

The “Mill Worker’s Son” Heuristic: How Voters Perceive Politicians from Working-Class Families—and How They Really Behave in Office

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Politicians often highlight how hard their families had it when they were growing up, presumably in the hopes that voters will see them as more supportive of policies that benefit middle- and working-class Americans. What do voters actually infer from how candidates were raised? And what *should* they infer? We use a set of candidate evaluation experiments (and an external validity test drawing on actual congressional election returns) to study how Americans perceive politicians raised in more and less affluent families. We then compare these perceptions to data on how lawmakers brought up in different classes actually behave in office. Although voters often infer that politicians from less privileged families are more economically progressive, these lawmakers don’t actually stand out on standard measures of legislative voting. The “mill worker’s son” heuristic appears to be a misleading shortcut, a cue that leads voters to make faulty inferences about candidates’ political priorities.

I’m running for president because [for] 54 years of my life I have believed to my soul that the men and women who worked in that mill with my father were worth every bit as much as the man that owned that mill.

—John Edwards (2008)

Politicians often talk about how hard they had it growing up.¹ Members of Congress raised in working-class families cast themselves as populists who “carr[y] the torch . . . of [their] working-class upbringing[s]” (Hatch 2010), who “ha[ve] not forgotten [their] origins” (Harkin 2007), and who hold a “strong belief that all Americans deserve an equal opportunity to succeed and be heard” (Edwards 2008). Judicial nominees who grew up poor are described as having “lived the American dream” (White House 2009, 1). Some politicians even exaggerate how difficult their childhoods were. Although few of our presidents were truly raised in economically disadvantaged families, “[f]rom George Washington’s time . . . politicians, orators, editorial writers, ministers, and scholars” have described

presidents as “ambitious and hardworking men who reached the political heights primarily by their own heroic efforts” (Pessen 1984, 1).

Politicians presumably invoke narratives like these in the hopes that voters will see them as attentive to the problems facing ordinary citizens or as allies to middle- and working-class Americans. But do these kinds of statements really affect how people perceive politicians? When voters hear messages about how a politician was raised, do they really make inferences about the politician’s personal views or political priorities?

And, perhaps more importantly: Should they? Are politicians raised in less affluent families really all that different from other leaders? Or is all the talk we hear about

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the importance of being a “mill worker’s son” just empty rhetoric?

To date, research on the informational shortcuts and *heuristics* people use when they evaluate politicians has largely side-stepped questions about social class (but see Campbell and Cowley, n.d.). When voters evaluate a politician, they make inferences (often unconsciously) about his or her policy positions based on things like the politician’s party affiliation, endorsements, race, gender, religion, and so on (e.g., Brady and Sniderman 1985; Campbell, Green, and Layman 2011; Feldman and Conover 1983; Huddy and Terkildsen 1993; Rahn 1993). However, we don’t know much about whether people pick up on politicians’ social class cues, or if they do, what they infer from them.

Likewise, we don’t know what voters *should* infer when they hear messages about the kind of family a politician grew up in. Scholars who study how politicians’ backgrounds shape their choices in office have largely ignored class (but see Carnes 2012, 2013); they, too, have focused primarily on important characteristics like partisanship, race, gender, and religion (e.g., Burden 2007; Canon 1999; McCarty, Poole, and Rosenthal 2006; Swers 2002). As it stands, however, political scientists don’t know whether voters see politicians from less privileged families any differently, and we don’t know whether they really are any different.

What, if anything, do voters infer when they learn whether a candidate was raised in a more or less privileged family? Do they use a “mill worker’s son” heuristic? And, if so, does it lead voters to make sensible inferences? Should voters believe what they hear about politicians raised in working-class families?

In this article, we use a set of candidate evaluation experiments (and an external validity test drawing on actual congressional election returns) to study how Americans perceive politicians raised in more and less affluent families. Whereas many studies of heuristics simply document whether and how voters use them, in this article we also test whether voters are *right* to use the heuristic in question: After analyzing how voters perceive candidates raised in different social classes, we compare their perceptions to the realities of class and legislative decision making using the Congressional Leadership and Social Status (CLASS) dataset, a new source of data on the class backgrounds of members of Congress who served from 1999 to 2008.

Our findings suggest that Americans do in fact use a “mill worker’s son” heuristic—voters often infer that politicians from less privileged families are more economically progressive than those who were raised in privileged homes. In office, however, these lawmakers do not tend to stand out on standard measures of legislative voting. Unlike many candidate attribute heuristics, the “mill worker’s son” heuristic

appears to be a misleading shortcut, a cue that leads voters to make faulty inferences about candidates’ political priorities.

These findings shed new light on a previously unstudied aspect of how candidates campaign, how voters evaluate them, and how class-based appeals are used in American politics. More broadly, this study also illustrates the importance of researching not just which shortcuts citizens use but also whether those shortcuts lead citizens to make accurate judgments about the political process.

POLITICIANS RAISED IN THE WORKING CLASS

Up front, there are good reasons to think that a typical voter may make inferences about how politicians will behave in office based on information about how they were raised. Informational shortcuts and heuristics are universal features of how we make decisions. Every day, people confront many choices that require information that they do not have and that they cannot or will not obtain (Tversky and Kahneman 1974). In these instances, they make quick judgments (often without realizing they are doing so) based on cues like the familiarity of the options available to them (Tversky and Kahneman 1973), the behavior of people similar to themselves (Grofman and Norrander 1990), the advice of experts (Feldman and Conover 1983), and the “goodness of fit” between new facts and old stereotypes (Kahneman and Tversky 1972; Popkin 1991).

The realm of politics is no exception. When citizens evaluate a policy or a political figure, they sometimes seek out detailed information (e.g., Marcus, Neuman, and MacKuen 2000), but most of the time they simply infer which option best suits their interests on the basis of facts or considerations that are easily and immediately available to them (Zaller 1992).

When voters evaluate a politician, for instance, some investigate his or her policy positions and general ideological orientation. However, many voters also make guesses and inferences about the politician’s views based on party affiliation (Rahn 1993), endorsements (Brady and Sniderman 1985; Mondak 1993), race (Citrin, Green, and Sears 1990; Weaver 2010), gender (Huddy and Terkildsen 1993; Koch 2000), and religion (Calfano and Djupé 2009; Campbell, Green, and Layman 2011). Some voters even take cues from a candidate’s physical appearance (Ottati 2002; Todorov et al. 2005).

If people infer how a politician will behave in office based on things like race, gender, religion, and appearance, why wouldn’t we expect them to also make inferences based on whether the politician grew up rich or poor? Voters often hear messages about candidates’ upbringings, families, and childhood circumstances. Of course, a candidate’s family background isn’t an issue in every campaign (and some

candidates may deploy narratives about their childhoods strategically; see Pessen 1984). But many campaigns prominently highlight stories about how candidates were raised in poor or working-class families. When voters hear those stories, many probably make inferences about how the candidate will behave in office.

Most people use social class stereotypes (whether they realize it or not) at least some of the time: they make snap judgments about how intelligent, friendly, hard-working, and trustworthy other people are based on class markers like clothing, occupation, and behavior (e.g., Fiske et al. 1999; Lott and Saxon 2002). *Underdogs*—people who “work their way up” from positions of disadvantage to positions of advantage—seem to enjoy especially favorable evaluations: people tend to see them as harder working, more deserving, and more likeable (Vandello et al. 2007).

