimental subjects and perform a survey experiment.<sup>5</sup> Retired judges may be more likely to respond to such a survey experiment with considerable candor, given they no longer have an active stake in the judiciary. Obviously, the pool of retired Supreme Court justices is extremely limited, but recruiting retired U.S. Courts of Appeals or District Court judges is a possibility.

In conclusion, the cognitive perspective presented in this essay has the potential for providing a more realistic, nuanced explanation of judging. By focusing on the cognitive processes inside the judicial mind, the cognitive approach has the ability to improve on existing models of judicial decision making that treat judicial reasoning processes as a black box. While I have aimed the essay toward justices of the U.S. Supreme Court, the theoretical framework I have presented has implications for judging at other levels in the judicial hierarchy.

## Notes

I am grateful to Lawrence Baum, Eileen Braman, David Klein, and Howard Lavine for extremely helpful feedback and suggestions on this essay.

1. I use the terms "policy preferences," "ideology," and "attitudes toward legal policy" interchangeably.
2. Posner (1992) has distinguished between top-down and bottom-up legal reasoning processes. While there are some general similarities between his approach and mine (e.g., emphasis on "theory-driven" reasoning), some key differences exist. Namely, his conceptual framework is not psychologically oriented. My focus is on the extent to which, and conditions under which, ideological predispositions bias legal reasoning processes.
3. The issue of whether this is a conscious or unconscious process would require a more in-depth discussion, which is beyond this essay's central scope of inquiry. What is most important in this discussion is whether and to what degree justices are motivated to control their biases. It is quite conceivable that such a process could be either conscious or unconscious, a question I leave for future research.
4. I exclude from this discussion any collegial interaction that occurs in the opinion drafting stage (e.g., Maltzman, Spriggs, & Wahlbeck, 2000). Incorporating small-group dynamics (see Martinek's essay in this volume) would offer a compelling addition to the framework I have laid out.
5. I thank Pete Rowland for suggesting this idea in a conversation.