THE FUTILITY OF APPEAL: DISCIPLINARY INSIGHTS INTO THE "AFFIRMANCE EFFECT" ON THE UNITED STATES COURTS OF APPEALS

CHRIS GUTHRIE* & TRACEY E. GEORGE**

I. INTRODUCTION

The judicial function is a vast human practice that can be usefully examined from social, political, philosophical, economical, psychological and other theoretical paradigms. No single perspective is capable of capturing judging comprehensively. . . . Thus, rather than compete for theoretical dominance, scholars should be encouraged to pursue each and every avenue capable of enhancing our understanding of the complex and vital practice of judicial decision making.[1]

---

   * Associate Dean for Academic Affairs & Professor of Law, Vanderbilt University Law School. B.A., Stanford University, 1989; Ed.M., Harvard Graduate School of Education, 1991; J.D., Stanford Law School, 1994.

   ** Professor of Law, Vanderbilt University Law School; Ph.D. Student, Washington University. B.A. & B.S., Southern Methodist University, 1989; J.D., Stanford Law School, 1992.

   1. Dan Simon, *A Psychological Model of Judicial Decision Making*, 30 RUTGERS L.J. 1, 32 (1998); *see also* Elinor Ostrom, *Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework*, *in* THEORIES OF THE POLICY PROCESS 35 (Paul A. Sabatier ed., 1999).

> Because regularized human behavior occurs within a wide diversity of rule-ordered situations that share structural features . . . there is no single discipline that addresses all questions important for the study of human institutions. Understanding the kinds of strategies and heuristics that humans adopt in diverse situations is enhanced by the study of anthropology, economics, game theory, history, law, philosophy, political science, psychology, public administration, and sociology.

Id. at 38.

Imagine a federal case on appeal about which you know nothing—not the parties, not the issue in dispute, not the court ruling below, nothing. Suppose the case is being decided by the United States Supreme Court. If this is all you know about the case, what prediction would you make about its outcome? Now suppose, instead, that the case is being decided by a panel of circuit judges on the United States Courts of Appeals. You do not know the particular judges on the panel, nor do you even know the circuit where the case is being heard. If all you know about the case is that a three-judge panel in one of the circuits is hearing the case, what prediction would you make about its outcome?

Even if you are only a casual observer of the federal courts, you would probably predict that the Supreme Court would *reverse* but that the court of appeals would *affirm*. More often than not, you would be right. Reversals are a defining feature of the Supreme Court: over the last decade, the Supreme Court *reversed* 64% of the cases it heard.[2] Affirmances are a defining feature of the courts of appeals: the courts of appeals *affirmed* 90% of the cases they decided during the same period.[3]

In a system in which the highest appellate court seldom affirms, why do the lower appellate courts routinely do so? What, in other words, accounts for this "affirmance effect"[4] in the United States Courts of Appeals? Consistent with Dan Simon's observation that appellate judging "can be usefully examined from social, political, philosophical, economical, psychological and other theoretical paradigms,"[5] we use insights from multiple disciplines in this Article to explore why the courts of appeals so often affirm and so seldom reverse. We begin in Part II by offering a statistical overview of the affirmance effect. In Part III, we use political science to develop two theoretical explanations (a sincere-rational-actor account and a strategic-rational-actor account) for this phenomenon and psychology and behavioral economics to develop a third explanation (a bounded-rationality account). We conclude that each of these accounts sheds some light on this question, but none of them is capable of providing a definitive answer. We thus echo Simon's sentiment that "scholars should be en-

---

2. *See* LEE EPSTEIN ET AL., THE SUPREME COURT COMPENDIUM: DATA, DECISIONS, AND DEVELOPMENTS 228-29 tbl.3-6 (3d ed. 2003) (reporting disposition for 1994 through 2001 Terms); Thomas C. Goldstein, *Statistics for the Supreme Court's October Term 2002*, 72 U.S.L.W. 3078, 3078 (July 15, 2003) [hereinafter Goldstein, *2002 Term Statistics*]; Thomas C. Goldstein, *Statistics for the Supreme Court's October Term 2003*, 73 U.S.L.W. 3045, 3046 (July 31, 2004) [hereinafter Goldstein, *2003 Term Statistics*].

3. The courts of appeals data in this paper are drawn primarily from the *Annual Reports of the Administrative Office of the United States Courts.*

4. *See* Kevin M. Clermont & Theodore Eisenberg, *Litigation Realities*, 88 CORNELL L. REV. 119, 150 (2002) (using the term "affirmance effect").

5. Simon, *supra* note 1, at 32.

couraged to pursue each and every avenue capable of enhancing our understanding"[6] of why appellate judges do what they do.

II. THE AFFIRMANCE EFFECT

The American federal judicial system has thirteen intermediate appellate courts[7] staffed by 179 active judges[8] and one court of last resort with nine Justices.[9] The courts of appeals handle the lion's share of the system's appellate work; last year, for instance, they reviewed more than 27,000 trial court decisions in the twelve general jurisdictions (circuits numbered one through eleven plus D.C.) and one specialized jurisdiction (the Federal Circuit).[10] By contrast, the Supreme Court granted review to fewer than eighty out of the thousands of requests presented in the October 2003 Term.[11] But, if your writ is granted by the Court, then you are almost assured of a victory: the Justices affirmed only twenty-two of the eighty cases they heard, or a mere 28%.[12] By contrast, the circuit courts affirmed nearly 91% of the 27,000-plus rulings reviewed during the same time.[13] Figures 1a and 2 show the affirmance rates and caseloads for the courts of appeals and Supreme Court respectively.

FIGURE 1A

CIRCUIT COURT CASELOAD AND AFFIRMANCE RATES: 1946-2003
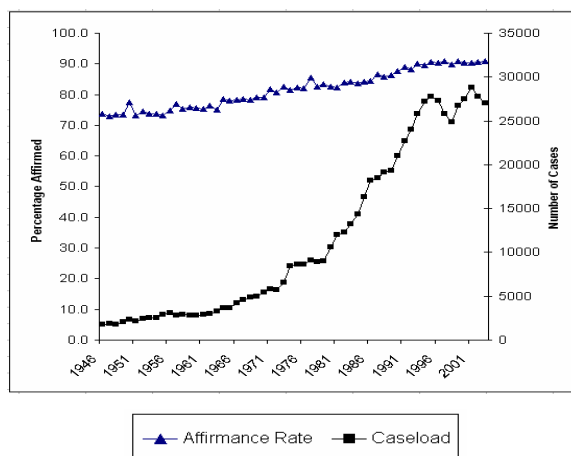
6.   *Id.*

7.   *See* 28 U.S.C. § 41 (2000).

8.   *See id.* § 44.

9.   *See id.* § 1.

10.   *See* 2003 DIR. ADMIN. OFF. U.S. CTS. ANN. REP. 34 tbl.S-1 [hereinafter ANNUAL REPORT], *available at* http://www.uscourts.gov/judbus2003/tables/s1.pdf (last visited Oct. 14, 2004).

11.   Goldstein, *2003 Term Statistics*, *supra* note 2, at 3046.

12.   *Id.*

13.   ANNUAL REPORT, *supra* note 10, at 27 tbl.B-5, 34 tbl.S-1 (presenting data for the October 2002 Term), *available at* http://www.uscourts.gov/judbus2003/contents.html (last visited Oct. 14, 2004).

FIGURE 2

SUPREME COURT CASELOAD AND
AFFIRMANCE RATES: 1946-2003 TERMS
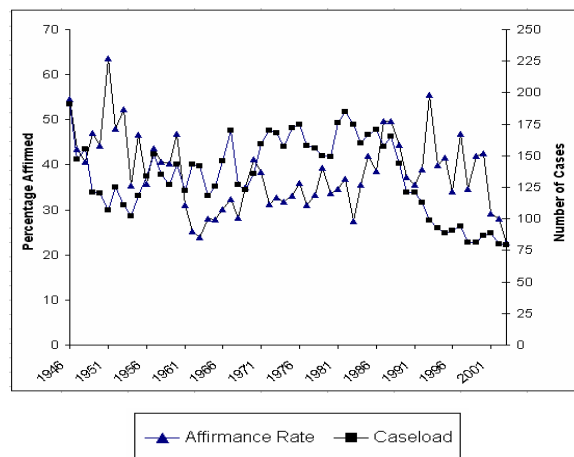
The Supreme Court's affirmance rate remained fairly steady during the last half-century, dipping below 50% only four times s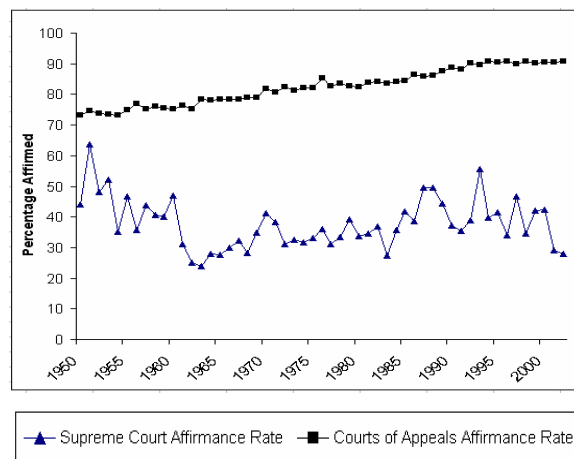ince the 1946 Term, as reflected in Figure 2. The circuit rate, by contrast, has seen a steady rise over the last half-century, from 72% in 1945 to 82% in 1975 to nearly 91% in 2003. Figure 3 combines both rates on a single graph to highlight the difference.

