Predicting Drift on Politically Insulated Institutions: A Study of Ideological Drift on the United States Supreme Court

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*We thank Emily Beaulieu, Ryan Black, Barry Burden, Brad Canon, Wonbin Cho, Marcus Hendershot, Dan Morey, Laura Moyer, Rich Pacelle, Nicolai Petrovsky, Clayton Thyne, Steve Voss, Geoff Wallace, and Sophia Wallace for comments, and Michelle Wedeking for research assistance. An earlier version of the paper was delivered at the 2011 Southern Political Science Association.
Abstract

Elected officials have a difficult time controlling politically insulated institutions, leaving the appointment process as perhaps their most effective means of influence. Yet, history shows that actors on these institutions often behave unpredictably. Our goal is to devise a methodology that predicts whether (and how much) nominees to politically insulated institutions will drift ideologically. Using linguistic software created by cognitive psychologists, we examined over 1000 speeches, articles, and separate opinions written by Supreme Court justices before they were nominated to detect cognitive patterns associated with ideological drift. Our results show that justices whose pre-nomination words revealed cognitive inconsistency drifted more than their colleagues with stable world views.
President Eisenhower was once asked whether he made any mistakes while president. His response: “Yes, two, and they are both sitting on the Supreme Court”—an obvious reference to the unexpected voting behavior of Chief Justice Warren and Justice Brennan, whom he put on the bench (Nemacheck 2007, 44). Likewise, never one to mince words, President Truman commented on Justice Tom Clark: “It isn’t so much that that he’s a bad man. It’s just that he’s such a dumb son of a bitch (Watson and Stookey 1995, 67).

Nor could President George W. Bush have been pleased when, in 2006, Peter Kirsanow, one of his Republican appointees to the National Labor Relations Board, voted pro-labor over 63% of the time, or when Peter Schaumber, his pick to chair the NLRB, voted pro-labor over 53% of the time. We can only imagine that other presidents have experienced similar frustrations with their appointees.

How can political actors influence policy outcomes in politically insulated policy-making bodies? While it is not impossible, such control is difficult. For example, post hoc controls such as auditing and policy reversal are often too costly to be effective (Moe 1987; Owens 2010). And ex ante controls like deck stacking (McCubbins, Noll and Weingast 1987), often break down in practice (Hill and Brazier 1991). So, what must politicians do to increase their control over politically insulated institutions? They must stock them with faithful agents. Yet, if history is any guide, agents appointed to such positions are anything but faithful. Supreme Court justices, for example, nearly always drift ideologically once on the Court (Epstein et al. 2007). And, if our data on the NLRB reflect anything, it may be that independent agencies pose similar challenges.

The central purpose of this paper is to devise an empirical model that predicts whether a nominee—before she takes office—will drift ideologically. While our method for examining this question applies to any nominee to a politically insulated position (and who, for reasons we explain more fully below, has a paper trail), we apply the approach to Supreme Court nominees, asking whether presidents and senators can, prior to a nomination (or con-

1Data on NLRB voting behavior during 2006 collected by the authors.
firmation), predict ideological stability. We focus on Supreme Court justices because they are actors with perhaps the most institutional protection, and their drift is most capable of producing significant policy change.

Using linguistic software created by cognitive psychologists, we examine the language justices publicly used prior to their nominations to detect cognitive patterns associated with ideological drift. We examine over 1000 speeches, articles, and separate (i.e., dissenting or concurring) opinions written by justices before they were nominated to the Court to determine whether the words they used revealed stable or unsettled minds. Drawing from literature on cognitive processing, our theory is that justices who exhibit pre-nomination cognitive inconsistency will drift once on the Court (and drift more than others), while those observing pre-nomination cognitive stability will drift less. In short, while politicians may have limited control over federal courts and independent agencies, through effective appointments undertaken with knowledge of the nominee’s ideological stability, they may nevertheless influence policy outcomes on these politically protected bodies.

**Political Control and Ideological Drift**

When it comes to determining whether elected officials exercise control over politically insulated institutions—both the federal judiciary and the bureaucracy—there has been no shortage of studies (Moe 1985, 1984; McCubbins, Noll and Weingast 1987; Owens 2010; Revesz 2001; Sala and Spriggs 2004; Weingast 1984; Whitford 2005). The 1980s saw a rebirth in research on whether political actors control bureaucrats. The almost universal consensus at that time was that executive agencies operated independently of a weak Congress. In 1983, Weingast and Moran (1983) and, later, McCubbins and Schwartz (1984) challenged this argument. They contended that members of Congress—or, more specifically, congressional committees—controlled agencies (Weingast 1984). Members of Congress, they argued, seek reelection and will not therefore allow wayward agencies to stand in their way of getting reelected (Mayhew 1974). Members help themselves get reelected by distributing policy goods to relevant groups in their districts, and they distribute these policy goods via com-
mittees (to which they self-select). Members, then, would do everything they could to control the agencies with jurisdiction over the issues that affected their electoral chances. Strategic separation of powers scholars examining political control over the Supreme Court came to similar conclusions, though by different methods (Epstein and Knight 1998). These scholars theorized that Congress and the president use their institutional tools to influence the choices justice make, forcing them into majoritarian compliance.

