



Faculty Research Working Papers Series

Is There a Psychology of Judging?

Frederick Schauer

John F. Kennedy School of Government – Harvard University

October 2007

RWP07-049

The views expressed in the [KSG Faculty Research Working Paper Series](#) are those of the author(s) and do not necessarily reflect those of the John F. Kennedy School of Government or of Harvard University. Faculty Research Working Papers have not undergone formal review and approval. Such papers are included in this series to elicit feedback and to encourage debate on important public policy challenges. Copyright belongs to the author(s). Papers may be downloaded for personal use only.

September 11, 2007

IS THERE A PSYCHOLOGY OF JUDGING?

Frederick Schauer¹

In the United States, as in most countries, judges share three prominent characteristics. First, and tautologically, they are judges. Second, and with the exception of the lay magistrates who hear small cases in many states, they are lawyers. And third, the opinions of some attorneys and litigants notwithstanding, they are human beings. My goal in this paper is to examine in a preliminary way the relative contributions of each of these three characteristics in explaining judicial cognition and judicial behavior.

The potential value of such an inquiry lies in its contrast with the (small) existing literature (e.g., Guthrie, Rachlinski, & Wistrich, 2001; Wistrich, Guthrie, & Rachlinski, 2005) on the psychology of judging.² That literature, with few exceptions, aligns itself with the conclusion that it is the third and not the first or second of the items on the above list -- the judge as human being and not the judge as judge or the judge as lawyer -- that has the greatest

¹ Frank Stanton Professor of the First Amendment, John F. Kennedy School of Government, Harvard University, Affiliated Professor, Harvard Law School, and George Eastman Professor (2007-2008), University of Oxford, and Balliol College, University of Oxford. This paper was prepared for and presented at the Conference on the Psychology of Judging, University of Virginia, Charlottesville, Virginia, March 29-31, 2007. I am grateful for the comments of the participants on that occasion, for thoughtful and challenging written comments from Barbara A. Spellman and Dan Simon, and for research support from the Harvard Law School and the Joan Shorenstein Center on the Press, Politics and Public Policy, Harvard University.

² For a useful analysis of the research that is genuinely focused on judges and judging, see (Robinson & Spellman, 2005).

explanatory power in accounting for judicial behavior, and that holds out the greatest promise for setting a research agenda for law and psychology and for the psychology of judging (Spellman, 2007). More often implicitly than explicitly, the existing research tends to support the view that a judge's attributes as human being reveal more about the psychology of judging than does anything a judge might have learned in law school, acquired in the practice of law, or internalized by virtue of serving in the judicial role.

The conclusion that judges share (some) important decision making characteristics with their fellow human beings is occasionally supported by empirical findings (Guthrie, Rachlinski, & Wistrich, 2001; Wistrich, Guthrie, & Rachlinski, 2005). More often, however, this conclusion lurks in the background as an undocumented and unargued premise of the research on the psychological dimensions of judicial behavior. Researchers commonly assume that what is known about human decision making and cognition will apply to judges, and thus conclude that non-judge experimental results can be applied to explain and predict judicial behavior. One survey of (non-judicial and non-legal) analogy research (Holyoak, 2005), for example, asserts that the legal system's use of precedent is but a formalized application of the non-legal and non-judicial human practice of analogizing, while another study (Simon, Krawczyk, & Holyoak, 2004) describes two of the authors' earlier study using undergraduate research subjects (Holyoak & Simon, 1999) as being about "legal decision making." And in the law review literature, it is routine to take the teachings of contemporary cognitive and social psychology as substantially applicable to the decisions of lawyers and judges (Arlen, 1998; Hanson & Yosifon, 2004; Schauer, 2006a, 2006b; Simon, 1998, 2002, 2004).

Although applying the research on lay decision makers to judges is thus relatively common, research on real judges has to date been quite limited.³ And even when there has been

³There are numerous logistical and ethical impediments to research using real judges as experimental subjects, and thus the conclusion that non-judge and non-lawyer research subjects

serious research on the psychological dimensions of actual judicial decision making, it is of less pervasive value than it might be because the research has focused almost exclusively on the fact-finding⁴ and verdict-rendering dimensions of the judicial role. Judges are indeed often required to determine simply what happened, and then, in place of a jury, are often in the position of delivering a final verdict. Thus, judges must frequently decide which of multiple opposing factual accounts is most likely true.⁵ And in engaging in such tasks, judges perform functions similar to those performed by a jury.⁶ So insofar as people tended to believe that judges would be superior to jurors as fact-finder or verdict-renderers, or to believe that judges would be largely immune from the cognitive biases of mere mortals, much of the current research on the psychology of judging has usefully cast doubt on the view that judges by virtue of their intelligence or legal training or judicial position could significantly outperform juries with respect to the same fact-focused inquiries.

By concentrating so dominantly on the fact-finding and verdict-rendering tasks that

are representative of judges is facilitated by the ease of locating the former and the obstacles to doing serious experimental work on the latter.

⁴Fact-finding is not to be confused with fact-locating or fact-discovering. Fact-finding is the legal term of art for determining what actually happened based solely on the evidence presented in court by the parties.

⁵Indeed, the preoccupation with the jury in much of the psychological research is itself curious in light of the fact that the institution of the jury does not exist in civil law countries, is not used outside of criminal cases (with the occasional exception of libel trials) in any common law country other than the United States, and is a rapidly declining institution even for criminal cases in the United States and elsewhere (Guthrie, Rachlinski, and Wistrich, 2001; Schauer, 2006b).

⁶On the implications for social science research of the distinction between the tasks typically performed by trial judges and those typically performed by appellate judges, see (Rowland & Carp, 1996).

judges share with jurors, however, the existing research tends to slight those aspects of judging – most obviously selecting the relevant law, interpreting the law, and sometimes making law – that are more or less the exclusive province of the judge. Because judges thus appear to take on many tasks that jurors and everyday decision makers do not, and also because judges likely possess some characteristics that experimental subjects do not,⁷ perhaps the conclusion (or the assumption) that judicial decision making is substantially similar to the decision making of those who are not judges is open to question. Just as it would be a mistake to conclude very much about the mathematical reasoning of the Harvard Mathematics faculty from studies about how ordinary people make mathematical calculations at the supermarket or when balancing their checkbooks, so too might it be a mistake to draw conclusions about how judges reasons with rules and precedents and authorities from the way in which the man on the Clapham omnibus⁸ deals with similar inputs into and constraints on his decision making processes. And if it is a mistake to move too quickly from what we know about how lay people perform certain tasks to conclusions about how judges perform some of those same tasks, it certainly would be a mistake to draw conclusions about how judges perform a range of judge-specific tasks from what we have found about how lay people perform quite different tasks.