FIGURE 3

AFFIRMANCE RATES: SUPREME COURT AND CIRCUIT COURTS

The courts of appeals' treatment of lower court decisions reveals interesting characteristics when subjected to closer scrutiny. First,

the circuit affirmance rate appears to rise with caseload, as can be seen in Figure 1b (in which the vertical axes from Figure 1a have been adjusted to the minimum and maximum values of each variable). Indeed, the rate of affirmances is strongly and positively associated with the number of cases: the Pearson correlation, a statistical measure of association, is .95 (on an absolute scale of 0 to 1).[14] Thus, a 9500-case increase in caseload corresponds to about a 6% increase in affirmance rate.[15] If this relationship sounds unimpressive, keep in mind that the circuit docket has increased tremendously (more than tenfold from 1946 to present) while the affirmance rate moves more slowly (the proportion of affirmed cases has not even doubled). These two phenomena may be related in any number of ways: one may be a cause of the other or both may be the product of other forces. These simple statistics only give us an initial sense of some possible relationship.

FIGURE 1B

ADJUSTED GRAPHS: 1946-2003
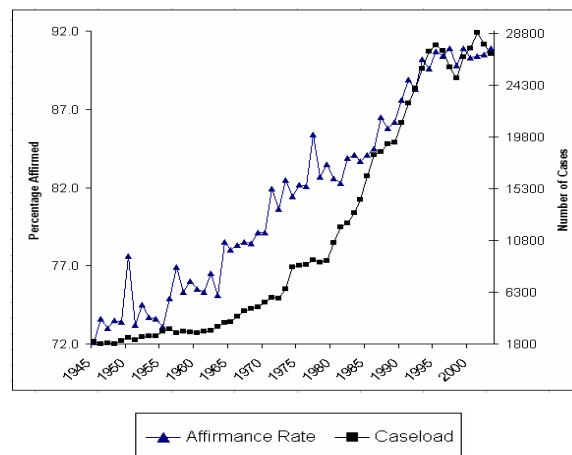
The circuit affirmance rate also appears related to whether the ruling is published.[16] Historically, practically all circuit opinions were printed in the Federal Reporter.[17] But, beginning in the 1960s and

---

14.   This is the Pearson correlation, chosen because it is a standardized measure and thus is not dependent on the units of measurement. Caseload is measured in individual cases while affirmance rate is measured in percentage points.

15.   That is, a one standard deviation increase in caseload is associated with a .95 standard deviation increase in reversal rate.

16.   *Cf.* Keith H. Beyler, *Selective Publication Rules: An Empirical Study*, 21 LOY. U. CHI. L.J. 1, 31 (1989) (reporting the same finding for Illinois state appellate courts).

17.   In 1964, the United States Judicial Conference recommended that courts of appeals publish "only those opinions which are of general precedential value." 1964 DIR. ADMIN. OFF. U.S. CTS. ANN. REP. 11, *reprinted in* 1962-1964 REPORTS OF THE PROCEEDINGS

picking up speed after 1973, circuit courts began to issue some opinions without publishing them.[18] The number of unpublished opinions has increased every year since.[19] We set forth below the affirmance rate in published opinions for three time periods from 1946 to 1988, as calculated by Songer, Sheehan, and Haire using the U.S. Courts of Appeals Data Base sample.[20] We are unaware of any available data on affirmance rate in unpublished opinions; however, we can infer that it is much higher by comparing the rate in published opinions to the rate in all merits decisions. When publication remained common practice (1946-1960), the two rates are essentially the same.[21] But the rates diverge as fewer opinions are published.

TABLE 1

RATE OF AFFIRMANCE IN PUBLISHED OPINIONS COMPARED TO ALL MERITS DECISIONS

TIME PERIOD	PUBLISHED OPINION[22] AFFIRMANCE RATE	ALL MERITS DECISIONS AFFIRMANCE RATE
1946-60	73.5%	74.6%
1961-69	74.3%	77.5%
1970-88	69.2%	83.0%

Finally, the courts of appeals have consistently been less receptive to criminal appellants than to civil ones. This is perhaps not surprising: the relative cost of appeal is lower for convicted defendants than for losing civil parties. Every year since 1946, the affirmance rate for criminal appeals has been higher than for civil appeals, ranging from

OF THE JUDICIAL CONFERENCE OF THE UNITED STATES. Prior to that time, the Federal Reporter contained every opinion.

18. In 1973, the United States Judicial Conference directed the circuits to develop local rules for selective publication. COMM. ON USE OF APPELLATE ENERGIES, ADVISORY COUNCIL ON APPELLATE JUSTICE, STANDARDS FOR PUBLICATION OF JUDICIAL OPINIONS 3 (1973).

19. *See* William L. Reynolds & William M. Richman, *An Evaluation of Limited Publication in the United States Courts of Appeals: The Price of Reform*, 48 U. CHI. L. REV. 573, 587 tbl.2 (1981) (finding a 38.3% publication rate for decisions in 1979); *see also* Martha J. Dragich, *Will the Federal Courts of Appeals Perish if They Publish? Or Does the Declining Use of Opinions to Explain and Justify Judicial Decisions Pose a Greater Threat?*, 44 AM. U. L. REV. 757, 761-62 (1995).

20. *See* DONALD R. SONGER ET AL., CONTINUITY AND CHANGE ON THE UNITED STATES COURTS OF APPEALS 105 tbl.5.1 (2000).

21. The difference may be the product of a small number of unpublished opinions or, more likely, of error—the standard error in the Songer sample or the clerk reporting error in the population number, or both.

22. The published opinion number is based on the U.S. Courts of Appeals Data Base sample. *See* SONGER ET AL., *supra* note 20, at 105 tbl.5.1 (reporting reversal rate in a *sample* of published opinions).

roughly 87% to 99%.[23] The proportion of criminal cases on the circuits' docket has varied over time, experiencing an extended spike following key defendant's rights rulings by the Warren Court. But the affirmance rate is only weakly positively correlated with the relative number of criminal cases on the docket. As with caseload and publication, the fact that a case is criminal gives us some information about whether it is likely to be affirmed. That said, the fact remains that the circuit affirmance rate is high even for civil cases, published cases, and in years with shrinking caseloads.

III.   THEORETICAL ACCOUNTS OF THE AFFIRMANCE EFFECT

The high affirmance rate on the U.S. Courts of Appeals is puzzling. The dominant model of litigation behavior—the "selection model"[24]—only adds to the puzzle. Analyzing litigants rather than judges,[25] George Priest and Benjamin Klein posit that litigants (in the civil justice system anyway) are rational actors seeking to maximize their outcomes.[26] When deciding whether to go forward with adjudication or to settle a dispute, litigants compare the expected value of adjudication to the actual value of settlement. Most cases will settle (even on appeal) because litigants can generally save money by doing so. The cases that fail to settle are those in which the litigants develop "divergent expectations" about the likely outcome in court, and this is most likely to occur in close cases where the court could come out either way. Because there is no reason to expect close cases to favor one side or the other, selection theory suggests that the affirmance rate in the courts of appeals should be about 50%. Kevin Clermont and Ted Eisenberg explain the logic of this account as follows:

> The usual brand of case-selection theory says that appeals should act like trials. Appeals that clearly favor either the appellant or the appellee would tend to be settled readily, because both sides could save costs by so acting in light of their knowledge of all aspects of the case. Difficult appeals falling close to the applicable decisional criterion would tend not to settle, because the parties

---

23.   For affirmance rates from 1946 to 1984, refer to Table B-1 of each *Annual Report of the Director of the Administrative Office of the United States Courts* released in that period. *See* source cited *supra* note 17. For affirmance rates from 1985 to 2003, refer to Table B-5 of each *Annual Report of the Director of the Administrative Office of the United States Courts* released in that period. *See* source cited *supra* note 17. The annual reports from 1997 to 2003 are also available on the World Wide Web at http://www.uscourts.gov/judbususc.judbus.html (last visited Oct. 19, 2004).

24.   *See generally* George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

25.   Frank Cross refers to selection theory and others of its type as "litigant-driven" theories of decisionmaking. Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CAL. L. REV. 1457, 1490-91 (2003).

26.   Priest & Klein, *supra* note 24, at 4.

would be more likely to disagree substantially with respect to their predicted outcomes. These unsettled, difficult appeals entailing divergent expectations would fall more or less equally on either side of the decisional criterion, regardless of both the position of that criterion and the underlying distribution of cases. Case selection, then, should leave for appellate adjudication a residue of appeals exhibiting some nonextreme affirmance rate. Indeed, under simplifying assumptions, and as a limiting implication, case-selection theorizing would even predict a 50% affirmance rate.[27]

The affirmance rate in the courts of appeals, even for civil cases alone, is significantly higher than 50%,[28] so selection theory sheds little light on it. Perhaps political science and psychology will be more illuminating.

A. *Political Science Rational-Actor Accounts*

Political scientists who study law and courts do not adhere to a single theory of judicial decisionmaking, but most adopt a (quasi) rational-actor paradigm that is the building block of modern political science. Positive political theorist William Riker explains that the two essential characteristics of the rational-choice model are: "1. Actors are able to order their alternative goals, values, tastes and strategies. This means that the relation of preference and indifference among the alternatives is transitive. . . . 2. Actors choose from available alternatives so as to maximize their satisfaction."[29] Some scholars believe the judge can best be understood as a sincere rational actor (the "attitudinal" model), but others contend the judge is better described as a sophisticated rational actor ("strategic" theory). We offer in the next two subsections a preliminary assessment of how each model might explain the relatively high affirmance rate on the U.S. Courts of Appeals.

1. *Political Behavioralism and the Attitudinal Model*

The dominant political science model of judicial behavior is the attitudinal model, which builds on the early work of Hermann Pritch-

---

27. Clermont & Eisenberg, *supra* note 4, at 150-51 (footnote omitted).

28. *See id.* at 150 (reporting an affirmance rate in federal civil cases of about 80%); *see also* Kevin M. Clermont & Theodore Eisenberg, *Anti-Plaintiff Bias in the Federal Appellate Courts*, 84 JUDICATURE 128 (2000) [hereinafter Clermont & Eisenberg, *Anti-Plaintiff Bias*]; Kevin M. Clermont & Theodore Eisenberg, *Plaintiphobia in the Appellate Courts: Civil Rights Really Do Differ from Negotiable Instruments*, 2002 U. ILL. L. REV. 947.