Despite the theoretical appeal of these (and other) studies, many scholars nevertheless contend that elected officials have a much more difficult time controlling these politically insulated institutions. When it comes to political control over the Court, a host of scholars find that political actors simply fail to influence judicial behavior, either at the Court’s merits stage (Sala and Spriggs 2004) or at its agenda setting stage (Owens 2010). On the bureaucratic side of things, Moe (1987) slices up many of the arguments favoring congressional control of politically insulated agencies. Among the features Moe underscores are that Congress suffers from collective action problems, making coordination problematic and that political control is costly. After all, agencies nearly always enjoy informational advantages over political actors, which makes effective monitoring difficult.

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2Committees have almost exclusive authority over small sets of policy issues, which provides committee members gatekeeping power over proposed legislation, as well as agenda setting power over their own desired legislation. At the same time, members tend to self-select on to committees with jurisdictions that impact their constituents. In so doing, members gain political leverage over the issues that affect their constituents the most, which also happen to be the same issues on which they could win or lose their elections.

3For example, Congress can initiate or support constitutional amendments to overturn judicial decisions. It can reduce the Court’s budget, alter its composition, strip it of jurisdiction, hold judicial salaries constant, change pension provisions, impeach justices, and override the Court’s statutory interpretation decisions. Presidents, of course, have similar powers.
Accordingly, even scholars associated with the political control perspective admit the limited capacity of elected officials to influence such policymakers via post hoc responses. Thus, McCubbins, Noll and Weingast (1987) argue that to control insulated agencies, winning political coalitions must “hard wire” them by imposing ex ante limitations in statutes. That is, politicians could use procedures as a way to force agencies to favor certain electoral coalitions over others and, ultimately, alter bureaucratic policy. Winning electoral coalitions could “stack the deck” on agencies by: providing subsidies to finance the under-represented (if they will support the coalition); giving resources to a “trustworthy” agency to be involved in the another agency’s rulemaking or adjudicative process; imposing stiff evidentiary burdens on challengers; limiting judicial review over issues; and by placing the burden of proof on a particular party (agency or individual) (McCubbins, Noll and Weingast 1987).

Yet, even these ex ante provisions are limited. To be sure, no scholarship of which we are aware examines how politicians use ex ante controls to influence judicial outcomes—something that, in itself suggests we should be doing more to predict ideological drift. And, applied to the political control over agencies, the theory of ex ante control still runs into trouble. While these controls may be effective in some broad sense, their specific applications may not amount to the type of contemporaneous control that elected officials desire. As Hill and Brazier (1991) point out, ex ante agency controls are only effective under a host of limited conditions. The enacting coalition must provide the agency with clear guidance, the enacting coalition must have designed the structure and process requirements specifically to maintain political agreement, and the courts must reliably enforce the original bargain (374).

So, given the difficulties with ex post control over courts and agencies and, as Hill and Brazier (1991) point out, the limited ability to use ex ante controls to induce outcomes, what can politicians do to increase the odds of favorable outcomes on these politically insulated entities? The answer, we argue, can be found in the appointment process. Of course, we are not the first to highlight the importance of selecting loyal agents (see, e.g., Dahl 1957). Wood and Waterman (1991), for example, examined seven different executive agencies and found
that their policy changes were primarily the result of the appointment process: “political appointments dominate the dynamic of institutional control” (822). Less sanguine, but still focusing on the notion of control via appointments, Snyder and Weingast (2000) focus on the number and types of appointments presidents need to make before they can effectively control an independent agency with a multi-member tribunal. And, Segal’s finding on the Supreme Court likewise suggests that to change the Court, elected officials should seek membership change.

The problem, however, is that elected officials do not always know whether their nominees will remain loyal agents over time. Consider Supreme Court justices. A recent study found that most justices change ideologically over time (Epstein et al. 2007). Of the twenty-six justices who served ten or more terms on the Court since 1937, fully twenty-two changed ideologically. As Figure 1 shows, twelve justices became more liberal, seven become more conservative, and three voted both more conservatively and more liberally during their tenures. Only four remained stable.

[Figure 1 about here]

As a normative consideration, this may be problematic. The United States Constitution, as amended, creates an advice and consent procedure that balances popular and elite control, providing an indirect role for public control over Court composition and direction (Calabresi and Lindgren 2006). The president, one of only two nationally elected office holders, selects the nominee. The senate, chosen by voters, confirms. This process allows the people, if only indirectly, to influence who sits on the Court, with the dominant popular regime nearly always occupying a majority in the nation’s highest tribunal (Dahl 1957). Indeed, some scholars claim “the democratic legitimacy of constitutional review rests upon the appointment of judges by elected authorities” (Jackson and Tushet 1999, 474; cited in Calabresi and Lindgren 2006, 811). This role is, of course, no coincidence. When creating the constitution, the Framers sought to grant a significant amount of nominating power to the president, but with the security of a veto power by the Senate, in order to ensure the proper
and stable use of the appointment power. Upon adoption of the Seventeenth Amendment, voters enjoyed the right to elect their senators, giving them additional power over the Court (see generally Maltese 1995).

The single largest factor that motivates presidents’ selection of nominees (Nemacheck 2007) and senators’ votes on those nominees is ideology (Epstein and Segal 2005; Cameron, Cover and Segal 1990). Yet, when justices change ideologies over time, their behavior deviates not only from the goal of the advice and consent procedure, but also from the public’s tacit acceptance of their selection. Epstein and her colleagues put it aptly when they ask us to “imagine a Court full of Blackmuns,” meaning, a Court composed of justices who drift significantly over time (Epstein et al. 2007, 1498). Can anyone who believes in the nomination process and the virtue of indirect public control claim that such widespread movement would be normatively appealing? We think not.5

What is more, the changing behavior of justices generates changes in legal doctrine. When justices drift ideologically, longstanding precedents can be toppled and new jurisprudential monoliths built to replace them, change that occurs without new members even passing through the advice and consent process. Indeed, Epstein et al. (2007) show that the Court’s doctrine in fact changed as a direct result of ideological drift. Had certain justices (i.e., Kennedy and O’Connor) not drifted, doctrine over affirmative action, gay rights, and other issues would have looked dramatically different (much more conservative) than they do today.