⁷The statement in the text is not intended to express even the slightest sympathy with the hoary but misguided cavil that experiments on university undergraduates are of limited value in learning about the behavior of people who are not undergraduates. In the absence of identifiable and germane differences between undergraduates and people in general, there is no good reason to doubt the generalizability of findings about undergraduates to conclusions about people as a whole. But when we are drawing conclusions about the decision making characteristics of individuals who are in theory specially trained to make decisions of a certain kind – as are judges – it is far more appropriate to question whether research using people without that special training can tell us much about the way in which people with special training make the very decisions for which they are supposedly specially trained and for which they are specially selected by virtue of possessing the requisite training and skills.

⁸The man on the Clapham omnibus being the quaint British equivalent of the American “reasonable man” (*Hall v. Brooklands Racing Club*).

Thus, one question – a question and not a conclusion -- is whether the experience of studying to be a lawyer and then of practicing law causes decision making in law, especially about legal (as opposed to factual) matters, to diverge in deep and cognitively substantial ways from the decision making of human beings who do not possess such training and experience.⁹ And a further question is whether those who self-select to be judges, who are selected as judges, and who have the experience of serving as judges make decisions differently from non-judge lawyers, thus causing further gaps between judicial decision making and the decision making even of similarly trained and experienced people holding different roles.¹⁰ Consequently, there are hypotheses worthy of investigation about whether in law-focused decision making there are divides between lawyers and people in general, between judges and non-judge lawyers, and consequently even larger divides between judges and people in general.

Indeed it is likely that multiple phenomena are at work. Self-selection into law, subsequent legal training, subsequent legal experience, self-selection into judging, and then finally serving in the judicial role may all interact with each other to produce considerable differences between how judges and lay people reason and decide. To the extent that this is so, the interaction among legal training, legal acculturation, legal experience, and the judicial role may even generate process and not just content-based differences between the cognitive mechanisms of judges and those of non-judge humanity. If so, there may be differences, at least with respect to some highly important judicial tasks, between *how* judges and lay people think

⁹Those who become lawyers may self-select, or may be selected, on the basis of their possession of attributes that are relatively rare in the general population but that are not only germane to success as a lawyer, but are also germane to success as a judge even among the class of lawyers.

¹⁰Or it may be that the causal mechanism operates in a different direction, with lawyers being selected for the judiciary, or self-selecting into the judiciary, because they possess skills or proclivities to forms of reasoning and decision making that are different from those of the mine run of practicing lawyers.

and not merely differences in *what* they think about.

The battery of possibilities offered in the previous paragraphs is no more than an array of testable hypotheses. If even some of these hypotheses turn out to be true, however, then there actually may be a genuine psychology of judging. But if on the other hand these hypothesized differences between judges and lay people turn out not to exist, and if instead the assumptions and premises of judge as human being lying behind most of the existing research are sound, then research into the psychology of judging will be an interesting application of larger psychological issues, but will not in any fundamental way constitute a discrete area of inquiry. If the most important or only determinant of judicial decision making characteristics is the fact that the judge is human, after all, then a psychology of judging will be little different from a psychology of dentistry or a psychology of plumbing. It would be interesting and possibly even important to know what psychology could teach us about how dentists and plumbers think, but the application of research findings about human beings generally to the human beings who fill these socially vital roles is a long way from saying that there is a psychology *of* dentistry or plumbing. Perhaps the psychological dimensions of judging are different from those of dentistry or plumbing, but we will not know that unless we depart from the assumption that what we know about people is necessarily applicable to judges. And because I suspect that there might be more to the psychology of judging than there is to the psychology of dentistry or plumbing,¹¹ and because I suspect as well that there are reasons to believe that legal and judicial attributes may cause judicial decision making to depart in relevant ways from the decision making of lay people, my aim in this paper is to examine in a preliminary and non-empirical way – hypothesis offering but not hypothesis-testing – what a genuine psychology of judging might look like, and why, most of the existing literature on the psychology of judging notwithstanding, we ought to

¹¹ This says nothing about the respective abilities or intelligence of judges, dentists, and plumbers. One need not be smarter (or dumber) than the average of humanity in order to engage in a cognitively specialized task.

take this possibility seriously.¹²

I. The Promises and Premises of Legal Reasoning

Almost four centuries ago, Lord Coke wrote of the “artificial” reason of the law (Coke, 1628; Fried, 1981), and he did so hundreds of years before even the advent of university-based formal training in law. Now that such training is ubiquitous, Lord Coke’s premise is more important yet, because the view that there is a special reason of and for law has become the guiding principle for the vast numbers of American law schools and their equivalents¹³ in other countries. These schools purport to teach their students the mysterious art of “legal reasoning,” and they hold out the hope that at the end of law study a student will have learned how to “think like a lawyer” (Schauer, 2003; 2004).

The belief that thinking like a lawyer is fundamentally different from simply thinking has

¹² It is worth emphasizing that nothing I say here denies that judges share some or perhaps even many decision making psychological characteristics with ordinary people (Simon, 1998, 2002, 2004), and that many of those shared characteristics are useful in understanding what judges do. My concern is that by focusing so heavily on the shared characteristics, researchers have slighted the non-shared characteristics to the detriment of a fuller understanding of what judges do. Tiger Woods and I both play golf, and I am reasonably sure that Woods and I share some number of decision making pathologies on the golf course, such as exaggerating the probability of making (for our skill level) low probability shots, or taking the most recent (and thus most cognitively available) shots as more representative of the array of outcomes on shots of that variety than they in fact are. But to focus only on these shared characteristics and to ignore the numerous ways in which Woods and I differ as golfers, mentally as well as physically, is to ignore something seemingly quite important. Without investigating the ways in which judges might be able to do things that lay people cannot, we run the risk of over-generalizing from the ways in which judges assuredly have decision making characteristics they share with lay people.

¹³ Outside of North America, the study of law takes place largely at the undergraduate level, although additional and post-graduate law study is common. A potentially valuable research project, although not my focus here, would be to examine whether studying law from the age of eighteen or nineteen, and in place of some other undergraduate specialization, produces a significant difference in reasoning and decision making from that which exists in those who do not commence the serious study of law until at least the age of twenty-two, and who already have as undergraduates studied another field.

declined a bit in the past several generations, but not much. Law schools these days pay more attention than previously to philosophy, literature, economics, and the empirical social sciences, among others, but they have scarcely abandoned their commitment to there being such a thing as legal reasoning, to legal reasoning being a somewhat autonomous skill, and to the responsibility of law schools to inculcate this skill in those who would be lawyers and judges. Moreover, law schools subscribe to the view that legal reasoning is not easily picked up on one's own, and that formal training and subsequent experience in thinking like a lawyer can and characteristically does produce a genuinely transformed method of thinking, reasoning, arguing, and decision making.

