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

Ryan J. Owens  University of Wisconsin-Madison
Justin Wedeking  University of Kentucky

Elected officials have difficulty controlling politically insulated institutions, leaving the appointment process as perhaps their most effective means of influence. Yet, history shows that actors on these institutions—especially the Supreme Court—often behave unpredictably. Our goal is to determine whether variation in two components of cognitive style, prior to a justice’s nomination to the Court, predicts ideological drift once on the Court. 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 the Court. Our results show that justices whose prenomination words revealed cognitive inconsistency drift more than those with stable world views.

How can elected officials influence the policies made by politically insulated institutions? Direct influence is difficult. Post hoc controls like policy reversal are often too costly (Moe 1987), while ex ante controls like deck stacking can break down in practice (Hill and Brazier 1991). So, what must politicians do to increase their influence over politically insulated institutions? They must stock them with faithful agents (Snyder and Weingast 2000). Yet, if history is any guide, appointees to such positions are anything but faithful. This is particularly true of Supreme Court justices who, recent research shows (Epstein et al. 2007), nearly all change ideologically over time—often in ways their appointing politicians dislike. As such, politicians must sink as many resources as they can into researching a nominee’s background, with the goal of selecting someone who behaves consistently over time (Nemacheck 2007).

The central purpose of this article is to predict whether Supreme Court nominees will drift ideologically later in office. More specifically, our aim is to examine whether variation in a nominee’s “cognitive style” predicts future ideological drift. We assess two aspects of cognitive style—cognitive complexity and cognitive inconsistency—and whether they are correlated with ideological drift. We draw from literature and software on cognitive processing and analyze over 1,000 speeches, articles, and separate (i.e., dissenting or concurring) lower-court opinions written by justices before they were nominated to the Court to determine their cognitive styles and whether those styles are associated with ideological drift. Our results suggest that justices who exhibit prenomination cognitive inconsistency will drift much more once they are on the Court than justices who exhibit prenomination cognitive consistency. At the same time, we find no connection between a justice’s average level of cognitive complexity and ideological drift. In short, our results show that through effective appointments undertaken with knowledge of the nominee’s cognitive consistency, elected officials can influence Supreme Court policy and minimize ideological drift among justices.

In what follows, we provide a brief overview of the difficulties politicians have controlling insulated institutions. We then discuss what ideological drift on the Court means and some of the normative implications of drift. Next, we present our theory and

1 An online appendix for this article containing additional information is available at http://www.uky.edu/~jpwede2/. Data and supporting materials necessary to reproduce the numerical results in the paper will be made available at http://www.uky.edu/~jpwede2/upon print.
hypotheses for predicting ideological drift. We then discuss our data and methods. Afterwards, we present our results and discuss their ramifications for researchers who study the Court and for the elected officials who seek to influence it.

**Political Control and Ideological Drift**

Determining whether and how elected officials control politically insulated institutions has been an important question occupying scholars for at least the last three decades. Scholars have focused on myriad questions such as whether congressional committees can control bureaucrats (McCubbins and Schwartz 1984; Weingast and Moran 1983), whether the president can do so (Moe 1987), and even whether professionals within bureaucracies can influence bureaucratic outcomes (Jeong, Miller, and Sobel 2009). Research has focused on a host of insulated institutions like the NLRB (Snyder and Weingast 2000), the FTC (Weingast and Moran 1983), and the EPA (Wood and Waterman 1991). And, in recent years, scholars have increasingly focused their attention on how politicians can influence Supreme Court justices. Indeed, trying to determine whether the separation of powers influences the choices justices make has been a growing topic among institutional scholars (Clark 2009; Owens 2010).

While elected officials have a number of tools that, theoretically, might influence insulated actors, many—if not most—scholars concede that controlling those actors is difficult. In a thorough analysis, Moe (1987) critiques many of the arguments favoring congressional control over bureaucracies. Among the weaknesses of those approaches, he points out that Congress suffers from collective action problems and that political control is costly. The recent scholarship on political control over the Court often, though not always, arrives at very similar conclusions (Owens 2010; Sala and Spriiggs 2004).