The goal of this paper is to devise an empirical model that predicts whether—a nominee to a politically insulated position will drift ideologically. We seek to offer elected officials and researchers a tool they can use to predict whether “20 years

4See The Federalist Numbers 76-77.

5Of course, if justices drift ideologically with a changing public, the normative threat may subside. Yet, that different justices, serving at the same time, drifted in different directions casts doubt on this saving argument.
from now, [they] will be the same [people] with the same philosophy…” (Welna October 5, 2005). The results may even influence whom they nominate and confirm.

**A Theory for Predicting Ideological Drift**

We argue that the words nominees used before their nominations can predict whether they will drift ideologically. Scholars examine language to peer into the thought processes of individuals. The language people use “provides important clues as to how people process...information and interpret it to make sense of their environment” (Tausczik and Pennebaker 2010, 19). Indeed, how people use language can reveal what they think and feel: “words that reflect how people are expressing themselves can often be more informative than what they are expressing” (Newman et al. 2003, 666). As such, by examining the words people employ, we can understand not just the substantive expressions they convey, but also their thought processes, gaining insight into how they make decisions, how they see the world, and where they see themselves in it. Put plainly, we believe that nominee language can predict drift.

First, though, we must establish that words do in fact convey important cognitive information about their users—signals that tell us about their users’ thought processes. A host of studies show that language use is strongly correlated to thought processes. Consider the relatively innocuous use of pronouns. Contemporary research finds that writers who use more first-person pronouns like “I” and “me” are more likely to commit suicide than writers who reference more collective dynamics, such as “we” or “us” (Stirman and Pennebaker 2001; cited in Newman et al. 2003, 666). People suffering from depression are more likely to use first person singular pronouns (Weintraub 1981). College students who use more cognitive words earn better grades and are more healthy (Klein and Boals 2001). These works, which represent but a fraction of related studies, highlight that a speaker’s words reveal important insights about her cognitive world (i.e., how she processes information about the world), and establish the value of examining words to understand individual cognitive styles.

We turn to a known construct—cognitive complexity—that captures speaker’s cogni-
tive styles. Cognitive complexity is composed of two cognitive elements: differentiation and integration. The first element, differentiation, represents the degree to which a speaker perceives multiple perspectives underlying an issue or dispute. That is, differentiation reflects whether the person sees the world in black and white, or in shades of gray. Integration, on the other hand, represents the degree to which the speaker can see the connectivity among these perspectives or dimensions. These two elements collapse into a single cognitive complexity score (ranging from least complex to most complex). Less complex language reflects speakers who use “one-dimensional, evaluative rules in interpreting events” and in which the speaker formulates opinions “on the basis of only a few salient items of information” (Gruenfeld 1995, 5). On the other hand, speakers using more complex language tend to “interpret events in multidimensional terms and to integrate a variety of evidence in arriving at decisions” (Tetlock, Bernzweig and Gallant 1985, 1228).

A host of studies suggest that we can learn much about political and legal actors—and their cognitive approaches—by examining their words. Consider Pennebaker and Lay (2002), who examined the words Rudy Giuliani used throughout his press conferences between 1993 and late 2001 to measure his cognitive complexity. Their results suggested that, as a result of his personal battle with cancer and the terrorist attacks on September 11, Giuliani became more socially connected and emotional, looked to the future, and perhaps most importantly, showed himself to be more open to multiple perspectives and compromise. Likewise, looking at the Supreme Court, Tetlock, Bernzweig and Gallant (1985) found that judicial ideology was related to how “cognitively complex” justices viewed cases. Gruenfeld and Preston (2000) argued that justices upholding precedent interpret the law with more complexity than justices overturning precedent (see also Gruenfeld 1995).

We take these studies as our starting point and expand on them. We believe that nominees who have exhibited a wide field of cognitive approaches to interpret the world will drift more ideologically once they take office than nominees who have shown a stable cognitive approach prior to their nomination. That is, we believe that nominees who evidence
cognitive consistency (i.e., employ a more consistent cognitive perspective to interpret the world) will drift less than nominees who evince cognitive inconsistency (i.e., employ a broader range of cognitive perspectives to interpret the world). There are two reasons why we believe cognitive inconsistency correlates with drift.

Consider, first, the causal story. When people use more than one cognitive approach to interpret the world (either intentionally or not) they expose themselves to various—and sometimes new—viewpoints. These viewpoints may challenge the person’s previous thoughts and beliefs and force them to reevaluate their positions. Simply put, the act of opening themselves up to multiple viewpoints might cause them to be exposed to new ideas which, in turn, can change their minds. The second reason why cognitive inconsistency might lead to drift is a more obvious one—the person’s mind has simply never been made up. Thus, the drift that we see is nothing more than the evolution of the person’s cognitive processing. Regardless, we expect that when a nominee’s pre-nomination words exhibit cognitive inconsistency (i.e., the use of varying cognitive approaches), she will drift more once she takes her seat on the politically insulated body.