Although I will discuss presently my view of what legal reasoning just *is*, I want to be careful not to overstate the claim about the alleged distinctiveness of legal reasoning. Law schools and the legal culture do not typically maintain that legal reasoning is totally or even almost totally unconnected with ordinary reasoning,¹⁴ in the way that Estonian is unconnected with English, for example, or that literary interpretation is unconnected with multivariate calculus. Nor could they. Rather, the most plausible version of the claim to distinctiveness in legal reasoning would be the comparative statistical claim that some of the methods of reasoning that are located outside of legal reasoning – arguments from precedent,¹⁵ reasoning from rules, and reliance on authority, most prominently – are more highly concentrated in legal argument and decision making than in ordinary reasoning and decision making, the difference being

¹⁴And if they do, they shouldn't.

¹⁵ To forestall a potential objection, I signal here (and address at somewhat greater length below, and see also (Schauer, 2007)) that I do not take the use of analogy and the constraints of precedent as being especially similar. Lawyers use analogy frequently, but so do other professionals and most lay people. Feeling obligated to follow a previous decision that one believes to be erroneous, however, is arguably far less prevalent outside of law than in, and may thus comprise part of the array of reasoning and decision making modalities that collectively can be thought of as legal reasoning.

sufficiently great as to support the conclusion that legal reasoning is, in the aggregate, substantially unlike the kind of reasoning that takes place in other decision making domains. So although lawyers and judges necessarily employ non-legal forms of reasoning as they argue cases and make decisions, and although non-lawyers occasionally make use of the characteristic modalities of legal argument, the concentration of these modalities in legal argument is so great, the law schools' view of the world appears to maintain, as to justify the claim that something very different is going on when lawyers and judges tackle a problem or face a decision.

So what then *is* legal reasoning, or at least what is it alleged to be? What is it to think like a lawyer, as opposed to just think. These are neither easy nor uncontroversial questions, and so we find in the literature on legal reasoning and argument the claims that legal thinking is about the ability to seek and do justice in the individual case (Bartlett, 1990; Burton, 1985; Henderson, 1987; Minow & Spelman, 1990; Solum, 1988; Sunstein, 1996, 1999), or about the capacity for self-critically seeing and appreciating viewpoints opposed to one's own (Sherry, 2007), or about a tendency towards clarity and analytic precision (Sherry, 2007; Vandavelde, 1996), or about a talent for understanding and dealing with facts (Bandstra, 2005), or about a facility in argument and debate (Bandstra, 2005), or about the capability of engaging in analogical reasoning (Brewer, 1996; Levi, 1948; Weinreb, 2005).¹⁶ Yet although there can be little doubt that all of these skills and many more are necessary for successful lawyering (and judging), and equally little doubt that good lawyers tend to have them in greater abundance than poor ones, these are not skills that seem especially of greater importance for lawyers than they are for police officers, physicians, social workers, politicians, and countless others. Most of these skills, even including the skill of analogical reasoning,¹⁷ are domain-general reasoning

¹⁶ For skeptical views about the alleged distinctiveness of analogical reasoning, see (Alexander, 1996; Posner, 2006; Schauer, 2007).

¹⁷ On the use of analogy in numerous occupations and endeavors, see (Blanchette & Dunbar, 2001a, 2001b).

abilities, and while lawyers may on average be better at some of them than other people, it is probable that any differential ability with respect to these and similar tasks is explained almost entirely by the fact that lawyers are on average somewhat better educated, smarter, and possibly even more motivated than the population at large.

But although many of the posited components of legal reasoning are neither unique to nor even much concentrated in lawyers and legal argument, there is one form of reasoning – or one cluster of associated forms of reasoning -- that can plausibly be understood to set lawyers apart from others, and it is one that can be described as *second-order reasoning* (Raz, 1979; Schauer, 1991, 2004; Sunstein & Ullman-Margalit, 1999). When engaged in ordinary (first-order) reasoning and decision making, people tend, not surprisingly, to try to make the best decision for the problem or task at hand. Their aim is typically to reach the right result for *this* case - the present case. That this is so for ordinary people, however, is not to say that it is so for lawyers and judges, for one of the things that law schools attempt to teach their students is precisely to *avoid* thinking that the right result for *this* present case is necessarily the right result all things considered. So consider, for example, the typical allegedly Socratic¹⁸ dialogue that takes place between student and teacher in the first year of law school. After eventually being coaxed into reciting the facts of some reported case correctly and accurately, the student is then asked what the correct result should be for the present case, and she commonly responds by announcing what she believes to be the most fair or just outcome as between the opposing positions of the

¹⁸There is scant connection between the question-centered methods of teaching employed by Socrates in the Platonic dialogues and the type of questioning that has traditionally taken place in the law school classroom. Even apart from the enormous advantage that Plato had over the rest of us in being able to write the answers as well as the questions, Socrates' goal was to extract from his interlocutors some latent but non-specialized insight, rather than to inculcate in them a specialized skill that they hitherto did not possess. Now it may be that the ability to engage in just this kind of second-order reasoning is latent in everyone, but if it is sufficiently latent that it takes law professors and three years of law school to extract it for most people, then there is no difference of consequence between an inculcation and an extraction model of legal education, for in either case that student develops the ability actually to *do* something she could not do before.

particular parties. At this point the student is then asked to give the rule or principle that would support this outcome, and here the characteristic pattern of Socratic inquiry begins. By a series of patterned and well-planned hypotheticals, the professor challenges the student's initially preferred rule, with the aim of demonstrating that the rule that would generate a just or fair or efficient outcome in the present case would generate less just, less fair, or otherwise less satisfactory results in other cases. And in taking the student through this series of uncomfortable applications of the student's initially chosen rule, the professor attempts to get the students to understand that the best legal rule may be one which produces an unjust result in the present case, but which will produce better results in a larger number of cases, the result in the present case notwithstanding.

This form of Socratic inquiry is not restricted to the law school classroom, and it is noteworthy that it is the common form of judicial questioning in appellate argument.¹⁹ Because appellate courts see themselves as setting forth rules that will control other and future factual situations and as writing opinions that will serve as precedent for future cases, appellate judges often focus as much on the effect of this ruling on future cases as with reaching the best result in the present case. As a consequence, appellate advocates often find themselves asked how the rule or result they are advocating will play out in various hypothetical cases. As in the law school classroom, these hypothetical situations are offered against the background of the view that the right result in the particular dispute before the court will only be the actual outcome if it

¹⁹A common mistake is to assume that legal argument is about persuasion, and that in seeking to persuade lawyers act similarly to politicians, editorialists, teachers, clergymen, and countless other persuaders. But legal argument under the traditional account is persuasion of a special kind precisely because it is parasitic on how the judge will make *her* decision. So if the traditional account of legal reasoning is sound – and it may not be – the lawyer is *not* attempting to persuade the judge that such-and-such is a good outcome *simpliciter*, but is instead trying to convince the judge that some good outcome is not precluded by contrary precedents, or that precedent commands a result without regard to the precedent-independent desirability of that result.