29. William H. Riker, *Political Science and Rational Choice*, *in* PERSPECTIVES ON POSITIVE POLITICAL ECONOMY 163, 172 (James E. Alt & Kenneth A. Shepsle eds., 1990). Riker is considered by many to be the father of positive political theory. *See generally* WILLIAM H. RIKER, LIBERALISM AGAINST POPULISM: A CONFRONTATION BETWEEN THE THEORY OF DEMOCRACY AND THE THEORY OF SOCIAL CHOICE (1982).

ett[30] and Glendon Schubert.[31] Pritchett and Schubert transformed the study of judicial politics by focusing on *individual* voting *behavior*. The attitudinal model has evolved from a psychology-based perspective[32] to a rational-choice one.[33] The modern attitudinal model posits that judges are goal-oriented actors who, when making decisions, seek to maximize their sincere policy preferences or attitudes. The model generally assumes that the content of judicial opinions is not an accurate measure of judicial attitudes because judges have incentives to veil their true goals or because they are unaware of the underlying causes of their actions, or both.[34] Attitudinal studies have adopted various measures of attitudes, drawing on judicial background and experience, political party of the appointing President, newspaper evaluations, and prior decisions.[35]

---

30. *See generally* C. HERMAN PRITCHETT, THE ROOSEVELT COURT: A STUDY IN JUDICIAL POLITICS AND VALUES, 1937-1947 (1948). Pritchett used simple statistics to evaluate systematically microlevel voting behavior on the Court between 1937 and 1947. For example, he identified distinct liberal and conservative voting blocs through agreement scores (which reflect the percentage rate at which a given Justice votes with another Justice) and revealed ideological preferences by counting votes on particular issues. Pritchett did not present an explanatory model of Supreme Court decisionmaking, but he did provide the basis for the development of the behavioral study of the Supreme Court.

31. *See generally* GLENDON SCHUBERT, THE JUDICIAL MIND: THE ATTITUDES AND IDEOLOGIES OF SUPREME COURT JUSTICES, 1946-1963 (1965) (drawing on the work of social psychologists, Schubert was the first to propose a model of judicial decisionmaking based on Justices' attitudes). Stuart Nagel and John Sprague also wrote groundbreaking work on the subject shortly after the publication of *The Judicial Mind. See generally* STUART S. NAGEL, THE LEGAL PROCESS FROM A BEHAVIORAL PERSPECTIVE (1969); JOHN D. SPRAGUE, VOTING PATTERNS OF THE UNITED STATES SUPREME COURT (1968).

32. *See generally* DAVID W. ROHDE & HAROLD J. SPAETH, SUPREME COURT DECISION MAKING (1976) (expanding on Schubert's model with a construct of attitudes built on the work of psychologist Milton Rokeach).

33. *See generally* JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL (1993) (presenting the best statement and defense of attitudinal theory); JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED (2002).

34. Attitudinal scholars have considered the role of legal doctrine as a limiting or guiding force in decisionmaking. *See, e.g.*, Tracey E. George & Lee Epstein, *On the Nature of Supreme Court Decision Making*, 86 AM. POL. SCI. REV. 323 (1992); Jeffrey A. Segal, *Predicting Supreme Court Cases Probabilistically: The Search and Seizure Cases, 1962-1981*, 78 AM. POL. SCI. REV. 891 (1984).

35. *See, e.g.*, Sheldon Goldman, *Voting Behavior on the United States Courts of Appeals, 1961-1964*, 60 AM. POL. SCI. REV. 374 (1966); Sheldon Goldman, *Voting Behavior on the United States Courts of Appeals Revisited*, 69 AM. POL. SCI. REV. 491 (1975) (using a variety of social background variables including age, gender, race, prior employment, religion, and political party to explain circuit judges' votes); Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999*, 10 POL. ANALYSIS 134 (2002) (estimating ideal points for the Justices on the U.S. Supreme Court using voting data); Jeffrey A. Segal & Albert D. Cover, *Ideological Values and the Votes of U.S. Supreme Court Justices*, 83 AM. POL. SCI. REV. 557 (1989) (measuring judicial ideology based on the content of editorials written about a Supreme Court candidate after presidential nomination and before Senate confirmation); Jeffrey A. Segal et al., *Ideological Values and the Votes of U.S. Supreme Court Justices Revisited,* 57 J. POL. 812 (1995) (expanding the Segal and Cover scores to include Bush, Roose-

Appellate judges who seek single-mindedly to make decisions consistent with their policy preferences would vote to affirm every lower court ruling with which they agree. This forecast seems inconsistent with the observed difference in the affirmance rates between the Supreme Court and the courts of appeals unless circuit judges and district judges are much more likely to concur than Supreme Court Justices and circuit judges. If that is true, then Supreme Court Justices must disagree nearly as frequently with district judges as they do with circuit judges since the two sets of lower court judges are in apparent accord. However, there is some evidence that the Supreme Court is more likely to reverse a circuit court that has reversed a district court.[36]

This simplistic attitudinal account seems insufficient. We can build a better attitudinal explanation, however, by considering each institution's discretion over its caseload. An attitudinal account would explain the Supreme Court's low affirmance rate by focusing on the Court's agenda-setting power: the Justices enjoy discretionary jurisdiction and thus choose almost all of the cases they hear (except for the small number of original disputes). The Court is more likely to grant certiorari to review lower court decisions that are ideologically inconsistent with the Court's current majority because the Supreme Court acts ideologically, and thus it is more likely to grant certiorari to reverse than to affirm the lower court.[37] That is, the attitudinal model predicts that ideologically conscious Justices grant review and then reverse divergent opinions from the lower courts.

velt, and Truman appointees); C. Neal Tate, *Personal Attribute Models of the Voting Behavior of U.S. Supreme Court Justices: Liberalism in Civil Liberties and Economics Decisions, 1946-1978*, 75 AM. POL. SCI. REV. 355 (1981) (finding that judicial background and appointing President's ideology explained Justices' decisions in civil liberties, civil rights, and economic liberties cases).

36. *See, e.g.*, Gregory A. Caldeira & John R. Wright, *Organized Interests and Agenda Setting in the U.S. Supreme Court*, 82 AM. POL. SCI. REV. 1109 (1988).

37. *See, e.g.,* Virginia C. Armstrong & Charles A. Johnson, *Certiorari Decisions by the Warren & Burger Courts: Is Cue Theory Time Bound?*, 15 POLITY 141, 149 (1982) (finding that the Burger Court was more likely to grant certiorari to liberal appeals from court rulings in civil liberties and economic liberties cases, and the Warren Court was more likely to grant certiorari in conservative economic liberties cases, but not in conservative civil liberties disputes); Robert L. Boucher, Jr. & Jeffrey A. Segal, *Supreme Court Justices as Strategic Decision Makers: Aggressive Grants and Defensive Denials on the Vinson Court*, 57 J. POL. 824, 833 (1995) (examining certiorari and merits votes of Vinson Court Justices from 1946 through 1952 and finding that Justices who voted to reverse a lower court decision were significantly more likely to have voted for certiorari than Justices who voted to affirm); Saul Brenner & John F. Krol, *Strategies in Certiorari Voting on the United States Supreme Court*, 51 J. POL. 828, 832-33 (1989) (concluding, based on a sample of cases from selected terms of the Vinson, Warren, and Burger Courts, that Justices who voted in favor of certiorari were more likely to vote to reverse than Justices who opposed certiorari, and terming such voting behavior an "error correcting strategy").

The Court's recent reduction in its caseload may reflect, in part, the grant-to-reverse effect: the conservative Rehnquist Court majority has found it less necessary to review (and reverse) relatively more conservative decisions by the courts of appeals.[38] Republican Presidents have appointed a majority of sitting Justices: seven of the nine Justices in the current Natural Court, that is, a period without any turnover (1994 to present). And, during most of this period, Republican appointees outnumbered Democratic appointees on the circuits.[39] Thus, the Court continues to reverse more cases than it affirms, but it hears fewer cases because it is so closely ideologically aligned with the circuit courts.[40]

The courts of appeals' *lack* of agenda control, coupled with the ideological alignment of upper and lower court judges, may also explain the circuits' high affirmance rate. In the federal system, the courts of appeals have mandatory jurisdiction over appeals from district courts; thus, they must decide all cases properly brought to them. An attitudinal explanation for the high affirmance rate would be shared policy preferences between circuit and district judges. A quick way to analyze this would be to consider the proportion of circuit and district court judges who are Republican appointees. As reflected in the table below, the ratio of Republican to Democratic appointees on the courts of appeals is similar to that on the district courts. And, indeed, we would expect this to be true over time, as the sitting President appoints judges to the courts at similar rates.

---

38. Frank B. Cross, *The Justices of Strategy*, 48 DUKE L.J. 511, 557-61 (1998) (reviewing LEE EPSTEIN & JACK KNIGHT, THE CHOICES JUSTICES MAKE (1998)).