Applying the Theory: Predicting Ideological Drift on the United States Supreme Court

While our theory for predicting drift could apply to all institutions with limited political control, we focus here on predicting whether Supreme Court justices drift. To be sure, we recognize that there are inherent differences between the Court and independent agencies. The Court has stronger institutional independence, justices serve longer, and the norms against attacking the Court are much stronger than those protecting independent agencies.

In a similar vein, a person who employs multiple cognitive approaches might be more susceptible to persuasion by others. Whereas a person with one stable world view likely believes in his or her view, the person who displays a wide range of cognitive styles may be more open to compromise, and ripe for persuasion by others.
agencies. Politicians thus are likely to find it easier to exercise control over agencies than courts. Still, the logic of drift prediction applies to all positions of limited political control. Put simply, given the difficulties elected officials experience trying to influence these bodies, they will be sure to desire information that allows them to predict ideological drift.\footnote{Of course, even if drift is only a phenomenon that occurs on the Court—which we doubt—the consequences of it (and need to study and predict it, are just as important).}

And drift most definitely occurs on the Court. As stated above, most justices drift ideologically over time (Epstein et al. 2007). To be sure, some justices’ changes were more pronounced than others. Justices Blackmun, O’Connor and Souter became more liberal, to the dismay of their Republican-appointing presidents, while others, like Black, Frankfurter and White, drifted to the right, presumably to the equal dismay of their Democrat-appointing presidents. By all accounts, Blackmun’s drift was unexpected, as was the changing behavior of Justices O’Connor and Black. But should their drift have been surprising? Are presidents simply without power to predict whether their nominees will drift? Our argument is, no. We believe that when the words justices use prior to their nominations show a world view that varies, they will drift once on the Court—and the more inconsistent their world views, the farther they are likely to drift. In short, we expect the following:

*Cognitive Inconsistency Hypothesis:* A justice whose pre-nomination words observe more cognitive inconsistency will drift ideologically more than a justice whose pre-nomination words reveal less cognitive inconsistency.

Of course, other factors likely predict ideological drift, and one of them is the political context underlying the nomination. Moraski and Shipan (1999) and, later, Johnson and Roberts (2005) argued that presidents face three political regimes when nominating Supreme Court justices: an unconstrained regime, a semi-constrained regime, or a fully constrained regime. These regimes will influence the strategy elected officials employ when nominating and justices (Nemacheck 2007; see also Snyder and Weingast 2000). For example, during periods where the president is unencumbered by the senate, he can devote substantial re-
sources towards selecting “true believers” who best fit his ideological goals. On the other hand, during fully constrained regimes, presidents will be less able to nominate such loyalists. We might therefore see the most drift among justices selected in constrained regimes and the least drift among justices nominated during unconstrained regimes.

Research also indicates that prior judicial experience may predict ideological drift (Cameron and Park 2009). When nominees serve as lower court judges, they develop records (i.e., paper trails) that become useful predictors of future behavior. These nominees, after all, will have seen controversial legal issues and formulated opinions about them. As such, we expect that a justice with more experience as a federal judge will be less likely to drift ideologically than a justice with little or no such experience.

We also thought it wise to control for features contemporaneous to decision making such as Court composition and institutional context. Greenhouse (2007), for example, suggests that other justices, and the cases for which justices are responsible, can influence their world views. It is no coincidence, Greenhouse argues, that Justice Blackmun moved to the left after Roe v. Wade. “...[B]eing vilified by one side of the abortion debate and lionized by the other... led him to become more and more entrenched in his defense of Roe” and thereby drift to the left. Epstein, Martin, Quinn and Segal (2007, 1520, n. 132) likewise suggest that the “push and pull” from other justices can influence drift. When a new justice joins the Court, the body’s group dynamics change. This leads us to expect that longer serving justices who sit with numerous colleagues will drift the most, while short-timers on stable Courts will drift the least.8

Finally, public opinion might lead to drift. A body of empirical scholarship focuses on whether public opinion influences justices. Some scholars find evidence that the Court is responsive to public opinion, while others find no such evidence (Mishler and Sheehan 1993; Norpoth and Segal 1994; Stimson, Mackuen and Erikson 1995; Flemming and Wood

8This control also enables us to account for the number of terms because, by chance alone, we are likely to observe more drift as the number of terms served increases.
1997; McGuire and Stimson 2004; Giles, Blackstone and Vining 2008). We control for public opinion, but since the literature does not agree on the direction of change (or whether it occurs at all) we do not hypothesize a direction in this regard.

**Data, Methods and Measures**

Our goal, again, is to devise an empirical model that predicts whether a nominee to a politically insulated body will drift once taking that office. There are, of course, two ways that political actors could be “let down” by the appointee. The first occurs when they simply wrongly estimate the nominee’s ideological mettle, and the nominee immediately takes office behaving contrary to expectations. The second form of deviation—which is our focus—occurs when the actor takes office largely behaving as expected, but then drifts over time.

To operationalize our approach, we followed Epstein et al. (2007) and examined the ideological drift of all justices who served ten terms or longer on the Court and who were appointed since 1937. For robustness purposes, we employ two different dependent variables. Our first dependent variable measures each justice’s average term-by-term Martin and Quinn (2002) preference change. More specifically, we calculated the justice’s change from year 1 to year 2, from year 2 to year 3, until retirement (or the end of our sample in the 2009 term), and then calculated the mean value of that change. Once we determined the mean value, we found the absolute value of that average change. This approach allows us to examine non-monotonic drift among justices. The second dependent variable measures the amount of drift between the justice’s first term and her last term. It is calculated by

\[ |(\text{term}_1 - \text{term}_2) + (\text{term}_2 - \text{term}_3) + (\text{term}_3 - \text{term}_4)| \]

where term values are the corresponding Martin-Quinn scores.