can be justified in a way that will not produce the wrong outcomes in too many expected future cases (Golding, 1963; Greenawalt, 1978).²⁰

In seeking to demonstrate to the hapless student or struggling advocate how the best legal outcome may be something other than the best outcome in the immediate case, the prototypical Socratic interrogation aligns itself with an even more important dimension of legal reasoning and argument, the way in which the backward-looking, constraining, and limiting dimensions of law (Levi, 1948; MacCormick, 2005; Raz, 1979; Wasserstrom, 1961)²¹ often mandate a result other than the one that is optimally fair or maximally wise, all things considered, in the particular case – a result that “will sometimes be wrong” for the particular dispute (Sherwin, 1999). It may seem unfair on the balance of all reasons to deprive a person of property (*United States v. Locke*, 1985) or a place on a ballot (*Hunter v. Norman*, described in Schauer, 1988) just because he has missed a statutory deadline for understandable, innocent, and ultimately inconsequential reasons, but the law characteristically even if not universally enforces the literal meaning of authoritative language even when such an action produces a bad outcome in the particular case (Manning, 2003; Schauer, 1992). And it may seem equally unfair to take the existence of clear precedent as commanding a suboptimal result, especially from the vantage point of a decision maker who thinks the precedent mistaken, but following even a precedent perceived to be erroneous is what, under the traditional understanding, the law expects its decision makers to do.²²

²⁰On the use of hypothetical cases to ensure principled decision making in just this way, see (Christie, 1969).

²¹ The “looking backward” aspect of law “makes judges think at least as much about conformity to an announced principle as about the right and justice and social utility of the case they are about to decide” (Ulman, 1933).

²² “[I]n most matters it is more important that the applicable rule of law be settled than that it be settled right.” *Burnet v. Coronado Oil & Gas. Co.* (Brandeis, dissenting). See also (Alexander, 1989; Alexander & Sherwin, 2001; Schauer, 1987).

The second-order reasoning I describe here is not about what *is*, but instead about what to *do*. The law must frequently engage in factual inquiry to determine who fired the gun, how much toxic waste was discharged into the river, whether someone was in possession of inside information when they purchased a quantity of securities, or whether the driver of some car had consumed alcohol prior to being involved in an accident. But in the law such factual determinations are typically precursors to a judgment about what the law requires to be *done* on the basis of these facts; and what the law requires to be done may be something other than that which a non-legal decision-maker would decide, all things considered, should be done. So although the legal system engages in factual inquiry, it is precisely in moving from factual inquiry to action-producing consequence that legal reasoning potentially differs in fundamental ways from the reasoning of other action-producing agents. These other agents, we typically think, are focused on producing the right decision for *this* decision making event, but if the characteristic decision-making modality of law is different from the decision making modalities of other domains, then legal reasoning and decision making may be different as well. Legal reasoning, on this widespread account, is “artificial” not only because of the way in which it is deliberately *not* focused on reaching the best for just this case, but also because decisions having legal consequences differ for just this reason from the practical reasoning in which non-lawyers ordinarily engage.

II. The Realist Challenge

Although a widely believed traditional conception of legal reasoning is consistent with the foregoing account,²³ the descriptive accuracy of the traditional conception has hardly gone unchallenged. More particularly, an array of perspectives collected under the heading of Legal

²³For earlier works articulating the traditional account even more boldly (and, perhaps, crudely) than the various sources cited in the previous section, see (Black, 1912; Cross & Harris, 1990; Wambaugh, 1894).

Realism²⁴ can be understood as presenting not only a challenge to the traditional conception of legal and judicial reasoning, but also, and more germane here, a challenge to the view that judicial reasoning is substantially different from the reasoning of ordinary people.²⁵ For the Realists, judges were less different from people in general, and from other public and private decision makers, than the traditional “artificial reason” view maintained. The Realists saw legal reason as human reason, and thus traditional claims for the distinctiveness of legal reasoning were to the Realists largely pretense. Because the Realists therefore implicitly (and sometimes explicitly) subscribed to the view that judges were best seen simply as human decision makers with few distinctive methods, most of the existing research on the psychology of judging can be understood as incorporating an unexpressed -- and typically unresearched -- Legal Realist outlook on what judges do and how they do it.

The connection between Legal Realism and the psychology of judging can be traced to the earliest days of Realism. In *Law and the Modern Mind* (Frank, 1930), Jerome Frank, then in the aftermath of his own recent psychoanalysis, claimed that it was impossible for judges to engage in the second-order decision making then and now associated with the traditional account of legal reasoning.²⁶ Frank argued that judges, like other human beings, invariably trained their

²⁴Or, sometimes, American Legal Realism, not only in acknowledgment of its provenance, but also to distinguish it from the largely unrelated Scandinavian Realism of, for example (Hägerström, 1953; Olivecrona, 1971; Ross, 1958).

²⁵On Legal Realism generally, see (Kalman, 1986; Leiter, 2004; Rumble, 1968). There are competing conceptions of what ideas lay at the core of Realism, but I disclaim the role of arbiter among the multiple views of what Legal Realism was “really” all about. So although various Realists and their fellow travelers advanced a cluster of different claims all in the name of Legal Realism, it is uncontroversial that the particular part of Realism I stress in the text is at least among the positions advocated by some of the more prominent Realists.

²⁶ It is fashionable these days to marginalize Frank’s contribution to Realism because of his belief that the judge’s personal idiosyncrasies were a significant determinant of judicial outcomes (Dagan 2007; Leiter, 1997). But although Frank’s (and Hutcheson’s) views about the *source* of the judge’s decision may be unrepresentative of so-called mainstream Realism, he remains a

attention on the facts and details of this particular case, and, moreover, unavoidably strove to make the best decision for this case and this dispute. Having done that, Frank insisted, the judges would then seek to find conventional legal materials – cases, statutes, regulations, constitutional provisions, maxims, canons, etc. – that would provide ex post justifications or rationalizations for decisions that were causally uninfluenced by those materials. For Frank and others (Hutcheson, 1929; Radin, 1925), the key challenges to the traditional account lay first in the way in which they saw judges as focused on reaching the best result for the particular case, and, second, in the fact that the *law* was used by judges not to produce decisions, but instead to justify ex post decisions made on decidedly non-legal grounds.²⁷

Not all of what ordinarily rides under the banner of Legal Realism fits this mold. When Karl Llewellyn, for example, suggested that judges often made decisions based on rules that diverged from the rules that one would find in the law books (Llewellyn 1930, 1960; Twining, 1973), he was denying neither the possibility nor even the desirability of rule-based second-order decision making. What he did deny, however, was the view that formal official written law provided the source for the actual rules that judges and other decision makers employed in making their decisions (Dagan, 2007). There were rules, Llewellyn agreed, but those rules came not from the law books or the decided cases, but instead from the judges' own policy views and from the social and professional culture within which the judge operated.