When politicians invoke how hard their families had it when they were growing up, they probably hope that voters will make similar associations—that voters will see them as likeable or down to earth—and some are probably right (see Sadin 2013). Our focus here, however, is on what voters infer about candidates’ *policy positions*, not their personal traits. Can stories about how a candidate was raised affect more than just whether voters feel sympathetic towards the candidate—can they actually influence what voters think about candidates’ political priorities, issue positions, and future behavior in office?

Politicians who highlight their working-class childhoods often seem to be attempting to convince voters that they will support policies that help less affluent Americans. In other words, that they will be more progressive or liberal if elected, more proworker and less probusiness. Many campaign messages that highlight candidates’ poor or working-class families have a strong progressive bent (Pessen 1984). John Edwards’s 2008 presidential primary campaign theme is a case in point: “I’m running for president because [for] 54 years of my life I have believed to my soul that the men and women who worked in that mill with my father were worth every bit as much as the man that owned that mill” (Edwards 2008).

Of course, there are also conservative populist narratives—I *pulled myself up by my bootstraps, and others should, too*. In principle, a working-class family cue might simply reinforce party cues: voters might think, for instance, that a Republican from a working-class family is more conservative than other Republicans (because he pulled himself up by his bootstraps) and that a Democrat from a working-class family would be more liberal than other Democrats (because he remembers how hard the other mill workers had it).

However, we think it is more likely that when voters make quick inferences based on how a candidate was raised, that

they do so in a simple additive fashion, that voters recognize that Republicans are more conservative than Democrats, but that they think that any given politician is somewhat more liberal if he mentions being raised in a working-class family.

When voters evaluate candidates, they often use a *goodness-of-fit* or *representativeness* heuristic, that is, they infer how economically liberal a candidate might be by how similar he or she is to the stereotype of economically liberal people (Kahneman and Tversky 1972; Popkin 1991, 74). On economic issues, working-class people are stereotyped (and tend to be in reality) more proworker and less probusiness on average (e.g., Bartels 2008b, Chap. 3; Hout 2008). If voters think of working-class people as less probusiness, when they hear that a candidate has working-class origins, they may infer that the candidate is less probusiness, too.²

The associations voters make using a *goodness-of-fit* or *representativeness* heuristic are likely to be reinforced by an *availability* heuristic. Examples of liberal candidates from working-class families are more readily available than examples of conservative candidates. From 1999 to 2008, there were almost twice as many Democrats in Congress who were the children of factory workers (29) than there were Republicans (15). When candidates mention their working-class upbringings, many voters will probably have an easier time recalling the more readily available examples of liberal candidates from working-class families (e.g., John Edwards) and a harder time thinking of conservative ones. If there is a “mill worker’s son” heuristic, the available evidence suggests that when voters learn that a candidate grew up poor or working class, they probably infer that the candidate has more progressive views on economic issues.

Representational Consequences

But would they be *right* to do so? In general, political psychology has focused more on identifying the shortcuts people use than on determining whether those shortcuts lead them to make *correct* inferences about politics. Part of the reason is that it can often be difficult to establish an objective benchmark for what constitutes a correct inference. Many aspects of politics are inherently subjective—Who *should* I vote for?—and it is often difficult to objectively determine when voters have made the “right” choice.

In many applications, however, citizens make inferences that can be tested objectively. In those cases, it is possible for political psychologists to not only document heuristics

2. People might also use a *likeability heuristic* (Brady and Sniderman 1985), but this heuristic affects whether one *likes* a candidate and is not as relevant to evaluating policy positions. The representativeness heuristic is the most straightforward way to infer policy positions from class.

but to study their representational implications, to determine whether the informational shortcuts citizens use help them make good or accurate choices—the kinds of choices they would have made if they had had more information—or whether these shortcuts lead them astray.

When people use mental shortcuts to make decisions, they sometimes make good choices, but overall their choices tend to be sloppier than decisions made slowly, methodically, and thoughtfully (e.g., Petty and Cacioppo 1986). They often overweight irrelevant information and underweight important information, ignore statistical base rates when distracting facts are available, and feel overly confident in predictions based on scant information (Tversky and Kahneman 1974). Some political inferences are decent bets, of course. Voters often infer that Republican candidates are more conservative than Democrats and that female candidates are more progressive on women’s issues. On average, they are right to do so.

It is less clear, however, that voters would be right (on average) to infer that candidates portrayed as coming from a poor or working-class family are more economically progressive. In general, politicians from different backgrounds tend to have different personal views and consequently tend to behave differently in office: traits like party (McCarty, Poole, and Rosenthal 2006), race (e.g., Canon 1999; Whitby 1997), gender (e.g., Bratton and Haynie 1999; Swers 2002), and religion (Burden 2007) are good predictors of how legislators will behave when relevant issues are before them. However, party, race, gender, and religion are characteristics that predict sizeable differences in most Americans’ political attitudes. When it comes to traits that *aren’t* major dividing lines in American political thought, it’s less clear that we should expect those traits to predict differences in how politicians behave.

Whether a politician was raised poor is exactly that kind of trait. People born to poor families who “work their way up” to higher incomes or classes tend to have slightly more progressive views on economic issues (Piketty 1995), but the difference is considerably smaller than, say, the difference between Republicans and Democrats, men and women, whites and blacks, or even people who are more and less affluent as *adults*. (That is, what really seems to matter is a person’s adult social class, not the social class the person grew up in; Carnes 2012.) People who move from a working-class childhood to a more privileged adult social class are often alienated from the working class in the process (Mirande 1973; Stuckert 1963). They tend to be “meticulous in [their] adoption of the values and symbols of [their] new group in [an] attempt to convince [themselves] or others that [they] really [do] belong” (Barber 1970,

29) and may even adhere to upper-class norms more carefully than people raised in upper-class families (Curtis 1959). Of course, some upwardly mobile people never forget their roots. But many are a far cry from the kind of progressive champions politicians often claim to be.

In short, there isn’t clear-cut research that suggests politicians from working-class families are any different from other lawmakers. If they have a reputation for being progressive, they may not deserve it. If there is a “mill worker’s son” heuristic, it may actually lead people to make faulty inferences about how candidates from working-class families behave in office.

What do voters infer when they learn how a candidate was raised? And what should they infer—how do candidates raised in more and less privileged families actually differ in office?

HOW VOTERS PERCEIVE POLITICIANS FROM WORKING-CLASS FAMILIES

Answering the first question is relatively straightforward. Political psychologists have developed several techniques for measuring voters’ mental shortcuts. One of the most useful for our purposes is the *candidate evaluation experiment*, which entails asking subjects to evaluate a hypothetical candidate and randomly varying one trait of the candidate, while holding all other traits constant. Candidate evaluation experiments isolate the effects of the trait in a setting that controls for confounds but still simulates the kinds of cues people receive in the real world.