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9We were not able to obtain a single pre-nomination text for Justice Byron White so we were forced to exclude him from our analysis.

10For example, if we considered a justice who served for four terms, we would calculate the absolute change as follows: \[ |(\text{term}_1 - \text{term}_2) + (\text{term}_2 - \text{term}_3) + (\text{term}_3 - \text{term}_4)| \], where term values are the corresponding Martin-Quinn scores.
subtracting the first term Martin-Quinn score from her final term Martin-Quinn score and then determining the absolute value. This approach is appropriate for those justices (the vast majority in our data) who drifted monotonically.\footnote{While drift is a term-by-term dynamic, we are trying to examine whether pre-nomination cognitive inconsistency predicts drift. As such, we must use the justice’s voting behavior across her tenure as the unit of analysis.} For example, Justice Douglas’s first term (1938) Martin-Quinn score was -2.688 and his final term (1974) Martin-Quinn score was -6.617. Thus, his absolute distance drifted from his first to last years was 3.929, the largest value in our dataset. On the other end of the spectrum, Justice Murphy’s first term (1939) Martin-Quinn score was -1.596 and his last term (1948) score was -1.597, for an absolute drift of .001, the smallest amount of drift. Because our dependent variables are measured on a continuous scale and distributed normally, we estimate our models using Ordinary Least Squares regression.\footnote{To account for potential sensoring of the data, we also refit our models using tobit regression and obtained nearly identical results.}

We pause momentarily to address the issue of drift directionality. Our models do not address the directionality of drift because we have no theory that predicts directional drift. While we are sure that readers will be interested in predicting directionality, we must reserve that study for another date. For now, however, our approach—focusing on drift in both directions—fits squarely with nearly every existing model of institutional behavior, which assume that presidents have uni-dimensional, single-peaked, \textit{symmetrical} preferences (Moraski and Shipan 1999; Ferejohn and Shipan 1990; Owens 2010; Sala and Spriggs 2004). This, of course, means that presidents (and senators) will be equally unhappy with shifts to the left as they are with shifts to the right. In our conclusion, we offer some preliminary findings vis-à-vis directionality, as well as suggestions for further inquiry into the topic.

\textit{Cognitive Inconsistency}. Our key covariate measures the cognitive inconsistency displayed by each nominee prior to his or her nomination. To generate measures of cognitive
inconsistency for each justice, we collected three sources of texts: every published article by a justice prior to his or her nomination; every separate opinion authored by a justice while presiding as a circuit court judge or state supreme court justice; and every speech delivered by a justice prior to his or her nomination. Some justices (e.g., Jackson, Murphy, and Warren) delivered numerous speeches, forcing us to rely on a random sample of utterances. Others (e.g., Blackmun, Brennan) delivered very few speeches, which allowed us to examine the universe of their speeches. The result was an extensive sample of 1,043 texts, consisting of over 445 separate lower court opinions, 393 articles, and 389 speeches written and delivered by the justices prior to their nominations. The distributions for each justice by type of documents are shown in the appendix.

Once we had these documents in hand, we calculated cognitive complexity scores for each text per justice. More specifically, we employed the content analysis program, “Linguistic Inquiry and Word Count” (LIWC) to analyze the cognitive complexity of each justice’s article, opinion, and/or speech. LIWC is a textual analysis software package, devised by psychologists, to examine the words people use and from them, capture various aspects of their cognitive processes. LIWC analyzes “attentional focus, emotionality, social relationships, thinking styles” and other features of speakers’ words (Tausczik and Pennebaker 2010, 24). The program assigns each word to one (or more) of 70 predefined dimensions that have

13 For a justice recess appointed to the Supreme Court, we collected and examined all materials prior to the date of the recess appointment. For more information on how we collected this information, see the appendix.

14 The one exception is Justice O’Connor. Because we found only one pre-Court writing by her, and because the only lower court opinions we have for her were majority opinions, we were forced to rely on her majority opinions. Our results do not change when we omit O’Connor from the analysis.

15 LIWC can be found at: http://www.liwc.net. More specifically, with a programmed dictionary, LIWC searches through each text for over 2,300 words (or word stems).
been categorized by independent examiners. It then tallies up the words used in each dimension and provides a descriptive output that alerts the researcher to the relative frequency with which the speech employed the various cognitive and emotional dimensions. We examined ten LIWC indicators that illuminate the speaker’s (or writer’s) cognitive complexity: *causation, insight, discrepancy, inhibition, tentative, certainty, inclusiveness, exclusiveness, negations, and the percentage of words containing six or more letters*. We then standardized and transformed these ten indicators into one new measure, their level of cognitive complexity.\(^\text{16}\)

After we retrieved a cognitive complexity score for each text per justice, we calculated the *standard deviation* of cognitive complexity scores for that justice. The standard deviation of complexity scores among all the justice’s texts, which we show below in Figure 2 constitutes our measure of *Cognitive Inconsistency*. Employing, instead, the mean level of cognitive complexity would tell us what average type of cognitive style a nominee held and whether that leads to drift, but it would not tell us how much the nominee’s pre-nomination cognitive processing varied. Since we theorize that pre-nomination inconsistency is correlated with post-confirmation drift, we believe our measure is more appropriate. Large values of *Cognitive Inconsistency* indicate that the nominee’s utterances revealed large changes in world view while small values indicate the nominee’s world view remained stable, pre-nomination. Our expectation is that large values of *Cognitive Inconsistency* will be associated with more drift while small values will be associated with less drift. (For robustness internal and external validity of LIWC has been established in a series of publications (*see, e.g.* Tausczik and Pennebaker 2010; Pennebaker and King 1999).\(^\text{15}\)