39. *See* Sheldon Goldman, *Judicial Selection Under Clinton: A Midterm Examination*, 78 JUDICATURE 276, 291 tbl.6 (1995) (reporting composition by appointing President on January 1, 1995); Sheldon Goldman & Elliot Slotnick, *Clinton's First Term Judiciary: Many Bridges to Cross*, 80 JUDICATURE 254, 272 tbl.8 (1997) (reporting composition by appointing President on January 1, 1997); Sheldon Goldman & Elliot Slotnick, *Clinton's Second Term Judiciary: Picking Judges Under Fire*, 82 JUDICATURE 264, 283 tbl.8 (1999) (reporting composition by appointing President on January 1, 1999); Sheldon Goldman et al., *Clinton's Judges: Summing Up the Legacy*, 84 JUDCATURE 228, 253 tbl.8 (2001) (reporting the composition by appointing President on January 1, 2001, which is the only year covered in these biannual reports when Democratic appointees held an edge—though only a slight one—over Republican appointees); Sheldon Goldman et al., *W. Bush Remaking the Judiciary: Like Father like Son?*, 86 JUDICATURE 282, 298 tbl.1 (2003) (reporting composition by appointing President on January 1, 2003). For data reflecting earlier periods, see SONGER ET AL., *supra* note 20, at 31 tbl.2.1. For data on court composition by party of appointing President, see INDEPENDENT JUDICIARY, ALLIANCE FOR JUSTICE, THE NOMINATION PROCESS: THE COURTS, *at* http://www.independentjudiciary.org/courts/ (last visited Oct. 10, 2004) (listing current composition by circuit).

40. The Rehnquist Court's affirmance rate has been higher, on average, than the two prior Courts. Only in the last three Terms has the Court's affirmance rate dropped to the Warren era lows. This may also reflect the level of accord between the higher and lower appellate courts. *See* Jeffrey A. Segal & Harold J. Spaeth, *Rehnquist Court Disposition of Lower Court Decisions: Affirmation Not Reversal*, 74 JUDICATURE 84, 86 (1990) (observing that initially the Rehnquist Court affirmed a higher proportion of cases than the Warren and Burger Courts and examining possible explanations).

TABLE 2

COMPARISON OF CIRCUIT AND DISTRICT COURT COMPOSITION, 2003[41]

		DEMOCRATIC APPOINTEES	REPUBLICAN APPOINTEES	PERCENTAGE REPUBLICAN
ALL CIRCUITS	CIRCUIT	65	84	56.4%
	DISTRICT	310	341	52.4%

We can consider the relationship between affirmance rate and court composition by looking at circuits separately. Some circuits are much more likely to reverse than others: The Second Circuit disagreed with district courts in about 1% of its cases last term, whereas the D.C. Circuit differed with districts courts in nearly 15% of cases. Likewise, the composition of circuits varies: Republican Presidents appointed 80% of active Eighth Circuit judges, but only 35% of Ninth Circuit judges. If our attitudinal hypothesis is correct, we would expect a statistical relationship between *relative* court composition (district as compared to circuit) and the reversal rate for the twelve general jurisdiction circuits.

Figure 4 presents circuit reversal rates and the relative ideology of the courts (as measured by party of appointing President). A quick look at the graphs would seem to reveal a relationship between a circuit's likelihood of disagreeing with district judges and the difference between the circuit and district courts' composition.

FIGURE 4

RELATIVE COURT COMPOSITION VERSUS REVERSAL RATE, 2003

■ Difference in Republican Appointees on District and Circuit   □ Reversal Rate

---
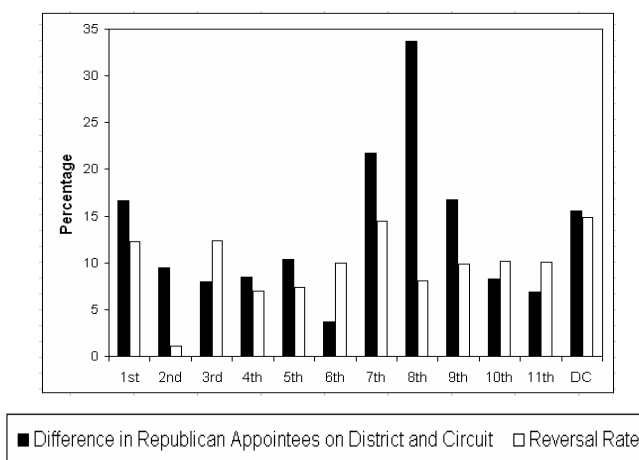
41.   Federal Judicial Center, *Judges of the United States Courts*, *at* http://www.fjc.gov/ history/home.nsf (last visited Mar. 8, 2005) (providing biographical information about federal judges who have served from 1789 through the present).

While ideological distance (as measured by composition) and reversal rate are positively correlated (as we expected), the correlation between the two variables is low: only 0.18 (perfect positive correlation, of course, would be 1).[42] This result may be driven by the outlier case of the Eighth Circuit. The Eighth Circuit has the largest difference between the percentage of Republican circuit and district appointees (34%), but one of the lowest reversal rates (8%). If we remove the Eighth Circuit, the correlation coefficient for the remaining circuits increases to 0.47. Thus, a one unit increase in the difference in court composition is associated with a .47 increase in the reversal rate.

The attitudinal model, then, might explain the relative difference in the Supreme Court's and courts of appeals' affirmance rates by focusing on their agenda-setting power. An appellate court with discretionary jurisdiction generally does not review cases with which it agrees because the judges are satisfied with the lower court decision. Thus, the court can focus on decisions with which it disagrees. An appellate court with mandatory jurisdiction does not have that option and must review all cases.

State courts may offer richer data to test this hypothesis. Forty-one states have two levels of appellate courts.[43] There are many patterns of discretionary and mandatory appellate jurisdiction in those states.[44] An empirical study of affirmance rates in those state courts could control for the relative importance of agenda-setting power (as well as other factors such as judicial selection method). We are unaware of any published scholarship that does so.

2. New Institutionalism and the Strategic Model

Increasingly, judicial scholars focus on institutional influences on judicial decisions as part of a general movement in political science termed "new institutionalism."[45] Strategic theories of judicial behavior adopt the attitudinal position that judges or justices seek to achieve policy goals, but in order to attain their policy preferences, they consider the preferences and likely actions of other relevant ac-

---

42. We calculated the linear association between the two variables using a simple correlation coefficient. We did not use the standardized coefficient (Pearson) because the two variables share the same units of measurement.

43. *See* NAT'L CTR. FOR STATE COURTS, STATE COURT CASELOAD STATISTICS, 2003, at 7-59 (2004) (charting every state's judicial system), http://www.ncsconline.org/D_Research/csp/2003_Files/2003_SCCS.html (last visited Oct. 10, 2004).

44. *See id.*; NAT'L CTR. FOR STATE COURTS, *A Taxonomy of Appellate Court Organization*, *in* CASELOAD HIGHLIGHTS: EXAMINING THE WORK OF THE STATE COURTS (1997).

45. *See generally* James G. March & Johan P. Olsen, *The New Institutionalism: Organizational Factors in Political Life*, 78 AM. POL. SCI. REV. 734 (1984) (heralding a "return" in political science to a consideration of the role of institutional structures and features in political behavior generally).

tors.[46] Leading proponents of this model, Forrest Maltzman, James Spriggs, and Paul Wahlbeck, explain that "strategic" refers to the fact that "justices' choices [are] shaped, at least in part, by the preferences and likely actions of other relevant actors."[47] Hence, strategic theorists emphasize the influence of institutional factors, such as interactions with colleagues on the Court (internal dynamics) or reactions of other institutional actors, most notably Congress and the President (exogenous constraints).

In order to understand why a judge votes to affirm (or reverse), a strategic theorist would contend that we need to know more than the ideological composition of the circuit and district courts. We also need to understand the relevant institutional forces in order to model the phenomenon. A strategic story would model a panel's decision to affirm as the product of individual judges' votes, which in turn are influenced by the other members of the panel and the circuit, the prior and anticipated actions of lower court judges, and the possible reaction of the Supreme Court.

A circuit judge would consider the power of those above her in the judicial hierarchy. For example, a panel's ruling is more likely to be reheard en banc and to be reviewed by the Supreme Court if the panel reverses the lower court (though the absolute probability remains low). Thus, an individual judge would consider that risk (though chances are numerically small, the cost is high) when deciding whether to vote in favor of reversal. This works against reversal.

A circuit judge also would consider her power to control those below her in the judicial hierarchy. The appeals courts' only means of disciplining district courts is reversal. Thus, it would seem necessary to reverse with some frequency to deter shirking by district judges. This works in favor of reversal. However, the district judges may be constrained because (1) they aspire to promotion and thus are reverse-averse, (2) they share common views with the courts of appeals (the attitudinal explanation), or (3) the costs of reversal in terms of reputational loss and additional workload mean the predicted loss is surprisingly high. Thus, a district judge's incentives, which are known to circuit judges, may mitigate against the need for frequent reversal.

---

46. *See, e.g.*, LEE EPSTEIN & JACK KNIGHT, THE CHOICES JUSTICES MAKE 9-18 (1998) (presenting the leading strategic account of the Supreme Court); WALTER F. MURPHY, ELEMENTS OF JUDICIAL STRATEGY 31-36 (1964) (offering one of the first judicial theories built on the collective nature of appellate courts).

47. *See* Forrest Maltzman et al., *Strategy and Judicial Choice: New Institutionalist Approaches to Supreme Court Decision-Making, in* SUPREME COURT DECISION-MAKING: NEW INSTITUTIONALIST APPROACHES 43, 47 (Cornell W. Clayton & Howard Gillman eds., 1999). *See generally* FORREST MALTZMAN ET AL., CRAFTING LAW ON THE SUPREME COURT: THE COLLEGIAL GAME (2000).

