#### Documenting Strategic Interaction on the U.S. Supreme Court

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Just over thirty years have elapsed since Walter F. Murphy (1964) published *Elements of Judicial Strategy*. Using the intuitions of the rational choice paradigm,<sup>1</sup> Murphy sought to demonstrate that justices of the U.S. Supreme Court operate in a political context not wholly unlike elected officials. He painted a portrait of policy-minded justices, who make decisions with some attention to the preferences of the other actors (*e.g.*, their colleagues, Congress, the president) and the actions they expect them to take. *Elements*, in other words, elucidated the strategic nature of judicial decision making.

Like their earlier counterparts, today's political scientists have mixed reactions to Murphy's work.<sup>2</sup> On the one hand, judicial specialists often include *Elements* on their lists of truly "seminal" works (see, *e.g.*, Walker 1994). On the other, analysts point to the limited influence of *Elements* on the direction of the field: With only scattered exceptions (*e.g.*, Howard 1968), few have adapted Murphy's vision of the way the Court operates. The explanation, it seems, is that the book may be a "good read," but it does not comport with the methodology that has come to dominate political science studies of judicial behavior.

<sup>&</sup>lt;sup>1</sup>Throughout this paper we use the term "rational choice" to refer to theories that offer explanations grounded in the following assumptions: 1) social actors make choices in order to achieve certain goals, 2) social actors act strategically in the sense that their choices depend on their expectations about the choices of other actors, and 3) these choices are structured by the institutional setting in which the choices are made. See Elster 1986 for a general discussion of rational choice explanations; see Knight 1992 for perspectives on the effects of institutions on strategic decision making.

<sup>&</sup>lt;sup>2</sup>It is perhaps more accurate to say that scholars of the 1960s and 1970s did not quite know what to make of his argument. Back then, key debates were between "traditionalists" and "behavioralists." And while *Elements* fits neatly into neither of those camps it was the behavioralists who claimed the work. They classified it with a then-developing body of literature invoking socio-psychological theories of small group interaction, despite the book's obvious economic orientation. In so doing, behavioralists could then assert that *Elements* and the writings of other "small group" theorists (*e.g.*, Danelski 1960; Ulmer 1971; Walker 1970) were "compatible with the attitudinal approach and, in a general sense, provide additional evidence supporting the attitudinal thesis" (Goldman and Jahnige 1976, 192; see also Grossman and Tanenhaus 1969, 15).

Pritchett alone seemed to understand the theoretical underpinnings and implications of Murphy's argument. In two essays, reviewing the field of public law, he (1968, 1969) mentioned Murphy's work in a section called "Influence and Judicial Strategy," and placed the discussion after a paragraph on game theory.

Murphy explored his thesis only against stylized case examples—albeit important ones while most scientific investigations of judicial decisions make use of much bigger samples of cases and claim more rigor in their methodology and analytics. What is more, when largescale studies have attempted to put Murphy's (and Howard's [1968]) predictions to the test they have failed or, at least, that is the conclusion reached by some scholars (*e.g.*, Brenner 1980, 1982).

Debates over the value of *Elements of Judicial Strategy* are, of course, interesting but they are also significant. Just as scholars were finding Murphy's intuitions inviting, they were rejecting them on the grounds that more "systematic" evidence seemed to prove them wrong. This rejection had an immeasurable impact on the direction of the field. It is now the case, as it has been for nearly thirty years, that political scientists largely view justices as "naive" decision makers who always vote their unconstrained attitudes, instead of the strategic actors Murphy made them out to be. Thus, the so-called "attitudinal model"—and not theories grounded in assumptions of strategic rationality—remains dominant in the discipline.<sup>3</sup> To put an even finer point on it, political scientists have published virtually no articles in disciplinary journals nor, for that matter, books that invoke rational choice perspectives to study judicial decisions—a phenomenon in direct contradistinction to many other areas of the discipline.<sup>4</sup>

It is also a trend that runs counter to the direction in which many students of the judicial process in other disciplines (especially law and business) are pushing their research

<sup>&</sup>lt;sup>3</sup> Theoretically speaking, the attitudinal model and the rational choice model are competing explanations. Still there are some who argue that—given the way scholars have applied them to study judicial decisions—they are simply different approaches, and not necessarily competing to explain the same thing. Later in the paper, we take issue with this claim; for a more general explanation of the differences between the two approaches, see Barry 1978.

<sup>&</sup>lt;sup>4</sup> This is not to say that political scientists studying judicial decision making have completely abandoned rational choice. In fact, if anything, interest in choice approaches appears to be on the rise (see, *e.g.*, Cameron 1994; Clinton 1994; Epstein and Walker 1995; Ferejohn and Weingast 1992a, 1992b; Schwartz 1992; Zorn 1995; Zorn and Caldeira 1995). Moreover, scholars have long claimed that other aspects of the decision making process may result from strategic considerations (*e.g.*, opinion assignment; see Maltzman and Wahlbeck 1995a for a recent review of this literature). Even so, to date choice theories have received a far warmer welcome from scholars working in virtually all other fields of political science. A review of articles published in the *American Political Science Review* in the 1990s shows that, with the exception of

programs. Over the past decade or so, Eskridge (*e.g.*, 1991a, 1991b, 1994) of the Georgetown University Law Center, Farber (Farber and Frickey 1991) of the University of Minnesota School of Law, Rodriguez (*e.g.*, 1994) of the Boalt Hall School of Law (Berkeley), Spiller (*e.g.*, Spiller and Gely 1992) of the Haas School of Business (Berkeley), Spitzer (*e.g.*, Cohen and Spitzer 1994) of the University of Southern California Law Center, and Tiller (*e.g.*, Spiller and Tiller 1993) of the Graduate School of Business at the University of Texas, to name just a few, have been touting positive political theory (PPT) <sup>5</sup> as an appropriate framework for the study of statutory interpretation; Kornhauser (1992a, 1992b) of NYU Law School has even invoked PPT to study internal decision making on the Court.<sup>6</sup> In so doing, he and the others assume that judges are strategic actors (see Rodriguez 1994).

In some sense, then, these law professors ask modern-day political scientists to take Murphy's' intuitions seriously and to integrate them into their work. Should they take heed? The answer, we argue, lies largely in whether evidence exists to support the PPT perspective, particularly the key assumption that justices are strategic, not naive, decision makers. For the PPTheorists offer very little in the way of systematic support for this underlying premise. They, like Murphy, simply assume the existence of strategic interaction and develop their models accordingly. But, for most political scientists who study courts, that is not enough. To persuade these scholars of the importance of strategic analysis for explanations of decision making, the existence of interdependent interaction must be well-documented, and that is the central purpose of this paper. In particular, we address this question: Does strategic interaction exist on the U.S. Supreme Court?

political philosophy, public law is the only major field of study lacking representation in the rational choice tradition.

<sup>&</sup>lt;sup>5</sup>A survey of positive political theorists (conducted by Farber and Frickey 1992) makes clear that "considerable" disagreement exists over the meaning of the term PPT. Farber and Frickey (1992, 461) set out the following definition: "PPT consists of non-normative, rational-choice theories of political institutions." For us, the key point is that PPTheorists typically adopt the assumptions of the strategic choice paradigm. <sup>6</sup> These law professors are joined by a few political scientists, most of whom developed their reputations as

<sup>&</sup>lt;sup>o</sup> These law professors are joined by a few political scientists, most of whom developed their reputations as students of Congress, e.g., Ferejohn and Weingast (1992a, 1992b) and Cameron (1993, 1994). See, generally, Shapiro 1995.

Our answer to this question is straightforward enough: A systematic investigation of the papers of William J. Brennan and Thurgood Marshall shows that Murphy was largely correct in his views of the interdependent nature of Supreme Court decision making. The evidence suggests that, at the very least, justices manifest precisely the kinds of behavior associated with the strategic assumption, namely, they realize that their fates depend on the preferences of the other actors and the choices they expect them to make (not just on their own preferences and actions) (see Cameron 1993, 1994).

This finding has serious implications for the future study of legal behavior, as it suggests that a key assumption of strategic variants of rational choice theory is as applicable to the justices as it is to elected political actors. In other words, if the lack of systematic support for Murphy's work provides the dominant explanation for its lack of influence (as we suspect) and for the lack of influence of rational choice models in judicial politics more generally, then this situation should be corrected.

# The Rise and Demise of the Rational Choice Paradigm in the Study of Judicial Politics

Based on the writings of today's PPTheorists, one would think that the injection of rational choice theory into the study of judicial politics began with them; in fact, they say that the field owes its origins to a 1989 dissertation written by Brian Marks, a student of economics at Washington University (see, e.g., Rodriguez 1994, 91, n. 395; Ferejohn and Weingast 1992a, 574).<sup>7</sup> This is not so. Nearly thirty years before Marks produced his "locus classicus" (Cameron 1993), political scientists—indeed some of the founders of the modern-day study of courts and law—implicitly or explicitly adopted economic perspectives to study judicial decision making. Still, we can hardly fault PPTheorists for claiming this particular piece of turf: The early research grounded in assumptions of rationality quickly gave way to studies lodged in a socio-psychological tradition.

<sup>&</sup>lt;sup>7</sup>More specifically, they claim that Marks (1988, 1989) gave rise to a major part of the PPT research program: the separation of powers games more fully developed in Ferejohn and Weingast 1992a, 1992b; Eskridge 1991a, 1991b, 1994; Epstein and Walker 1995—to name just a few.

In what follows, we describe the evolution of rational choice theories in the study of judicial politics. We also explain how the lack of systematic support for a key assumption—that legal decision making is interdependent—may have contributed to the present state of affairs and may even retard the ability of the current crop of PPTheorists to influence the direction of the field.

## The Rise of Rational Choice Theory

Marks (1988, 1989) may be starting point for modern-day PPTheorists but it was Glendon Schubert, more typically associated with social-psychological theories of judicial decision making (see, *e.g.*, Schubert 1965; Segal and Spaeth 1993, 67-69), who was one of the first political scientists to apply rational choice theory to political problems. In his 1958 review of the field of law and courts for the *American Political Science Review*, Schubert included a section that he called "game analysis." He wrote (1958, 1022), "[t]he judicial process is tailor-made for investigation by the theory of games. Whatever may be their obligations as officers of courts, attorneys frequently play the role of competing gamesmen, and the model of the two-person, zero-sum game certainly can be applied to many trials...and to the behavior of Supreme Court justices." Schubert went on to provide several examples, including one that applied game theory to the voting behavior of two Supreme Court justices—Roberts and Hughes— during a crucial historical period, the New Deal (the "Hughberts" game). In so doing, he showed that the justices were strategic decision makers; only by recognizing their interdependency, Schubert argued, could they maximize their utility.

Schubert's application may have been crude but it was important in two regards. First, it demonstrated that approaches based on assumptions of rationality, specifically game theory, could be applied to important political problems.<sup>8</sup> Although this is now something scholars working in most fields of political science (but not necessarily those in law and courts) take for granted, it was not so clear in 1958. Game theory was relatively new in the

social sciences and, when it was applied to social science problems, it was usually by economists in pursuit of explanations of economic phenomena. Second, Schubert's work generated interest in other applications of the rational choice paradigm to legal questions. Or, at the very least, it encouraged scholars working in the field to think about the interdependent nature of judicial decision making. Two of the most proximate exemplars were Prichett's (1961) *Congress versus the Supreme Court* and Murphy's (1962) *Congress and the Supreme Court*.

Prior to his work on Congress, Pritchett had published several articles (*e.g.*, 1941) and a seminal book, *The Roosevelt Court* (1948), which moved legal realism from the sole province of law school professors to political scientists, who were theretofore reluctant adherents.<sup>9</sup> Like Holmes, Brandeis, and later adapters of sociological jurisprudence (*e.g.*, Frank 1930; Llewellyn 1951), Pritchett argued that justices are simply "motivated by their own preferences," with rules based on precedent nothing more than smokescreens behind which they hide their values and attitudes. Or, to put it in modern-day language, he was perhaps the first political scientist to view justices as "single-minded seekers of legal policy" (George and Epstein 1992, 325)

This intuition about the goals of justices provided the basis for Pritchett's (1961) and Murphy's (1962) books on Congress-Court interactions but in those works they pushed it one step further.<sup>10</sup> Working with interview data, Court cases, information collected from manuscript collections, congressional hearings, and the like, Murphy and Pritchett showed that if justices are single-minded seekers of policy, they necessarily care about the "law,"

<sup>&</sup>lt;sup>8</sup>Other articles published around the same time (e.g., Shapley and Shubik 1954) also pointed to the promise of game theory in political science.