To determine what voters infer from narratives about “mill workers’ sons,” we analyzed data from two candidate-evaluation experiments. In these experiments, subjects read brief biographies about a hypothetical candidate and were then asked where they thought the candidate stood on a variety of issues. The experiments randomly assigned respondents to either a hypothetical candidate raised by a factory worker and educated in public schools (our simple way of cuing that the candidate was raised in a lower-income or working-class family) and others to *an otherwise identical* candidate raised by a surgeon and educated at an elite private academy (our way of cuing that the candidate came from a higher-income or white-collar family).³ This experimental approach effectively controlled for any potential confounding factors; any differences in how subjects responded can be attributed to the inferences they made based on how the candidates were raised. In other words, we are able to

3. Surgeon and doctor are among the highest-paying jobs and have always scored high in studies of occupational prestige (Hodge, Siegel, and Rossi 1966).

measure how a candidate's upbringing influences citizens' perceptions of his political views and likely conduct in office, how people perceive "mill workers' sons" (and "doctors' sons") who run for office.

The first of the two experiments was conducted in October 2010 by Knowledge Networks, which administered the study through an online survey of a probability-based nationally representative sample of Americans ($N=380$). The second experiment was conducted in a similar fashion in November and December of 2011 via Amazon.com's Mechanical Turk (or "MTurk") using a comparable sample of respondents ($N = 663$). These subject pools are more likely to be representative of the population than in-person convenience samples or traditional university subject pools, although subjects who are interested in politics tend to be slightly overrepresented (see Berinsky, Huber, and Lenz 2010; Paolacci, Chandler, and Ipeirotis 2010).⁴

In both experiments, respondents were given identical instructions up front: "Below is the biography of a man who is thinking of running for Congress next year. Please read it carefully and answer the questions that follow." The brief (approximately 180-word) biography listed simple information about a candidate named Ron Campbell modeled on the information typically provided on candidates' official websites.

In Experiment 1, respondents were randomly assigned to read either a biography that stated that Campbell was a graduate of "the public school system" and that his father⁵ was a "factory worker" (the working-class condition) or they were assigned to read an otherwise identical biography in which Campbell graduated from "Philips Academy Andover, a selective private boarding school" and that his father was a "surgeon" (the upper-class condition).

In Experiment 2, subjects were given biographies embedded with one of the randomly assigned social class categories in Experiment 1 and a randomly assigned cue about the candidate's partisan identification—the single best predictor of legislative conduct (McCarty, Poole, and Rosenthal 2006; Poole and Rosenthal 1997) and one of the characteristics that voters are most likely to see and notice on their

4. In Experiment 2, subjects were slightly more likely to be Democrats, educated, and female than a random draw from the national population. Balance checks for both experiments (reported in the online appendix) did not produce any statistically significant differences across conditions on race, gender, income, party, age, or education.

5. When most of today's politicians were growing up, fathers were still the primary breadwinners in most two-parent families. As such, many candidates signal their childhood social classes by describing what their fathers did for a living. We have done so here, too, in an effort to mirror the kinds of messages voters are likely to hear in the real world.

ballots—in both the initial instructions and the first line of the biography. This 2×2 design allowed us to determine how information about a candidate's childhood influenced respondents' impressions of the candidate *even after knowing the candidate's party*. Box 1 lists the complete text of the biography and the experimental manipulations.

Box 1: Survey Text for Experiments 1 and 2

Experiment 1 randomized *the social class origins of the hypothetical candidate* but did not mention the candidate's party. Experiment 2 randomized *the candidate's social class origins* and the candidate's party.

Below is the biography of a man who is thinking of running (Experiment 2 only: as the Democratic/Republican candidate) for Congress next year. Please read it carefully and answer the questions that follow.

Ron Campbell is running (Experiment 2 only: as the Democratic/Republican candidate) for Congress to bring accountability back to the political system. He knows that with integrity and commitment, we can put our country back on track.

Ron has served two terms in the state legislature from 2002–2010. During his time in the state legislature, he served as Vice Chairman of the powerful Appropriations Committee, which shapes the state's budget.

Ron's parents were his greatest teachers. His father was a *factory worker/surgeon* and taught Ron the value of public service. Ron is a proud graduate of *the public school system/Philips Academy Andover, a selective private boarding school* and believes that every child deserves a high-quality education. Ron has a steadfast commitment to the citizens of his state and has worked to bring jobs to the area and to promote economic growth.

He is married to Susan, his wife of 24 years, and enjoys camping with his two sons, Jake and Scott, and his daughter, Erica.

In both experiments, respondents read the biography and were then asked to estimate Campbell's general political ideology and his support for several of the economic policies that tend to divide Americans most sharply along social class lines (Hout 2008), including middle-class taxes,

corporate tax breaks, social welfare, and (in Experiment 2 only) union rights.

Findings

When voters learn about a new candidate, do they perceive him as more economically progressive if they hear that he was raised in a less privileged family? Figure 1 uses data from Experiment 1 to plot respondents’ average perceptions of the hypothetical candidate’s political views (rescaled to range between 0 and 1). Consistent with the popular rhetoric about “mill workers’ sons,” respondents who were told that Ron Campbell was from a working-class family ($N = 192$) judged him to be significantly more liberal on taxing the middle class (diff = .04; $|t| = 2.15$; $p = .03$), significantly more liberal on providing tax breaks to corporations (diff = .07; $|t| = 3.43$; $p = .001$), and nearly significantly more liberal on welfare spending (diff = .03; $|t| = 1.62$; $p = .11$) than respondents who were told that he was from a privileged family ($N = 196$).⁶ The one exception was the measure of Campbell’s general political ideology—the broadest, most general measure of subjects’ views about him—on which there was essentially no difference. On substantive economic issues, however—the issues that typically divide Americans from different classes—respondents who didn’t know Campbell’s party or political platform appeared to make inferences about his policy preferences based on the kind of family he was raised in. When people hear how a politician was raised, they seem to use a “mill worker’s son heuristic.”

They appear to do so, moreover, even when they know the one piece of political information most voters know about most candidates (if they know anything at all): party affiliation. Figure 2 plots the perceptions of subjects in Experiment 2 in the same fashion as Figure 1, this time dividing the sample by whether the subjects were told Ron Campbell was a Republican or a Democrat. On almost every issue, respondents perceived the Republican version of Ron Campbell as more conservative than the Democratic version. However, they also perceived differences within party based on his childhood social class. Relative to subjects who were told Campbell was a Democrat from an upper-class family ($N = 168$), those who were told he was a Democrat from a working-class family ($N = 165$) perceived him as more generally ideologically liberal (diff = .04, $|t| = 1.77$,

$p = .08$) and more liberal on taxing the middle class (diff = .06, $|t| = 2.83$, $p = .004$), union bargaining power (diff = .06, $|t| = 2.51$, $p = .01$), welfare spending (diff = .07, $|t| = 2.65$, $p = .01$), and corporate tax breaks (diff = .06, $|t| = 2.20$, $p = .03$). Relative to subjects who were told Campbell was a Republican from an upper-class family ($N = 166$), those who were told he was a Republican from a working-class family ($N = 164$) perceived him as significantly more liberal on taxing the middle class (diff = .07, $|t| = 2.92$, $p = .003$) and marginally more liberal on union bargaining power (diff = .05, $|t| = 1.92$, $p = .06$) and in terms of his general political ideology (diff = .04, $|t| = 1.55$, $p = .1$).