A strategic explanation of the Supreme Court's very low affirmance rate does not directly conflict with the attitudinal explanation, but it does reveal a more complex process and also addresses one conundrum of the attitudinal explanation. Since the Supreme Court is formally at the apex of the judicial pyramid, the Court's decisions can be conceptualized as a principal directing (or attempting to direct) its agents: the lower courts.[48] In this model, Supreme Court Justices, seeking to advance their own policy preferences, will utilize certiorari review to monitor the activities of the agents, namely courts of appeals judges applying Supreme Court doctrine. If the Supreme Court uses certiorari primarily as a means of controlling recalcitrant circuits, it should reverse most of the decisions that it reviews, and in fact, it does.[49]

The foregoing explanation predicts the same outcome as the attitudinal model. Thus, it would be impossible to test empirically the relative explanatory value of each. However, the strategic account does overcome one shortcoming in the sincere-rational-actor story. The attitudinal explanation ignores the fact that only four votes are required to grant certiorari under the informal "Rule of Four."[50] Thus, it would seem possible that a four-Justice minority would disagree with a lower court ruling and vote for review, but these Justices would ultimately lose on the merits because they could not gain a fifth vote and the lower court would be affirmed. If this is true, the Supreme Court's reversal rate would be lower when the Court is closely divided ideologically. The current Natural Court (1994-present) appears relatively closely divided: It has decided more than twenty percent of its cases by a one-vote margin.[51] But, its reversal rate has been essentially the same as earlier courts. The reason is that a four-Justice minority will be reticent to favor certiorari although it could do so alone. Justices will behave strategically, refusing to vote for review of a decision if the majority of the Court is likely to affirm, and thereby strengthen the disfavored lower court position.[52]

---

48. *See* Donald R. Songer et al., *The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court-Circuit Court Interactions*, 38 AM. J. POL. SCI. 673, 675 (1994). *See generally* Matt Spitzer & Eric Talley, *Judicial Auditing*, 29 J. LEGAL STUD. 649 (2000) (providing a framework for analyzing judicial monitoring of lower courts).

49. For a development and empirical test of this model, see Charles M. Cameron et al., *Strategic Auditing in a Political Hierarchy: An Informational Model of the Supreme Court's Certiorari Decisions*, 94 AM. POL. SCI. REV. 101 (2000).

50. Certiorari requires the vote of only four out of nine Justices, as opposed to the majority vote required to decide a case. For an account of this informal rule of Supreme Court practice, see DAVID M. O'BRIEN, STORM CENTER: THE SUPREME COURT IN AMERICAN POLITICS 207-20 (6th ed. 2000).

51. EPSTEIN ET AL., *supra* note 2, at 224-25 tbl.3-4 (providing statistics for the 1994-2001 Terms); Goldstein, *2002 Term Statistics*, *supra* note 2, at 3079 (reporting five-to-four cases decided by the Supreme Court during the 2002 Term).

52. *See* Gregory A. Caldeira et al., *Sophisticated Voting and Gate-Keeping in the Supreme Court*, 15 J.L. ECON. & ORG. 549, 570-71 (1999).

The strategic theory also can improve on the attitudinal account of the high circuit affirmance rate by considering the relationships within a circuit court and between a circuit and other courts. The principal-agent construct reveals key features of the relationship between the panel and full court, situating the circuit court, as a whole, as the principal that authorizes the panel as the agent to act on its behalf. The circuit bench delegates the resolution of some cases to a given panel. The panel has limited discretion to resolve the disputes assigned to it.[53] The explicit limitation on the panel is circuit precedent in the form of published opinions, but implicit limitations, such as respect for informal circuit norms, also exist.[54] When a circuit learns that a panel has violated any shared expectation about appropriate behavior, the circuit will act to censor the panel.[55] But it is difficult and costly for the circuit to monitor the panel's behavior because of information asymmetries; hence circuit judges will typically rely on "signals"—warning signs—to alert them when a panel has exceeded its authority.[56] The circuit's only formal mechanism of control is en banc review of the panel's decisions.[57]

Circuit courts do not share the Supreme Court's prerogative to select cases for review. Thus, most appeals courts' decisions involve routine examinations of lower court outcomes, primarily using highly deferential standards of review, such as abuse of discretion or plain error.[58] Hence it appears to be a shared expectation of the courts of

---

53. *Cf.* PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATION AND MANAGEMENT 132 (1992); GARY J. MILLER, MANAGERIAL DILEMMAS: THE POLITICAL ECONOMY OF HIERARCHY 49-56 (1992) (explaining the principal's delegation of authority to an agent by way of an incomplete contract which sets forth general, rather than detailed, boundaries on the agent's authority).

54. *See, e.g.*, J. WOODFORD HOWARD, JR., COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM: A STUDY OF THE SECOND, FIFTH, AND DISTRICT OF COLUMBIA CIRCUITS 191-92 (1981) (delineating the development and influence of informal norms and procedures of decisionmaking within circuit courts); *cf.* PETER F. NARDULLI, THE COURTROOM ELITE: AN ORGANIZATIONAL PERSPECTIVE ON CRIMINAL JUSTICE 66 (1978) (explaining how collective efforts by courtroom elites (judges and lawyers) produce shared norms).

55. *See* Steven R. Van Winkle, Dissent as a Signal: Evidence from the U.S. Courts of Appeals, at 3-4 (Aug. 29, 1997) (unpublished manuscript, delivered at the 1997 annual meeting of the American Political Science Association) (on file with author).

56. *See, e.g.*, Songer et al., *supra* note 48, at 674 (describing how "[d]ifficulty in monitoring," "asymmetric information," and "transactions costs" provide agents with the opportunity to reach decisions contrary to the principal's dictates); Van Winkle, *supra* note 55, at 4.

57. Van Winkle, *supra* note 55, at 3 (noting that "[e]n banc review . . . is the only intra-circuit way to enforce the terms of the incomplete contract, ex post, when a violation is suspected").

58. *See, e.g.*, Maurice Rosenberg, *Standards of Review*, *in* RESTRUCTURING JUSTICE: THE INNOVATIONS OF THE NINTH CIRCUIT AND THE FUTURE OF THE FEDERAL COURTS 30, 31 (Arthur D. Hellman ed., 1990) (explaining that in many instances "the court of appeals [is] obliged by established standards to affirm unless, for example, crucial fact findings were not merely in error but clearly so" and, likewise, that "[d]iscretionary rulings [have] to be not merely incorrect, but abusive").

appeals that decisions will affirm lower court rulings. Principal-agent theory would hold that such a strong norm acts as an implicit limitation on the authority of panels. Hence, if a panel reverses a lower court, that panel's decision would violate that limitation. It is relatively easy for nonpanelists to detect violations of the affirmation norm and hence to decide whether to exact the sanction of en banc review on panels that defect from the norm. One recent empirical study found that the en banc court was much more likely to grant certiorari to panels reversing lower courts, holding other factors constant.[59] Thus the strategic theory predicts that low reversal rates become self-reinforcing: Current judges are hesitant to reverse because prior judges did not reverse, and so on.

The circuit-district relationship can also be understood using the principal-agent construct. The courts of appeals enunciate doctrine that is effectuated by district courts. The circuits are not capable of writing decisions sufficiently explicit and broad to allow for only one outcome in a particular dispute. Thus, district judges may make decisions that conflict with those that the courts of appeals would otherwise have made. Circuit and district judges have their own preferences that reflect many factors, including policy goals, legal perspective, professional objectives, and personal desires. If those preferences are congruent, then a district judge will have no incentive to depart from the circuit's preferences. If the preferences are divergent, a judge has an incentive to make a noncomplying ruling.

The appeals courts' obvious mechanism of control over district courts is reversal of their decisions. Likewise, a district judge's decision to make a ruling on her ideal point, rather than the circuit's, will be affected by the availability of sanctions and the probability that she will be caught. That is, a district judge will consider the probability of circuit reversal. Although the likelihood of reversal is relatively small given the courts of appeals' recent practice, the cost of reversal may be perceived as higher than a rational-actor model would dictate. For example, lower court judges who aspire to promotion to a higher court know that their success will depend in part on an evaluation of the number of times they have been reversed. The Federal Judicial Center estimates that between 40% and 60% of court of appeals appointments in the last century were district judges.[60] Because there are almost four times as many district judges as circuit judges, the likelihood that any individual district judge would be promoted is relatively low—estimated by one study to be 6% during the

---

    59.   Tracey E. George, *The Dynamics and Determinants of the Decision to Grant En Banc Review,* 74 WASH. L. REV. 213, 267 (1999).
    60.   Daniel Klerman, *Nonpromotion and Judicial Independence*, 72 S. CAL. L. REV. 455, 460 (1999) (presenting data compiled by the Federal Judicial Center).

1990s.[61] Yet, anecdotal evidence, as well as empirical studies of judicial behavior, suggests that a far greater number of district judges aspire to promotion to the courts of appeals.[62]

B. Boundedly-Rational-Actor Account

The political science accounts of appellate judging assume that judges are rational actors who maximize their preferences when rendering decisions.[63] Whether seeking to comply with governing legal principles, to further their ideological goals, or to increase their chances of promotion, judges maximize.

These rational-actor accounts of judicial behavior assume that judges, like other individuals, fully process all available information, identify each available decision option, carefully calculate the costs and benefits of each, and then select the one that maximizes their preferences.[64] Research conducted by psychologists, behavioral economists, and others over the past three decades calls the assumptions of rational-choice theory into question by demonstrating that individuals often depart from its dictates in systematic and predictable ways. To use Herbert Simon's terminology, individuals are not fully rational actors but instead are "boundedly rational" actors[65] who often rely on "heuristics," or mental shortcuts, to make decisions that are "good enough."[66]

There are two prominent approaches to bounded rationality:[67] the well-known "heuristics and biases" approach[68] (associated largely

---

61. *Id.* at 461.

62. *Id.* at 463 (observing that "[l]awyers are often heard to say that a particular ruling reflects the fact that the judge is 'gunning for the circuit'" and that "[w]hile the average probability of promotion is relatively low, particular judges may perceive it as higher"); *see* RICHARD A. POSNER, OVERCOMING LAW 111-12 (1995) (indicating that the structure of the judicial compensation package discourages judges from seeking promotion outside the judiciary); Mark A. Cohen, *Explaining Judicial Behavior or What's "Unconstitutional" About the Sentencing Commission?*, 7 J.L. ECON. & ORG. 183, 189 (1991) (indicating that judges seek promotions to a higher bench).