Given these limitations with control, then, what can politicians do to influence policy? As those before us have argued, they must appoint individuals who will remain ideologically compatible (see, e.g., Snyder and Weingast 2000; Wood and Waterman 1991). They must stock agencies and courts with individuals who can be trusted to “behave”—and to behave consistently—during their tenures.

The problem, however, is that elected officials do not always know whether their appointees will remain ideologically compatible. And, once out of the gate, it is difficult to corral ideological drifters. Indeed, perhaps no institution is more difficult to control than the United States Supreme Court. Once elected officials nominate and confirm justices to the Court, they enjoy very little actual power to influence how the Court decides cases. Short of impeachment and removal or some other large-scale, punitive act like Court packing, they have very little influence over how individual justices vote.

So the modern Court is tailor made for individuals to change over time, and to do so largely without any relevant political repercussions. And that is precisely what scholars observe. A recent study found that most Supreme Court justices drift ideologically (Epstein et al. 2007). Of the 26 justices who served 10 or more terms on the Court since 1937, 22 drifted ideologically. Only four (15%) remained ideologically consistent. Put plainly, the protection justices enjoy allows them to change dramatically over time, and there is little that political actors reasonably can do in response.

Ideological drift by justices has major implications, and not just for their appointing presidents. As a normative consideration, drift may call the Court’s legitimacy into question. Some scholars claim that the Court’s legitimacy hinges on justices’ political and ideological attachments to the public who (indirectly) appointed them (Jackson and Tushnet 1999). The United States Constitution creates an advice-and-consent procedure that balances popular and elite control, providing an indirect role for public control over Court composition and direction. And since ideology is a crucial factor that motivates the president’s selection of nominees (Nemacheck 2007)—and senators’ votes on those nominees (Epstein and Segal 2005), justices who drift may deviate from the public’s tacit acceptance of their selection.2

Ideological drift also has implications over how law evolves. The changing behavior of justices can generate significant changes in legal doctrine. When justices drift ideologically, long-standing precedents can be toppled and new jurisprudential monoliths built to replace them. Epstein et al. (2007) show that legal doctrine in fact has changed because of ideological drift. Had Justices Kennedy and O’Connor not drifted, doctrine over affirmative action, gay

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2Of course, if justices drift ideologically with a changing public, the normative threat may subside. Additionally, if justices drifted because of the constraining effect of law, such drift would seem normatively appropriate. That different justices, serving at the same time, drifted in different ideological directions, however, casts doubt on these arguments.
Because ideological drift on the Court is a phenomenon with a host of important ramifications, we seek to predict it. We aim to determine whether a nominee’s cognitive style correlates with ideological drift later in office. To do so, we turn to research on language and cognitive style.

Predicting Ideological Drift: Cognitive Complexity and Cognitive (In)Consistency

Our starting point is to examine the language nominees used before their nominations. We do so to determine their cognitive styles. After all, the words political and legal actors use “provide[] important clues as to how [they] process... information and interpret it to make sense of their environment” (Tausczik and Pennebaker 2010, 19). That is, their words provide important information about how they view and interpret the world. Simply put, the words people use provides insight into their cognitive styles (Newman et al. 2003; Stirman and Pennebaker 2001).

Cognitive style refers to the characteristics and manner in which individuals conceptually structure, organize, and process information in their environment (Sidanius 1978; Tetlock 1983). Cognitive style is widely believed to be comprised of many different components (Scott 1962; Sidanius 1978, 1985; Tetlock 1983; Van Hiel and Mervielde 2003) such as cognitive complexity, cognitive flexibility, dogmatism, (in)tolerance of ambiguity, and cognitive coping. We focus on two of the more empirically tractable components of cognitive style: cognitive complexity and cognitive flexibility. (For a host of reasons, we generally refer to cognitive flexibility as “cognitive inconsistency.”)³

³We prefer the label “cognitive inconsistency” over “cognitive flexibility” (or its opposite, “cognitive rigidity”) for two primary reasons. First, use of the word “rigidity” to describe one end of the flexibility dimension risks creating confusion between cognitive complexity and cognitive flexibility, as rigidity plays a part (though differently) in each. Second, while early scholars could use the label “cognitive flexibility” without ambiguity, the term has recently become more closely associated with a learning theory in the field of educational psychology. Thus, to avoid this confusion, we simply employ the phrase cognitive inconsistency.