The only times respondents did not appear to use the “mill worker’s son” heuristic were when evaluating the Republican version of Campbell’s views on welfare spending (diff = .02, $|t| = .65$, $p = .51$) and corporate tax breaks (diff = .03, $|t| = .89$, $p = .37$). Even then, the differences—though not statistically significant—were in the expected direction and comparable in magnitude to other gaps that we documented. It seems more likely that these null results were an artifact of sample size and repeated measurement than genuine nonfindings. In this analysis, even the broad political ideology measures differed depending on the class Campbell was raised in.⁷

In general, subjects perceived the candidate from a working-class family as more economically progressive than the candidate from an upper-class family, even when they knew the candidate’s party. There are conservative populist narratives, but voters seem to infer that candidates portrayed as growing up poor are more liberal *regardless of the candidate’s party*. The rhetoric about candidates’ parents seems to have sunken into the American psyche.

Experiment 2 also gives us an easy benchmark to judge the *magnitude* of this effect. Scholars have long recognized that party is the single most important political heuristic voters use (e.g., Rahn 2003). How does the “mill worker’s son” heuristic stack up? As Figure 2 illustrates, voters generally infer more from party, but they make sizeable inferences based on how a candidate was raised, too. Compared to the party gap in Experiment 2, the average class gap on our middle-class tax item was 76% as large in Experiment 1 and 123% as large in Experiment 2. Compared to the party gap on corporate taxes in Experiment 2, the class gap was 51% as large in Experiment 1 and 32% as large in Experiment 2. On unions, it was 40% as large in Experiment 2

6. Posttreatment manipulation checks indicated that most respondents construed the treatment as intended. In Experiments 1 and 2, 80% and 84% of respondents correctly identified his social class background. In Experiment 2, 80% of respondents correctly identified his party.

7. We also subset our sample by the respondent’s party and income (see the online appendix).



Figure 1. Candidates' social class origins and citizens' perceptions of candidates' attitudes. Bars report average scores from Experiment 1, in which the party of the candidate is not listed. Dashed lines represent 95% confidence intervals from two-tailed *t*-tests.

(since it was only asked in Experiment 2). On welfare, it was 22% as large in Experiment 1 and 30% as large in Experiment 2. On ideology, it was 1% and 18% as large. As these differences in magnitude illustrate, the “mill worker’s son” heuristic is by no means as sharp a cue as the party heuristic on most issues. On some issues, however, voters make significant inferences about politicians’ views based on information about how they were raised.⁸

External Validity Test: The CLASS Dataset

Of course, in the real world, candidates may not share that information with voters, or voters may not notice it. And in the real world, people can learn a lot more about a politician than just the kinds of facts summarized in our hypothetical candidate’s biography. Does the “mill worker’s son” heuristic actually matter in *real* elections?

As an external validity test, we used the CLASS dataset (Carnes 2011) to determine whether members of Congress who were raised in working-class families tended to do better in more liberal districts (controlling for the legislator’s party and actual behavior in office). The CLASS

dataset contains systematic information about the family backgrounds of a large sample of American legislators. The dataset includes a wide range of detailed biographical data for each of the 783 legislators who served in the 106th through 110th Congresses (1999 to 2008).

To measure how each legislator was raised, the CLASS dataset includes information about the occupations the legislator’s family’s primary breadwinner held while the legislator was growing up. Using these data, we identified the legislators who were raised by factory workers and those who were raised by doctors (there were too few raised by surgeons to single them out for analysis). To double-check our results, we also created a *broader set of occupational categories* for legislators raised by working-class families (those whose parents were coded as “poor/working class,” manual laborers, service industry workers, or union officials) and legislators raised by affluent professionals (those whose parents were listed as doctors, bank owners, executives in medium- or large-sized businesses, or owners of medium- or large-sized businesses).⁹ Unfortunately, information about the kinds of schools lawmakers attended while they were growing up was limited, so we were unable to identify legis-

8. In some instances, the “mill worker’s son” heuristic may have actually affected how subjects perceived the candidate’s *party*. In Experiment 2, subjects assigned to the Republican working-class biography were 50% more likely ($p = .13$) to report thinking that Campbell was a Democrat than those assigned to the Republican upper-class biography. (These cases account for only 14% of the sample, and excluding them does not change our results; see the online appendix.)

9. Only 44 lawmakers in this sample were raised by factory workers (15 Republicans, 29 Democrats) and 24 were raised by doctors (14 Republicans, 10 Democrats). In contrast, our broader occupational coding scheme indicates that 152 legislators were raised by workers (59 Republicans, 93 Democrats) and 86 by affluent professionals (58 Republicans, 27 Democrats).

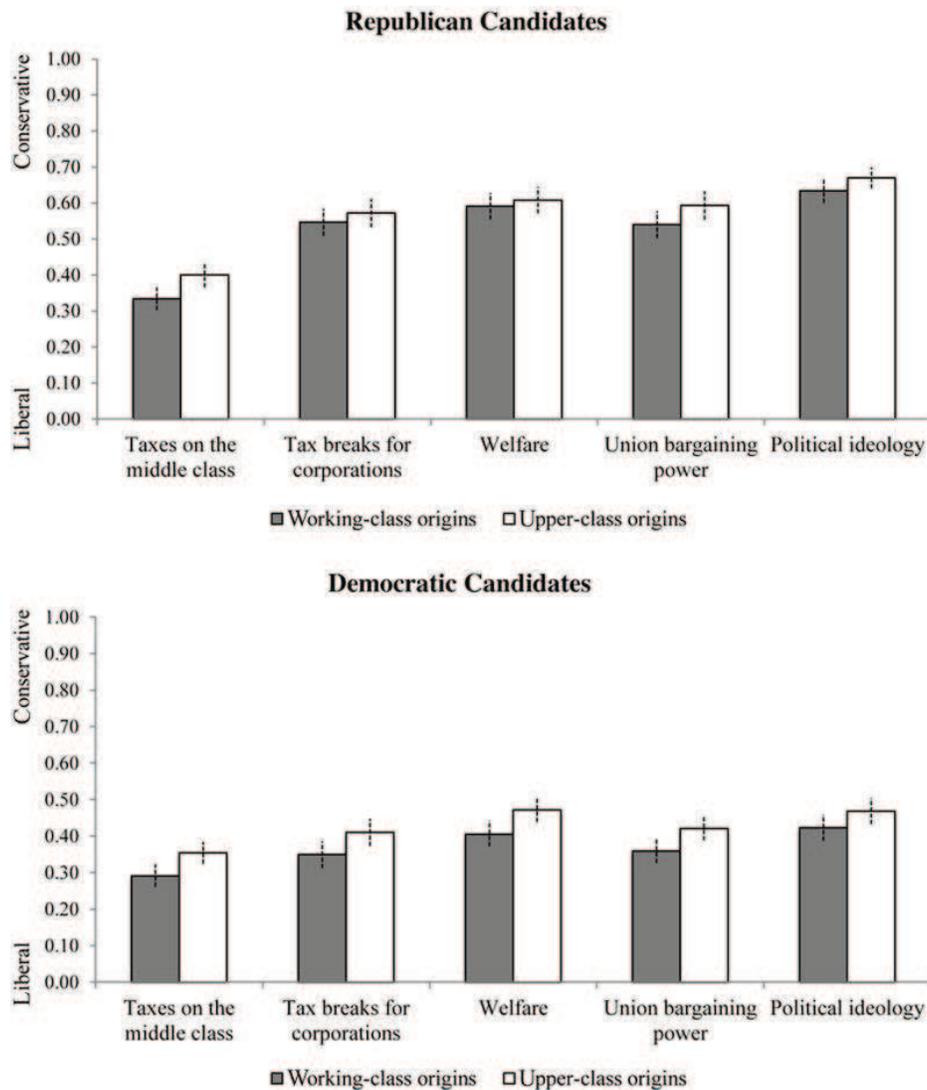


Figure 2. Candidate social class origins and citizens’ perceptions, by candidate party. Bars report average scores from Experiment 2, in which the candidate’s childhood social class and political party are both randomized. Dashed lines represent 95% confidence intervals from two-tailed *t*-tests.

lators who attended schools analogous to the ones in Ron Campbell’s fictional biography. In light of the strong association between occupation and other measures of class, however, we suspect that knowing lawmakers’ educational backgrounds would not change our results in any meaningful way.