63. *See, e.g.*, sources cited *supra* note 29.

64. For an accessible introduction to rational-choice theory in the legal literature, see Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1060-66 (2000).

65. *See* HERBERT A. SIMON, MODELS OF MAN 198-99 (1957). *See generally* HERBERT A. SIMON, REASON IN HUMAN AFFAIRS 19-23 (1983).

66. *See* sources cited *supra* note 65.

67. *See* Gerd Gigerenzer & Peter M. Todd, *Fast and Frugal Heuristics: The Adaptive Toolbox*, *in* SIMPLE HEURISTICS THAT MAKE US SMART 3, 26-27 (Gerd Gigerenzer et al. eds., 1999) [hereinafter SIMPLE HEURISTICS] (observing the connection between the fast-and-frugal program and the "adaptive decision maker" research developed by Payne, Bettman, and Johnson).

68. *See* Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124 (1974) [hereinafter Tversky & Kahneman, *Heuristics*] (introducing the heuristics-and-biases program). Many of the important early works are collected in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel Kahneman et

with Daniel Kahneman and Amos Tversky) and the less familiar "fast and frugal heuristics" approach[69] (associated with Gerd Gigerenzer and his collaborators). Although these two approaches differ from one another,[70] their similarities are greater than their dissimilarities. Most significantly, proponents of both the heuristics-and-biases program and the fast-and-frugal-heuristics program contend that human beings are boundedly rational actors who use heuristics, or mental shortcuts, to make decisions.[71]

Judges, too, are human beings, and like other human beings, judges surely employ heuristics in their own decisionmaking.[72] Indeed, recent studies of *trial judges* have found evidence that heuristics influence decisionmaking on the trial bench;[73] it seems likely that *appellate judges* also use heuristics when making decisions on appeal.

Individuals are perhaps most likely to rely on heuristics when it is taxing to use more deliberative decision processes due to cognitive overload, limited time and attention, and so forth. Circuit court judges, who have substantial caseloads and limited discretion over

---

al. eds., 1982) [hereinafter JUDGMENT UNDER UNCERTAINTY]. Many of the important recent works are collected in HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT (Thomas Gilovich et al. eds., 2002) [hereinafter HEURISTICS AND BIASES].

69. *See, e.g.*, BOUNDED RATIONALITY: THE ADAPTIVE TOOLBOX (Gerd Gigerenzer & Reinhard Selten eds., 1999) [hereinafter ADAPTIVE TOOLBOX]; SIMPLE HEURISTICS, *supra* note 67.

70. First, as noted in the text, the heuristics-and-biases theorists embrace rational choice as a normative model, but the fast-and-frugal theorists do not. Second, and also noted in the text, the heuristics-and-biases researchers tend to dwell on the maladaptive properties of heuristics, while the fast-and-frugal theorists tend to focus on their adaptive properties. Third, the theorists in each camp define and test heuristics in different ways. The fast-and-frugal theorists develop what they call "computational models of heuristics" rather than relying solely on the "vague labels" used by the heuristics-and-biases theorists. Gigerenzer & Todd, *supra* note 67, at 28. Gigerenzer and Todd define a "computational model of a heuristic" as one that "specifies the precise steps of information gathering and processing that are involved in generating a decision, such that the heuristic can be instantiated as a computer program." *Id.* at 16. Fourth, and relatedly, the heuristics-and-biases researchers focus solely on judgment and decisionmaking, *see* sources cited *supra* note 68; the fast-and-frugal theorists focus not only on decision rules but also on rules for searching and stopping search. Gigerenzer & Todd, *supra* note 67, at 16-17.

71. Gigerenzer & Todd, *supra* note 67, at 28 ("Our research program of studying fast and frugal heuristics shares some basic features with the heuristics-and-biases program. Both emphasize the important role that simple psychological heuristics play in human thought, and both are concerned with finding the situations in which these heuristics are employed.").

72. *See, e.g.*, Stephen M. Bainbridge & G. Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does—Boundedly): Rules of Thumb in Securities Fraud Opinions*, 51 EMORY L.J. 83 (2002) (arguing that judges use substantive law doctrinal rules of thumb to simplify decisionmaking in securities cases); Adam J. Hirsch, *Cognitive Jurisprudence*, 76 S. CAL. L. REV. 1331 (2003) (arguing that appellate judges and other lawmakers are boundedly rational); Hillary A. Sale, *Judging Heuristics*, 35 U.C. DAVIS L. REV. 903 (2002) (exploring the use of judge-made heuristics in securities fraud cases).

73. Chris Guthrie et al., *Inside the Judicial Mind*, 86 CORNELL L. REV. 777 (2001) (finding evidence that judicial decisionmaking is influenced by anchoring, framing, hindsight bias, representativeness, and egocentric bias).

the cases they hear, are much more likely to find themselves in this position than Supreme Court Justices, who hear very few cases. Thus, we would expect the heuristics-based account we offer below to shed more light on circuit judge decisionmaking than on Supreme Court Justice decisionmaking.

1. *Heuristics-and-Biases Program*

The heuristics-and-biases program embraces rational choice as a *normative* model of decisionmaking but rejects it as a *positive* model. Relying largely on experimental evidence documenting departures from rational choice, proponents of the heuristics-and-biases program argue that individuals often use heuristics, rather than the complex computations required by rational-choice theory, to make decisions. Because heuristics-and-biases theorists believe individuals *should* decide according to rational-choice theory but observe that they often do not, they worry that heuristics can be maladaptive. They acknowledge that individuals often do well using heuristics, but they are concerned that heuristics can lead individuals astray. Tversky and Kahneman explain that individuals "rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations. In general, these heuristics are quite useful, but sometimes they lead to severe and systematic errors."[74]

The heuristics and biases theorists have identified a number of heuristics that individuals use to make decisions. Initially, Tversky and Kahneman focused their attention on three basic heuristics: availability, representativeness, and anchoring.[75] More recently, Kahneman and his collaborator, Shane Frederick, have argued that the three basic heuristics are availability, representativeness, and the affect heuristic.[76] Nonetheless, most decision researchers in this tradition use the term *heuristics-and-biases* loosely to include several

---

74. Tversky & Kahneman, *Heuristics*, *supra* note 68, at 1124. More recently, Kahneman and his collaborator, Shane Frederick, have explained heuristics as follows:

We will say that judgment is mediated by a heuristic when an individual assesses a specified *target attribute* of a judgment object by substituting another property of that object—the *heuristic attribute*—which comes more readily to mind. . . .

Because the target attribute and the heuristic attribute are different, the substitution of one for the other inevitably introduces systematic biases.

Daniel Kahneman & Shane Frederick, *Representativeness Revisited: Attribute Substitution in Intuitive Judgment*, *in* HEURISTICS AND BIASES, *supra* note 68, at 49, 53.

75. *See* Tversky & Kahneman, *Heuristics*, *supra* note 68.

76. *See* Kahneman & Frederick, *supra* note 74, at 56 ("It has become evident that an *affect heuristic* should replace anchoring in the list of major general-purpose heuristics." (citation omitted)).

mental shortcuts that individuals have been shown to use.[77] This is also true in the legal literature, where scholars writing in the still-emerging field of "behavioral law and economics"[78] use the term *heuristics and biases* to encapsulate a number of phenomena.[79]

Two heuristics seem particularly likely to illuminate the affirmance effect in the U.S. Courts of Appeals: the status quo bias and the omission bias.

(a) Status Quo Bias

The first is the so-called "status quo bias." All other things being equal, individuals tend to prefer an option that is consistent with the status quo rather than one that requires a change from the status quo.[80] The literature includes ample illustrations of status quo bias. Researchers have found, for instance, that consumers given a choice between a highly reliable but more expensive utility (like electric service) and a less reliable but less expensive utility tend to choose whichever is the status quo option.[81] Likewise, when choosing among auto insurance plans,[82] health insurance plans,[83] investment portfolios,[84] or contract terms,[85] most people select the option representing the status quo. Researchers have even used the status quo bias to explain the incumbency effect in American electoral politics. According to Tversky and George Quattrone, "Because it is natural to take the incumbent's policy as the status quo—the reference point to which the challenger's policy is compared—and because losses loom larger than gains, it follows that the incumbent enjoys a distinct advantage."[86] In short, "preferences are shaped, in part, by superficial

---

77. *See, e.g.*, HEURISTICS AND BIASES, *supra* note 68 (containing articles identifying and describing the operation of several different phenomena under the rubric of "heuristics and biases"); JUDGMENT UNDER UNCERTAINTY, *supra* note 68 (same).

78. *See, e.g.*, Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998) (proposing behavioral law and economics as a field).

79. *See, e.g.*, Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U. L. REV. 1165, 1170-73 (2003) (observing that legal scholars have focused primarily on the following five heuristics and biases: representativeness, availability, hindsight bias, anchoring, and self-serving bias).

80. *See* William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7 (1988).

81. *See* Raymond S. Hartman et al., *Consumer Rationality and the Status Quo*, 106 Q.J. ECON. 141, 158-60 (1991).

82. *See* Colin F. Camerer, *Prospect Theory in the Wild: Evidence from the Field, in* CHOICES, VALUES, AND FRAMES 288, 294 (Daniel Kahneman & Amos Tversky eds., 2000).

83. *Id.*

84. Samuelson & Zeckhauser, *supra* note 79, at 12-19.

85. *See* Russell Korobkin, *Inertia and Preference in Contract Negotiation: The Psychological Power of Default Rules and Form Terms*, 51 VAND. L. REV. 1583, 1586 (1998); Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 611 (1998).