\(^{16}\)For a discussion of these dimensions, the words they include, and the transformation process, see the appendix. Our approach is justifiable based on a separate factor analysis that revealed only one factor. The alpha scale reliability coefficient for these 10 items is .68, which is reasonably good for a large set of variables (Gadarian 2010; Jamal and Nooruddin 2010).
purposes, we also measured *Cognitive Inconsistency* by looking to the inter-quartile range of each justice’s cognitive complexity scores. The results remained the same.) Additionally, some readers may wonder if we simply are measuring an ideological dynamic here: whether justices with higher levels of cognitive complexity are more liberal. We find, however, no correlation between cognitive complexity and ideology in our sample, nor between cognitive inconsistency and ideology.

[Figure 2 about here]

*Political Regimes.* To measure whether the nomination took place during an unconstrained, semi-constrained, or fully constrained regime, we followed the logic of Johnson and Roberts (2005) and looked to the Court’s position vis-à-vis the president and senate filibuster pivot. When the president was spatially located between the senate filibuster pivot and the Court, we coded *Unconstrained Court* as 1; 0 otherwise. When the senate filibuster pivot fell between the president and Court, we coded *Semi-Constrained Regime* as 1; 0 otherwise. And, when the Court fell between the senate filibuster pivot and the president, we coded *Constrained Court* as 1; 0 otherwise.\(^{17}\)

*Experience as a Federal Judge.* To measure the nominee’s experience as a lower federal court judge, we counted the number of separate opinions the nominee wrote as a federal circuit court judge. (We obtain the same results if we use the number of years the nominee served as a lower federal court judge at the time of the Supreme Court nomination.)

*Court Composition.* To measure whether justices are “pushed or pulled” by changing Court composition, we take into consideration two things: (1) the number of terms a justice served on the court; and (2) the number of new justices that ascended to the Court while the justice served on the Supreme Court. To construct the measure, we divide the number of years on the Court by the number of new justices on the Court during the justice’s tenure, and then multiply that number by negative one. Large values (i.e., negative numbers closer

\(^{17}\)Further information on our coding practices can be found in the online appendix.
to zero) indicate more instability in the surrounding context with more changes taking place relative to the length of tenure on the Court. Small values (i.e., larger negative numbers) indicate more stability (i.e., less turnover relative to the length of tenure). This measure differentiates between the most unstable context—Stanley Reed, with a value of -1.46, who served 19 years but experienced 13 other new justices—and the most stable context—Stephen Breyer, with a value of -5.33 who served 16 years but experienced only 3 new members through the 2009 term.

Public Opinion. To measure public opinion, we referred to Ellis and Stimson (2009), which examines the percentage of the public since 1937 that self-identifies as being liberal per year.\textsuperscript{18} We calculated the public’s average opinion movement each year during the terms the justice was on the bench and take the absolute value of that average.\textsuperscript{19} Stated differently, it provides a good measure of the public’s average volatility during the justice’s tenure on the Court. High values indicate more average public movement ideologically and low values indicate low average volatility.

Finally, we control for the overall number of speeches and writings a justice made (in our sample) pre-nomination. We do so to account for the fact that when making more utterances, the nominee has more potential to fluctuate.\textsuperscript{20}

\textsuperscript{18}Unfortunately, the Stimson (1999) public mood measure only dates back to 1952 and is therefore incomplete for our purposes.

\textsuperscript{19}This means that the measure disregards if the public is moving liberally or conservatively from year to year, as it simply tracks the absolute level of movement.

\textsuperscript{20}We also note in a separate model, we included a control for the Chief Justice (as a dummy variable) to determine whether his institutional duties lead to drift. The coefficient was not statistically significant. We also controlled for all appointments made by presidents since Reagan (with a dummy variable) because recent presidents have taken a stronger interest in their nominees’ ideologies. The coefficient, however, did not approach conventional levels of statistical significance. We also tried controlling for the nominees’ qualifications but that
Results

We sought to devise an empirical model that predicts whether a nominee—before she takes office—will drift ideologically. On that score, we have succeeded. Our results, provided in Table 1, show that the coefficients on nearly all our variables are signed in the expected direction and are statistically significant.

[Table 1 about here]

Consider our main covariate of interest, Cognitive Inconsistency. We hypothesized that as the justice’s pre-nomination words showed cognitive inconsistency, the justice would drift more once on the Court. The results support our hypothesis. As the level of the justice’s pre-nomination cognitive complexity scores increases, the justice drifts more.21 Figure 3 shows how much a justice drifts as a result of Cognitive Inconsistency. The top figure variable too failed to reach statistical significance.