Even for Llewellyn at times, however, and for other Realists more pervasively, the challenge offered to the traditional model of legal reasoning was a challenge to the possibility

seminal figure for the view that the judge's determination of the right outcome precedes the judge's consultation of formal legal doctrinal sources, and also for the view that judicial decision is substantially particularistic, both being central tenets of the broad Realist program.

²⁷For a modern and sophisticated version of this form of Realism, see (Kennedy, 1986).

that judges could avoid what they saw as the best result for the case at hand in the service of other and larger law-based, rule-based, precedent-based, or process-based goals. In this regard, therefore, the Realists saw judges first and foremost as human beings, and saw the (natural) human desire to reach the best outcome for *this* case as the primary determinant of judicial behavior and judicial decision making. What judges learned in law school or in practicing law might make some difference at the margins, and so too would what judges internalized in taking on the role and duties of a judge, but these minor differences, many Realists insisted, were overshadowed by the particularistic proclivities which judges shared with their fellow human beings. And it is precisely in this respect that most of the existing research on the psychology of judging, research that also sees the pervasively human characteristics of judges as the primary determinant of judicial behavior and judicial decision, is best understood as embodying a Realist outlook on adjudication in particular and law more generally.

III. The Issue Joined

The contrast between Realist and traditional views of legal reasoning – between Frank and Coke, if you will – is an important window through which to view questions about the psychology of judging. And although I have stressed the contrast between Realist and traditional views in terms of particularism and generality, and in the distinction between first-order and second-order reasoning, my larger point hinges on neither of these distinctions. Rather, the central claim is that the Realists, or at least many of them, were concerned with challenging the larger view that there is something distinctive about legal reasoning. The traditional view, captured well by Coke's appeal to artificiality, is that lawyers and judges are engaged in demonstrably different cognitive processes from other reasoners and decision makers. And the Realist view, exemplified by Frank, is that the alleged cognitive differences between judges (or lawyers) and the rest of humanity are exaggerated, with judges engaged in forms of cognition not appreciably different from those of the human species in general, a species of which judges are of course a part.

If the Realists were right to trivialize the differences between judges and the rest of us, then the psychology of judging is, simply, psychology. What we can learn about the psychology of human cognition, human reasoning, human perception, and human decision making will accordingly serve us well, with few modifications, in describing, predicting, and understanding the psychology of judging. But if the Realists are wrong, then what the existing research tells us about how ordinary people use analogy will tell us little about how judges decide according to precedent, what the existing research tells us about how people make decisions will tell us little about how judges make decisions according to rules, and what the existing research tells us about the inputs into human decision making will tell us little about how judges make decisions by following the dictates of even those authoritative sources with which they disagree.

At the very least, the contrast between the traditional and Realist accounts of legal reasoning suggests that a research agenda could be aimed at answering the precise question of the extent to which, if at all, judges actually do engage in second-order reasoning and actually do refrain from reaching what they believe to be the correct outcome in this case because of the perceived (or actual) constraints of precedent, rule, or authoritative source. Moreover, such a research agenda need not be limited to examining the hypothesis that judges engage in second-order reasoning. It could also usefully test the hypothesis that judicial second-order reasoning is substantially different from, more frequent than, or more effective than the second-order reasoning of non-judge decision-makers, even assuming that non-judge-decision makers engage in second-order reasoning at all.

Even the foregoing sketch of a research program is far too crude. In addition to attempting to control for intelligence, education, motivation, and other attributes that judges likely possess to a greater degree than the population at large, such a program would attempt to disaggregate the components of second-order legal reasoning in order to determine whether there

was a gap between judges and lay decision makers for each of those components. When judges are expected to make a decision consistent with a previous decision with which they disagree – the central case of decision according to precedent – will they follow precedent and reach what they think is the wrong result more often than ordinary people assigned the same task? If judges are told that the only sources on which they may rely are part of an artificially constricted array of sources that in this instance might support an erroneous result (Schauer, 2004), will they limit their attention to this suboptimizing and error-producing (from their lights) array to a greater extent than the non-judges? If commanded to follow a bad rule or a good rule which in this instance produces an unfortunate outcome, will judges more than others simply follow the rule and swallow the unfortunate outcome? And if instructed to refrain from doing the right thing because doing the right thing is in someone else’s jurisdiction or is someone else’s responsibility,²⁸ will judges more than others remain passive in the face of an opportunity to do the right thing, or will they, like most others, treat jurisdictional and similar limitations as inconsequential?²⁹

Even if such research were to indicate that judges really *were* different from lay people for some or all of these tasks, additional research would still be necessary to determine whether it was simply legal training that produced the difference, or whether it was something about the role of judge as judge. We can imagine a research design that might, for example, assign similar tasks to judges, practicing lawyers, and law students, in order to determine whether an identified

²⁸ See (*Blanchflower v. Blanchflower*, 2003), concluding that same-sex adultery ought to constitute grounds for at-fault divorce, but that such a change was for the legislature and not the courts).

²⁹ Consider the question of federalism. Although lawyers and judges spend much time wrestling with the respective jurisdictional competences of the federal government and the states, there is little indication that either the public or the political world that caters to that public takes the principles of federalism as constituting an independent second-order constraint on either the states or the federal government adopting what the public believes to be a desirable first-order policy.

difference between judges and lay people was explained by some difference between judges and lawyers, or was explained instead by a difference between judges and lawyers and (advanced) law students, on the one hand, and those without legal training, on the other. And even more fine-grained research could explore attempt to locate differences even among classes of judges, as for example in the differences between elected and appointed judges, or between trial and appellate judges, or among judges with different varieties of pre-judge backgrounds.

Other hypotheses and research possibilities abound, but like the ones just sketched they would identify a task other than fact-finding or verdict-rendering, and then seek to determine whether for this task judges were genuinely different, either in outcome or in method, from some relevant non-judge class. An affirmative answer to this question would not, of course, exclude the likelihood of relevant similarities existing alongside the genuine differences. And that is why the existing research showing that judges are susceptible to many well-discussed cognitive failings and biases – anchoring and availability, for example – is highly important. Even though important, however, this research is incomplete. Even if judges when acting as finders of fact or when reaching verdicts are prone to all or most of these familiar reasoning failures,³⁰ the question remains entirely open whether there are also areas in which judges think quite differently, even supposing that with respect to those areas judges would be similarly afflicted with the same or analogous cognitive deficiencies. The existing research tells us little about whether there are such areas of differential thinking, and, if so, what they look like, but until we can answer this question we cannot know whether the conclusions of Legal Realism are correct, and whether the hidden Legal Realist premises of the existing psychological research on judging are sound.