86. George A. Quattrone & Amos Tversky, *Contrasting Rational and Psychological Analyses of Political Choice*, 82 AM. POL. SCI. REV. 719, 725-26 (1988).

features of the task," including "which option is labeled 'status quo.'"[87]

With respect to judges, scholars have used the status quo bias to explain *stare decisis*. As Robert Prentice and Jonathan Koehler put it, "American judges adhere to *stare decisis* because it is an inheritance from English tradition and therefore represents the status quo."[88] Moreover, "Judges will often accept the current state, which is represented by precedent, because to do otherwise would require significant cognitive effort."[89] And, as Oona Hathaway observed, "By relying on past decisions, judges can save significant time and effort and thereby consider far more cases than would otherwise be possible. Judges can turn to past analyses and avoid rethinking every aspect of a decision."[90]

Likewise, each case on appeal comes with a status quo position: one party has won a judgment below. All other things being equal, appellate judges may prefer not to disturb the status quo position because the costs of doing so may appear to outweigh the benefits for two reasons. First, changing the status quo by reversing the lower court decision requires the appellate judge to impose a "loss" on a previously victorious litigant; although this means that a losing party below will incur a corresponding "gain," psychological evidence demonstrates that losses are much more aversive than corresponding gains are attractive.[91] Judges are likely to know this intuitively and perhaps even to feel the loss themselves. There is evidence, for example, that judges are susceptible to "loss framing" when supervising litigants in settlement conferences;[92] there is no obvious reason why appellate judges would not be susceptible to the same phenomenon. Second, and more simply, altering the status quo by reversing the lower court decision requires the appellate judge to expend time, attention, and effort on the case that she would not otherwise have to expend. In other words, the path of least resistance is to "turn to

---

87. Robert A. Prentice & Jonathan J. Koehler, *A Normality Bias in Legal Decision Making*, 88 CORNELL L. REV. 583, 598 (2003) (footnote omitted).

88. *Id.* at 638.

89. *Id.* at 639.

90. Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 626 (2001).

91. *Cf.* Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263, 279 (1979) ("The aggravation that one experiences in losing a sum of money appears to be greater than the pleasure associated with gaining the same amount."). Research suggests that losses loom at least twice as large as equivalent gains. *See* Chip Heath et al., *Goals as Reference Points*, 38 COGNITIVE PSYCHOL. 79, 87 (1999) ("Studies of risky choice and riskless choice have presented converging evidence that losses are weighted approximately two times more than equivalent gains . . . ." (citations omitted)).

92. *See* Guthrie et al., *supra* note 73, at 794-97.

[the] past analys[is] and avoid rethinking every aspect of [the] decision."[93]

The status quo bias may play an even more prominent role on courts of appeals due to the phenomenon of "accountability." Phil Tetlock and Richard Boettger have demonstrated in experimental studies that individuals who know they will be held accountable for their decisions are more likely to adhere to the status quo than are those who do not expect to be held accountable.[94] Because individual judges are accountable to the litigants whose fates they determine (as well as to their copanelists, the circuit as a whole, and even the Supreme Court), the status quo bias may have an even greater influence on them.

(b) Omission Bias

Closely related to the status quo bias is the so-called "omission bias." Individuals tend to react more strongly to a result that is the product of an apparent "action" rather than an apparent "inaction."[95] Moreover, an individual "is perceived to be more responsible for outcomes of commissions than for outcomes of omissions"[96] and also to experience more regret as a consequence of an action rather than an omission. Consider the following example tested by Kahneman and Tversky:

> Paul owns shares in Company *A*. During the past year he considered switching to stock in Company *B*, but he decided against it. He now finds that he would have been better off by $1,200 if he had switched to the stock of Company *B*. George owned shares in Company *B*. During the past year he switched to stock in Company *A*. He now finds that he would have been better off by $1,200 if he had kept his stock in Company *B*. Who feels more regret?[97]

George and Paul obtained the same outcome, but most study participants indicated that George would experience more regret than

---

93.   Hathaway, *supra* note 90, at 626; *see also* Adrian Vermeule, *The Judicial Power in the State (and Federal) Courts*, 2000 SUP. CT. REV. 357, 391 ("Judges, like other people, become habituated to and invested in the tasks, activities, and procedures they customarily and repetitively perform. They overestimate the disruption that would arise from switching to new tasks or activities." (footnote omitted)).

94.   Philip E. Tetlock & Richard Boettger, *Accountability Amplifies the Status Quo Effect when Change Creates Victims*, 7 J. BEHAV. DECISION MAKING 1 (1994).

95.   *See, e.g.*, JONATHAN BARON, THINKING AND DECIDING 400-01 (3d ed. 2000); *see also* Marcel Zeelenberg et al., *Attributions of Responsibility and Affective Reactions to Decision Outcomes*, 104 ACTA PSYCHOLOGICA 303, 304 (2000) ("Outcomes achieved through action generally lead to more intense affective reactions than the same outcomes achieved through inaction." (citations omitted)).

96.   Ilana Ritov & Jonathan Baron, *Reluctance to Vaccinate: Omission Bias and Ambiguity*, 3 J. BEHAV. DECISION MAKING 263, 275 (1990).

97.   Daniel Kahneman & Amos Tversky, *The Psychology of Preferences*, 246 SCI. AM. 160, 173 (1982).

Paul.[98] George, not Paul, acted, and actions that turn out poorly induce more negative affect than inactions that turn out poorly.[99]

The omission bias thus induces people not to act, to just "leave things as they are." In the courts of appeals, judges have essentially two choices: they can leave the lower court opinion undisturbed, which is akin to an omission, or they can disturb the lower court opinion by reversing (or reversing and remanding, reversing in part, and so on), which is akin to a commission. Given the omission bias (in conjunction with the status quo bias), it seems reasonable to predict that judges would favor affirmances over reversals. In so doing, they protect themselves psychologically because any negative outcome resulting from the decision is a product of the *trial judge's* action, *not the appellate judge's* inaction. Moreover, the law generally favors omissions over commissions. As Prentice and Koehler put it, "The law favors inaction over action and the usual over the unusual. Existing principles are presumed to be appropriate and are relatively unscrutinized. Old laws that would never receive support if offered anew go unchallenged. When suggestions for change do emerge, they are received skeptically."[100]

2. *Fast-and-Frugal-Heuristics Program*

The fast-and-frugal-heuristics program departs in an even more dramatic way from rational-choice theory. In contrast to the heuristics-and-biases program, which rejects rational-choice theory only on positive grounds, the fast-and-frugal program rejects rational-choice theory as both a positive *and* normative account of decisionmaking.

From a *normative* perspective, the proponents of the fast-and-frugal-heuristics program argue that a decision strategy should be assessed on the basis of its success or failure in real-world environments, not according to whether it complies with the logical and mathematical rules of rational-choice theory.[101] As Gigerenzer and his colleague Peter Todd explain:

> There are no optimal strategies in many real-world environments in the first place. This does not mean, though, that there are no performance criteria in the real world. As a measure of the success

---

98.   *Id.*

99.   *Id.*

100.   Prentice & Koehler, *supra* note 87, at 589-90 (footnotes omitted).

101.   *See* Gigerenzer & Todd, *supra* note 67, at 28 ("The [fast-and-frugal approach] dispenses with the focus on coherence criteria (e.g., the laws of probability) as the yardsticks of rationality. Instead, we study the correspondence-based performance of heuristics in real-world environments, situations where optimal coherent strategies are often not known or not feasible."); Gary Klein, *The Fiction of Optimization, in* ADAPTIVE TOOLBOX, *supra* note 69, at 103, 104 (arguing that "optimization cannot and should not be a gold standard for decision making").

of a heuristic, we compare its performance with the actual requirements of its environment, which can include making accurate decisions, in a minimal amount of time, and using a minimal amount of information. We have thus replaced the multiple coherence criteria stemming from the laws of logic and probability with multiple correspondence criteria relating to real-world decision performance.[102]

From a *positive* perspective, the fast-and-frugal-heuristics theorists reject rational-choice theory on the grounds that it paints an unrealistic picture of how individuals actually make decisions, viewing "the mind as if it were a supernatural being possessing demonic powers of reason, boundless knowledge, and all of eternity with which to make decisions."[103] They propose, instead, a more "psychologically plausible"[104] approach to decisionmaking:

> The goal of the program is to understand how actual humans . . . make decisions, as opposed to heavenly beings equipped with practically unlimited time, knowledge, memory, and other infinite resources. The challenge is to base models of bounded rationality on the cognitive, emotional, social, and behavioral repertoire that a species actually has.[105]

In short, the fast-and-frugal-heuristics theorists claim not only that individuals *do* use heuristics when making decisions but also that they *should* use heuristics because they will obtain good outcomes in a fast and frugal manner. As Gigerenzer and Todd put it, "whereas the heuristics-and-biases program portrays heuristics as a frequent hindrance to sound reasoning, rendering *Homo sapiens* not so sapient, we see fast and frugal heuristics as enabling us to make reasonable decisions and behave adaptively in our environment— *Homo sapiens* would be lost without them."[106]

The fast-and-frugal-heuristics theorists have identified several heuristics that individuals use in real-world environments, including "ignorance-based" heuristics,[107] "one-reason" heuristics,[108] and heuristics that reflect social and cultural forces.[109]