<sup>&</sup>lt;sup>9</sup> Schubert (1965, 6) details just how important this book was for the development of the field of judicial politics: "I am quite aware that [*The Roosevelt Court*] is the most important and influential book to be published in the past two decades in the general field of constitutional law and politics, and that a whole generation of political scientists—of whom I am one—was compelled to modify, some more radically and others less so, their basic orientation toward the Supreme Court, as a consequence of having read *The Roosevelt Court*."

*Roosevelt Court.*"<sup>10</sup> To put it in contemporary terms, Murphy and Pritchett used the intuitions of the attitudinal model (discussed more fully in text) to study the relationship between Congress and the Court but they extended those premises and demonstrated that the resulting behavior may differ from what attitudinalists postulate.

broadly defined. And if justices care about the ultimate state of the law, then they may be willing to modulate their views to avoid an extreme reaction from Congress and the President.<sup>11</sup> Murphy and Pritchett, in other words, tell a tale of shrewd justices, who anticipate the reactions of the other institutions and take those reactions into account in their decision making. The justices they depict would rather hand down a ruling that comes close to, but may not exactly reflect, their preferences than, in the long run, see Congress completely reverse their decision.

Murphy's and Pritchett's works on Congress and the Court, thus, clearly, if implicitly, adopted the strategic assumption of Schubert's "Hughberts" game, and, at the same time, underscored the importance of policy goals brought to light in *The Roosevelt Court*. Still, it was Murphy's *Elements of Judicial Strategy*, which came on the heels of the Congress-Court books, that most fully embraced the notion of interdependent interaction and that explicitly found its grounding in rational choice theory.

The core arguments of *Elements of Judicial Strategy* are the same ones that Schubert, Pritchett, and Murphy advanced earlier: 1) Supreme Court justices are policy oriented, 2) they act strategically to further their goals, and 3) their interactions are structured by institutions. <sup>12</sup> The key contribution, instead, came in the blending of Schubert's earlier focus on internal decision making, with Pritchett's (and his own) stress on the external constraints placed on the Court by Congress and the President. For, under Murphy's framework, not only does strategic interaction exist between the Court and the other branches of government but among the justices as well.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup>Reactions can vary from overturning decisions through legislation to holding judicial salaries constant to impeaching judges. The general point Pritchett and Murphy make: The lack of an electoral connection does not negate strategic behavior on the part of non-elected actors.

<sup>&</sup>lt;sup>12</sup> Murphy (Murphy and Tanenhaus 1972, 25) described *Elements* in this way: "It took as its point of departure the individual Supreme Court justice and tried to show how, given his power as one of nine judges and operating within a web of institutional and ideological restraints, he could maximize his influence on public policy."
<sup>13</sup> That Murphy arrived at these views is not all too surprising. After all, the rational choice paradigm, by

<sup>&</sup>lt;sup>13</sup> That Murphy arrived at these views is not all too surprising. After all, the rational choice paradigm, by this time, was beginning to take hold in the political science literature, what with publication of Downs' (1957) classic work on political parties and Riker's (1962) on coalition formation. And it is quite clear that Murphy was heavily influenced by some of this thinking. In the preface to *Elements*, Murphy (1964, *x*)

*Elements of Judicial Strategy,* then, is an attempt to "understand how, under the limitations which the American legal and political systems impose, a Justice can legitimately act in order to further his own policy objectives" (1964, *vii*). To accomplish this, Murphy followed the same methodological strategy as he (and Pritchett) did in the Court-Congress book: examination of Court memoranda and opinion drafts found in the private papers of several justices. The book made no attempt to analyze systematically the information it mined from manuscript collections; rather, it consists of stylized stories that in one way or another reinforced Murphy's central thesis.

So, at the end of the day, Murphy provided little in the way of conclusive evidence to support a general claim about the predominance of strategic behavior. Still, scholars found aspects of his work attractive. Or, at least attractive enough to continue in his path. Particularly noteworthy was Howard's (1968) examination of "fluidity" on the Court, which explicitly uses *Elements* as its starting point. Indeed, Howard's article is, in large part, an attempt to provide more systematic support for one of Murphy's key observations: judges "work" changes in their votes and "permit their opinions to be conduits for the ideas of others" through "internal bargaining" (1968, 44). Though Howard's methodology was similar to Murphy's in its reliance on a small number of important cases, he cast his argument in general terms: "it may come as some surprise to political scientists how commonplace, rather than aberrational, judicial flux actually is" (1968, 44). He further claimed (1968, 44) that "hardly any major decision in [the decade of the 1940s] was free from significant alteration of vote and language before announcement to the public."

### The Decline of Rational Choice Theory

Howard's article was not the last of the post-*Elements* pieces for, into the next decade, analysts applied theories grounded in assumptions of rationality (especially game theory) to study opinion coalition formation (see Rohde 1972a, 1972b) and jury selection

writes: "Almost as jarring to some readers as quotations from private papers will be my use of terms which are familiar to economic reasoning and the theory of games but which are alien to public law literature."

(Brams and Davis 1976). In fact, by the 1970s, there had been enough work invoking game theoretic analysis, in particular, that Brenner (1979) wrote a bibliographic essay devoted exclusively to the subject.

Close examination of the works on Brenner's list, however, reveals that most either were not explicit applications of game theory or were conducted in the late 1960s and early 1970s. We do not have to search too long to explain this trend away from approaches ground in rationality: They were displaced by the attitudinal model of legal decisions—a model grounded in the social-psychological tradition and one which received full-blown treatments in Schubert 1965; Spaeth 1972; and Rohde and Spaeth 1976.

Under this attitudinal approach—at least in its purest incarnation—justices base their decisions solely on the facts of cases vis-à-vis their ideological attitudes and values. They are the "single-minded seekers of legal policy" suggested by the legal realists and by Pritchett's earliest writings but they do not consider Congress's preferences, those of the President, the executive, the public, or even their colleagues'. Rather they are naive actors who merely vote their unconstrained preferences into law. As the most careful contemporary adherents of this school, Segal and Spaeth (1993, 65), put it, "Rehnquist votes the way he does because he is extremely conservative; Marshall voted the way he did because he is extremely liberal." Justice behave in this way, according to Segal and Spaeth (1993, 69), because they are free from the kinds of institutional constraints placed on other political actors: "Members of the Supreme Court further their policy goals because they lack electoral or political accountability, ambition for higher office, and comprise a court of last resort that controls its own jurisdiction. Although the absence of these factors may hinder the personal policy-making capabilities of lower court judges, their presence enables justices to vote as they individually see fit."

Why did the attitudinal model so fully supplant the rationally-grounded approaches offered by Murphy, Pritchett, and others? Two answers come to mind. First, beginning with

Alien perhaps but not completely unknown. The strategic assumption, as we already have documented,

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Schubert (1965) and culminating with Segal and Spaeth (1993), attitudinalists have claimed to gather a tremendous amount of systematic support for their theory. That is, those working within the social-psychological tradition, unlike say Murphy or Howard, usually refrain from detailed analyses of particular litigation and instead focus on large samples of Court cases—the dispositions of which they claim to predict with a good deal of success. And it is this prediction accuracy that political scientists find especially attractive and about which attitudinalists often boast (see Spaeth 1995a).

But there is a second reason for the attitudinal model's domination. Just as scholars were claiming that the key premise of the attitudinal model held up against systematic, dataintensive investigations, they were also arguing that the Murphy-Howard strategic view did not withstand similar scrutiny. The critical works here are by Brenner (1980, 1982), which reassessed Howard's contention, namely, voting fluidity was rampant on the Court. As interpreted by Segal and Spaeth (1993, 213), "Brenner's [1980] results show that the Vinson Court justices voted the same way at the original and final votes on the merits 86 percent of the time overall and 91 percent of the time in major cases. In 8.6 percent of the cases, a voting change transformed a minority into a majority. Similar findings resulted from his study [1982] of the latter portion of the Warren Court."<sup>14</sup>

Given this interpretation of Brenner's work (an interpretation carrying implications with which we later take issue, but which seems to represents the prevailing wisdom among scholars of the judicial process [*e.g.*, Goldman and Sarat 1989, 466; but see Baum 1995, 174]), given the massive amounts of data analysts have gathered to support the attitudinal model, and given the significance political scientists in this field attach to large-scale statistical studies, it is easy to understand why judicial decision making theories grounded in

formed the basis of Schubert's Hughberts game.

<sup>&</sup>lt;sup>14</sup> Spaeth, who has recently completed coding conference vote data from the Vinson and Warren Court eras, has apparently had a change of heart on the question of vote fluidity. He now asserts that "Not uncommonly the justices change their votes after conference, which changes sometimes produce a different case outcome...Indeed, I suspect that users [of his expanded data base] will make directional differences between the merits and report votes a focal point of their research, addressing such questions as which justices switch? In what sorts of cases? Why? With what effect on case outcome" (Spaeth 1995b, 19)?

assumptions of rationality have virtually disappeared from the political science journals. Attitudinalism, while sharing certain features of the strategic approach (both acknowledge the importance of rules<sup>15</sup> and both generally assert the primacy of policy<sup>16</sup>), simply rejects a core assumption of choice theory—that strategic interaction exists over the outcomes of cases. What is more, the attitudinal model focuses on votes—while rational choice theory typically stresses policy.

These are distinctions that we cannot stress enough; in fact, to drive them home, consider Figure 1. It depicts the possible choices— ordered from left (most liberal) to right (most conservative)— confronting a justice in case involving this question: For how many hours can the government detain a criminal suspect between a warrantless arrest and a determination of probable cause? We have labeled three of the possibilities: 24, 36, and 48 hours.

# (Figure 1 about here)

Now suppose justice X was to select among the three possible alternatives; further suppose that she genuinely prefers 48 hours to 36 to 24. The *attitudinal model* would predict that justice X would always choose 48 hours, regardless of the positions of, say, her colleagues.<sup>17</sup> That is because the institution of life tenure permits justice X to vote in accord with her unconstrained political attitudes. *The rational choice model*, on the other hand, supposes that justice X might choose 36 hours if—depending on the preferences of the other players (again, say, her colleagues)— that would allow her to avoid 24 hours, her least preferred outcome.

In offering this prediction, Murphy (1964), Howard (1968), and other advocates of

<sup>&</sup>lt;sup>15</sup>While both agree on the importance of institutions, they interpret their effects differently. For example, to attitudinalists the institution of life tenure frees justices to vote their sincere preferences. To rational choice theorists, it does no such thing; in other words (and for the reasons we discuss below), if justices behave in ways that accord with their unconstrained preferences, it is not necessarily because they lack an electoral connection.

<sup>&</sup>lt;sup>16</sup> Typically, rational choice theorists assume that justices are "single-minded seekers of policy" but that need not be the case. It is up to the researcher to specify the content of actors' goals so as to give meaning to the assumption that people are "utility maximizers." For more on the goals of justices, see Baum 1994.

strategic rationality take direct aim at the attitudinalists' arguments about the importance of life tenure and the behavior to which that rule allegedly gives rise (naive voting)—arguments that they suggest are both misguided and internally inconsistent. The claims are *misguided*, Murphy et al. assert, because justices do not need an electoral connection to act strategically. They know that the other institutions wield an impressive array of weapons, which can move policy away from their preferred positions or threaten their institutional power in other ways. To argue that justices do not consider the preferences of other institutions is to argue that justices do not care very much about what happens to policy after a case leaves their chambers. The claims are *inconsistent* with their own theory, Murphy et al. suggest, for this reason: If justices are the policy maximizers that attitudinalists make them out to be.<sup>18</sup> then at the very least they must be concerned with the positions of their colleagues. For they know that their colleagues can make credible threats to abandon a majority coalition, to write separately, to switch their votes, and, generally, to move policy far from their preferred positions. How can justices possibly achieve their policy goals if they vote naively? In fact Murphy et al. argue that they cannot, for if the justices voted strictly on the basis of their own preferences, then they actually are non-policy seekers, who driven by their own "psychic" needs.<sup>19</sup>

Figure 1 also shores up the second and related point of distinction between the two approaches—one that concerns their foci. At least in their empirical work, attitudinalists typically do not set out to explain whether a justice will select 48 hours or 36 hours or 24 hours. That is because they focus on predicting the dichotomous vote choice—reversal or

<sup>&</sup>lt;sup>17</sup> Spaeth confirmed for us that this is precisely what the attitudinal model would predict for non-conference merits votes. <sup>18</sup> As Rohde and Spaeth (1976, 72) put it: "The primary goals of Supreme Court justices in the decision-

<sup>&</sup>lt;sup>10</sup> As Rohde and Spaeth (1976, 72) put it: "The primary goals of Supreme Court justices in the decisionprocess are *policy goals*. Each member of the Court has preferences concerning the policy questions faced by the Court, and when the justices make decisions they want the outcome to approximate as nearly as possible those policy preferences."