If congressional candidates talk about how they were raised—and if voters use a “mill worker’s son” heuristic—members raised in working-class families should tend to do better in more liberal districts and worse in more conservative districts, other things equal.

And, indeed, they do. Model 1 in Table 1 reports the results of a regression model that related the percentage of the vote members of the 106th through 110th Congresses received in their last elections to (1) indicators for whether each member was the child of a factory worker or the child of a surgeon, (2) a measure of the average ideological orientation of the member’s constituents (created using the standard 7-point ideology scale in the National Annenberg Election Study and scaled here to range between 0 and 1, where 0 is the most conservative constituency in the sample and 1 is the most liberal), and (3) the interaction be-

Table 1. Childhood Social Class, Constituency Composition, and Congressional Vote Margins, 1999–2008

	1	2	3	4
Working-class origins	−8.02* (4.75)	−4.33 (4.14)	−10.33* (2.91)	−10.66* (2.73)
Upper-class origins	5.29 (6.62)	5.58 (6.93)	3.44 (5.06)	2.85 (4.24)
Constituency Liberalism	14.31* (3.28)	11.07* (3.63)	10.91* (3.73)	7.44* (3.90)
Working-class origins × Liberalism	20.92* (12.08)	11.50 (10.45)	27.82* (7.27)	26.01* (6.51)
Upper-class origins × Liberalism	−21.61 (16.15)	−19.55 (16.88)	−16.60 (13.05)	−12.32 (10.46)
(intercept and controls omitted)				
Occupational categories	Narrow	Narrow	Broad	Broad
Controls	No	Yes	No	Yes
N	2,646	2,643	2,646	2,643
R ²	0.0424	0.1594	0.0264	0.1704
SE	12.979	12.185	13.087	12.104

Notes—Cells report coefficients (with clustered standard errors in parentheses to account for the fact that many legislators appear more than once in the CLASS dataset). Asterisks denote point estimates that were statistically significant (at the $p < 0.10$ level in two-tailed tests). The models estimated with narrower occupational categories defined a legislator as the child of a worker if he or she was raised by a factory worker and defined a legislator as the child of an affluent professional if the legislator was raised by a doctor or surgeon. The models estimated with broader occupational categories defined a legislator as the child of a worker if the legislator was raised by parents who were coded as “poor/working class,” manual laborers, service industry workers, or union officials. The broader categories defined a legislator as the child of an affluent professional if the legislator was raised by a doctor, bank owner, executive in a medium- or large-sized business or the owner of a medium- or large-sized business.

tween these parental occupation indicators and the ideology measure. In model 2, we also added controls for the legislator’s actual ideology (measured as his or her DW-NOMINATE score); the legislator’s party, age, race, gender, and religion; and the characteristics of the legislator’s constituents (percent urban, percent white, percent working class, median household income, and union household density). And in models 3 and 4, we used the broader occupational measures, which identified legislators raised by working-class people—not just factory workers—or affluent professionals—not just doctors. (We also separately reestimated each model for only Republicans and only Democrats, but we found no differences, so we omitted those models here; see the online appendix).

All four models showed that legislators raised in working-class families performed worse in more conservative districts (the indicator for *Working-class origins* had a negative coefficient) but performed better in more liberal districts (the coefficient for *Working-class origins x Liberalism* was positive, meaning that the electoral “penalty” for the children of workers was smaller—and eventually an electoral “bonus”—in increasingly liberal districts). The reverse was

true (though not statistically significant) for children of well-off professionals.¹⁰

Americans seem to view legislators raised in working-class families as more progressive or liberal on economic issues. And they seem to vote accordingly: members of Congress raised in working-class families do better at the polls in more liberal places, over and above what we can attribute to their partisan loyalties or their actual behavior in office. The “mill worker’s son” heuristic appears to be a real and important part of how voters evaluate candidates.

HOW POLITICIANS FROM WORKING-CLASS FAMILIES ACTUALLY BEHAVE

Should it be? When voters hear that a politician was raised in a working-class family, are they right to infer that the politician is more liberal than one raised in an upper-class family, even when they know the candidate’s party? Is the

10. We also replicated these results with data from Experiment 2 (which provided party information). Our findings (reported in the online appendix) suggested that liberals were 13 percentage points more likely to vote for a candidate raised in the working class.

“mill workers’ son” heuristic a decent bet for evaluating candidates, at least on average?

Knowing whether citizens are making *good* inferences is challenging. The scholars who have wrestled with this “theoretically difficult and partly normative” problem (Kuklinski and Quirk 2001, 301) have typically adopted one of four techniques. Some have used the preferences and choices of highly informed citizens as their benchmarks for good or competent decision making (e.g., Lupia 1994). Others have used the “correct voting” approach, a more complex procedure for estimating the policies or candidates a person should support using data on the policies or candidates supported by better-informed citizens who share that person’s core values (Baum and Jamison 2006; Lau and Redlawsk 1997). Others have focused on whether citizens are satisfied with their choices after they make them (Popkin 1991; Sniderman, Brody, and Tetlock 1991). And still others have attempted to determine whether the inferences voters draw square with some objective measure of reality, an approach that most political psychologists regard as ideal but—unfortunately—impossible in many applications. (For example, scholars *can’t* objectively measure whether citizens are right to infer that female candidates are morally upstanding, since there is no objective benchmark of what it means to be morally upstanding.)

Fortunately, in this case, the inferences we are interested in can be evaluated objectively. We need not compare the perceptions of more and less informed citizens, estimate more complex correct voting models, or ask citizens whether they were satisfied with their choices. In this application, we can simply compare whether the inferences people make line up with legislators’ actual behavior in office. To determine whether politicians from the working class actually tend to behave differently in office, we used the CLASS dataset to examine how members of Congress raised in more and less affluent families actually voted on economic issues.

To measure legislators’ general political ideology, we relied on first-dimension DW-NOMINATE scores, composite scores based on every roll-call vote legislators cast that reflect where they fall on the major ideological divisions between the two parties. To measure their choices on specific economic issues, we relied on composite roll-call measures computed by the Chamber of Commerce and the AFL-CIO. These measures captured legislators’ general conduct with respect to issues affecting businesses and the working class. Although not as fine-grained as the issue evaluation questions in our experimental study, they allowed us to gauge whether lawmakers raised in working-class families deserve to be seen as more economically progressive.

Of course, voting is only one measure of legislative conduct (e.g., Burden 2007; Carnes and Lupu, n.d.; Hall 1996). In this application, however, studying how legislators in the CLASS dataset vote seems like a sensible test. During this time period, legislators from different racial, gender, and religious backgrounds differed significantly in how they voted on economic issues (Carnes 2013, Chap. 2). If legislators raised by working-class people are really more progressive on economic issues, it should have been apparent in how they voted, too.