---

102.   Gigerenzer & Todd, *supra* note 67, at 22.
103.   *Id.* at 5.
104.   Gerd Gigerenzer, *The Adaptive Toolbox*, *in* ADAPTIVE TOOLBOX, *supra* note 69, at 37, 38.
105.   *Id.*
106.   Gigerenzer & Todd, *supra* note 67, at 29.
107.   *See generally* Daniel G. Goldstein & Gerd Gigerenzer, *The Recognition Heuristic: How Ignorance Makes Us Smart*, *in* SIMPLE HEURISTICS, *supra* note 67, at 37; Bernhard Borges et al., *Can Ignorance Beat the Stock Market?*, in SIMPLE HEURISTICS, *supra* note 67, at 59.
108.   *See generally* Jean Czerlinski et al., *How Good Are Simple Heuristics?*, *in* SIMPLE HEURISTICS, *supra* note 67, at 97; Gerd Gigerenzer & Daniel G. Goldstein, *Betting on One Good Reason: The Take The Best Heuristic*, *in* SIMPLE HEURISTICS, *supra* note 67, at 75; Laura Martignon & Ulrich Hoffrage, *Why Does One-Reason Decision Making Work? A Case*

(a) Recognition Heuristic

The "recognition heuristic"[110] is an example of an "ignorance-based"[111] heuristic. Applicable only when an individual is attempting to select one of two (or more) options and recognizes only one of those options,[112] the recognition heuristic posits that "[i]f one of two objects is recognized and the other is not, [the individual should] infer that the recognized object has the higher value."[113] For example, researchers asked students from Germany and the United States to indicate which city—San Diego or San Antonio—has a larger population. Surprisingly, 100% of the German students but only 62% of the American students correctly chose San Diego. Why? "All of the German students had heard of San Diego, but many of them did not recognize San Antonio. They were thus able to apply the recognition heuristic and make a correct inference. The American students, recognizing both cities, were not *ignorant* enough to be able to apply the recognition heuristic."[114] Ignorance-based heuristics, like the recognition heuristic, are unlikely to shed much light on the affirmance effect because judges, too, are unlikely to be "ignorant enough" about the matters in front of them to employ these ignorance-based heuristics successfully. However, the recognition heuristic might help explain the so-called "repeat player" effect in court, according to which those entities who appear frequently in court—governments, corporations, insurance companies, and so forth—tend to fare better than those "one-shotters" who appear only once.[115] That is, judges might

---

Study in Ecological Rationality, *in* SIMPLE HEURISTICS, *supra* note 67, at 119; Laura Martignon & Kathryn Blackmond Laskey, *Bayesian Benchmarks for Fast and Frugal Heuristics*, *in* SIMPLE HEURISTICS, *supra* note 67, at 169; and Jörg Rieskamp & Ulrich Hoffrage, *When Do People Use Simple Heuristics, and How Can We Tell?*, *in* SIMPLE HEURISTICS, *supra* note 67, at 141.

    109.   *See generally* ADAPTIVE TOOLBOX, *supra* note 69.

    110.   *See generally* Gigerenzer & Todd, *supra* note 67.

    111.   *See* Goldstein & Gigerenzer, *supra* note 107, at 57.

    112.   *Id.* at 41.

    113.   *Id.* (emphasis omitted).

    114.   *Id.* at 43. Likewise, in another study, researchers asked German and American subjects to make hypothetical stock purchase decisions. *See* Borges et al., *supra* note 107, at 59. Those who followed the recognition heuristic—that is, those who invested in companies whose names they recognized—built portfolios that performed better than others over a six-month period (though this was during a bull market, when one might expect this strategy to perform disproportionally well). *See id.* at 71.

> The impressive performance of recognition-based portfolios was obtained in a strong bull market. We do not yet know how well these results would generalize to other periods, such as a decreasing bear market. One explanation for the recognition heuristic's good performance is that it is picking "big" firms, which are known to do well in up markets.

Id.

    115.   *See generally* Stanton Wheeler et al., *Do the "Haves" Come Out Ahead? Winning and Losing in State Supreme Courts, 1870-1970*, 21 LAW & SOC'Y REV. 403 (1987); Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 LAW & SOC'Y REV. 95 (1974).

make note of the parties (or their counsel) and tend to rule favorably for those whom they have encountered previously. Because those they have encountered previously are likely to fall into the repeat-player category, repeat players might fare better due to this recognition heuristic.

(b) One-Reason Heuristics

The so-called "one-reason" heuristics are only slightly more complicated than the "ignorance-based" heuristics. According to the one-reason heuristics, individuals choose between options based on one salient dimension.[116] Two one-reason heuristics might contribute to the affirmance effect: the "take the first" heuristic and the "take the last" heuristic. Using the take-the-first heuristic[117]—a heuristic that is most appropriate for expert decisionmakers like judges[118]—individuals simply adopt the first course of action that comes to mind.[119] Thus, a judge may simply affirm a case in front of her because that is the decision strategy most likely to occur to her first. The take-the-last heuristic is similar, though it is potentially appropriate for both expert and nonexpert decisionmakers. Using the take-the-last heuristic,[120] individuals simply use the same decision cue they used before to make the decision. Thus, if an appellate judge voted to affirm in a similar prior case, she might simply opt to do the same thing this time around. Neither of these heuristics can account for why judges *initially* decided to affirm because both assume some recollection of prior decision strategies—take-the-last does so explic-

---

116. Gigerenzer, *supra* note 104, at 45 (observing that one-reason heuristics "rely only on one cue to make the decision and ignore all others").

117. *See generally* Daniel G. Goldstein et al., *Group Report: Why and When Do Simple Heuristics Work?*, *in* ADAPTIVE TOOLBOX, *supra* note 69, at 173.

118. *Id.* at 177.

> Take The First is argued to be effective because, for an expert, part of recognizing or categorizing a situation as typical is to recall what to do in that situation. Options generated are not random but may come to mind in order of quality. Take The First is less successful in domains where the decision maker is not an expert or in completely novel situations within a domain of expertise.

Id.

119. *Id.*

> [W]hen faced with a problem to solve, often the best course of action to take is the first (or only) one that comes to mind. The strategy of evaluating solutions as they come to mind, and stopping with the first one that satisfies an aspiration level, is called Take The First.

Id.

120. Gigerenzer & Goldstein, *supra* note 108, at 80.

> [Take-The-Last] uses a heuristic principle for search that draws on a strategy known as an *Einstellung set*. Karl Duncker and other Gestalt psychologists demonstrated that when people work on a series of problems, they tend to start with the strategy that worked on the last problem when faced with a new, similar-looking problem . . . .

Id.

itly and take-the-first does so implicitly because the first thought that occurs to a decisionmaker will often be based on expertise arising from prior experience—but both the take-the-first heuristic and the take-the-last heuristic might help explain the perpetuation of the affirmance effect.

(c) Imitation

Finally, some heuristics are a product of social and cultural factors. As Gigerenzer and Reinhard Selten explain, "Social norms can be seen as fast and frugal behavioral mechanisms that dispense with individual cost-benefit computations and decision making."[121] This means that "[a]daptive solutions can be found with little knowledge; the price for this is that they are not general, but do work in a specific environment, culture, or time."[122]

One such heuristic is the "imitation heuristic,"[123] which is "a fast and frugal strategy that saves an organism from having to extract information from the environment anew, or from calculating from scratch."[124] This heuristic "allow[s] individuals to save the costs of individual learning, experimentation, and search by exploiting the information available in the minds of other individuals."[125] Following such imitation strategies "as 'eat what older and experienced conspecifics eat' or 'prefer mates picked by others' can speed up decision making by reducing the need for direct experience and information gathering."[126]

Using the imitation heuristic, an appellate judge would simply make the same decision that relevant others have made. The judge might defer to what most others confronted with the same decision have decided[127]—for example, the district judge below, other circuits, or other colleagues on the panel—or she might defer to those whom she deems to have greater status than her[128]—for example, other judges in her circuit or in other circuits who have faced the same essential decision. Whether imitating the district judge below or other

---

121. Gerd Gigerenzer & Reinhard Selten, *Rethinking Rationality*, *in* ADAPTIVE TOOLBOX, *supra* note 69, at 1, 10.

122. *Id.*

123. *See generally* Joseph Henrich et al., *Group Report: What Is the Role of Culture in Bounded Rationality?*, *in* ADAPTIVE TOOLBOX, *supra* note 69, at 343.

124. Daniel Goldstein et al., *supra* note 117, at 174.

125. Henrich et al., *supra* note 123, at 343.

126. Gigerenzer & Todd, *supra* note 67, at 31.

127. *See generally* Gigerenzer & Selten, *supra* note 121, at 9-10; Gigerenzer & Todd, *supra* note 67, at 31-33; Goldstein et al., *supra* note 117, at 175-75; Henrich et al., *supra* note 123, at 343-45.

128. *See generally* Gigerenzer & Selten, *supra* note 121, at 9-10; Gigerenzer & Todd, *supra* note 67, at 31-33; Goldstein et al., *supra* note 117, 174-75; Henrich et al., *supra* note 123, at 343-45.

circuit judges, an appellate judge who decides per the imitation heuristic is likely to affirm the decision in front of her because that is consistent with what the trial judge decided below and what her colleagues on the appellate bench, particularly those who share her ideological preferences, are likely to do.[129]

IV. CONCLUSION

We have attempted in this Article to examine the affirmance effect on the U.S. Courts of Appeals through the lens of political science, psychology, and behavioral economics. Are these disciplines necessary to this inquiry? The affirmance effect may simply be the product of two phenomena: the "deference norm" on the courts of appeals and the tendency of experts to agree with one another about three-quarters of the time.[130] These factors are undoubtedly relevant to understanding the affirmance effect, but we believe our analyses of individual decisionmaking and institutional behavior also shed light on why circuit court judges so frequently "just say no" to appellants.

---

129. The "bounded rationality" explanation we have developed in this Article takes as its unit of analysis the individual judge. We recognize, of course, that circuit judges decide in panels of three, so a more extensive analysis would also take into account the literature on group decisionmaking.

130. *See* Kevin M. Clermont & Theodore Eisenberg, *Appeal from Jury or Judge Trial: Defendants' Advantage*, 3 AM. L. & ECON. REV. 125, 131 (2001).