<sup>&</sup>lt;sup>19</sup> By the same token, more contemporary advocates of the strategic approach suggest that is only commonsensical to believe that collegial court decision making is an inherently strategic situation. Cameron (1994) remarks on the context of U.S. Court of Appeals decision making in this way: "the outcome of cases in federal appellate courts depend on the individual votes on of several justices sitting as a

affirm—rather than the policy. For the example set out in Figure 1, they might ask: How many justices voted to affirm? To reverse? Then, they would invoke some measure of policy preferences to predict who voted in what direction (see Segal and Spaeth 1993, 223). Rational choice theorists, in contrast, are concerned with understanding policy and the process by which the justices make policy. Central to these accounts (see, generally, Murphy 1964), thus, is the choice of 48 or 26 or 24 and how that choice comes about—not exclusively on explaining votes. For, in these accounts (see Murphy 1964; Howard 1968), votes and policy are inextricably linked.

### The (Re)emergence of the Rational Choice Paradigm

The attitudinal model, to be sure, continues to dominate the way political scientists think about Supreme Court decisions. But it is Murphy's more strategically-oriented approach that has moved to the fore in the law reviews. In fact, there now exists a growing and influential group of (mainly) law and business school professors who advocate rational choice approaches to study everything from relations among the Court, Congress, and the executive branch (*e.g.*, Eskridge 1991a, 1991b; Eskridge and Ferejohn 1992; Ferejohn and Weingast 1992a, 1992b; Rodriguez 1994; Cohen and Spitzer 1994; for reviews of this literature see Cameron 1994; Segal 1995) to internal decision making on the merits of cases (e.g., Kornhauser 1992a, 1992b).<sup>20</sup>

Interestingly, the typical PPTheorists of today approach their research in much the same way as did the strategically-minded political scientists of yesteryear. Like Murphy, they begin with a set of assumptions about the way the world works. Sometimes those assumptions are peculiar to the particular modeling enterprise; in separation of powers games, for example, analysts often posit that the Court makes the first move and Congress the last. But,

panel. Plausibly, the judges care about the outcome of cases, and they certainly recognize that outcomes depend on collective behavior." The same, of course, is true of U.S. Supreme Court justices. <sup>20</sup> Should anyone doubt the growing influence of this group, note the foreword to the *Harvard Law* 

*Review's* examination of the Supreme Court's 1993 term. It was co-authored by Eskridge, one of the leaders of the PPT movement. Also consider that important law reviews have dedicated volumes to PPT (*e.g., Georgetown, Law and Contemporary Problems*). Finally, several influential university presses,

to reiterate, there exists a general set of premises that guide most of this work—and they are the same ones invoked by Murphy: (1) justices' actions are directed toward the attainment of goals (usually policy goals), (2) justices are strategic and (3) institutions structure justices' interactions.

While these assumptions parallel those made by Murphy so to does the methodology typically invoked by PPTheorists (but see Spiller and Gely 1992; Cohen and Spitzer 1994; Zorn 1995): They assume the propriety of their premises and, then, set out to test their models against a handful of important cases. The emphasis is not on large-scale data compilation and analysis but on detailed consideration of a few cases.

## The Impact of PPT?

In all of this, the question remains: Will this group of PPTheorists have any sway with political scientists who study the courts? Of course, such influence would not be unprecedented. George and Epstein (1992) and Segal and Spaeth (1994) trace—and rightfully so—the attitudinal model back to the legal realists of the 1920s and 1930s, most of whom were lawyers. Will history repeat itself?

Since both schools (generally) agree on the primacy of political preferences and on the importance of rules, we think the answer to this question lies in the most fundamental point of contention between social-psychological models of judicial decision making and strategically-based ones—the interdependency assumption. If proof, and systematic proof at that, can be mustered to show that a strategic component exists to decision making on the merits of cases, then political scientists who study courts will no longer be able to ignore the rational choice paradigm: In our estimation, it simply provides more leverage to study policy and the process by which justices make policy than do competing models. But that proof, in light of the dominant methodological standards in contemporary political science analyses of the judicial process, must incorporate more than a thorough reading of a few select cases; it must provide evidence of the widespread existence of strategic decision making, and it must

including Harvard (Baird, Gertner, and Picker 1994) and Chicago (Farber and Frickey 1991) have put their

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do so systematically. If such proof cannot be found, then PPT is likely to go the way of the many other approaches that remain confined to the corridors of law schools, with only the most negligible impact on the way political scientists study courts.

### **Conceptualizing and Measuring Strategic Interaction**

From our discussion thus far a natural question emerges: Given its fundamental role in rational choice theories of judicial decision making, why, with only limited exceptions, do we lack systematic investigations of the interdependency assumption? This is not an especially difficult question to answer. Even if one can develop objective indicators to detect the presence of strategic activity, it is extraordinary difficult to gather the data—over any period of time and across cases— necessary to animate those measures. These obstacles may explain why scholars of the Court, such as Murphy (1964) and Eskridge (1991a, 1991b), often rely on stylized examples to tell their stories.<sup>21</sup>

Still there are ways of hurdling these obstacles, and we have, based on our reading of the literature, developed a few. We begin by conceptualizing the process of Supreme Court policy making as occurring in two key steps—both of which create opportunities for strategic behavior.<sup>22</sup> Table 1 outlines this conceptualization, along with some possible manifestations and measures of interdependent interaction.

# (Table 1 about here)

In what follows, we elaborate on this scheme. Before so doing, though, two general notes are in order. First, Table 1 identifies the manifestations and measures of strategic behavior that we think predominate during the various stages. But we do not wish to convey

imprint on this work. <sup>21</sup> Scholars of the Court are not alone. As Krehbiel (1988, 260) warns students of the legislative process, "If the promise of formal theory is to be fulfilled, it will be fulfilled sooner and more convincingly if models are regularly help up to empirical scrutiny." This is the general point Green and Shapiro 1994 claim to be making as well.

To be sure, in this paper, we are not testing a formal model of judicial decision making. We are instead taking a necessary first step-that is, attempting to determine whether a key assumption seems plausible to make.

There is at least one other stage that falls between the two depicted in Table 1: opinion assignment. Since this has been the subject of extensive scholarly inquiry (again, see Maltzman and Wahlbeck 1995a) and since it is somewhat tangential to our overall concerns, we do not focus on it in this paper.

the notion that these manifestations and measures are associated only with the stages listed in the table. For example, under the logic presented below, changes in votes and dispositions can come about as a result of strategic interaction during the opinion circulation process—and not just during the first stage. Second, we do not pretend that the table presents an exhaustive set of manifestations or indicators, but we do contend that we have identified the types of behavior that are most likely to be associated with strategic decision making on the Supreme Court. As such, we maintain that these types of behavior are phenomena which competing perspectives (*e.g.*, the attitudinal model) cannot readily (or do not attempt to) explain.

#### Conference

After a case is briefed and argued, the Court holds a conference to discuss it. During conference, the justices state their views on the case—beginning with the Chief Justice and moving in order of seniority—and, frequently, how they would dispose of it (*e.g.*, reverse, remand, affirm). Some justices take copious notes of conference discussion (*e.g.*, Brennan and Douglas); others do not (*e.g.*, Marshall). But, at the very least, most contemporary justices record the conference votes on docket sheets (see Appendix B); at least one (Brennan) also entered them on circulation records (see Appendix C).

Conference discussion and votes provide several opportunities for strategic behavior; in particular, as Table 1 depicts, justices can misrepresent their preferences in their case statements and in their votes; and they can engage in strategic persuasion. Both have implications for the resulting *policy*, not to mention case *disposition*. But, to consider some of those consequences, it is necessary to backtrack a bit and address a more fundamental question: Why would justices act in sophisticated fashions or engage in persuasion?

Fortunately, the extant literature is replete with explanations. For starters, Murphy (1964) Schwartz (1990), and others suggest that justices act in sophisticated fashions to bring policy as close as possible to their ideal points. While Schwartz (1990) provides numerous examples, his discussion of *Craig v. Boren* (1976) is especially illuminating. In that case, the

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Court considered a state law mandating different legal drinking ages for men and women. As Schwartz (1990, 226-227) notes, during conference discussion of *Craig*, Brennan claimed that he wanted the Court to apply an "in between" standard (later called "heightened scrutiny") to sex discrimination cases, rather than a rational basis or a strict scrutiny test. It is easy to understand why Brennan eschewed a rational basis test—this was his least preferred standard. But why did he advocate the heightened approach, as opposed to his sincerely preferred position of "strict scrutiny"?<sup>23</sup> Schwartz explains it in this way (1990, 226): "Brennan...realized that he could not secure a Court for [an opinion] that treated sex as a suspect classification subject to the compelling interest requirement." In other words, Brennan—given his beliefs about the positions of the other members of the Court and the actions he expected them to take— strategically misrepresented his preferences to attain the best possible outcome (heightened) and to avoid his least favored alternative (rational basis) (see also Epstein 1997).

Other examples of misrepresentation of policy preferences during conference abound (see Murphy 1964; Schwartz 1990). And, as *Craig* illuminates, one reason for such sophisticated behavior is obvious: It is the rational course of action for the policy-minded justice. But why would justices misrepresent their votes—either by casting a vote different from their sincere preferences or by "passing" during conference, even if they have a position on the case? The literature suggests the same explanation: to establish a legal principle as close as possible to their most preferred policy outcome. It is well known, for example, that Chief Justice Burger occasionally voted in a sophisticated fashion so that he could control opinion assignment—and, thus, to some extent, the policy emanating from the Court.<sup>24</sup> Associate justices also misrepresent their preferences in their votes. For senior associates, they too may be motivated by the possibility of assigning the opinion but other

<sup>&</sup>lt;sup>23</sup> There is absolutely no doubt that Brennan preferred strict scrutiny to heightened scrutiny to rational basis. See his case files in *Frontiero v. Richardson* (1973), along with his opinion in that case.
<sup>24</sup>Numerous scholars have made this point about Burger (see, *e.g.*, Urofsky, 1987; Schwartz 1990). And we found many examples in the papers of Justices Brennan and Douglas. Apparently, neither was hesitant to challenge the Chief Justice when they thought he had abused his opinion assignment power.

reasons exist. For example, by "passing" at conference, especially in a closely divided cases, justices may place themselves in a stronger position to influence the policy content of the opinion and the disposition of the case (see, generally, Epstein, Mershon, Segal, and Spaeth 1994).

Moreover, justices can act strategically at conference without acting in a sophisticated fashion. For, as Schwartz (1990), Urofsky (1987) and many others document, justices view their conference statements as tools of persuasion; indeed, in preparing them, they and their clerks are often mindful of the preferences of other justices and the positions they are likely to take. So, for instance, one justice may try to demonstrate to others how a particular policy position will lead them to a result more in line with their goals than other courses of action. Or, they occasionally attempt to add another dimension to a case as a way to control the agenda in order to manipulate the outcome. Chief Justice Burger took this latter route during the *Craig* conference. He tried to steer conference attention toward a procedural dimension—standing—and away from sex discrimination policy (see Epstein 1997).

If conference provides opportunities for strategic behavior, then how might we measure its manifestations—misrepresentation of preferences and persuasion? We offer two indicators: shift in votes and in dispositions.<sup>25</sup> In what follows we discuss each of these measures and how they are linked to the manifestations of strategic interaction; in Appendix A we provide more details about our coding rules and data sources.

