Intuitive Politics: How Moral Intuitions Shape Political Identities

Abstract

In this paper, I lay the groundwork for a new understanding of the origins and consequences of individual political predispositions. Borrowing from recent work in moral psychology, I adopt an intuitionist model. The theory suggests that a diverse set of deep moral intuitions – concerns for care, fairness, loyalty, respect, and purity – structure and constrain cognition in important ways. When individuals are confronted with political stimuli, flashes of positive or negative affect are causally prior to rational considerations. Because it offers a way to open the "black-box" of political predispositions, this new perspective has the potential to structure an integrated theory of individual attitudes and political behavior. I test the claims of the theory with nationally representative survey data collected in 2008. I develop hypotheses that link the intuitions to political orientations and behavior. With estimates of individuals' moral intuitions derived from a multidimensional item response model, I demonstrate the hypothesized relationships between intuitions and political identification. Individual differences in moral intuitions accounts for differences in partisanship, partisan stability and vote choice in primary and general elections. My results show that the intuitionist model has the potential to greatly increase our understanding of how individuals interact with the political world.

Brad Jones University of Wisconsin Contemporary scholars of politics at the individual level owe a large debt to the early work of the Michigan School. The names of Angus Campbell, Phillip Converse, Warren Miller and Donald Stokes appear in almost every important debate in the discipline since their seminal work, *The American Voter*, first appeared (1960). Campbell et al. outlined a research agenda that has guided the study of voter decision making throughout much of the subsequent 60 years since the publication of their early studies. These studies were institutionalized and evolved into the perennial American National Elections Studies, and they have become an invaluable source of data for the study of how individuals engage with (or often fail to engage with) the political world. Armed with interviews of thousands of individuals, they were in a position to develop a streamlined model of voter choice that depended almost entirely on attitudes that existed within the individual's head. Their model gave special place to three attitudes in particular: party identification, issue attitudes, and candidate evaluations (Campbell et al. 1960; Campbell, Gurin, and Miller 1954, 85-86).

In the years since the publication of *The American Voter*, psychology has come a long way. Unfortunately, much of the political science literature continues to rely on the (often not fully articulated) assumptions of the Michigan school. The received wisdom from the intellectual fathers of our discipline functions as a sort of origin myth for scholars of individual political attitudes that can be difficult to escape. In light of the advances in psychology in the last 60 years, it is time that we revisit some of the more problematic foundations of our theories of individual political attitudes.

Foremost among these problematic assumptions is the idea of equipotentiality or the "blank slate" (Jones 2001, 29; Joseph, Graham, and Haidt 2009; Pinker 2003). For a host of regions, social scientists have tended to resist the idea that humans come pre-equipped in ways

that have a meaningful impact on their subsequent attitudes and behavior. These scholars prefer instead to think of all meaningful individual differences arising as a result of socialization or rationalization of self-interest. A newly revitalized strain of psychology offers tools for understanding innate individual differences and how they might translate into differences in political behavior and attitudes.

In this paper, I introduce moral foundations theory to political science. The theory holds that human morality can be understood in terms of a small set of concerns that can be found in all human societies and throughout history (Haidt and Joseph 2004). I offer an initial exploration of how these moral foundations influence political orientations. Using data from the 2008 National Election Study, I show how individual differences in moral foundations account for differences in partisanship—both cross-sectionally and over the course of a campaign. I also show how the moral foundations affect voting behavior in primary and general elections. I find that individuals' political identification and behavior are shaped by their moral outlook. The moral foundations help to elucidate the meaning of self-reported party identification and provide a more satisfying theoretical framework from which to move forward in the study of individual political judgment.

Theory and Literature Review

The authors of the Michigan studies built from a model of individual psychology that has become increasingly out of date. Their studies were grounded in ideas that, fifty years ago, represented the state of the art in psychology and sociology. Unfortunately, political scientists have largely failed to revisit the central assumptions of the Michigan school. Critical evaluation of these foundational assumptions is essential if we are to break out of the old paradigm and its associated limitations.