³⁰I bracket here the important debates about whether patterns of reasoning falling short of optimal or perfect rationality are better understood as desirable adaptive strategies (Gigerenzer, 2000; Gigerenzer & Selten, 2001) or instead as potentially and correctable errors whose correction would, in general, be desirable (Kahneman & Tversky, 1981, 1984; Kahneman, Slovic, & Tversky, 1982).

Much of the existing research on the psychology of judging takes the Realist view of judging as axiomatic, but that conclusion is hardly inevitable and hardly based on systematic research directed precisely at that question.

IV. The Question of Expertise

Although a substantial psychological literature explores the nature of expertise and the differences between expert reasoning and that of novices,³¹ surprisingly little of that literature is especially relevant to the question whether, if at all, judges reason differently from ordinary folk. And that is because the psychological literature on expertise tends to be focused on the question of comparative expertise within a single area of knowledge rather than on the hypothesized cognitive differences across different areas of knowledge. The existing research examines what experts at x do that novices at x do not, but almost none of it looks at whether people who know how to x, whether expert or novices or somewhere in between, tackle problems and make decisions differently from people who do not know how to x at all, or from people who know only how to y, again regardless of whether they are expert or not.

Yet although little research addresses this question of cross-domain expertise -- what we might call specialization rather than expertise -- this question is central to examining the psychology of judging. We *could* determine what expert fact-finders do that novice fact-finders do not, just as we could ask what expert judges do that novice judges do not. But if we are interested in testing the hypothesis that there is a psychology of judging that differs from the psychology of decision making *simpliciter*, then we want to see whether there are some tasks that judges perform differently just because they are judges. We know from the existing research on judging that in some tasks - many aspects of fact-finding, principally – judges do differ less from non-judges and non-lawyers than the conventional wisdom has appeared to suppose. But to take

³¹ For an introduction to the psychological literature, see (Ericsson, et al., 2006; Chi, Farr, & Glaser, 1998).

these findings, important as they are, as answering the central question about the psychology of judging is like imagining that because auto mechanics approach the finances of their own small business in the same way that psychiatrists approach the finances of *their* own small businesses that auto mechanics are importantly similar to psychiatrists. That the two are similar with respect to accounting says nothing about whether they are similar with respect to fixing cars and fixing heads, and similarly the discovery that judges and jurors (or people generally) are similar with respect to fact-finding skirts the question whether there is something else that judges do for which their training and expertise might actually produce important differences.

If I am right that an important component of judging is something other than fact-finding – arguably true for trial judges and self-evident for appellate judges – then we can understand the importance of focusing on law-finding, law-applying, law-interpreting, and, yes, law-making, for these are a large part of the judicial task. But when judges perform these tasks, do they perform them in the same way that those without legal or judicial training or experience would approach them, which is what many of the Realists argued, or do they employ a different skill set, to use an infelicitous and fashionable but not inappropriate term from contemporary management-speak? When it comes to tasks other than fact-finding, do judges think like human beings, or like lawyers, or like judges? Addressing this question should be one of the central items on a research agenda for the psychology of judging, but it is, surprisingly, an item that up to now has been almost completely absent.

V. Conclusion: The Is and the Ought

Jerome Frank understood the traditional claim about legal reasoning, but he argued that judges were psychologically unable to do what the traditional theory demanded.³² Frank is

³²It is interesting that when Frank became a federal judge, a role he occupied from 1941 until his death in 1957, he wrote opinions that hardly differed in style from those of other judges. Much better examples of Realist judging can be found in the opinions of Justice William O. Douglas.

treated nowadays as a bit idiosyncratic, but the psychological lens through which he viewed judging points to the importance of distinguishing three questions about second-order reasoning. The first, the answer to which is embodied in Frank's own point of view, is whether people are naturally particularistic. When engaged in decision making tasks, do people just because of the makeup of the human mind think in terms of *this* task, thus being psychologically averse to making the wrong decision on this occasion in the service of larger or more distant goals.

In insisting on a deep human proclivity towards the particular, Frank may well have been wrong. After all, delayed gratification is hardly beyond the capacities of most people, and there is more than a remote possibility that Frank's speculations – and they were hardly more than that – about the raw material of human psychology were guided less by psychological fact than by Frank's own normative views about what lawyers and judges *ought* to be doing.

Even assuming that Frank was right about what humans start with, he may nevertheless have been unduly pessimistic about the possibility that these antecedent particularistic instincts could be changed. So even if humans are temperamentally, physiologically, or genetically averse to second-order reasoning, there is little reason to believe that this aversion is so hard-wired as to be incapable of change. Perhaps one form of education, including one form of moral education, is aimed, at least in part, at fostering various forms of second-order reasoning, and to the extent that such education is at times successful Frank and his compatriots may have given up too quickly on the possibility that anyone – and not just judges – can both grasp and perform the basic skills of reasoning from rules, making decisions constrained by precedent,³³ and taking the

³³This is a good place to point out the important difference, off-hand remarks in the psychology analogy literature notwithstanding, between analogical reasoning and the legal constraint of precedent. When people, including lawyers (Levi, 1949; Weinreb, 2005), seek to persuade others, or seek guidance in making a decision, they often rely on analogies. They think it is good to take some action now because it is similar to some action in the past that has worked out successfully, or they think it wise to avoid some decision because the circumstances resemble circumstances of the past. But in such cases the decision-maker is using the analogy (Spellman

commands of an authority as providing reasons for action. To the extent that humans in general can be taught to engage in such reasoning, then there would be reason to believe that lawyers and judges could be trained to do the same thing, to do it more often, and to do it better. Implicit in the traditional picture of the artificial reason of the law, therefore, is a story about the possibility that this artificial reason can be inculcated in and internalized by even those humans for which it would initially seem artificial.

Because Frank believed that human particularism was so hard-wired as to be unchangeable, however, he was never forced to reach the normative question. If we assume that the basic tools of second-order reasoning are learnable, we then face the question whether it would be good for lawyers and judges to learn them. Weber sneered at his (erroneous, as a matter of Islamic law) image of the q'adi, making the best all-things considered for each case. But as some voices in contemporary philosophy (Dancy, 2000), feminist theory (Bartlett, 1992), and legal theory (Sunstein, 1998) have insisted, making decisions for the particular case – deciding things one case at a time – is supported by influential arguments, and has much to recommend it, even for those of us (Schauer, 2003) who in the final analysis see fewer virtues in particularism than others. But the point here is not rehearse these familiar debates. It is instead to emphasize that an inquiry into the possibility of judicial second-order reasoning -- an inquiry into a central but under-studied dimension of the psychology of judging – is important not only