21We performed several diagnostic tests on the two models. First, using the Breusch-Pagan test, we determined that our model is not plagued by heteroskedasticity. We also checked for multicollinearity by examining the Variance Inflation Factor (VIF). For both models, the VIFs ranged between 1.3 and 1.98, with a mean of 1.62 in both models, indicating that the predictors are not highly correlated. We also checked the correlations among the covariates and none are problematic. Next, we checked for the presence of outliers in the data by graphing the student and standardized residuals and checking to see if any observations were greater than 2. We found Brennan, Harlan, and Warren showed signs of being outliers. Nevertheless, when we re-estimated the models with each of them removed from the data (first individually, and then all together), our results stayed the same or became stronger. Next, we estimated the DFBETA influence statistic, and for any observations with values greater than 1 we removed the observations from the analysis. Nothing changed. Finally, we estimated Cooks Distance as another way to see how much influence certain observations held. After accounting accordingly, our results remained the same.
represents the average drift per term and the bottom figure represents total drift from the first to last term. The figure shows that justices who exhibited pre-nomination cognitive consistency drifted the least, while justices with the most inconsistent scores drifted the most. To be sure, even justices who held the most consistent pre-nomination cognitive scores drifted, but they drifted much less than their vacillating colleagues. As the bottom portion of Figure 3 shows, with a *Cognitive Inconsistency* score of 5—which is approximately one standard deviation above the mean—a justice will have drifted over two Martin-Quinn units since their first term (or almost a tenth of a unit each term). Put in more personal terms, this difference reflects the ideological distance (during the 2009 term) between Chief Justice Roberts, a conservative stalwart, and Justice Ginsburg, a consistent liberal. Drift, in short, is real, meaningful, and now, predictable.

![Figure 3 about here](image)

Of course, one alternative argument is that large values of cognitive inconsistency are simply the result of some nominees having spoken to or written for different audiences. For example, the language a nominee might use when giving a speech to the chamber of commerce might be dramatically different than language included in her dissent as a lower court judge in an abortion case. We are sympathetic to this claim but, ultimately, believe that our results remain strong in the face of it. For starters, one might think that the largest difference in “utterance style” would come from the comparison of (very formal) opinion writing versus published articles and speeches. When we remove lower court opinions from the sample and refit the model, however, our results remain robust (though we lose the ability to examine some nominees). Additionally, in our model we control for the number of utterances made by justices, so our results hold even in the face of that variable. Finally, we believe that this is an argument that actually *supports* our assertion. If nominees try to be all things to all people when delivering public utterances, no one—perhaps including the nominee herself—has a strong grasp of that person’s world views. The chameleon changes
colors with its surroundings. We might therefore expect someone with such traits to change over time, especially when enjoying a politically insulated office.

Next, consider the effects of regime type on drift. The coefficient on *Unconstrained Regime* is statistically significant and negatively signed, supporting our hypothesis that when the president is unconstrained, he is able to pick justices who drift less. Model 2 highlights the magnitude of this constraint on the president. A nominee selected during an unconstrained regime drifts approximately 2.5 Martin-Quinn units less over his or her tenure compared to justices nominated during a constrained or semi-constrained regime.22 Given the relatively few justices nominated during such a regime, however, one must exercise caution interpreting these results. Still, the findings accord with presidential scholarship (Nemacheck 2007) and literature that finds presidents generally are constrained by the filibuster pivot (Krehbiel 1998).

We also observe that as a justice endures more turnover during her tenure on the bench, she drifts more. Under periods of great stability, marked by a long tenure on the Court with few new justices, ideological drift is relatively minimal—less than one Martin-Quinn unit. During periods marked by relative instability (one standard deviation above the mean), however, with high turnover among justices, a justice will drift over two Martin-Quinn units.

Looking at the bottom half of Table 1, we see the public opinion coefficients are statistically significant and negatively signed, suggesting as the public shows more volatility, justices drift less. It is only when the public shows little change do we see justices drift more. The magnitude of the coefficients suggests it is a relatively strong force. We speculate (admittedly, *post hoc*) that justices might view it as their role to serve as a brake on majoritarian shifts. Nevertheless, more research on this topic is needed.

22For the models reported, Justice Jackson is coded as a constrained regime, though nothing changes if he is coded as an unconstrained regime.
Finally, we see the coefficients for *Judicial Experience* and *Number of Utterances* are both significant and negatively signed. Nominees with longer paper trails, whether from writing separate lower court opinions or from non-judicial writings and speeches, drift significantly less than justices with shorter paper trails. The larger implication of this finding is that presidents need to pay close attention to what they know (and can learn) about their potential nominees. Selecting a stealth candidate, while it may improve the odds of confirmation, can have long term negative repercussions for the president and his policy goals.\(^{23}\)

Our main contribution here is *methodological*—we seek to predict whether and how much a nominee will drift ideologically. We would be remiss, then, if we did not offer some predictions about recent nominees to the Court. In that vein, we collected information on two nominations to the Supreme Court—one successful (Chief Justice Roberts) and one not (Harriet Miers). By all accounts, President Bush nominated John Roberts, not just because he was eminently qualified to serve on the Court, but also because he was a known commodity, a committed conservative. The converse, however, was not true of Harriet Miers. Conservatives did not know whether she would be “another Souter” and drift once on the Court. While President Bush assured conservatives that she would remain the same over time, they were skeptical. We examined these two nominations by collecting 15 texts for Roberts (6 writings and 9 separate opinions), and 22 texts for Miers (20 writings and 2 speeches). We then fit a model and, from it, predict their behavior. The results, as shown in Figure 4 are compelling. On the one hand, we see that Chief Justice Roberts is not likely to drift much while on the Court. Of course, by all accounts, President Bush knew precisely what he was getting with Chief Justice Roberts, a solid conservative justice. And that is what he got. Perhaps the more interesting story, though, is whether Miers would have drifted. The data suggest that conservatives had little to fear from Miers’s drift. Our

\(^{23}\)This finding also suggests that nominees who deliver more speeches and write more articles tend to be more settled and drift *less.*
results suggest that while he should have done a better job selling her to his base, President Bush might have been right about Miers’s overall minimal likelihood of drifting.