**Vote Fluidity.** Perhaps the manifestation of interdependent decision that has received the most scholarly attention (see Brenner 1980, 1982; Howard 1968) is vote fluidity—when justices change their votes between conference and publication of the final opinion; or when they decline to state a position on the case's disposition during conference

 $<sup>^{25}</sup>$  For reasons that are probably obvious, both are imperfect measures. Perhaps a better approach would be to obtain independent measures of the justices' sincere preferences (*e.g.*, speeches or off-the-bench writings), compare them to conference discussion and, then, to opinions written or joined. Of course, carrying out such plan would involve a good deal of work and planning—and may yield results of questionable validity

and then, eventually vote one way or the other. Fluidity, for the reasons detailed above, may reveal the presence of sophisticated behavior on the part of the justices; or, it may provide traces of the efforts of some justices to persuade others during or after conference—at least these were the claims made by Brenner (1980), Howard (1968), and Murphy (1964). Indeed, Howard (1968, 43) took evidence of "extensive" fluidity to indicate that justices "permit their opinions to be the conduits for the ideas of others." Howard (1968, 44) also used the presence of fluidity to challenge those tests of the attitudinal model that measure preferences through past votes: "If a vote or an opinion has changed in response to a multiplicity of intracourt influences before its public exposure, how reliable is that vote or opinion as an indicator of attitude, ideology, or if one pleases, predilection?" Even attitudinalists seem to understand that extensive fluidity poses theoretical and empirical threats to their model. For it may indicate that votes of all sorts are the products of forces other than unconstrained preferences (see, *e.g.*, Brenner 1980, 526-527).

Still, vote fluidity need not occur for strategic activity to be present.<sup>26</sup> As Murphy demonstrated (see also Brenner 1980), shifts in votes depend a good deal on the opinion produced by the writer and the degree to which she is willing to accommodate her colleagues. In other words, votes are linked to policy. This is a crucial point, and one that *Craig* nicely illustrates. Epstein (1997) claims that Burger would have changed his vote had Brennan adopted a rational basis standard.<sup>27</sup> But the fact that Burger stuck with his conference vote surely cannot be taken to mean that he was not strategic in his decision making.

and reliability (see, generally, Epstein and Mershon 1996). So, for now, we thought it best to stick with more traditional measures.

<sup>&</sup>lt;sup>26</sup> On the flip side, some scholars argue that fluidity may come about from forces other than strategic policy considerations. For a preliminary view—based on a rather stringent operational definition of vote change—see Maltzman and Wahlbeck 1995c.
<sup>27</sup> In a memo written to Brennan (before Brennan circulated a first draft of the majority opinion) Burger

<sup>&</sup>lt;sup>27</sup> In a memo written to Brennan (before Brennan circulated a first draft of the majority opinion) Burger said: "I may decide to join you in reversal, particularly if we do not expand the 'equal advantage' clause or 'suspect' classifications! In short, I am 'available.'" After Brennan circulated his first draft, Burger wrote: "I thought I might be able to join a reversal in this case and I may yet do so as to the result. However, your 'test' goes beyond what I could accept. More later." These memoranda are located in the case files of Justices Brennan and Marshall, housed in the Library of Congress.

Murphy (1964) provides examples that work in precisely the opposite way—that is, cases in which the opinion writer was able to hold a justice she might have lost by framing her writing in a fashion attractive to the tentative voter. But the more general point is this: Vote fluidity may provide an indication of strategic interaction, but it should not be taken as the only or, even, the best measure.

**Dispositional Fluidity.** As Brenner (1980) points out, vote changes can lead to changes in the disposition of a case. Most obviously, a decision at conference to affirm can become one to reverse if a requisite number of justices change their votes (of course, in a 5-4 vote, that number is one). But dispositional changes can come about in other ways. For example, occasionally, the Conference<sup>28</sup> is unable to reach consensus on disposition, as Brennan's conference notes/docket sheets in *Youngsberg v. Romeo* (1982) show. They indicate that that four justices voted to vacate, two to affirm (though on different grounds), and three cast no vote, even though at least two of three commented on the case during conference discussion. So it is not surprising that Brennan left blank his circulation sheet vote tally.

However dispositional fluidity comes about, its presence—under the same logic offered for the vote fluidity measure— provides some indication of the interdependent nature of the decision making process. But the caveat registered for votes applies here with equal force: Changes in the Court's disposition of a case (just as vote fluidity), while indicating the presence of interdependent decision making, need not occur for strategic activity to be present.<sup>29</sup> Just consider that the disposition in *Craig* never changed: the Conference had voted to strike the drinking age law; yet the case was replete with strategic interaction.

### **Opinion Circulation: Bargaining**

After the Court discusses a case in conference, the Chief Justice (or the most senior member of the majority, if the Chief Justice is not in the majority) assigns the opinion to

<sup>&</sup>lt;sup>28</sup> In their memoranda, the justices refer to themselves—as participants in conference discussion— as "The Conference".

himself or to another member of the Court. The next step, typically, <sup>30</sup> is for the opinion writer to circulate a draft of her opinion. <sup>31</sup>

Once the justices receive the first draft of the opinion, they generally (and initially) pursue one of four courses of action: (1) join the opinion, (2) tell the opinion writer that they await further writings, (3) tell the opinion writer that they plan to write a dissent, or (4) request the opinion writer to make changes, that is, to *bargain* with the opinion writer over the content and, even, disposition of the opinion. To see how this can work, again consider *Craig.* Immediately after Brennan circulated his first opinion draft: (1) Rehnquist told Brennan and the Conference that he planned to write a dissent; (2) Blackmun wrote a memo, sent only to Brennan, asking for changes in the opinion; and (3) Burger told Brennan and the Conference that "I thought I might be able to join a reversal in this case and I may yet do so as to the result. However, your 'test' goes beyond what I could accept. More later."

How do justices decide which course of action to pursue? We think that they take into account many factors, including their own preferences, their assessment of the preferences of the opinion writer and the actions they expect her to take, institutional rules and norms, and the social and political context (see, generally, Knight and Epstein 1995). In other words, we believe that the decision over which course of action to pursue is an inherently interdependent one. But, because we are interested in documenting strategic interaction rather than applying choice theory to study decision making and because even the most strident attitudinalist would agree that bargaining attempts are manifestly strategic, we have chosen to focus on action (4)—when justices request opinion writers to make changes.

<sup>&</sup>lt;sup>29</sup> And, again, the converse is true. Dispositional fluidity may result from forces other than strategic interaction.

<sup>&</sup>lt;sup>30</sup> Typically, but not always. For one thing, a Court norm is that no other justices circulate writings (*e.g.*, dissents and concurrences) until the justice assigned to pen the majority opinion circulates her first draft. But, as justices have acknowledged in their memoranda, this norm occasionally goes unheeded. Second, sometimes, as we noted above, no clear disposition results from conference discussion. In this instance, the Chief Justice might ask a particular justice to write a memorandum laying out her views; or he may ask two justices with divergent views to circulate memoranda. Finally, the opinion writer may circulate her draft to only a few members of the Court, rather than to the entire Conference.

<sup>&</sup>lt;sup>31</sup> Unless otherwise indicated, we use the term "opinion writer" to refer to the justice assigned to write on behalf of the majority of the Court, whether that writing is a per curiam or a majority opinion.

That is, we assume all would agree that bargaining is a manifestation of strategic interaction. And we attempt to capture attempts at bargaining in three ways: the number of memoranda, the presence of bargaining statements in memoranda, and changes in opinion status.

**Number of Memoranda.** This measure was suggested by the work of Epstein, Mershon, Segal and Spaeth (1994), which claims that the number of memoranda—circulated after the opinion writer has issued the first draft of her opinion— provides a reasonable, albeit indirect, indicator of the degree to which bargaining exists on the Court.

Although the Appendix provides a full description of how we counted memoranda, a word of clarification is in order here: Virtually every case generates memos, as the justices must eventually tell Conference what they plan to do, *e.g.*, join the Court's opinion, file a dissent, join a concurrence, etc. (see Segal and Spaeth 1993, 276-277 for a list of voting/opinion options). We excluded memoranda of this sort from our count. Thus, the memos we did include were generally substantive: They contained suggestions for opinion revision, "plots" among subgroups of justices to bring the opinion more in line with their preferences, to name just two (see Appendix A for more details).

**Bargaining Statements.** This measure of bargaining— the number of bargaining statements present in memoranda—was suggested by Brenner (1980, 527). He observed that vote shifts were only one manifestation of strategic interaction; and that a better approach would entail the "content analysis" of "internal memos. "We couldn't agree more. Quite clearly, once the opinion writer has circulated her opinion, the other justices have an opportunity to respond with suggestions for changes. And, sometimes they frame those suggestions as bargaining statements.

Of what do such bargaining statements provide evidence? This is an important question to address because, surely, a strategic justice might make a number of different claims in the course of bargaining—claims that may vary in the degree to which their promises and threats are credible. Not all of these statements are evidence that a justice would in fact have changed her vote if the proposed changes were not made. But the very existence of these

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statements suggests that justices believe that bargaining occurs. If they thought that such statements had no effect, there would be no reason to make them. Moreover, the existence of this form of bargaining challenges the attitudinal model: A justice motivated in the matter assumed by the attitudinalists would have *no* reason to make bargaining statements, whether they reflect real intentions to change behavior or not.

So we examined the memoranda, written by justices to the opinion writer, with an eye toward determining whether or not the following kinds of statements (all written to those assigned to write the majority opinion) were present:

• "I am in general agreement with your opinion in this case, but am uncomfortable with the broadly stated proposition in the fourth sentence of Section II, p. 6....I hope that you will consider simply dropping the sentence and its accompanying citations."

• "I will join your opinion if you will make one change in it..."

• "I hope you will consider two suggestions in this case...If you can see your way clear to making these changes, I would be pleased to join."

These are a few examples; Appendix A provides a fuller description of what we took to mean a "bargaining statement."

**Changes in Opinion Status.** Once the opinion writer has released her first draft, the other justices are free to issue their own writings. These may be: (1) concurrences in judgment, (2) regular concurrences, (3) concurrences in part and dissents in part, (4) memoranda opinions,<sup>32</sup> or (5) dissents. Based on the writings of Schwartz (1985, 1988, 1990) and others (*e.g.*, Urofsky 1987), though, we know that not all of these are published nor do they necessarily remain in the same form as they were when they were initially written (*e.g.*, dissents sometimes become concurrences, and vice versa).

Why changes in opinion status occur is, of course, a matter of speculation. But some have suggested that the justices use these writings as bargaining tools: They demonstrate to the writer that she cannot count on support if she does not adjust her opinion in ways

<sup>&</sup>lt;sup>32</sup> Sometimes non-opinion writers will circulate opinions labeled "Memorandum of Justice X." These are not (at least initially) called dissents or concurrences—but they typically do take a position in the case and

suggested in the dissent/concurrence/opinion memoranda. Under this logic, a writing (circulated by the non-opinion writer) that is never published or that changes in status when it is published provides some evidence of strategic interaction.<sup>33</sup> Our final measure of bargaining, then, is simply whether or not an opinion (written by a justice other than the assigned opinion writer) changed in status or was retracted.

# **Opinion Circulation:** Accommodating

Opinion writers too have many opportunities to engage in strategic activity. For, once they circulate their opinions and receive requests for changes from the justices, they have several available courses of action: (1) refuse to make further changes in the draft, (2) make changes, or (3) do nothing until other writings (*e.g.*, dissents, concurrences) circulate.

Factors contributing to this decision, we think, are the same as those that influence the choices made by non-opinion writers: *e.g.*, the writer's preferences, her beliefs about the preferences of the justices and the actions she expects them to take, institutional rules and norms, and so forth. But, for the same reasons we chose to focus on *bargaining* behavior (*e.g.*, it is an obvious manifestation of strategic interaction), we direct attention here toward (2)—*accommodating* behavior. More specifically, we have devised the following indicators of accommodation attempts on the part of the opinion writer: number of opinion drafts, changes in opinion form, and changes in the language of the opinion. Below we briefly describe these indicators; again Appendix A provides more detail.

Number of Opinion Drafts. As we have already noted, certain measures of strategic interaction—such as vote fluidity— may be the most obvious manifestations of interdependent decision making (see Brenner 1980, 527). But it is possible, as Murphy (1964) demonstrated, that opinion writers attempt to accommodate other justices through their opinions in ways that would be related to the vote. That is to say, they may be willing

provide some rationale. For an interesting example, see Harlan's memorandum in *Johnson v. Louisiana* (1972), located in the case files of Justices Brennan and Marshall.

<sup>&</sup>lt;sup>33</sup> We should also point out that both the threat of publications of alternative opinions and their actual publication provide evidence of the importance justices attach to content of legal opinions—evidence that

to recast opinions to prevent a justice from defecting to the other side or from concurring in judgment; or to lure a justice outside of the pre-existing majority coalition. Whatever the reason may be, attempts at accommodating the preferences of others provides some indication of an interdependent decision-making environment.

One way to capture attempts at accommodation is to count the number of opinion drafts circulated by the justice assigned to write the opinion of the Court. Again, this measure flows directly from work by Epstein, Mershon, Segal and Spaeth (1994), which claims that the number of drafts provides a reasonable, although probably imperfect, way to assess attempts at accommodating other justices. In particular, these scholars suggest that the number of drafts is an indication of the rounds of bargaining.