The Cognitive Revolution and the Blank Slate

Campbell et al. were beginning their work at a moment of great upheaval in psychology. In the early 1950s, strict behaviorism was giving way to the "cognitive revolution" in psychology departments across the country (Miller 2003; Sperry 1993). This shift in attention away from observable behaviors and into the subjective experience of the individual is clearly reflected in the theoretical outlook of the authors of *The American Voter*. However, the cognitive revolution did more than just draw the attention of researchers to individuals' subjective experiences. It also began to erode the implicit equipotentiality assumption of behaviorists (Pinker 2003, 31). This assumption informed the work of the Michigan school. Their model of individual level attitudes relies heavily on socialization and intergenerational transmission of norms and values (1960, 146-7).

For the most part, the mainstream of political science stayed close the Michigan model for decades after its original publication (see Easton [1985] for a review of the intellectual development of the discipline). For a brief period, this approach seemed endlessly promising, and the new school certainly seemed to have great explanatory power. Much of the work produced during this period is heavily inflected with positivistic language, and it must have been a heady time to be a political scientist. Findings seemed to accumulate and one gets the sense from reading the research that came out of this period that the scholars of this era believed the end was nearly in sight. However, as James Stimson puts it, "Blossoms are most brilliant just before they wilt" (2004, 160). As ever more complicated statistical methods were brought to bear on this promising new data, cracks began to appear.

Given an individual's partisan identification and evaluations, we could predict with reasonable certainty his or her vote choice. However, on reflection, this finding seemed

unsatisfying (Converse 2006). These observations were entirely too far down the "funnel of causality." In an early attempt to untangle the endogeneity of individual attitudes and political identification, Markus and Converse (1979) developed a sophisticated dynamic simultaneous equations model and applied it to panel data from the 1970s. They allow for individuals' party identification to affect the way they evaluate the candidates and candidates' issue positions to affect individuals' evaluations and vice versa. The tangled web of arrows and boxes in their Figure 1 (1979, 1059) is a monument to complexity, but after the dust settles on their system of regression equations, the authors conclude on a high note, reminding the reader of the remarkable amount of variance in vote choice their models seem to account for. However, one need only turn to the very next article in the same issue of the *APSR* to find Page and Jones (1979) coming to a substantively different conclusion using the same data and similar methods. Page and Jones have just as many arrows (although their Figure 7 is free of boxes [1979, 1081]), but by arranging them differently, they reach a different answer.

What was needed was some "unmoved mover" to give structure and direction to individual political attitudes. A debate continues to wage, with waxing and waning intensity over time, about the suitability of partisan identification as a candidate to fill this critical role in theories of individual politics. On one side, the revisionists have aimed at the foundations of the Michigan school model by asserting that party attachments themselves are endogenous to the political process (Fiorina 1977; Franklin 1984; Franklin and Jackson 1983; Grynaviski 2006; Jackson 1975). This spurred something of a counter-revolution as traditionalists rallied around the basic stability of the party attachment (Goren 2005; Green, Palmquist, and Schickler 2004; Green and Yoon 2002; Green and Palmquist 1990; Green and Palmquist 1994; Steven Greene 1999; Schickler and Green 1993). A third faction has found an uneasy sort of compromise

between the two warring camps by allowing for a sort of augmented rationality where information is processed in a biased way colored by partisan affiliation (Bartels 2002; Jessee 2009; Johnston 2006; Kroh and Selb 2009).

Political scientists have been making movements toward an alternative understanding of political attitudes and away from the equipotentiality assumption in recent years. This approach was revitalized with Alford, Funk and Hibbing's (2005) analysis of twin studies in the United States and Australia, political scientists have become increasingly interested in the most distant parts of the "funnel of causation" described by the authors of the early Michigan studies (Alford and John R. Hibbing 2007; Alford, Funk, and John R. Hibbing 2008; Amodio et al. 2007; Gerber et al. 2010; Hannagan and Hatemi 2008; Hatemi et al. 2009; Mondak et al. 2010; Monroe, Adam Martin, and Ghosh 2009; Oxley et al. 2008). This work represents movement towards a new theoretical framework, but it remains to be seen how these different research programs might converge on a coherent theory of political behavior.