Cognitive Complexity

Cognitive complexity refers to the manner in which an individual interprets the world. It focuses on whether an individual sees the world in a straightforward manner or whether the person finds the world connected by numerous complicated and interwoven dynamics. Cognitive complexity is composed of two elements—differentiation and integration. The first element, differentiation, represents the degree to which a speaker acknowledges multiple perspectives underlying an issue. That is, differentiation reflects whether a person sees the world in black and white or in shades of gray. Integration, on the other hand, represents the degree of recognition of “conceptual relations” among these perspectives (Gruenfeld 1995, 5). These two elements form the basis of a unidimensional scale that ranges from least complex to most complex, where “individuals at the low end of the complexity continuum tend to rely on rigid, evaluative rules in interpreting events and to make decisions on the basis of only a few salient items of information. Individuals at the high end tend to interpret events in multidimensional terms and to base their decision on evidence from multiple perspectives” (Gruenfeld 1995, 5).⁴

⁴Thus, if a speaker is low on the differentiation element, the integration element becomes irrelevant.
complexity in their speeches than senators with liberal voting records. In short, these studies argue that conservatives have a cognitively simple view of the world, and that people with such views tend to be rigid in their thinking and behavior, while liberals tend to see many sides to issues and therefore sometimes vacillate.

Most relevant for our purposes, of course, are studies of cognitive complexity among Supreme Court justices, some of which support the rigidity of the right theory. For example, Tetlock, Bernzweig, and Gallant (1985) found that judicial ideology was related to a justice’s cognitive complexity, with liberal justices being more complex than conservatives (but see Gruenfeld 1995; Tetlock 1984). Looking at opinions written by justices during their first terms on the Court, they discovered that liberals and moderates drafted more complex opinions than conservatives.

In a related study, Collins and Martinek (2011) suggest that conservative judges’ lower levels of cognitive complexity might account for their approach to amicus curiae briefs. The authors find that conservative judges look to the number of briefs as a heuristic while liberals do not. That conservative judges relied on “simpler evaluative criteria,” they argued, supported the rigidity of the right theory as applied to judges. Similarly, Moyer (forthcoming) finds that in complex cases, conservative judges tend to vote more ideologically than liberal judges, a result she attributes to the conservative’s need to simplify the world.

Given the view among many scholars that liberals typically observe higher levels of complexity—and that more complexity leads them to vacillate—we hypothesize that increased cognitive complexity may lead to ideological drift on the Court. At the same time, because many believe that conservatives have lower levels of complexity, and will be more rigid, we hypothesize that lower levels of cognitive complexity will lead to ideological stability. That is, we expect that justices whose words, on average, generate higher levels of cognitive complexity will be more likely to drift ideologically than justices whose words generate lower levels of complexity. This gives rise to the following hypothesis:

Cognitive Complexity Hypothesis: A justice whose prenomination utterances reveal cognitive complexity will drift more than a justice whose prenomination words reveal cognitive simplicity.

Cognitive Inconsistency

While cognitive complexity is one component of cognitive style, cognitive inconsistency, or what some researchers have called “cognitive flexibility,” is a second and equally important component. Cognitive inconsistency assesses how much an individual’s views vary. That is, it examines the extent to which an individual’s cognitive approach changes. Scott, for example, defines cognitive flexibility as “the readiness with which the person’s concept system changes selectively in response to appropriate environmental stimuli” (1962, 405). Sidanius (1978, 1985) likewise defines cognitive consistency (or, flexibility) as “the ease with which an individual can reorganize his cognitive structure and information-processing strategy in accordance with the demands of changing environmental situations” (1978, 515).