**Opinion Form Changes.** During conference, the justices typically decide on what form an opinion should take. In some instances, they fully anticipate that an opinion for the Court will result; in others, they believe that a per curiam is the appropriate way to treat the case; and, in still others, they agree to dispose of a case in a summary fashion even if it has been orally argued. We suppose that a change in the conference decision (*e.g.*, when a majority opinion becomes a per curiam) indicates the presence of strategic interaction. It is through an interdependent decision making process—typically with the justice initially assigned to write the opinion of the Court deciding to accommodate or not to accommodate others—that changes in opinion form result (see Epstein, Mershon, Segal, and Spaeth 1994).

**Changes in Language.** The most fundamental and consequential manifestation of strategic interaction—particularly accommodation on the part of the opinion writer— is when it generates major changes in the policy produced by the Court or in the rationale it uses to dispose of a case. This is surely the lesson of work by Pritchett (1961), Murphy (1964), and Howard (1968), not to mention of the more contemporary studies produced by the positive political theorists.

lends indirect support to the centrality of the most fundamental measure of strategic interaction (discussed below), changes in the language of majority opinions.

To capture such changes, we compared the policy and rationale adopted in the opinion writers' first circulation with that contained in the published opinion, and noted fundamental changes. Again, because Appendix A provides more detail, it is enough to say here that this is not as difficult as it seems because, on their circulations, the justices note whether the changes they made were merely "stylistic" or more substantive; they also list the pages on which they made language alterations (see Appendix D).

#### Data

To animate our measures, we drew two different samples of cases: (1) 1983 term cases that were orally argued and that are listed in William J. Brennan's register<sup>34</sup> (N=157) and (2) "important" cases<sup>35</sup> handed down during the Burger Court years (1969 through 1985 terms) (N=125).<sup>36</sup> Our logic in drawing these particular samples is as follows. We thought it important to examine an entire term—and a fairly typical one at that—to determine whether strategic interaction is commonplace or associated only with the kinds of *sui generis* cases examined by Howard (1968) and Murphy (1964). We looked at significant cases with an toward determining whether the critics of Howard and Murphy are right in arguing vote shifts and policy changes, in particular, more often occur in significant, rather than ordinary, cases (see, *e.g.*, Brenner 1980, 1982).

Our focus on the Burger Court era is by no means coincidental. For one thing, as the discussion of our measures makes clear, we needed to collect most of the data from the papers of Supreme Court justices—particularly their case files, docket books, and circulation records (see Appendix A)—rather than from published sources. For all of the Burger Court years, we could access the complete case files for two justices, Thurgood Marshall and William J.

<sup>&</sup>lt;sup>34</sup> This list is located in the Library of Congress' guide to the Papers of William J. Brennan (pp. 171-179). We took the cases from this list, rather than from another source (*e.g.*, the Spaeth database), because we wanted to track a term through the eyes of the justices. We are in the process of comparing the Brennan list with one generated from the Spaeth database. <sup>35</sup> Important cases are those listed in Witt (1990). This list has been used by many scholars (*e.g.*, Brenner

<sup>&</sup>lt;sup>35</sup> Important cases are those listed in Witt (1990). This list has been used by many scholars (*e.g.*, Brenner and Spaeth 1995; Segal and Spaeth 1996) because (1) other lists often exclude statutory cases and (2) other contemporary lists are not as reliable (see Cook 1993; Segal and Spaeth 1996).
<sup>36</sup> Appendix A provides more information on the two samples. All data used in this study will eventually

<sup>&</sup>lt;sup>30</sup> Appendix A provides more information on the two samples. All data used in this study will eventually be archived with the ICPSR.

Brennan; Brennan's docket books are available for the entire period and have been deemed highly reliable and comprehensive (see Maltzman and Wahlbeck 1995b).<sup>37</sup> For another, many modern-day internal procedures begin with the Burger Court. Before the 1969 Term, for example, justices did not regularly note where they had made changes in their opinion circulations. Such procedural changes were designed to facilitate the decision making process for the justices. But they also help scholars to trace that process.

There are, of course, drawbacks with looking exclusively at the Burger Court era. The most important and obvious one is that we may be unable to generalize about other Court periods. As many analysts have demonstrated, Chief Justices set particular and, apparently, distinct contexts for the process by which their Courts reach decisions. Certainly this was true of Hughes (see Danelski 1960), Stone (Walker, Epstein, and Dixon 1988; Haynie 1992), and perhaps Burger (see Kobylka 1989; Woodward and Armstrong 1979), to name just a few. And, since we have argued elsewhere that rational justices take into account the context in which they operate (see Knight and Epstein 1995), we would be loathe to say here that it is irrelevant to the decision making process.

More serious, though, is the draw back associated with relying on the papers of two justices—Brennan and Marshall—who generally agreed on the direction in which policy should head.<sup>38</sup> That drawback centers on the use of private memoranda and it results (probably) in the significant underestimation of strategic interaction as some of our measures capture it. Let us elaborate.

As we have noted, after the opinion writer circulates her first draft, justices can send her memoranda requesting changes; they can also send non-opinion writers memoranda on the circulated opinion. When justices decide to send such memoranda, they can choose to circulate it to (1) one justice (perhaps the opinion writer) and "cc" it to the entire

<sup>&</sup>lt;sup>37</sup> Of course, both of these justices served on the Rehnquist Court but Brennan has not permitted researchers to examine records compiled after the 1985 term. Even scholars who have been allowed to study the balance of his collection have been denied access to the Rehnquist Court records. Scholars do not need consent to inspect the entire Marshall collection but his dockets are available for only a few terms.

Conference (all justices participating in the case) or (2) one (perhaps only the opinion writer) or more justices but not "cc" it to all Court members. We refer to (1) as public memoranda and to (2) as private memoranda. *If private memoranda were not circulated ("cc ed") to Brennan or Marshall we have no record of them.* 

To what extent do the existence of private memoranda effect our analysis? On the one hand, they lead us to underestimate two of our indicators (the number of memoranda and the number of bargaining statements), and that underestimation, for the following reasons, is probably significant. First, we have several reasons to suspect that many private memoranda are, in fact, regularly circulated. For example, sometimes justices mention private memors in their public memoranda. In other instances, the opinion writer will make numerous changes in her first draft, circulate the new draft with the changes, and then be "joined"<sup>39</sup> immediately by a particular justice. When events occur in this sort of sequence, we suspect that the changes were the result of private correspondence. (And our examination of the Brennan and Marshall files provides some confirmation of this suspicion.) Second, private memoranda tend to be written by those in the majority. In other words, a justice who voted in conference with the prevailing coalition is more likely to write to the opinion writer and to circulate her memoranda only to other members of the majority. As the Burger Court wore on, Brennan and Marshall were less likely to be members of the winning coalition and, thus, less likely to receive private memos.

On the other hand, even if we had access to the papers of all the justices who sat on the Burger Court, some strategic interaction would remain undetected. For the justices do communicate orally. We know this because often justices write in their memoranda "As I said to you orally..." or "At the luncheon conference, we discussed..." So too, sometimes private memoranda get shared. That is, one justice will show another (or others) private correspondence. Unfortunately, information sharing of this sort is probably the exception,

<sup>&</sup>lt;sup>38</sup> At the very least, these justices had high inter-agreement scores. See Epstein, Segal, Spaeth, and Walker 1994, Table 6-3.

not the rule. So, in the end, we are left with the problem of underestimation—with no easy remedy in sight.

### Results

With this important caveat in mind, we now turn to the results. We begin with the measures of strategic interaction at conference and, then, explore those associated with the opinion circulation period.

#### Conference

As Table 1 suggests, traces of interdependent decision making at conference may manifest themselves in vote and dispositional fluidity. Beginning with vote fluidity, we found at least one shift in 57.3 % of the 281 total cases included in this part of the analysis.<sup>40</sup> Our figure comports with Brenner's work on earlier eras, as he found at least one change of vote in 61% of the Vinson Court cases (Brenner 1980) and 55% of those decided by the Warren Court (Brenner 1982).

Also fitting compatibly with Brenner's findings are the results of our comparison of landmark cases and those decided during the 1983 term. As Figure 2 shows, we—like Brenner—found differences between the two samples. In nearly 70% of the important cases did at least one vote change; that figure was around 50% for the 1983 term cases. Consider too the means of the samples: about 1.3 (std. dev.=1.3) for important cases and .95 (std. dev.=1.4) for 1983 disputes.

# (Figure 2 about here)

Turning to disposition, we found fluidity in about 14.9% of the cases— a figure that sits comfortably with Brenner's research. And, again, we observed differences between the two samples. As Table 2 shows, in only 9.6% (15 of 157) of the 1983 cases did changes in disposition occur; that figure was 21.4% (27 of 126) for the landmark sample.

<sup>&</sup>lt;sup>39</sup> When justices agree to sign on to an opinion, they typically write a memo to the writer saying that they "join" the opinion. Many simply write "I join" or "Join me."
<sup>40</sup> This figure excludes two cases (both in the landmark sample) in which the conference votes were

This figure excludes two cases (both in the landmark sample) in which the conference votes were completely unclear. Also note that, for the analyses of vote and dispositional fluidity (but for no others), we counted *Buckley v. Valeo* (1976) twice. For an explanation, see Appendix A.

### (Table 2 about here)

How should we interpret these findings? Surely, the data do not lend complete support to the first half of Howard's (1968, 44) contention ("hardly any major decision [is] free from significant alteration of vote..."). Dispositional fluidity did not occur in 80% of the landmark sample and vote changes failed to materialize in 30%; those figures were significantly less for 1983 term cases.

Yet neither do the data lend support to Segal and Spaeth's contention (and the implication of that contention) that voting/dispositional changes occur so infrequently as to verge on the trivial. In the first place, our results clearly show that members of the Court change their votes with some degree of frequency. Of course, the particular reasons for vote shifts are difficult to discern. It is possible, as we suggested earlier, that they are engaging in sophisticated behavior at conference, are updating their beliefs on the basis of new information, and so forth. Based on this analysis, however, we can only state that vote fluidity exists; we leave it to future work to analyze the specific causes.<sup>41</sup> Second, even though the odds are that the average case will not undergo a change in disposition between conference and final publication, we would not want to use conference disposition as the sole predictor of the final result for the landmark cases. After all, the 20% figure may be small but it is not without consequence.

More important is that changes in the Court's disposition of the case (just as changes in votes), while indicating the presence of interdependent decision making, need not occur for strategic activity to be present. Because votes are inextricably tied to policy as Murphy (1964) demonstrated, shifts in disposition (and votes) depend a good deal on the opinion produced by the writer and the degree to which she is willing to accommodate her colleagues. This follows from the fact that justices who are motivated by policy preferences will be primarily concerned with the substantive content of the law established by the opinion. Accordingly, we certainly want to consider the results of our other measures—particularly

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language changes in opinions—before reaching any strong conclusions about strategic activity (or the lack thereof) over disposition.

# **Opinion Circulation—Bargaining**

Opportunities for strategic interaction during the opinion circulation stage typically begin after the opinion writer sends a first draft of her opinion to the other members of the Court. From there, the justices may attempt to bargain with her over the language of the opinion (including the rationale it invokes and the policy it adopts). To capture this bargaining process, we adopted three measures: total number of memoranda, presence of bargaining statements, and changes in opinion status.

Figure 3 displays data concerning the total number of memoranda circulated in the 282 cases, and information about the two samples. Several results deserve underscoring. Consider, first, that in only 19.1% of the cases was no memoranda circulated; the mean case generated 4.8 memos (the median was 3.0). Quite clearly, then, it is the rare opinion draft that fails to generate some response from the justices. This is especially so since our overall figures—due to our inability to obtain all the private memoranda—underestimate the actual number of memos. Second, we again observe differences between the landmark and 1983 term samples. The mean for the former was 6.9 (median=4.) and 3.05 (median=2) for the latter. To put it another way, only 8 of the 1983 term cases generated 10 or more memos; that figure was 27 for the landmark sample.

# (Figure 3 about here)

As we suggested above, the number of memoranda may convey important information about the nature of Court decision making; at the very least the results indicate that justices do respond to one another's opinions. What the data in Table 3 show is whether or not these memos contain explicit bargaining statements. As we can see, differences exist between the samples, but the overall figures are impressive. In over 50% of the cases did at least one justice attempt to bargain with the opinion writer (64.8% for important cases and

<sup>&</sup>lt;sup>41</sup> Again, for a preliminary attempt to examine the causes, see Maltzman and Wahlbeck 1995c.