& Holyoak, 1996) to help reach the right decision now. The analogy is a tool, and in theory a friend. The constraint of precedent in law, however, which is not coextensive with lawyers' use of analogical reasoning, is more foe than friend. Having concluded that the right thing to do now is to N, the lawyer or judge will sometimes find that N is precluded by some previous decision, often a decision that the present judge thinks mistaken. But insofar as the constraint of precedent actually constrains (which it likely does outside of hard Supreme Court cases far more than it does in the Supreme Court (Segal & Spaeth, 1996, 2002), then the judge is not looking for the analogy that helps, but instead seeking, often unsuccessfully, to avoid the analogy that hurts. Whether such constraint by precedent is desirable is itself debatable, as is the empirical question about its frequency in legal decision making. But the importance of these questions should not lead us to think that being bound by a similar but erroneous decision from the past is similar to choosing to be guided or persuaded by analogous circumstances from an earlier time.

as description and explanation of how judges behave and decide, but also as the precursor to a normative inquiry into how judges *should* behave and decide. Such inquiries dominate legal scholarship, often to unfortunate exclusion of almost everything else, but they are hardly without import. But before we can intelligently decide what judges *should* do, we need to see both what they are doing and what they can do. This inquiry can be usefully informed by serious empirical inquiry into the psychology of judging, but little progress will be made even on this dimension until the research agenda begins to take seriously the possibility that there might actually *be* a psychology of judging, a possibility that is surprisingly absent from almost all of the existing literature.

References

- Alexander, L. (1996). Bad beginnings. *University of Pennsylvania Law Review*, 145, 57-87
- Alexander, L., & Sherwin, E. (2001). *The rule of rules: Morality, rules, and the dilemmas of law*. Durham, NC: Duke University Press.
- Arlen, J. (1998). The future of behavioral economic analysis of law. *Vanderbilt Law Review*, 51, 1765-1788
- Bandstra, R.A. (2005). Looking toward Lansing: Could you be a lawyer-legislator? *Michigan Bar Journal*, 89, 28-29
- Bartlett, K. (1990). Feminist legal methods. *Harvard Law Review*, 103, 829-888
- Black, H.C. (1912). *Handbook on the Law of Judicial Precedents*. St. Paul, MN: West Publishing Co.
- Blanchette, I., & Dunbar, K.N. (2001a). The inVivo/inVitro approach to cognition: The case of analogy. *Trends in Cognitive Science*, 5, 334-339
- Blanchette, I., & Dunbar, K.N. (2001b). Analogy use in naturalistic settings: The influence of audience, emotion, and goals. *Memory & Cognition*, 29, 730-735

- Brewer, S. (1996). Exemplary reasoning: Semantics, pragmatics, and the rational force of legal argument by analogy. *Harvard Law Review*, 109, 925-1028
- Blanchflower v. Blanchflower*, 834 A.2d 1010 (N.H. 2003).
- Burnet v. Coronado Oil & Gas Co.*, 285 U.S. 393 (1932).
- Burton, S. (2005). *An introduction to law and legal reasoning* (3d ed.). Frederick, MD: Aspen Publishers.
- Chi, M.T.H., Farr, M.J., & Glaser, R. (Eds.) (1988). *The nature of expertise*. Hillsdale, NJ: Lawrence Erlbaum.
- Christie, G.C. (1969). Objectivity in law. *Yale Law Journal*, 78, 1311-1342
- Cohen, F. (1935). Transcendental nonsense and the functional approach. *Columbia Law Review*, 35, 809-845
- Coke, E. (1628). *Commentary upon Littleton* (Charles Butler Ed., Legal Classics Library, 18th ed., 1985). Delran, NJ: Gryphon Books.
- Cross, R., & Harris, J.W. (1990). *Precedent in English law* (4th ed.). Oxford: Clarendon Press.
- Dagan, H. (2007). The realist conception of law. *University of Toronto Law Journal*, 57, 607-660.
- Dancy, J. (1993). *Moral reasons*. Oxford: Blackwell.
- Ericsson, K.A., Charness, N., Feltovich, P.J., & Hoffman, R.R. (Eds.) (2006). *The Cambridge handbook of expertise and expert performance*. New York: Cambridge University Press.
- Frank, J. (1930). *Law and the modern mind*. New York: Brentano's.
- Fried, C. (1981). The artificial reason of the law or: What lawyers know. *Texas Law Review*, 60, 35-58
- Gigerenzer, G. (2000). *Adaptive thinking: Rationality in the real world*. New York: Oxford University Press.
- Gigerenzer, G., & Selten, R. (Eds.) (2001). *Bounded rationality: The adaptive toolbox*. Cambridge, MA: MIT Press.
- Golding, M.P. (1963). Principled decision-making and the Supreme Court. *Columbia Law*

- Review*, 63, 35-58
- Greenawalt, K. (1978). The enduring significance of neutral principles. *Columbia Law Review*, 78, 982-1021
- Griswold v. Connecticut*, 381 U.S. 479 (1965).
- Guthrie, C., Rachlinski, J.J., & Wistrich, A.J. (2001). Inside the judicial mind. *Cornell Law Review*, 86, 777-830
- Hägerström, A. (1953). *Inquiries into the nature of law and morals* (C.D. Broad, trans). Stockholm: Almqvist & Wiksell.
- Hall v. Brooklands Auto Racing Club*, [1933] K.B. 205.
- Hanson, J., & Yosifon, D. (2004). The situational character: A critical realist perspective on the human animal. *Georgetown Law Journal*, 93, 1-177
- Holyoak, K.J. (2005). Analogy. In K.J. Holyoak & R.G. Morison (Eds.), *The Cambridge handbook of thinking and reasoning* (pp. 117-142). Cambridge, UK: Cambridge University Press.
- Holyoak, K.J., & Simon, D. (1999). Bidirectional reasoning in decision making by constraint satisfaction. *Journal of Experimental Psychology: General*, 128, 3-31.
- Hurd, H. (1991). Challenging authority. *Yale Law Journal*, 100, 1611-1677
- Hurd, H. (1999). *Moral Combat*. Cambridge, UK: Cambridge University Press.
- Hutcheson, J.C., Jr. (1929). The judgment intuitive: The role of the “hunch” in judicial decision. *Cornell Law Quarterly*, 14, 274-307
- Kahneman, D., Slovic, P., & Tversky, A. (Eds.) (1982). *Judgment under uncertainty: Heuristics and biases*. New York: Cambridge University Press.
- Kahneman, D., & Tversky, A. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American psychologist*, 39, 341-350
- Kalman, L. (1986). *Legal Realism at Yale, 1927-60*. Chapel Hill, NC: University of North