Recent developments in psychology suggest some significant revisions to the foundational assumptions of the study of individual attitudes. Modern psychological science has moved toward a synthesis of the cognitive model and the relatively newer affective models of human cognition and moral judgment (Haidt 2007). These advancements have obvious application to the intersection between the individual and the political world. This synthesis suggests that individual predispositions, interacting with group memberships, drive attitudes and behaviors. Unlike socio-demographic models of political attitudes, which generally impute attitudes and predispositions based on what the researcher assumes is the interest of the individual (Bartels 1996; Campbell et al. 1960; Conover 1988; Lazarsfeld, Berelson, and Gaudet

¹ Jost (2009) points out that the Alford et al. genetics-politics research should be seen as part of an older literature in behavioral genetics (see, for example, Eaves and Eysenck 1974).

1944), this new approach articulates the important domains of moral thinking and offers ways to measure them directly. The theory suggests that a diverse set of deep moral intuitions – relating to care, fairness, loyalty, respect, and purity – structure and constrain cognition in important ways. When individuals are confronted with morally-charged political stimuli, flashes of positive or negative affect emerge before rational considerations (Storbeck and Clore 2008). Because it offers a way to open the "black box" of political predispositions, this new synthesis has the potential to structure an integrated theory of individual attitudes and political behavior.

The social intuitionist model (Haidt 2001) seems to fill in a theoretical gap for political scientists. Originally formulated by Jonathan Haidt, the model accounts for empirical regularities in human moral judgment. Subsequent research by Haidt (Haidt and Graham 2007; Haidt, Graham, and Joseph 2009) and others (Cushman, Young, and Hauser 2006; Joshua Greene and Haidt 2002; Moll et al. 2005; Pessoa 2008) has elaborated on the original theory and shown how innate moral intuitions relate to the complex moral judgment tasks that form the foundation of smooth social interactions. Serious inquiry into the origins and structure of individual predispositions themselves will lead to a richer understanding of the attitudes and behaviors that flow from them. In order to truly understand how individuals engage with the political world, we must understand the deep roots of these predispositions.

Moral foundations theory (Haidt and Graham 2007; Haidt, Graham, and Joseph 2009; Haidt and Joseph 2004), building from cross-cultural work in anthropology, philosophy, and even primatology, describes a set of moral intuitions that are common to all humans. The most recent iteration of the theory asserts that five foundations (Harm/Care, Fairness/ Reciprocity, Ingroup/Loyalty, Authority/Respect, Purity/Sanctity) can account for the commonalities and the variance that we observe between and within cultures across the world. Haidt, Graham, and

Joseph (2009) use the metaphor of an equalizer as is found on a home stereo system; individuals have different settings on the equalizer that are partially determined by biological factors and partially culturally determined. Individual differences across the moral foundations account for differential moral judgments. In Western cultures, they have found that political liberals tend to emphasize the Harm/Care and Fairness/Reciprocity foundations while political conservatives seem to place equal weight on all five foundations (2009, 113). In practice, this means liberals and conservatives often find it difficult to understand one another, as they are speaking different moral languages.

Moral Foundations Theory and the Study of Values

Moral foundations theory has its intellectual roots in the study of values (Haidt and Joseph 2004; Shweder et al. 1997) and sentimentalist moral philosophy (Hume 1739). Although by no means unknown to political science, values research in political science seems to have been eclipsed by the study of attitudes. Rokeach enunciates this privileging of attitudes over values well when he observes,

This generally greater emphasis on attitudes [in the social sciences] has not arisen from any deep conviction that man's attitudes are more important determinants of social behavior than his values. Rather, it seems to have been forced upon us or to have evolved out of the more rapid development of methods for measuring attitudes, combined perhaps with a lack of clarity about the conceptual differences between values and attitudes and about their functional interconnections (1973, 17-18).

Rokeach aptly describes the arc of the research in political science. Values have popped up from time to time (Feldman 1988; Feldman and John Zaller 1992; Golebiowska 1995; Jacoby 2006; Sears et al. 1997), but taken together, the existing values scholarship has had difficulty coming to any kind of consensus as to which values out of the extensive catalog compiled by social scientists should be considered. Even the definition of the term "values" is the subject of some debate (Hitlin and Piliavin 2004).