Cognitively inconsistent (i.e., flexible) people adopt an array of views to suit their needs while cognitively consistent people have a hard time thinking about or accepting divergent views. Stated differently, cognitive consistency represents the degree to which individuals can conceptualize a given topic in several different ways. For example, if an individual were to explain a causal relationship between two objects, a cognitively rigid person would maintain and support one theory, while a cognitively flexible person could entertain more than one theory. In the communication field, Martin and Anderson note that a cognitively flexible individual is one “who can acknowledge the need for possible behavioral adjustments based on situational factors” while a cognitively rigid person is marked by seeing “only proper or correct behavioral responses” (1998, 2). For example, in determining whether some people were more “resistant to change” than others, Oreg (2003) found that an individual’s cognitive rigidity, which he conceived of as a crucial part of the personality trait “resistant to change,” was strongly predictive of whether college students would make changes to their course schedule. Moreover, Oreg found that this “resistance to change” was the only personality trait that significantly predicted the students’ behavioral change. In another study, examining employee’s resistance to organizational change, Oreg (2006) found that the higher an employee’s score on the resistance to change scale (i.e., more rigid), the more negative were his or her behavioral response to the change. In sum, this research suggests that some people are more likely to change than others, and an important part of this is their degree of cognitive consistency.5

5We note, however, that this conceptualization of cognitive consistency is distinct from other theories concerning an individual’s need or preference for consistency (e.g., Cialdini, Trust, and Newsom 1995) or when an individual experiences cognitive dissonance (e.g., Festinger 1957).
Building on these studies, we believe that cognitive inconsistency can predict ideological drift. Just as the cognitively rigid respondents in Oreg’s studies were more resistant to change, we expect cognitively rigid (i.e., consistent) justices not to drift from their ideologies when placed on the Court. As Martin and Anderson (1998) argue, these justices will stick to the responses—or, ideologies—they believe are “proper” while justices who are more flexible (or, inconsistent) will do the opposite. That is, we expect the following:

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

**Other Factors Associated with Ideological Drift**

Of course, other factors likely predict ideological drift, and one of them is the political context underlying the nomination. Moraski and Shipan (1999) and Johnson and Roberts (2005) argue that presidents face three political regimes when nominating Supreme Court justices: an unconstrained regime, a semiconstrained regime, or a fully constrained regime. These regimes will influence the strategy elected officials employ when nominating justices. For example, during periods where the president is unencumbered by the senate, he can devote substantial resources towards selecting nominees who best fit his ideological goals (Nemacheck 2007). On the other hand, during fully constrained regimes, presidents will be less able to achieve their goals and, instead, must compromise with the Senate. We might therefore see the most drift among justices nominated during 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). Nominees who have served as lower court judges will have seen controversial legal issues, formulated opinions about them, and developed paper trails that explain those views. 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 drift to the left (2007, 133–37). Epstein et al. (2007, 1520, n. 132) likewise suggest that the “push and pull” from other justices can influence drift. If this is correct, we would expect longer serving justices who sit with numerous colleagues may drift the most, while short-timers on stable Courts may drift the least. This 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.

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 (Casillas, Enns, and Wohlfarth 2011; Giles, Blackstone, and Vining 2008; McGuire and Stimson 2004). 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 determine whether cognitive style (both cognitive complexity and cognitive inconsistency) predicts ideological drift among Supreme Court justices later in life.6 To operationalize our approach, we followed Epstein et al. (2007) and examined the ideological drift of all justices who served 10 terms or longer on the Court and who were appointed since 1937.7 For robustness purposes, we employ four different measures of our dependent variable. If we find consistent results across all four measures, this suggests our findings are not an artifact of any one particular measure. To construct these dependent variables, we use the Martin and Quinn (2002) ideal point estimates, though our

6There 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 drifts over time.

7We were not able to obtain a single prenomination text for Justice Byron White, so we were forced to exclude him from our analysis.
results are largely the same if we use Bailey’s (2007) ideological measures.8

The first dependent variable is the standard deviation of a justice’s Martin-Quinn scores during his or her entire tenure on the Court. That is, for every justice, we examine his or her ideal point during each term served on the Court and calculate the standard deviation of those scores. This measure provides a good estimate of how much a given justice varies during his or her time on the Court.9 Its other strength is that it can account for both monotonic drift (i.e., when a justice drifts in one ideological direction) and nonmonotonic drift (i.e., when a justice starts drifting in one direction but then drifts back the other direction).