- Carolina Press.
- Kennedy, D. (1986). Freedom and constraint in adjudication: A critical phenomenology. *Journal of Legal Education*, 36, 518-547
- Leiter, B. (1997). Rethinking legal realism: Toward a naturalized jurisprudence. *Texas Law Review*, 76, 267-315
- Leiter, B. (2004). American legal realism, in Golding, M.P., & Edmundson, W.A. (Eds.), *The Blackwell guide to the philosophy of law and legal theory* (pp. 50-68). Oxford: Blackwell.
- Levi, E. (1948). *An introduction to legal reasoning*. Chicago: University of Chicago Press.
- Llewellyn, K. (1930). *The bramble bush: Law and its study*. New York: Columbia Law School.
- Llewellyn, K. (1960). *The common law tradition: Deciding appeals*. Boston, Little, Brown.
- MacCormick, N. (2005). *Rhetoric and the rule of law: A theory of legal reasoning*. Oxford: Oxford University Press.
- Manning, J. (2003). The absurdity doctrine. *Harvard Law Review*, 116, 2387-2486
- Minow, M., & Spelman, E. (1990). In context. *Southern California Law Review*, 63, 1597-1653
- Oklahoma Tax Commission v. Jefferson Lines, Inc.*, 514 U.S. 175 (1995).
- Oliphant, H. (1928). A return to stare decisis. *American Bar Association Journal*, 14, 159-163
- Olivecrona, K. (1971). *Law as fact* (2nd ed.). London: Stevens & Sons.
- Posner, R.A. (2006). Reasoning by analogy. *Cornell Law Review*, 91, 761-774
- Radin, M. (1925). The theory of judicial decision: Or how judges think. *American Bar Association Journal*, 11, 357-362
- Raz, J. (1979). *The authority of law: Essays on law and morality*. Oxford: Clarendon Press.
- Robinson, P.H., & Spellman, B.A. (2005). Sentencing decisions: Matching the decisionmaker to the decision nature. *Columbia Law Review*, 105, 1124-1161
- Ross, A. (1958). *On law and justice*. Berkeley, CA: University of California Press.
- Roe v. Wade*, 410 U.S. 113 (1973)
- Rowland, C.K., & Carp, R.A. (1996). *Politics and judgment in federal district courts*.

- Lawrence, KS: University Press of Kansas.
- Rumble, W.E. (1968). *American legal realism: Skepticism, reform, and the judicial process*. Ithaca, NY: Cornell University Press.
- Schauer, F. (1988). Formalism. *Yale Law Journal*, 97, 509-548
- Schauer, F. (1987). Precedent. *Stanford Law Review*, 39, 571-605
- Schauer, F. (1991). *Playing by the rules: A philosophical examination of rule-based decision-making in law and in life*. Oxford: Clarendon Press.
- Schauer, F. (1992). The practice and problems of plain meaning. *Vanderbilt Law Review*, 45, 715-741
- Schauer, F. (2003). *Profiles, probabilities, and stereotypes*. Cambridge, MA: Harvard University Press.
- Schauer, F. (2004). The limited domain of the law. *Virginia Law Review*, 90, 1909-1956
- Schauer, F. (2004). Judicial supremacy and the modest constitution. *California Law Review*, 92, 1045-1067
- Schauer, F. (2004). The generality of law. *West Virginia Law Review*, 107, 217-238
- Schauer, F. (2006a). Do cases make bad law? *University of Chicago Law Review*, 73, 883-918.
- Schauer, F. (2006b). On the supposed jury-dependence of evidence law. *University of Pennsylvania Law Review*, 155, 165-202.
- Schauer, F. (2007). Why precedent in law (and elsewhere) is not totally (or even substantially) about analogy. Kennedy School of Government Working Paper RWP07-036.
- Segal, J.A., & Spaeth, H.J. (1996). The influence of stare decisis on the votes of United States Supreme Court justices. *American Journal of Political Science*, 40, 971-1003
- Segal, J.A., & Spaeth, H.J. (2002). *The Supreme Court and the attitudinal model revisited*. New York: Cambridge University Press.
- Shapiro, S. (1998). The difference that rules make. In Bix B. (Ed.), *Analyzing law: New essays in legal theory* (pp. 33-52). Oxford: Clarendon Press.
- Sherry, Suzanna. (2007). Democracy and the death of knowledge. *University of Cincinnati Law*

- Review*, 75, 1053-1069
- Sherwin, E. (1999). A defense of analogical reasoning in law. *University of Chicago Law Review*, 66, 1179-1197
- Simon, D. (1998). A psychological model of judicial decision making. *Rutgers Law Review*, 30, 1-142
- Simon, D. (2002). Freedom and constraint in adjudication: A look through the lens of cognitive psychology. *Brooklyn Law Review*, 67, 1097-1139
- Simon, D. (2004). A third view of the black box: Cognitive coherence in legal decision making. *University of Chicago Law Review*, 71, 511-586
- Simon, D., Krawczyk, D.C., & Holyoak, K.J. (2004). Construction of preferences by constraint satisfaction. *Psychological Science*, 15, 331-336.
- Solum, L. (1988). The virtues and vices of a judge: An Aristotelian guide to judicial selection. *Southern California Law Review*, 61, 1735-1756
- Spellman, B.A. (2004). Reflections of a recovering lawyer: How becoming a cognitive psychologist – an (in particular) studying analogical and causal reasoning – changed my views about the field of psychology and law. *Chicago-Kent Law Review*, 79, 1187-1214
- Spellman, B.A. (2007). On the supposed expertise of judges in evaluating evidence. *University of Pennsylvania Law Review PENNumbra*, 156, 1-9, at <http://www.pennumbra.com/issues/articles/155-1/Spellman.pdf>.
- Spellman, B.A., & Holyoak, K. (1996). Pragmatics in analogical mapping. *Cognitive Psychology*, 31, 307-346
- Sunstein, C. (1999). *One case at a time: Judicial minimalism on the Supreme Court*. Cambridge, MA; Harvard University Press.
- Sunstein, C. (1996). *Legal reasoning and political conflict*. New York: Oxford University Press.
- Sunstein, C., & Ullman-Margalit, E. Second-order decisions. *Ethics*, 110, 5-26
- Twining, W. (1973). *Karl Llewellyn and the realist tradition*. London: Weidenfeld & Nicolson.
- Ulman, J.N. (1933). *A judge takes the stand*. New York: Alfred A. Knopf, Inc.

United States v. Locke, 471 U.S. 84 (1985).

Vandevelde, K.J. (1996). *Thinking like a lawyer: An introduction to legal reasoning*. Boulder, CO: Westview Press.

Wambaugh, E. (1894). *The study of cases* (2nd ed.). Boston: Little, Brown.

Wasserstrom, R. (1961). *The judicial decision: Toward a theory of legal justification*. Stanford, CA: Stanford University Press.

Weinreb, L. (2005). *Legal reason: The use of analogy in legal argument*. New York: Cambridge University Press.

Wistrich, A.J., Guthrie, C., & Rachlinski, J.J. (2005). Can judges ignore inadmissible information?: The difficulty of deliberately disregarding. *University of Pennsylvania Law Review*, 153, 1251-1345