42.7% for the 1983 term). Of course, we suspect that these figures would be even higher if we had access to all of the private memoranda.

## (Table 3 about here)

Finally, we take as a manifestation of strategic interaction whether non-opinion writers circulated opinions that were never published or changed in form, say, from a dissent to a concurrence. For recall that various scholars have speculated that justices use these writings as bargaining tools and then withdraw or change them during the policy making process. Table 4 displays the results. As we can see, in 17.7% of the cases did justices retract their writings or change them during the circulation period. The figure again was significantly higher for important cases (26.4%) than for those decided during the 1983 term (10.8%).

## (Table 4 about here)

Thus, two of the bargaining measures point in the same direction: The justices typically respond to opinion drafts with memoranda and they tend to attempt to bargain with the opinion writer. And, again, these results are particularly impressive since we have been unable to obtain all the private memos. The data for the third indicator are more difficult to interpret. To be sure, we would be hard pressed to say that justices often write opinions that go unpublished or unchanged; yet, the fact that such writings are produced and then retracted or altered in nearly 20% of the cases is not easy to ignore—especially in light of the workload complaints that were registered by many Burger Court justices (Wasby 1993, 196-197).

### **Opinion Circulation**—Accommodating

As her opinion draft circulates and the justices respond, the writer may (or may not) attempt to accommodate the concerns raised by her colleagues. To explore this accommodation process, we devised three measures: number of opinion drafts, changes in opinion form, and changes in opinion language.

Overall, opinion writers produce about 3.2 drafts (std. dev.=1.5; median=3) per case. But, again, as Figure 4 shows, the figures differ for the two samples: about one more draft is

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circulated in important cases than in average ones. Changes in the form of the opinion, as Table 5 shows, did not occur at such high rates. In about 13% of the cases did, say, a majority opinion become a per curiam or vice versa. And differences between the two samples were rather small: Opinion form changed in about 10% of the 1983 term cases and in 17% of the important cases.

#### (Figure 4 and Table 5 about here)

Finally, we turn to changes in opinion language—the most consequential manifestation of strategic interaction and the one that has received the lion's share of attention. Are scholars (*e.g.*, Murphy 1964; Howard 1968) justified in suggesting that many opinions under go significant change in their rationale or in the policy they generate during the circulation process? As Table 6 shows the answer appears to be yes. In 53% of the cases did an important change—from the first draft through the published version— occur in the language of the opinion. And, as Brenner suspected, changes were more likely to occur in important cases than in average ones (62 % versus 45%).

## (Table 6 about here)

This finding, coupled with our other results, draws attention to the fact that changes in language occur in the absence of vote/dispositional changes. Just consider that policy/rationale alterations transpire in far more cases than do changes in disposition; moreover, of the 149 cases exhibiting a change in language, 35% did not experience a vote shift. One might speculate that had the opinion writer failed to accommodate various justices, more dispositional/vote changes would have resulted. What is beyond speculation, though, is that the second half of Murphy's assertion— "hardly any major decision [is] free from significant alteration of...language before announcement to the public"—receives support from our data.

#### Discussion

Obviously, specific aspects of our results are open to interpretation. Some may suggest that a 15% change in dispositions from conference to final publication, for example,

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is not very striking. But, as we have argued throughout, an emphasis on disposition (and votes), which the attitudinal model takes as a measure of judicial behavior, is inherently less meaningful (and less interesting) than a focus on the substantive content of the law established by the opinion. If justices are truly policy-seekers, then a concentration on disposition (or votes) will inevitably fail to capture much of the strategic behavior that may occur on the Court.

And, on the whole, it is difficult to peruse the various figures and tables and fail to reach the conclusion that such strategic interaction in fact exists. The justices bargain and accommodate, they change their votes, and they alter their opinions. In numerical terms, in only 36 of the total 282 cases did we find absolutely no indication of strategic interaction (at least by our measures)—and only 4 of those 36 cases were among those in the landmark sample; that is, of the 125 important cases, a measly 3% failed to register on at least one of our indicators.<sup>42</sup>

So our measures certainly reveal the presence of strategic behavior. Yet, we would be remiss if we failed to mention that they only scratch the surface. We became acutely aware of this as we coded the data from the justices' case files: Simply put, there exists a good deal of strategic behavior that, however difficult to tap through conventional measures, is noteworthy and important. Some examples include:<sup>43</sup>

1. Long-Term Thinking. In United Jewish Organizations v. Carey (1977), Powell told White (the opinion writer) that he was joining Stewart's concurrence because it "leaves me more options for the future."

2. Sophisticated Writing. In Keyes v. Denver Schools District (1973), Brennan circulated an opinion that distinguished between de jure and de facto desegregation. In an uncirculated memo (perhaps meant for his clerks), Brennan wrote:

At our original conference discussion of this case, Lewis [Powell] first expressed his view that the de jure/ de facto distinction should be discarded. I told him then that I too was deeply troubled by the distinction. Nevertheless, it appeared that a majority of the Court was committed to the view that the distinction should be maintained, and I therefore drafted *Keyes* within the framework

 $<sup>^{42}</sup>$ To derive this figure, we calculated those cases for which there were (1) no changes in votes, disposition, opinion form, opinion status, and language; (2) no bargaining statements; and (3) two or less memoranda and two or less circulated opinion drafts. <sup>43</sup> These examples come from the case files of Justices Brennan and Marshall.

established in our earlier cases... I would be happy to recast the opinion and jettison the distinction if a majority of the Court was prepared to do so.

In *Davis v. Passman* (1979), in which Brennan had assigned the majority opinion to himself, he also wrote a separate opinion that was never circulated. The opening paragraph (and first note) of that opinion was as follows:

The Court [that is, Brennan's opinion] does not address in detail the question of why challenges to congressional employment decisions, unprotected by the Speech or Debate Clause of the Constitution, Art I, §6, cl. 1, are justiciable, and I feel constrained to add a few words explaining why, in my view, this is the case.\*

\*As Justice Jackson once remarked, "it cannot be suggested that in cases where the author is a mere instrument of the Court he must forego expression of his own convictions."

**3**. Trading-Off. In United Steelworkers of America v. Weber (1979), Stewart wrote to Brennan: "if there are three others who join your proposed opinion, I shall also join in order to make it an opinion of the Court." In Summa Corporation v. California ex rel. State Lands Commission (1984), two justices—Brennan and Blackmun— voted to affirm. After Brennan joined Rehnquist's majority opinion to reverse, Blackmun wrote to Rehnquist: "I'll give you one of Charlie Whittaker's 'graveyard dissents' and go along in this case."

4. Manipulating/ Conflicting over Institutions. In several cases, five justices voted to "DIG" (dismiss certiorari as improvidently granted), while four voted to affirm (or four voted to reverse). Going with the majority preference, in such circumstances, would conflict with the Rule of 4, since four justices wanted to decide the case. Yet, some justices have taken seemingly contradictory positions on this conflict depending—we suspect—on their preferences and their beliefs about those of other Court members. Compare, for example, Brennan's positions in Welsh v. Wisconsin (1984) and Uplinger v. New York (1984). In Welsh, a majority of justices vote to DIG the case; Brennan wanted to reverse. And believing that at least three others would join him in reversal, he wrote a memo (to Powell) saying, "Although there are obviously no set rules that control the propriety of a DIG, the Court has previously acknowledged that the five Justices who originally voted to deny the writ will DIG a case only in the most narrow of circumstances." But, in Uplinger, another case in which five voted to DIG and the rest to affirm, Brennan wrote a per curiam for the majority, DIGGING the case. When Stevens questioned this, Brennan wrote back: "I do not believe the Rule of Four precludes the disposition I have proposed in this case nor do I think that the disposition is inconsistent with the position I advanced in Welsh."

In Garcia v. SAMTA (1985), the Conference split four to four; Burger eventually cast his vote to affirm and assigned the opinion to Blackmun. Blackmun, however, produced a first draft that reversed (interestingly enough, the first draft did not overrule *National League of Cities*). Immediately thereafter, the Chief Justice circulated a memo to Blackmun and to Conference saying that he thought the case should be reargued. This generated a long response from Stevens (who had voted to reverse): "Your motion to reargue this case prompts me to suggest that perhaps it would be useful to have a conference discussion of the standard that should be applied to such motions." He went on to articulate "four alternative grounds for reargument," none of which—perhaps not so surprisingly—covered *Garcia*.

These examples, not to mention the overall results of our study, take us back to our starting point. If the lack of documentation provides the dominant explanation for the lack of influence of choice models in judicial politics, then this situation should be corrected. For our data lead to the inescapable conclusion that interdependent interaction is a fundamental part of the process by which justices reach decisions. It is, thus, incumbent on scholars of the Court to consider strategic choice models as appropriate and potentially powerful vehicles through which to unravel the complexities of that process.

#### References

- Baird, Douglas G., Robert H. Gertner, and Randal C. Picker. 1994. *Game Theory and the Law*: Harvard University Press.
- Barry, Brian. 1978. Sociologists, Economists & Democracy. University of Chicago Press.
- Baum, Lawrence. 1994. "What Judges Want: Judges' Goals and Judicial Behavior." *Political Research Quarterly* 47:749-768.
- Baum, Lawrence. 1995. The Supreme Court. Washington, D.C.: CQ Press.
- Brams, Steven J. and Morton D. Davis 1976. "A Game-Theory Approach to Jury Selection." *Trial* 13:47-49.
- Brenner, Saul. 1979. "Game Theory and Supreme Court Decision Making: A Bibliographic Overview." Law Library Journal 72:470-475.
- Brenner, Saul. 1980. "Fluidity on the United States Supreme Court: A Reexamination." American Journal of Political Science 24: 526-535.
- Brenner, Saul. 1982. "Strategic Choice and Opinion Assignment on the U.S. Supreme Court: A Reexamination." *Western Political Quarterly* 35:204-211.
- Brenner, Saul and Harold J. Spaeth 1995. Stare Indecisis. Cambridge University Press.
- Cameron, Charles M. 1993. "New Avenues for Modeling Judicial Politics." Paper presented at the Conference on the Political Economy of Public Law, Rochester NY.
- Cameron, Charles M. 1994. "Decision-Making and Positive Political Theory (Or, Using Game Theory to Study Judicial Politics)." In *Position Papers*, ed. Lee Epstein and Gregory A. Caldeira for the Columbus Conference, Columbus OH.
- Clinton, Robert Lowry. 1994. "Game Theory, Legal History, and the Origins of Judicial Review: A Revisionist Analysis of *Marbury v. Madison. American Journal of Political Science* 38:285-302.
- Cohen, Linda R. and Matthew L. Spitzer. 1994. "Solving the *Chevron* Puzzle." *Law and Contemporary Problems:* 57:65-110.
- Cook, Beverly B. 1993. "Measuring the Significance of U.S. Supreme Court Decisions." Journal of Politics. 55:1127-1139.
- Danelski, David. 1960. "The Influence of the Chief Justice in the Decisional Process of the Supreme Court." Paper presented at the annual meeting of the American Political Science Association. Excerpted in *American Court Systems*. 1978, ed. Sheldon Goldman and Austin Sarat. San Francisco: W. H. Freeman.
- Downs, Anthony. 1957. An Economic Theory of Democracy. New York: Harper and Row.
- Elster, Jon. 1986. Rational Choice. New York University Press.
- Epstein, Lee. 1997. The Choices Justice Make. Washington, D.C.: CQ Press, under contract.
- Epstein, Lee and Carol Mershon. 1996. "Measuring Political Preferences." *American Journal of Political Science*, forthcoming.

Epstein, Lee, Carol Mershon, Jeffrey A. Segal, and Harold J. Spaeth. 1994. "Collaborative Research on the

Formation of Opinion Coalitions on the U.S. Supreme Court." Proposal to the National Science Foundation. Funded under SBR-9320284.