Figure 3 plots the average first-dimension DW-NOMINATE scores, AFL-CIO scores, and Chamber of Commerce scores among the members of Congress in the CLASS dataset who were raised by doctors and factory workers. (Our results—available in the online appendix—were nearly identical when we used the broader occupational categories described above.) To facilitate comparisons to our experimental analyses, we rescaled each variable to range between 0 (most liberal) and 1 (most conservative).

The differences in how lawmakers raised in different kinds of families scored on these scales were striking and consistent with those documented in our first experiment on citizens’ perceptions. Relative to members of Congress raised by doctors, those raised by factory workers had more liberal DW-NOMINATE scores (diff = .09, $|t| = 3.37$, $p < .01$), Chamber of Commerce scores (diff = .12, $|t| = 3.19$, $p < .01$), and AFL-CIO scores (diff = .19, $|t| = 3.43$, $p < .01$). In the absence of any information about a legislator’s issue positions or partisanship, the inferences citizens make on the basis of his childhood social class seem to be consistent with reality; that is, the “mill worker’s son” heuristic appears to improve the quality of citizens’ judgments.

The inferences they make when they know the legislator’s party, on the other hand, seem to be mistaken. Figure 4 again plots average roll-call scores among lawmakers raised by factory workers and doctors, this time dividing the sample by the legislator’s party. The differences were tiny compared to those documented in Figure 2. Among Republicans, DW-NOMINATE and AFL-CIO scores hardly varied (diff. = .01, $|t| = 1.00$, $p = .32$; diff. = .02, $|t| = 0.87$, $p = .39$) and Chamber of Commerce scores were actually negligibly more conservative among legislators raised by factory workers (diff. = -.01, $|t| = 0.4$, $p = .67$). Among Democrats, average DW-NOMINATE scores were essentially the same regardless of legislators’ class origins (diff. = .01, $|t| = .49$, $p = .62$). The most pronounced childhood-class-based differences evident in Figure 4—those in Democrats’ Chamber of Commerce and AFL-CIO scores (diff. = .04, $|t| = 1.26$, $p = .11$; diff. = .03, $|t| = 1.43$, $p = .08$)—were only marginally significant and were smaller in magnitude

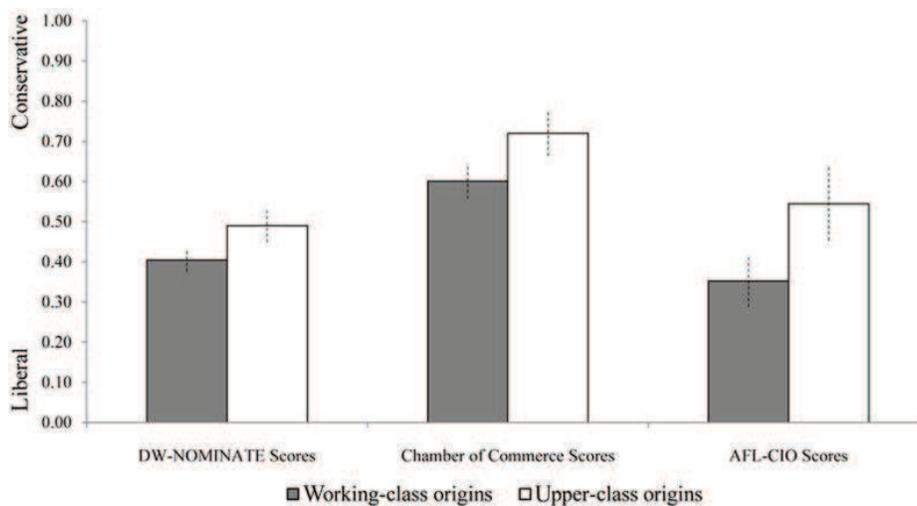


Figure 3. Childhood social class and economic roll-call voting in Congress, 1999–2008. Bars report average scores, and dashed lines represent 95% confidence intervals from two-tailed *t*-tests.

than the differences in citizens' perceptions evident in Figure 2. And these differences were tiny compared to other kinds of social divisions in legislative conduct (the gap between legislators who had working-class jobs *themselves* and legislators who were business owners was more than four times larger; Carnes 2013, Chap. 2), and they disappeared in regression models (available in the online appendix) that added simple controls for standard legislator and constituency characteristics (which were held constant in Experiments 1 and 2 by design).

In other words, once we take into account one or more of the political characteristics that a citizen might know about a lawmaker, there are no measurable differences between legislators who were raised by factory workers and those who were raised by doctors (and, likewise, no differences when we expanded our analysis to compare legislators raised by working-class people and affluent professionals more generally). Ordinary Americans who were raised in the working class but who hold high-paying white-collar jobs themselves tend not to be all that different from other white-collar professionals. The same seems to be true for politicians. Some lawmakers raised in working-class families may be genuine working-class heroes. However, they appear to be the exceptions, not the rule. Once we know a legislator's party, knowing what his parents did for a living doesn't help us predict how he will vote on economic issues.

Of course, it's possible that many legislators raised in working-class families inherit progressive values that lead them to become Democrats at disproportionate rates. However, once elected, these lawmakers tend to behave about

the same as other Democrats (or Republicans). Voters see them as more economically progressive than their fellow partisans—but in most cases, they shouldn't. Once a voter knows a legislator's party background, knowing how they were raised doesn't provide any additional information about how they will behave in office.

In short, if a voter doesn't know a candidate's political party (e.g., some local elections or judicial races, where every candidate is from the same party), the "mill worker's son" heuristic will lead them in the right direction more often than not. However, once a person knows a candidate's party—as Americans do in most elections, at least when they get to the voting booth—information about how the candidate was raised is less helpful for predicting how the candidate will behave in office. Politicians often highlight how hard their parents had it when they were growing up, and Americans often give those who do credit for bringing a uniquely progressive economic perspective to public office. But when they get down to the business of governing, mill workers' sons tend to look just like everyone else with a \$400 haircut.

THE MYTH OF THE MILL WORKER'S SON

In *Public Opinion*, Walter Lippmann argued that the world of politics was "altogether too big, too complex, and too fleeting for direct acquaintance" (1922, 11–19). Citizens who participate in political life must therefore first mentally "reconstruct it on a simpler model before we can manage with it" (11). The world of public affairs is simply too vast and too complicated for anyone to know everything and for