The second dependent variable measures the amount of drift between the justice’s first term and her last term. It is calculated by subtracting the justice’s first term Martin-Quinn score from her final term Martin-Quinn score and then using the absolute value of that difference.

Our third dependent variable measures each justice’s average term-by-term Martin and Quinn (2002) preference change. To generate this value, 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 used the absolute value of that average change. Justice Blackmun’s first three terms serve as an example. In the 1970 term, Blackmun’s ideal point estimate was 1.894, in the 1971 term it was 1.842, and in the 1972 term it was 1.491. We next calculate the amount of ideological drift from one term to the next term across all terms. For example, the drift from 1970 to 1971 was -0.052 (1.842–1.894). The drift from the 1971 to 1972 term was -0.351 (1.491–1.842). We followed this procedure for each term in which the justice served. Next, we calculate the mean of these amounts (which, for Blackmun, was -0.163) and then remove the directionality by taking the absolute value of that mean.

Our fourth dependent variable measures the absolute range a justice drifts during his or her tenure on the Court. Specifically, it represents the absolute value of the difference between a justice’s most liberal term and most conservative term on the Court.10

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 it. 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 (and other actors) have unidimensional, single-peaked, symmetrical preferences (Moraski and Shipan 1999; Sala and Spriggs 2004). This, of course, means that presidents (and senators) will be equally unhappy with shifts to the left and 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.

Because our dependent variables are measured on a continuous scale, we estimate our models using Ordinary Least Squares regression. To account for potential censoring of the data, we also re-fit our models using tobit regression and obtained nearly identical results. Below, we present the results for the models using OLS.

**Cognitive Complexity.** Our first key covariate measures the average cognitive complexity each nominee displayed prior to his or her nomination. To generate measures of cognitive complexity for each justice, we examined three sources of texts: published articles written by a justice prior to his or her nomination; prenomination separate opinions authored by a justice while presiding as a circuit court judge or state supreme court justice; and speeches delivered by a justice prior to his or her nomination.11 Some justices delivered numerous speeches or wrote a number of articles, forcing us to rely on a random sample of utterances, while others spoke publicly or wrote articles infrequently, which allowed us to examine all their utterances. The result was an extensive sample of 1,043 texts, consisting of 445 separate lower court opinions, 205 writings, and 393 speeches written and delivered by 4 justices.

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8We chose Martin-Quinn scores because they contain observations for all of our justices for all years, whereas Bailey’s (2007) measures only extend back to 1950. In other words, if we used Bailey’s measures, we would lose Justice Murphy altogether, and we would lose some terms for six other justices (Black, Burton, Douglas, Frankfurter, Jackson, and Reed).

9While drift is a term-by-term dynamic, we are trying to examine whether prenomination cognitive inconsistency predicts drift. As such, we must use the justice’s voting behavior across her tenure as the unit of analysis.

10A factor analysis of the four dependent variables produced a single factor solution, supporting the idea that all four are measuring the same underlying concept.

11For a justice recess appointed to the Supreme Court, we examined all materials prior to the date of the recess appointment. For more information on how we collected this information, see the appendix.
the justices prior to their nominations. The distributions for each justice by type of document 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 been categorized by independent examiners. It then tallies 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 10 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 10 indicators into one new measure, their level of cognitive complexity.

Once we retrieved an individual complexity score for each justice-utterance, we calculated the mean cognitive complexity score for each justice. That is, we simply calculated the mean, for each justice, of all her public utterances in the data. If conventional views about the rigidity of less complex thinkers are correct, we would expect to see justices with smaller values of complexity drift less and justices with larger values of complexity drift more.