- Epstein, Lee, Jeffrey A. Segal, Harold J. Spaeth, and Thomas G. Walker. 1994. *The Supreme Court Compendium: Data, Decisions, and Developments*. Washington, D.C.: Congressional Quarterly.
- Epstein, Lee and Thomas G. Walker. 1995. "The Role of the Supreme Court in American Society: Playing the Reconstruction Game." In *Contemplating Courts*, ed. Lee Epstein. Washington, D.C.: CQ Press.
- Eskridge, William N. Jr. 1991a. "Reneging on History? Playing the Court/Congress/President Civil Rights Game." *California Law Review* 79:613-684.
- Eskridge, William N. Jr. 1991b. "Overriding Supreme Court Statutory Interpretation Decisions." Yale Law Journal 101:331-417.
- Eskridge, William N. Jr. 1994. Dynamic Statutory Interpretation. Harvard University Press.
- Eskridge, William N., Jr. and John Ferejohn. 1992. "The Article I, Section 7 Game." *Georgetown Law Journal* 80:523-564.
- Farber, Daniel A. and Philip P. Frickey. 1991. *Law and Public Choice*. Chicago: University of Chicago Press.
- Farber, Daniel A. and Philip P. Frickey 1992. "Foreword: Positive Political Theory in the Nineties." Georgetown Law Journal 80: 457-476.
- Ferejohn, John and Barry Weingast. 1992a. "Limitation on Statutes: Strategic Statutory Interpretation." Georgetown Law Journal 80:565-582.
- Ferejohn, John and Barry Weingast. 1992b. "A Positive Theory of Statutory Interpretation." *International Review of Law and Economics* 12:263-279.
- Frank, Jerome. 1930. Law and the Modern Mind. New York: Coward-McCann.
- Gely, Rafael and Pablo T. Spiller. 1990. "A Rational Choice Theory of Supreme Court Decision Making with Applications to the State Farm and Grove City Case." Journal of Law, Economics and Organizations 6:263-300.
- George, Tracey E. and Lee Epstein. 1992. "On the Nature of Supreme Court Decision Making."
- Goldman, Sheldon and Thomas P. Jahnige. 1976. *The Federal Courts as Political System*. New York: Harper & Row.
- Goldman, Sheldon and Austin Sarat, eds. 1989. American Court Systems. New York: Longman.
- Green, Donald P. and Ian Shapiro. 1994. Pathologies of Rational Choice Theory. Yale University Press.
- Grossman, Joel B. and Joseph Tanenhaus, eds. 1969. Frontiers of Judicial Research. New York: Wiley.
- Haynie, Stacia L. 1992. "Leadership and Consensus on the U.S. Supreme Court." Journal of Politics 54:1158-1169.
- Howard, J. Woodford. 1968. "On the Fluidity of Judicial Choice." *American Political Science Review* 62:43-56.

Knight, Jack. 1992. Institutions and Social Conflict. Cambridge University Press.

- Knight, Jack and Lee Epstein 1995. "On the Struggle for Judicial Supremacy." Paper presented at seminars at the SUNY/Stony Brook, Texas A&M University, University of Minnesota, and University of Virginia.
- Kobylka, Joseph F. 1989. "Leadership on the Supreme Court of the United States: Chief Justice Burger and the Establishment Clause." *Western Political Quarterly* 42:545-568.
- Kornhauser, Lewis A. 1992a. "Modeling Collegial Courts I: Path Dependence." International Review of Law and Economics. 12:169-185.
- Kornhauser, Lewis A. 1992b. "Modeling Collegial Courts. II. Legal Doctrine." Journal of Law, Economics, & Organization. 8:441-470.
- Krehbiel, Keith. 1988. "Spatial Models of Legislative Choice." Legislative Studies Quarterly 3:259-319.
- Llewellyn, Karl N. 1951. The Bramble Bush: On Our Law and Its Study. Rev. ed. New York: Oceana.
- Maltzman, Forrest and Paul J. Wahlbeck. 1995a. "May It Please the Chief? Opinion Assignments in the Rehnquist Court." *American Journal of Political Science*, forthcoming.
- Maltzman, Forrest and Paul J. Wahlbeck. 1995b. "Inside the U.S. Supreme Court: The Reliability of the Justices' Conference Records." *Journal of Politics,* forthcoming.
- Maltzman, Forrest and Paul J. Wahlbeck. 1995c. "To Affirm or Reverse? Strategic Policy Considerations and Voting Fluidity on the Burger Court." George Washington University. Typescript.
- Marks, Brian. 1988. "A Model of Judicial Influence on Congressional Policymaking: Grove City College v. Bell." Working Paper in Political Science P-88-7. Stanford University: The Hoover Institution.
- Marks, Brian. 1989. "A Model of Judicial Influence on Congressional Policymaking: Grove City College v. Bell." Ph.D. diss., Washington University.
- Murphy, Walter F. 1962. Congress and the Supreme Court. University of Chicago Press.
- Murphy, Walter F. 1964. Elements of Judicial Strategy. Chicago: University of Chicago Press.
- Murphy, Walter F. and Joseph Tanenhaus. 1972. The Study of Public Law. New York: Random House.
- Ordeshook, Peter C. 1992. A Political Theory Primer. New York: Routledge.
- Pritchett, C. Herman. 1941. "Divisions of Opinion Among Justices of the U.S. Supreme Court, 1939-1941." American Political Science Review 35: 890-898.
- Pritchett, C. Herman. 1948. The Roosevelt Court. New York: Macmillan.
- Pritchett, C. Herman. 1961. Congress versus the Supreme Court. University of Minnesota Press.
- Pritchett, C. Herman. 1968. "Public Law and Judicial Behavior." In *Political Science: Advance of the Discipline*, ed. Marian D. Irish. Englewood Cliffs, NJ: Prentice-Hall.
- Pritchett, C. Herman. 1969. "The Development of Judicial Research." In *Frontiers of Judicial Research*, ed. Joel B. Grossman and Joseph Tanenhaus. New York: Wiley.
- Riker, William H. 1962. The Theory of Political Coalitions. Yale University Press.
- Rodriguez, Daniel B. 1994. "The Positive Political Dimensions of Regulatory Reform." *Washington University Law Quarterly* 72:1-150.

- Rohde, David W. 1972a. "A Theory of the Formation of Opinion Coalitions in the U.S. Supreme Court." in *Probability Models of Collective Decision-Making*, ed. Richard G. Niemi and Herbert F. Weisberg. Columbus: Merrill.
- Rohde, David W. 1972b. "Policy Goals and Opinion Coalitions in the Supreme Court." *Midwest Journal* of Political Science 16:208-224.

Rohde, David W. and Harold J. Spaeth. 1976. Supreme Court Decision Making. San Francisco: Freeman.

- Schubert, Glendon. 1958. "The Study of Judicial Decision-Making as an Aspect of Political Behavior." American Political Science Review 52: 1007-1025.
- Schubert, Glendon. 1965. The Judicial Mind. Evanston: Northwestern University Press.
- Schwartz, Bernard. 1985. The Unpublished Opinions of the Warren Court. Oxford University Press.
- Schwartz, Bernard. 1988. The Unpublished Opinions of the Burger Court. Oxford University Press.
- Schwartz, Bernard. 1990. The Ascent of Pragmatism: The Burger Court in Action. Reading, MA: Addison-Wesley.
- Schwartz, Edward P. 1992. "Policy, Precedent, and Power: A Positive Theory of Supreme Court Decision Making." Journal of Law, Economics, and Organization. 8:219-252.
- Segal, Jeffrey A. 1995. Marksist (and Neo-Marksist) Models of Supreme Court Decision Making: Separation-of-Powers Games in the Positive Theory of Law and Courts." Paper presented at the annual meeting of the American Political Science Association, Chicago IL.
- Segal, Jeffrey A. and Harold J. Spaeth. 1993. *The Supreme Court and the Attitudinal Model*. Cambridge University Press.
- Segal, Jeffrey A. and Harold J. Spaeth. 1996. "The Impact of Stare Decisis on the Votes of Supreme Court Justices." *American Journal of Political Science,* forthcoming.
- Shapiro, Martin. 1995. "From the Section Chair." Law and Courts 5:1.
- Shapley, L.S. and Martin Shubik. 1954. "A Method for Evaluating the Distribution of Power in a Committee System." *American Political Science Review* 48:791-792.
- Spaeth, Harold J. 1972. An Introduction to Supreme Court Decision Making. New York: Harper & Row.
- Spaeth, Harold J. 1995a. "The Attitudinal Model." In *Contemplating Courts*, ed. Lee Epstein. Washington, D.C.: CQ Press.
- Spaeth, Harold J. 1995b. "The U.S. Supreme Court Database Column: An Expanded Version of the Database (Continued)." *Law and Courts* 5:19.
- Spiller, Pablo T. and Rafael Gely. 1992. "Congressional Control of Judicial Independence: The Determinants of U.S. Supreme Court Labor-Relations Decisions, 1949-1988." *RAND Journal of Economics* 23:463-492.
- Spiller, Pablo T. and Emerson Tiller. 1993. "Invitations to Override: Congressional Reversals of Supreme Court Decisions." University of California-Berkeley. Typescript.
- Ulmer, S. Sidney. 1971. Courts as Small and Not So Small Groups. Morristown, NJ: General Learning Press.

Urofsky, Melvin I., ed. 1987. The Douglas Letters. Bethesda, MD: Adler and Adler.

- Walker, Thomas G. 1970. "Judges in Concert: The Influence of the Group on Judicial Decision-Making." Ph.D. diss., University of Kentucky.
- Walker, Thomas G. 1994. "The Development of the Law and Courts Field." In *Position Papers*, ed. Lee Epstein and Gregory A. Caldeira for the Columbus Conference, Columbus OH.
- Walker, Thomas G., Lee Epstein, and William Dixon. 1988. "On the Mysterious Demise of Consensual Norms in the United States Supreme Court." *Journal of Politics* 50:361-389.
- Wasby, Stephen L. 1993. The Supreme Court in the Federal Judicial System. Chicago: Nelson-Hall.
- Witt, Elder. 1990. Congressional Quarterly's Guide to the U.S. Supreme Court. Washington, D.C.: Congressional Quarterly.
- Woodward, Bob and Scott Armstrong. 1979. The Brethren. New York: Simon and Schuster.
- Zorn, Christopher J. 1995. "Congress and the Supreme Court: Reevaluating the 'Interest Group Perspective'." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago IL.
- Zorn, Christopher J. and Gregory A. Caldeira. 1995. "Separation of Powers: Congress, the Supreme Court, and Interest Groups." Paper presented at the annual meeting of the Public Choice Society and Economic Science Association, Long Beach, CA.

#### **Appendix A. Data Collection**

Before detailing our data collection procedures, a few general words are in order. First, throughout this Appendix we use the term "case files" to describe folders, in the Brennan and Marshall collections, that house information on particular cases. That information typically includes: opinion drafts, conference memoranda, and public and private memoranda circulated among the justices. "Docket sheets" are the sheets Brennan used to record conference votes and discussion (see Appendix B for an example). "Circulation Records" (see Appendix C) are the sheets Brennan used to record votes and to track the circulation of various opinions.

Second, over the next few months, we plan to conduct reliability analyses. Our design calls for two checks. First, new coders will recode samples of the 1983 term and important cases for all indicators. Second, we are contacting other researchers who have been coding votes from Brennan's docket sheets with the hope of conducting some comparative analyses.

#### **Case Selection**

#### **Important Cases**

We included all cases on Witt's (1990) list that were decided during the 1969-1985 terms. The unit of analysis was citation. In other words, if two or more cases were combined under one U.S. cite. we included only the lead case.

#### 1983 Term Cases

We included all 1983 cases listed on the register of the Papers of Justice William J. Brennan, located in the Library of Congress (pp. 171-179), with two exceptions: original cases and non-orally argued cases. We also included only the lead case if two or more cases were combined under one U.S. cite (in fact, Brennan and Marshall stored information about consolidated cases in the folder with the lead case).

#### Measures

#### Vote Fluidity

**Coding Rules.** We compared the vote taken during the first conference on the case with the published vote. We coded fluidity as occurring 1) when justices changed their votes in any way (*e.g.*, affirm to reverse, DIG to affirm, etc.) or 2) when justices passed at conference. We did not code fluidity as occurring when 1) justices cast votes at conference and later recused themselves or 2) Brennan penned a ? next to the justice's vote, as in Blackmun—affirm? We would code "no fluidity" if Blackmun in fact voted to affirm in the published opinion; if he reversed, we would count this as a vote change.

In some cases, the justices took separate votes on the various issues raised in a given case. Typically the votes did not differ much from issue to issue but *Buckley v. Valeo* (1976) raised some problems. Each justice cast a vote on all the law's provisions. For virtually all but one of these provisions, one vote changed (albeit by different justices); for the remaining one, five votes changed. We debated a number of plausible coding schemes but settled on one that counted *Buckley* twice: in one, we coded the vote shift as 1; in the other as 5. Only for vote and dispositional fluidity did we include two *Buckleys* in the analysis. One was eliminated for all other measures.