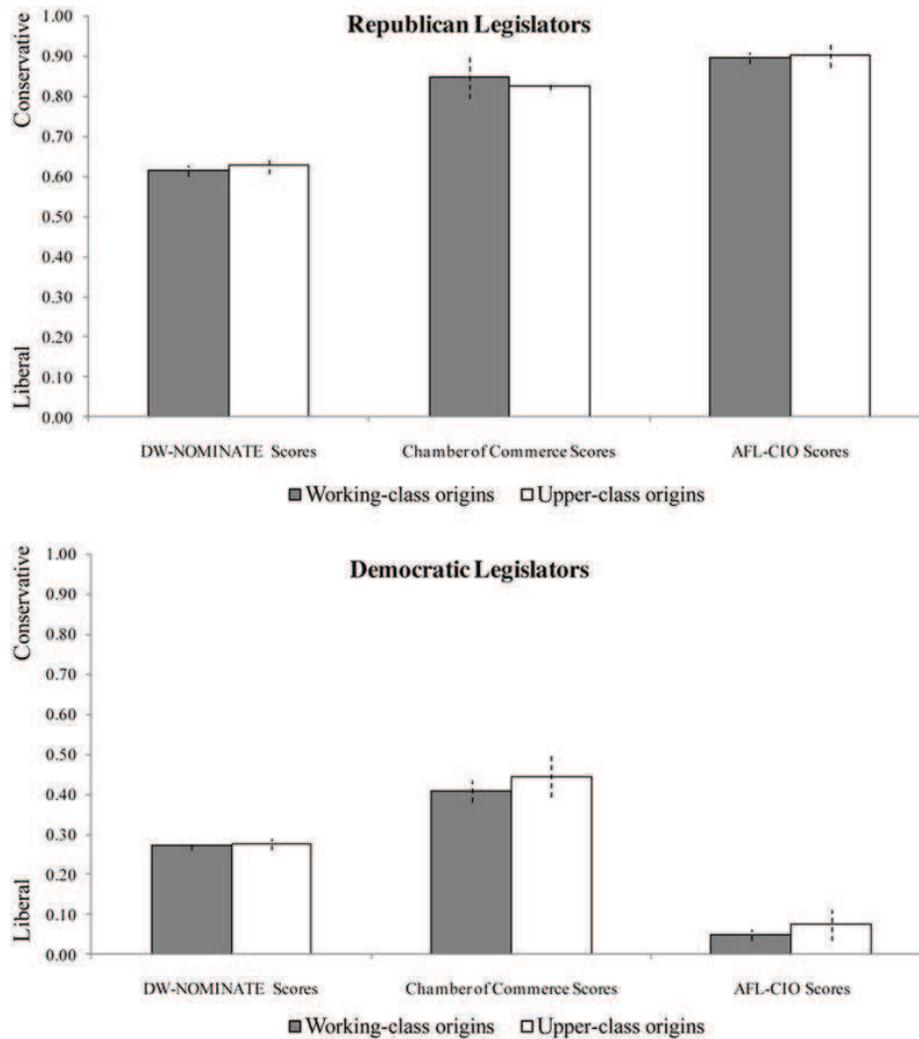


Figure 4. Childhood social class and economic roll-call voting in Congress, by party. Bars report average scores, and dashed lines represent 95% confidence intervals from two-tailed *t*-tests.

most people to know very much. In other words, citizens must make guesses and use heuristics. However, Lippmann was deeply skeptical about their ability to do so: “the picture inside . . . often misleads men in their dealings with the world outside” (18). He ultimately concluded that the prospects for democratic politics were grim: “representative government,” he wrote, “cannot be worked successfully, no matter what the basis of election” (19).

Although many political scientists have disputed Lippmann’s pessimistic take on the role of informational shortcuts in popular government, most have shared his sense that the stakes are high. People use informational shortcuts to simplify a wide range of complex political judgments.

Like shortcuts in the real world, some get us to our destinations more efficiently. Others lead us in the wrong direction.

The popular idea that politicians raised in less affluent families are more progressive or proworker seems to be one of those kinds of inferences. Of course, there are many politicians from working-class families who really are the kinds of progressive champions embodied in rhetoric about mill workers’ sons—including, perhaps, John Edwards himself. However, our data on legislative voting suggest that cases like these are the exceptions, not the rule. Politicians raised in working-class families do not tend to vote differently on economic issues. Even during a period when politicians tend to vote differently depending on their races,

genders, and adult occupations (Carnes 2013, Chap. 2), legislators raised in working-class families do not stand out. Yet when citizens learn that a candidate was raised in a working-class family, they infer that the candidate will take more progressive stances on the important issues of the day.

Even well-informed citizens use the misleading “mill worker’s son” heuristic. In a simple follow-up analysis of our second candidate experiment (reported in its entirety in the online appendix), we found that subjects who scored the highest on a standard set of political knowledge questions were *more* likely than the subjects who scored the lowest to make inferences based on how our candidate was brought up. Even smart people can be taken in by myths about mill workers’ sons.

Of course, other social class markers may not be so misleading. What a politician’s *parents* did for a living doesn’t tell us much, but what the politician did *herself* is a strong predictor of her choices on economic policy (Carnes 2012, 2013). Now that we know that voters notice one kind of social class cue, it may be fruitful to ask whether they pick up on others. Unlike the “mill worker’s son” heuristic, an “I was a mill worker *myself*” heuristic might actually lead voters to make good inferences about candidates who worked in blue-collar jobs themselves. Political psychologists have developed rich accounts of how party cues, race cues, and gender cues matter to voters—it is high time they turn their attention to class cues, too.

Moreover, there is still work to be done on the “mill worker’s son” heuristic. We have only examined data on voters in a few contexts; voters may use the heuristic differently depending on the other heuristics they are using at the time—race, gender, religion, and so on. And we have only examined data on one form of legislative conduct in one time period; future work should investigate other eras and other choices politicians make.

Scholars also need to learn more about when and how candidates invoke their origins. Do they selectively play up their humble upbringings depending on their audiences? Especially in an age of economic hard times and soaring inequality, candidates often have strong electoral incentives to appear as though they’re fighting for the middle and working classes. When candidates play up their working-class families, some may be attempting to activate the misleading “mill worker’s son” heuristic—and some who wish to appear conservative may be downplaying their working-class roots for the same reasons. If voters use a “mill worker’s son” heuristic, there’s a good chance candidates know it—and that scholars could learn a great deal about accountability, representation, and economic in-

equality by studying when and how candidates play up their working-class roots.

This study also illustrates the importance of researching not just which shortcuts citizens use but also whether those shortcuts lead citizens to make accurate judgments. Social-class cues are complex, and voters need to be careful when politicians flash working-class credentials. When candidates have to reach back a generation to connect with the less fortunate, Americans need to take a hard look at what those candidates have actually done for the working class.