[Figure 4 about here]

Conclusion

For elected officials, political control over insulated institutions is difficult at best. This is not to say that political control is absent. It is to say, however, that standard tools available for auditing such actors are costly to employ effectively. As such, perhaps the best method available to elected officials to influence politically insulated institutions is to stock them with loyal agents. But, if history shows anything, it is that insulated actors behave in ways that frustrate their appointers. So what are elected officials to do? The answer, we argued, was to take additional steps to ensure that the people they appoint will drift as little as possible once they take their protected offices.

We examined thousands of pages of speeches, published articles, and separate opinions written by justices prior to their nominations to determine whether the pre-nomination words justices used predict whether they would drift. This massive set of data allowed us to peer into the cognitive processes of justices prior to their nominations. We were able to examine how stable their world views were. We theorized that nominees whose world views were inconsistent would drift more once on the Court than their counterparts with stable cognitive approaches—and the data supported our hypotheses. Justices whose pre-nomination words evinced cognitive inconsistency drifted more than their counterparts with more stable views. The results suggest, then, that politicians should think twice about nominating individuals with inconsistent cognitive processing traits.

At the same time, we found that political context (the nominating regime for the president), the volatility of public opinion, and prior judicial experience (i.e., the length of their paper trails) all matter. So too, does the relative degree that the Court composition changes. Thus, while elected officials can only control so much in terms of limiting the amount
of ideological drift, they must—if they have a hope to influence insulated institutions—scrutinize nominees closely for cognitive (in)consistency.

Finally, while we provide a method to predict ideological drift by politically insulated actors, one question remains. Can cognitive inconsistency predict the ideological direction in which a nominee will drift? While we do not have any theoretical expectation regarding the direction, we find some evidence that cognitive inconsistency leads to liberal drift (p=0.12, two-tailed test). Why this might be the case, we cannot be sure. One possibility is that the justices we examined largely served with other liberal colleagues who could persuade them to drift. In this vein, Greenhouse’s assertion that Blackmun drifted as a result of his caseload and colleagues is spot on. Still, though, we controlled for this argument, which suggests that there may be something inherent in cognitive processing that makes some actors more likely to drift to the left, while others drift to the right. To be sure, politicians are likely to want this information, perhaps to make strategic nominations with the goal of putting nominees on insulated bodies who look moderate today, but might become more extreme in the future. We leave these questions to future scholarship. The first step is to predict drift, and the data suggest that our model has done just that.
References


Table 1: Ordinary Least Squares Estimates of Ideological Drift

<table>
<thead>
<tr>
<th></th>
<th>(1) Average Drift</th>
<th>(2) Total Distance Drifted</th>
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<tbody>
<tr>
<td>Cognitive Inconsistency</td>
<td>0.016* (0.007)</td>
<td>0.498** (0.185)</td>
</tr>
<tr>
<td>Semi-Constrained Regime</td>
<td>0.002 (0.028)</td>
<td>0.314 (0.737)</td>
</tr>
<tr>
<td>Unconstrained Regime</td>
<td>-0.093** (0.027)</td>
<td>-2.559** (0.722)</td>
</tr>
<tr>
<td>Court Composition</td>
<td>0.019* (0.008)</td>
<td>0.619** (0.219)</td>
</tr>
<tr>
<td>Public Opinion</td>
<td>-0.159* (0.067)</td>
<td>-4.235* (1.756)</td>
</tr>
<tr>
<td>Judicial Experience</td>
<td>-0.001** (0.000)</td>
<td>-0.030** (0.009)</td>
</tr>
<tr>
<td>Number of Utterances</td>
<td>-0.001* (0.000)</td>
<td>-0.030** (0.011)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.130** (0.039)</td>
<td>3.404** (1.040)</td>
</tr>
</tbody>
</table>

N: 25
Adj. R²: 0.528, 0.564

Standard errors in parentheses
* p < .05, ** p < .01, one tailed
Note: See text for details on diagnostic tests for heteroscedasticity, multicollinearity, and outliers.
Figure 1: Estimated ideal points of justices serving ten or more terms between 1937 and 2009. The vertical axes are the justices’ estimated ideal points, with higher values representing more conservative preferences. The dots are the point estimates and the vertical lines are the 95% credible intervals. All estimates derived by Martin and Quinn (2002). Graph reflects findings of Epstein et al. (2007).
Figure 2: Dots represent the level of Cognitive Inconsistency displayed by a justice, pre-nomination. It is derived from the standard deviation of a justice’s level of cognitive complexity.
Figure 3: Predicted amount of ideological drift based on level of pre-nomination cognitive inconsistency. The top figure corresponds to the first model (Average Drift Per Term) and the bottom figure corresponds to the second model (Total Distance Drifted). Dots represent means and dashed lines represent 95 percent confidence intervals.
Figure 4: Predicted amount of ideological drift for Chief Justice Roberts and Harriet Miers. The top figure corresponds to the first model (Average Drift Per Term) and the bottom figure corresponds to the second model (Total Distance Drifted). Dots represent means and whiskers represent 95 percent confidence intervals. Note, the difference in the size of the confidence intervals is largely due to their different nominating regimes.