**Data Sources.** Traditionally, scholars have coded vote fluidity from the docket sheets of the justices. But, as we discovered, there are many problems with relying solely on the dockets. First, in handling the original materials, we noted numerous erasures and white outs. This led us to suspect that someone (Brennan, one of his clerks, etc.) had gone back and changed the sheets *after* conference. And, as it turned out, we were right—dockets are occasionally altered at a later date. Second, and relatedly, Brennan's docket sheet votes did not always jive with what he recorded on his circulation records or with memoranda contained in the case files. For example, we would occasionally come across a memo saying "I passed at conference but now vote to affirm." Yet, when we returned to Brennan's docket sheet we would find that he recorded (perhaps at a later date) the vote as an affirm (or a reverse, etc.), not a pass. Third, even though Brennan's records have been deemed highly reliable and complete, he occasionally failed to record votes of one or more the justices. Finally, some of the docket sheets are missing.

Given these problems, we relied on three sources of information to compile conference vote records: the docket sheets, the circulation records, and memoranda. We think this triangulation approach helped us to create an extremely accurate data set; at the very least our records are reasonably complete. For only two cases were conference votes so unclear as to make them impossible to code and, thus, to include in the vote analysis. We obtained final vote records from the *U.S. Reports*.

#### Dispositional Fluidity

**Coding Rules.** We compared the disposition reached in the first conference vote on the case with the published disposition. We coded fluidity as occurring when the disposition changed in any way (*e.g.*, affirm to reverse, DIG to affirm, etc.). We coded the disposition as unclear when we could not ascertain precisely what the majority wanted to do with the case.

Data Sources. See "Vote Fluidity" above.

#### Number of Memoranda

**Coding Rules.** We counted the number of private and public memoranda circulated among (or between) the justices from the day of conference through the announcement of the decision. Excluded were: 1) opinion drafts that were labeled "Memorandum of Justice X", 2) "I join" or 'I await dissent"-type memos, 3) hold memos, <sup>\*</sup> and 4) memoranda to or from the justices' clerks or the Clerk of the Court.

Data Sources: Case files of Brennan and Marshall.

#### **Bargaining Statements**

**Coding Rules.** We coded a bargaining statement as present when a justice explicitly hinged her "join" of the majority opinion/per curiam, etc. on the writer making a change(s) in the opinion. We excluded 1) memoranda in which justices asked for a change but stated that they joined the opinion regardless of whether or not the change was made, 2) various memoranda (as in Memorandum of Justice X) that were actually opinions designed to persuade tentative justices.

Data Sources. Case files of Brennan and Marshall.

#### Changes in Opinion Status

**Coding Rules:** We coded a change in opinion status as present when justices, other than the justice assigned to write on behalf of the Court, 1) circulated a dissent, concurrence, or unlabelled opinion ("Memorandum of Justice X") that they eventually retracted or 2) circulated a dissent, concurrence, or unlabelled opinion that eventually changed in status (*e.g.*, from a dissent to a concurrence). We excluded opinions that were never circulated to the full Court.

Data Sources. Case files of Brennan and Marshall.

#### Number of Opinion Drafts

**Coding Rules:** We took this number directly from Brennan's circulation record (see our notation on Appendix C). Brennan's count includes all drafts written by the justice assigned to write the opinion of the Court, the per curiam, the summary order or, more generally, any circulation representing the views of

<sup>&</sup>lt;sup>\*</sup> Quite often the Court will receive a set of cases that raise the same issue, say, speedy trials. The justices will group together these "speedy trial" cases, select one for full dress treatment, and put the rest on a special "hold" list. Once the Court issues its decision in the case it selected for full review, the opinion writer circulates a "Hold" memo, detailing what she thinks the Court should do with the "held" cases. (It is worth noting that cases on the "Hold" list have not been argued, briefed, or discussed.) Basically, these Hold memos prescribe one of two courses of action for each held case: deny cert. or issue a *summary* order (*e.g.*, a GVR [grant, vacate, and remand]). Each justice then sends a memo stating what should be done with the held cases: deny cert. or GVR. The votes are tallied and the appropriate order issued. All memos concerning "hold" decisions were excluded from our count.

the plurality/majority of the Court. It does not include drafts of dissents, concurrences, etc. If the circulation record was missing (this occurred in only a few cases), we adopted Brennan's rules and hand counted the number of drafts located in the case file. This was not difficult to do since the drafts are numbered (see Appendix D).

We encountered only one problem. In two cases, *Buckley v. Valeo* (1976) and *United States v. Nixon* (1974), most or all members of the Court drafted particular sections of the opinion. Because so many drafts circulated in these cases—and because it was virtually impossible to keep track of all the writings (some were typed; many were not labeled)—we excluded these cases from this part of the analysis.

Data Sources: Brennan's circulation records and Brennan's and Marshall's case files, which contain numbered opinion drafts.

#### **Opinion Form Changes**

**Coding Rules.** We coded the presence of a change in opinion form if 1) the first draft of the opinion changed from a per curiam to a signed opinion of the Court or a judgment and vice versa or 2) if the first draft of the opinion changed from an opinion of the Court to a judgment and vice versa (some opinions do start out as judgments). We excluded Memoranda that became majority opinions/judgments.

Data Sources. Case files of Brennan and Marshall; U.S. Reports.

#### Language Changes

**Coding Rules.** Virtually all opinions undergo changes in language. Since we were interested in major changes in rationale or policy, we noted the presence of change if 1) a case was overruled in the first draft but not in the final opinion (or vice versa), 2) the case was reassigned (to a member in the minority conference coalition) after the first draft was circulated, 3) the case was summarily disposed of but later was decided by a full opinion, 4) a major section of the opinion was deleted (or added) between the first draft and final publication, 4) the published opinion articulated a different test, policy, or standard of law from that which appeared in earlier drafts. We excluded 1) minor or stylistic changes, that is, those that were really nothing more than wording changes and 2) changes that occurred during the circulation process but were omitted in the final version.

**Data Sources.** We compared opinion drafts contained in the Brennan/Marshall case files with the opinions reported in *U.S. Reports*. As Appendix D shows, the justices indicate the pages on which they made changes. This greatly facilitated the coding process.

### Appendix B. Brennan's Docket Sheet for *Batson v. Kentucky* (1986)

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Voted on....., 19... Assigned ....., 19... Announced ....., 19...

JAMES KIRKLAND BATSON

78.

KENTUCKY

|               | HOLD<br>FOR | CERT. JURISDICTIONAL ME |          |   | MERITS MOTION |     | ABSENT | NOT VOTING   | TING   |   |   |   |   |         |
|---------------|-------------|-------------------------|----------|---|---------------|-----|--------|--------------|--------|---|---|---|---|---------|
|               |             | G                       | D        | N | POST          | DIS | APT    | REV          | AFF    | 0 | D |   |   |         |
| Burger, Ch. J |             |                         |          |   |               |     |        |              | $\leq$ |   |   |   |   |         |
| Brennan, J    |             | ι                       | <b>.</b> |   | 1             |     |        | $\leq$       |        |   |   |   |   |         |
| White, J      |             |                         |          |   |               |     |        |              |        |   |   |   |   |         |
| Marshall, J   |             |                         | ]        |   |               |     |        | V            |        |   |   |   | 1 |         |
| Blackmun, J   |             | l                       | ]        | I |               |     |        | $\checkmark$ |        |   |   |   |   |         |
| Powell, J     |             | l                       | l        |   |               |     | [      | M            |        |   |   |   |   |         |
| Rehnquist, J  |             |                         |          |   |               |     | []     |              | Y      | [ |   |   |   |         |
| Stevens, J    |             | l                       |          |   |               |     | [      |              |        | [ |   |   |   |         |
| O'Connor, J   |             |                         |          |   |               |     |        | $\mathbf{V}$ |        | [ |   |   | I |         |
|               |             |                         | ι .      |   |               |     | ι      | ι            |        |   | ι | 1 | ι |         |
|               |             |                         |          | _ |               |     |        |              |        |   |   |   |   | مارون ب |

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# Appendix C. The First Page of Brennan's Circulation List in *Batson v. Kentucky* (1986)

Batson v. Kentucky No. 84-6263 ..... Announced: \_\_April 30, 1986. Argued: \_\_\_\_\_ December 21, 1985 Date: December 16, 1985 Assigned: Justice Powell Affirm: CJ, WHR Vote: Reverse: WJS, BRM. TH. HAB, LPD, JPS, SOC Pass: . No Vote: Out: Print: Date: Circulated: Authors' Note: This is where Brennan recorded the number of opinions circulated by the justice assigned to write the opinion of the Court. So, for Batson, we record the number of opinion Print: Remarks: Date drafts as four. The Chief Junite: \*\* ... .. .. .. Justice Brennan: Justice White: 8-16





### Table 1. Conceptualizing and Measuring Strategic Behavior

| Stage   | Manifestations of<br>Strategic Behavior                      | Measures of Manifestations   |
|---|--|--|
| 1. Conference Discussion Strategi<br>and Tentative Vote | c Misrepresentation<br>of Preferences<br>Persuasion/Updating | Vote Change<br>Disposition Change  |
| 2. Opinion Circulation                                  | Bargaining   | Number of Memoranda<br>Bargaining Statements in Memoranda<br>Change in Opinion Status                      |
|   | Accommodating  | Number of Majority Opinion Drafts<br>Opinion Form Change<br>Rationale/Policy Change in Majority<br>Opinion |

*Note:* This table identifies the manifestations and measures of strategic behavior that we think predominate during the various stages. But we do not wish to convey the notion that these manifestations and measures are associated only with the stages listed above. For example, justices can engage in strategic persuasion during both the conference and circulation stages. During that latter phase, they can use memoranda, phone conversations, and opinion drafts to persuade others. By the same token changes in votes and dispositions can come about as a result of strategic interaction during the opinion circulation process—and not just during the first stage.

# Table 2. Dispositional Fluidity

|                            | Important Cases |      | 1983 | Term Cases | All Cases |         |
|----------------------------|-----------------|------|------|------------|-----------|---------|
|                            | n percent       |      | n    | percent    | n         | percent |
|                            |                 |      |      |            |           |         |
| Disposition Did Not Change | 99              | 78.6 | 142  | 90.4       | 241       | 85.2    |
| Disposition Changed        | 20              | 15.9 | 15   | 9.6        | 35        | 12.4    |
| Disposition Unclear        | 7               | 5.6  |      |            | 7         | 2.5     |
| total                      | 126             |      | 157  |            | 283       |         |

### Table 3. Bargaining Statements

|   | Important Cases |              | 1983     | Term Cases   | All Cases  |              |
|---|-----------------|--------------|----------|--------------|------------|--------------|
|   | n               | percent      | n        | percent      | n          | percent      |
| No Bargaining Statements<br>1 or More Bargaining Statements | 44<br>81        | 35.2<br>64.8 | 90<br>67 | 57.3<br>42.7 | 134<br>148 | 47.5<br>52.5 |
| total   | 125             |              | 157      |              | 282        |              |

# Table 4. Changes in Opinion Status

|   | Important Cases |              | 1983      | Term Cases   | All Cases |              |
|---|-----------------|--------------|-----------|--------------|-----------|--------------|
|   | n               | percent      | n         | percent      | n         | percent      |
| Absence of Change<br>Presence of Change | 92<br>33        | 73.6<br>26.4 | 140<br>17 | 89.2<br>10.8 | 232<br>50 | 82.3<br>17.7 |
| total                                   | 125             |              | 157       |              | 282       |              |

# Table 5. Changes in Opinion Form

|   | Important Cases |              | 1983      | Term Cases   | All Cases |              |
|---|-----------------|--------------|-----------|--------------|-----------|--------------|
|   | n               | percent      | n         | percent      | n         | percent      |
| Absence of Change<br>Presence of Change | 104<br>21       | 83.2<br>16.8 | 141<br>16 | 89.8<br>10.2 | 245<br>37 | 86.9<br>13.1 |
| total                                   | 125             |              | 157       |              | 282       |              |

# Table 6. Changes in Opinion Language

|   | Important Cases |              | 1983     | Term Cases   | All Cases  |              |
|---|-----------------|--------------|----------|--------------|------------|--------------|
|   | n               | percent      | n        | percent      | n          | percent      |
| Absence of Change<br>Presence of Change | 47<br>78        | 37.6<br>62.4 | 86<br>71 | 54.8<br>45.2 | 133<br>149 | 47.2<br>52.8 |
| total                                   | 125             |              | 157      |              | 282        |              |