REFERENCES

- Barber, James Alden, Jr. 1970. *Social Mobility and Voting Behavior*. Chicago: Rand McNally and Company.
- Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton, NJ: Princeton University Press.
- Baum, Matthew A., and Angela S. Jamison. 2006. “The Oprah Effect: How Soft News Helps Inattentive Citizens Vote Consistently.” *Journal of Politics* 68 (4): 946–959.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2010. “Using Mechanical Turk as a Subject Recruitment Tool for Experimental Research.” Massachusetts Institute of Technology. Unpublished manuscript.
- Brady, Henry, and Paul Sniderman. 1985. “Attitude Attribution: A Group Basis for Political Reasoning.” *American Political Science Review* 79: 1061–78.
- Bratton, Kathleen A., and Kerry L. Haynie. 1999. “Agenda Setting and Legislative Success in State Legislatures: The Effects of Gender and Race.” *Journal of Politics* 61: 658–79.
- Burden, Barry C. 2007. *The Personal Roots of Representation*. Princeton, NJ: Princeton University Press.
- Calfano, Brian Robert, and Paul A. Djupe. 2009. “God Talk: Religious Cues and Electoral Support.” *Political Research Quarterly* 62 (2): 329–39.
- Campbell, David E., John C. Green, and Geoffrey C. Layman. 2011. “The Party Faithful.” *American Journal of Political Science* 55 (1): 42–58.
- Campbell, Rosie, and Philip Cowley. N.d. “What Voters Want: Reactions to Candidate Characteristics in a Survey Experiment.” *Political Studies*. Forthcoming.
- Canon, David T. 1999. *Race, Redistricting and Representation: The Unintended Consequences of Black Majority Districts*. Chicago: University of Chicago Press.
- Carnes, Nicholas [producer]. 2011. *Congressional Leadership and Social Status* [dataset]. Duke University.
- Carnes, Nicholas. 2012. “Does the Underrepresentation of the Working Class in Congress Matter?” *Legislative Studies Quarterly* 37 (1): 5–34.
- Carnes, Nicholas. 2013. *White-Collar Government: The Hidden Role of Class in Economic Policy Making*. Chicago: University of Chicago Press.
- Carnes, Nicholas, and Noam Lupu. N.d. “Rethinking the Comparative Perspective on Class and Representation.” *American Journal of Political Science*. Forthcoming.
- Citrin, Jack, Donald Philip Green, and David O. Sears. 1990. “White Reactions to Black Candidates: When Does Race Matter?” *The Public Opinion Quarterly* 54 (1): 74–96.
- Curtis, Richard F. 1959. “Occupational Mobility and Membership in Formal Voluntary Associations: A Note on Research.” *American Sociological Review* 24: 846–48.

- Edwards, John. 2008. "About." johnedwards.com/about/john (accessed September 8, 2008).
- Feldman, Stanley, and Pamela Johnston Conover. 1983. "Candidates, Issues and Voters: The Role of Inference in Political Perception." *Journal of Politics* 45 (4): 810–39.
- Fiske, Susan T., Jun Xu, Amy C. Cuddy, and Peter Glick. 1999. "(Dis)respecting versus (Dis)liking." *Journal of Social Issues* 55: 473–89.
- Grofman, Bernard, and Barbara Norrander. 1990. "Efficient Use of Reference Group Cues in a Single Dimension." *Public Choice* 64 (3): 213–27.
- Hall, Richard L. 1996. *Participation in Congress*. New Haven, CT: Yale University Press.
- Harkin, Tom. 2007. "Biography." harkin.senate.gov/abouttom.cfm (accessed Oct. 12, 2007).
- Hatch, Orrin G. 2010. "Biography." <http://hatch.senate.gov/> (accessed February 1, 2010).
- Hodge, Robert, Paul Siegel, and Peter Rossi. 1966. "Occupational Prestige in the United States." In *Class, Status, and Power*, eds. Reinhard Bendix and Seymour Martin Lipset. New York: Free Press, 322–34.
- Hout, Michael. 2008. "How Class Works: Objective and Subjective Aspects of Class since the 1970s." In *Social Class*, ed. Annette Lareau and Dalton Conley. New York: Russell Sage, 25–64.
- Huddy, Leonie, and Nayda Terkildsen. 1993. "Gender Stereotypes and the Perception of Male and Female Candidates." *American Journal of Political Science* 37 (1): 119–47.
- Kahneman, Daniel, and Amos Tversky. 1972. "Subjective Probability: A Judgment of Representativeness." *Cognitive Psychology* 3: 430–54.
- Koch, Jeffrey W. 2000. "Do Citizens Apply Gender Stereotypes to Infer Candidates' Ideological Orientations?" *Journal of Politics* 62 (2): 414–29.
- Kuklinski, James, and Paul Quirk. 2001. "Conceptual Foundations of Citizen Competence." *Political Behavior* 23 (3): 285–311.
- Lau, Richard R., and David P. Redlawsk. 1997. "Voting Correctly." *American Political Science Review* 91 (3): 585–98.
- Lippmann, Walter. 1922. *Public Opinion*. New York: Harcourt, Brace.
- Lott, Bernice, and Susan Saxon. 2002. "The Influence of Ethnicity, Social Class, and Context on Judgments about U.S. Women." *Journal of Social Psychology* 136: 481–99.
- Lupia, Arthur. 1994. "Shortcuts versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Elections." *American Political Science Review* 88: 63–76.
- Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.
- McCarty, Nolan M., Keith T. Poole, and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, MA: MIT Press.
- Mirande, Alfred M. 1973. "Social Mobility and Participation: The Dissociative and Socialization Hypotheses." *Sociological Quarterly* 14: 19–31.
- Mondak, Jeffery J. 1993. "Source Cues and Policy Approval: The Cognitive Dynamics of Public Support for the Reagan Agenda." *American Journal of Political Science* 37 (1): 186–212.
- Ottati, Victor C. 2002. *The Social Psychology of Politics*. Boston: Springer.
- Paolacci, Gabriele, Jesse Chandler, and Panagiotis G. Ipeirotis. 2010. "Running Experiments on Amazon Mechanical Turk." SSRN Working Paper No. 1626226.
- Pessen, Edward. 1984. *The Log Cabin Myth: The Social Backgrounds of the Presidents*. New Haven, CT: Yale University Press.
- Petty, Richard E., and John T. Cacioppo. 1986. "The Elaboration Likelihood Model of Persuasion." *Advances in Experimental Social Psychology* 19: 123–205.
- Piketty, Thomas. 1995. "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics* 110: 551–84.
- Poole, Keith T., and Howard Rosenthal. 1997. *Congress: A Political Economic History of Roll Call Voting*. New York: Oxford University Press.
- Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. Chicago: University of Chicago Press.
- Rahn, Wendy M. 1993. "The Role of Partisan Stereotypes in Information Processing about Political Candidates." *American Journal of Political Science* 37 (2): 472–96.
- Sadin, Meredith. 2013. "Campaigning with Class: The Effect of Candidate Social Class on Voter Evaluations." Working Paper, University of California – Berkeley.
- Sniderman, Paul M., Richard A. Brody, and Philip Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York: Cambridge University Press.
- Stuckert, Bob. 1963. "Occupational Mobility and Family Relationships." *Social Forces* 4: 301–307.
- Swers, Michele. 2002. *The Difference Women Make*. Chicago: University of Chicago Press.
- Todorov, Alexander, Anesu N. Mandisodza, Amir Goren, and Crystal C. Hall. 2005. "Inferences of Competence from Faces Predict Election Outcomes." *Science* 308: 1623–26.
- Tversky, Amos, and Daniel Kahneman. 1973. "Availability: A Heuristic for Judging Frequency and Probability." *Cognitive Psychology* 5 (2): 207–32.
- Tversky, Amos, and Daniel Kahneman. 1974. "Judgment under Uncertainty: Heuristics and Biases." *Science* 185: 1124–31.
- Vandello, Joseph A., Nadav P. Goldschmied, and David A. R. Richards. 2007. "The Appeal of the Underdog." *Personality and Social Psychology Bulletin* 33: 1603–16.
- Weaver, Vesla M. 2010. "The Electoral Consequences of Skin Color: The 'Hidden' Side of Race in Politics." *Political Behavior* 34 (1): 159–92.
- Whitby, Kenny J. 1997. *The Color of Representation: Congressional Behavior and Black Interests*. Ann Arbor: University of Michigan Press.
- White House, Office of the Press Secretary. 2009. "Judge Sonia Sotomayor." whitehouse.gov/the_press_office/Background-on-Judge-Sonia-Sotomayor/ (accessed July 20, 2011).
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.