Cognitive Inconsistency. Our second key covariate measures the cognitive inconsistency displayed by each nominee prior to his or her nomination. To calculate cognitive inconsistency, we followed the general approach taken by Sidanius (1978, 1985). To determine how cognitively inconsistent a person was, Sidanius (1978, 1985) examined the variance in the correlations between six stimulus variables and subjects’ political predictions in over 30 categories. According to Sidanius, “the greater this variance the greater the individual's cognitive flexibility; the less this variance the less the individual’s cognitive flexibility” (1978, 520). Following the contours of this approach, once we retrieved a cognitive complexity score for every text per justice, we calculated the standard deviation among all those cognitive complexity scores for that justice. Large values of Cognitive Inconsistency indicate that the nominee displayed large reorganizations in cognitive processing strategies (Sidanius 1978) while small values indicate the nominee’s prenomination cognitive structure remained stable. Figure 1 provides a visual display of each justice’s cognitive complexity (the dots) and cognitive inconsistency (solid lines). Importantly for our analyses below, Cognitive Inconsistency and Cognitive Complexity are not significantly correlated (r = -.10, p = .632), supporting the argument that they represent two distinct elements of cognitive style.

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.

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. 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 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 three 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. Unfortunately, the Stimson (1999) public mood measure only dates back to 1952 and is therefore incomplete for our purposes. 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. Stated differently, the measure examines 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) prenomination. We do so to account for the fact that when making more utterances, the nominee has more potential to display inconsistency. In a separate model, we included a control for the Chief Justice to determine whether his institutional duties leads to drift. The coefficient was not statistically significant. We also controlled for all appointments made by presidents since Reagan because some scholars argue that recent presidents may have taken a stronger interest in their nominees’ ideologies. The coefficient, however, did not approach conventional levels of statistical significance. We also controlled for the nominees’ qualifications but it, too, failed to reach statistical significance.
Results

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. We find evidence to support our theory linking cognitive inconsistency and ideological drift. We find no support, however, for the cognitive complexity theory.17

Consider, first, the relationship between cognitive inconsistency and ideological drift. Building on literature which found that cognitively rigid people are more resistant to change, we hypothesized that as the justice’s prenomination words showed cognitive inconsistency, the justice would drift more on the Court. The results support our hypothesis.18

Figure 2 shows how much a justice drifts as a result of Cognitive Inconsistency. The top figure represents the standard deviation drift measure (the first dependent variable) and the bottom figure represents average drift per term (the third dependent variable). Each figure shows that justices who exhibited prenomination cognitive consistency drifted the least, while cognitively inconsistent nominees drifted the most. To be sure, even justices who held the most consistent prenomination cognitive scores drifted, but they drifted much less than their cognitively inconsistent colleagues. As the bottom portion of Figure 2 shows, with a Cognitive Inconsistency score of 3—which is approximately one standard deviation above the mean—a justice will have drifted about one-tenth of a Martin-Quinn unit per term. Put in more personal terms, if a justice were on the Court 20 years, this reflects the distance (during the 2009 term) between Justice Ginsburg and Chief Justice Roberts.

One area of concern might stem from the materials we used to calculate cognitive inconsistency. Recall that we drew from a nominee’s speeches, published articles, and, when relevant, separate lower court opinions. Is it possible that our measure of inconsistency is simply a function of the types of documents we employed? The data suggest not. First, one might believe that court opinions would be more complex than, say, speeches. Yet, when we remove lower court opinions from the sample and refit the models, our results remain robust (though we lose the ability to examine some nominees, e.g., Brennan, Kennedy, O’Connor, and Souter). What is more, as Figure 3 shows, there are no systemic differences in complexity among speeches, articles, and opinions. Thus, justices with more of one utterance type than another do not drive the results.

Of course, it is possible that a few utterance outliers may drive up a justice’s Cognitive Inconsistency measure. If a justice was largely consistent, save for a handful of utterances that deviated from her usual cognitive approach, our measure of Cognitive Inconsistency might be inflated. To protect against this potentiality, we recoded Cognitive Inconsistency as the interquartile range of each justice’s complexity scores. Doing so sheds the most extreme values of complexity per justice and retains the complexity scores between the 25th and 75th quartiles in the data. When we recoded Cognitive Inconsistency accordingly and refit our models, the results remained substantively the same. In short, the results across all four models support our hypothesis that cognitively consistent nominees drift the least, while cognitively inconsistent justices drift the most. That is, the results appear to confirm the general arguments made by Martin and Anderson (1998) and Oreg (2003, 2006) that cognitively consistent (i.e., rigid) people are more resistant to change—and to changing their own behavior.

Consider, next, the relationship between cognitive complexity and ideological drift. Important as it is in other contexts, cognitive complexity does not predict ideological drift among Supreme Court justices. The

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17 Importantly, the Cognitive Complexity results do not change if we reestimate the models after removing Cognitive Inconsistency, or vice versa (see the appendix).

18 We performed several diagnostic tests on the four 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). The VIFs ranged between 1.31 and 2.36, with a mean of 1.78 in all models, indicating that the predictors are not highly correlated (a common rule of thumb is that a VIF above 4 indicates potential problems). We also checked the correlations among the covariates and none are problematic. 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. We also estimated Cook’s Distance as another way to see how much influence certain observations hold. After accounting accordingly, our results remained the same. Finally, we checked for the presence of outliers in the data by graphing the studentized 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 on both studentized and standardized residuals. Douglas was just beyond the “outlier” threshold for studentized residuals, but was within the “normal bounds” for standardized residuals. Nevertheless, when we reestimated the models with each of them removed from the data (first individually, and then all together), our results stayed largely the same across all four dependent variables. There was one minor exception, however. When we removed Douglas and reestimated the model using our first dependent variable, the results for cognitive inconsistency weaken (p=.18, one-tailed) in this estimation (i.e., the other dependent variables generated results substantively similar to our earlier findings). To ensure this was idiosyncratic, in a follow-up we reestimated all four models using Bailey’s measure of ideological drift, excluding Douglas. The coefficient on cognitive inconsistency was positive and statistically significant in all of them at p < .01.
Coefficient on Cognitive Complexity does not approach conventional levels of statistical significance for any model. Whether a nominee, on average, sees the world in black and white or in shades of grey does not predict whether he or she will drift ideologically once on the Court.

More specifically, in an earlier section, we explained the rigidity of the right theory. We reported that many scholars argue conservatives tend to be more cognitively simple and, in turn, less likely to change their beliefs, while liberals are more complex and might vacillate. Because our finding that complexity does not correlate with drift is at odds with this belief, we investigated the results more closely. That is, we examined the connection between ideology and cognitive complexity. Our data show that liberal nominees to the Court are not more complex than conservatives, nor were conservatives more simple than liberals. Rather, we find a curvilinear relationship between ideology and complexity. As Figure 4 shows, moderate justices tend to be more cognitively complex than extreme nominees. Importantly, while the curvilinear line is statistically significant, the linear line is not.

These findings are important for two reasons. First, they accord with Gruenfeld (1995), who argued that Tetlock et al.’s (1985) rigidity of the right results were simply a function of the liberal justices’ overwhelming majority status. Justices in the majority, she found, tend to write more complex opinions than those in dissent. And since liberal justices in the Tetlock, Bernzweig, and Gallant (1985) study happened to be in the majority much more often than the conservatives, they had higher complexity scores. Our data suggest she was correct. Second, the finding that conservative and liberal justices displayed similar complexity scores suggests that scholars should rethink the rigidity of the right theory, at least as applied to Supreme Court justices. Indeed, our data offer more support for the extremism theory which holds that moderates are more complex than ideologues.19 Thus, while the rigidity of the right theory may apply outside the Court, it does not seem to apply to justices, nor does it—or cognitive complexity—predict ideological drift.

We next examine our control variables. We begin with the effects of regime type on drift. The coefficient on Cognitive Complexity does not approach conventional levels of statistical significance for any model. Whether a nominee, on average, sees the world in black and white or in shades of grey does not predict whether he or she will drift ideologically once on the Court.

More specifically, in an earlier section, we explained the rigidity of the right theory. We reported that many scholars argue conservatives tend to be more cognitively simple and, in turn, less likely to change their beliefs, while liberals are more complex and might vacillate. Because our finding that complexity does not correlate with drift is at odds with this belief, we investigated the results more closely. That is, we examined the connection between ideology and cognitive complexity. Our data show that liberal nominees to the Court are not more complex than conservatives, nor were conservatives more simple than liberals. Rather, we find a curvilinear relationship between ideology and complexity. As Figure 4 shows, moderate justices tend to be more cognitively complex than extreme nominees. Importantly, while the curvilinear line is statistically significant, the linear line is not.

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19 As a further check, we also examined whether ideology (or a squared ideology term) predicts drift. That analysis found no link between ideology and drift.
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 semiconstrained regime.

Given the few justices nominated during such a regime, however, one must exercise caution interpreting these results.

We also observe that as a justice endures more turnover during her tenure on the bench, she drifts more. Under periods of great stability, ideological drift is relatively minimal—less than one Martin-Quinn unit. During periods of instability with high turnover among justices, however, (one standard deviation above the mean) 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 that we see justices drift more. We speculate (admittedly, post hoc) that justices might view it as their role to serve as a brake on majoritarian shifts. More research on this topic is warranted though.

Finally, the coefficients on 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 nonjudicial 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 in a constrained regime, can have long-term negative repercussions for a president’s broader policy goals.

Conclusion

President Eisenhower once was asked whether he made any mistakes while president. His response: “Yes, two, and they are both sitting on the Supreme Court” (Nemacheck 2007, 44)—an obvious reference to Chief Justice Warren and Justice Brennan, both of whom he put on the bench and both of whom drifted to the left (Epstein et al. 2007). For elected officials like Eisenhower and countless others, political control over politically insulated institutions is difficult at best. As such, the best way to influence politically insulated institutions is to stock them with loyal agents. Determining who will remain consistent over time, however, is a Herculean task. Or is it?

We examined thousands of pages of speeches, published articles, and separate opinions written by justices prior to their nominations to determine

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20 For the models reported, Justice Jackson’s nomination is coded as a constrained regime, though nothing changes if it is coded as an unconstrained regime. There is uncertainty over the regime type because of temporal limitations with the ideal point estimates.
whether the prenomination words justices used could predict whether they would drift. This massive set of data allowed us to peer into justices’ cognitive styles prior to their nominations. We theorized that cognitively complex nominees and nominees whose world views were inconsistent would drift once on the Court, while cognitively simple and cognitively consistent nominees would not. Our data show that justices whose prenomination words evinced cognitive inconsistency drifted more than their counterparts with more stable views. It did not find any correlation between a justice’s average cognitive complexity and her ideological drift. This otherwise null effect, however, did suggest that scholars should reexamine the rigidity of the right theory, as extremist justices were less complex than moderates.

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 degree to which 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 inconsistency.

While we examined drift on the Supreme Court, we can certainly envision elected officials having similar concerns about ideological drift by actors in other politically insulated bodies. For example, President George W. Bush could not have been pleased when, in 2006, Peter Kirsanow, one of his Republican appointees to the National Labor Relations Board, voted prolabor over 63% of the time, or when Peter Schaumber, his pick to chair the NLRB, voted prolabor over 53% of the time. Presidents and senators will want to ensure that the people they install in key positions such as these will largely act the same in the future. And our approach may allow them to make predictions about these actors in these settings as well.

At least one question remains. Can cognitive style predict the ideological direction in which a nominee will drift? While we do not have any theoretical...
expectation regarding directionality, we find some evidence that cognitive inconsistency leads to liberal drift \((p=0.13, \text{two-tailed test, for models 2 and 3})\). Why this might be the case, we cannot be sure. Of course, politicians are likely to want this information, perhaps to make strategic nominations with the goal of installing justices who look moderate today, but might become more extreme in the future. We leave these questions to future scholarship. Our first, and more modest effort, was to predict drift, and the data suggest that our model has taken a step toward that goal.

Acknowledgments

We thank Emily Beaulieu, Ryan Black, Barry Burden, Brad Canon, Wonbin Cho, Craig Emmert, Marcus Hendershot, Dan Morey, Laura Moyer, Rich Pacelle, Nicolai Petrovsky, Clayton Thyne, Steve Voss, Geoff Wallace, and Sophia Wallace for comments and suggestions, and Michelle Wedeking for research assistance. Earlier versions of the article were delivered at the 2011 Southern Political Science Association and Midwestern Political Science Association.

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Ryan J. Owens is a Lyons Family Faculty Scholar & Assistant Professor of Political Science at the University of Wisconsin, Madison, WI 53706.

Justin Wedeking is Assistant Professor of Political Science at the University of Kentucky, Lexington, KY 40506.