One of the major limitations facing the researcher interested in incorporating values into a theory of political behavior is the tremendous number of potential candidates. Rokeach's original values survey had thirty-six separate values. In the political science literature, several scholars have narrowed the field down to four or five, but even within the relatively narrow subdiscipline of American political behavior there is no generally agreed upon set of values. Feldman (1988) identifies three: economic individualism, equality of opportunity, and support for the free enterprise system. Goren (2005) adds traditional family values and moral tolerance but excludes support for the free enterprise system. Jacoby (2006) focuses on liberty, equality, economic security, and social order. It is difficult to identify any pair of studies by different authors that make use of the same set of values. Zaller (1991) outlines a particularly expansive definition of values. In his classic study, values "refers to any relatively stable, individual-level predisposition to accept or reject certain kinds of arguments", and he notes that they "may be rooted in personality, philosophy, ideology, gender, experience, religion, ethnicity, occupation, or interest (among other things). Party attachments ... also qualify as values under this definition" (1991, 1216). Given the broad pool of possible candidates and lack of consensus as to which qualify as values at all, it is no wonder the values literature has largely existed on the margins.

What is needed is an overarching framework that can bring these disparate constructs under one theoretical roof. Mondak (2010) describes how the five-factor model of personality filled this role for personality psychology. Until McCrae and Costa's (1987; 2003) encompassing theory of personality, trait psychology research (in both political science and psychology) suffered from ill-defined terms and concepts much as values research in political science does

today.² Researchers produced scores of studies showing correlations between their favorite personality constructs and various behaviors and attitudes. Much of this work is interesting and instructive, but it fails to present a comprehensive picture. The five-factor model gave scholars a common set of constructs to work with and the scholarship around this new view of personality has exploded in recent years.

Table 1 describes each of the moral foundations and relates them to several strands of research on values in the social sciences. Each row of the table lists one of the five moral foundations, a short description of its content, and a small selection of related concepts in the social science literature. As made clear by the table, the theory provides a unifying thread across a wide swath of the research on human values.

[Table 1 here]

An Alternative to Issue Scales

In those rare cases where an individual's value system, ideology, or partisan identity is treated as the dependent variable in political science, researchers often use indices composed of attitude reports as independent variables in their analysis (Claggett and Shafer 2010; Conover and Feldman 1981; Cormack and Nagler 2010; Alan S. Miller 1992; Schiffer 2000; Treier and Hillygus 2009). Either with additive scales or more complicated methodologies, this method closes the door on using the derived measures of "ideology" to then explain issue attitudes as well. Karen Stenner (2005) identified a similar kind of problem in the earlier psychometrics literature. Her book dealing with authoritarianism and its political consequences, argues that the traditional ways of measuring the concept were hopelessly entangled with the very things

² One notable exception is Shalom Schwartz's (Barnea and Schwartz 1998; Bilsky and Schwartz 1994; Schwartz, Caprara, and Vecchione 2010) typology with ten separate values organized along two primary dimensions.

authoritarianism was supposed to cause. To generalize Stenner's treatment of authoritarianism to the study of ideology more generally:

The first step is to distinguish among the sources of [ideology], the predisposition itself, and [it's] attitudinal and behavioral consequences.... Once we unpack these pieces of the puzzle, we can strip [ideology] down to an elemental predisposition that is not tautological with the dependent variables it purports to "explain" (2005, 13).

Moral foundations theory gives us a distinct and causally prior variable with which to explain attitudes and ideology. The questionnaire is composed of items that leave plenty of theoretical space between themselves and what we generally consider political considerations.

The moral foundations measures allow us to move beyond simple left-right conceptions of ideology. The ideology literature in political science and social psychology has long had trouble nailing down its concepts (Jost, Federico, and Napier 2009). It is unclear what exactly individuals are thinking when they self-identify as "liberal" or "conservative" (Cormack and Nagler 2010). The terms themselves have undergone significant change, and even among experts one would be hard pressed to find consensus definitions (Conover and Feldman 1981; Feldman and John Zaller 1992; Gerring 1997). Given the ambiguity surrounding the concept (and perhaps its tendency to soak up variance in regression tables), some have argued that it is too unwieldy for serious social scientific inquiry (for a review of these arguments see Jost [2006]).

Ideology, at least as it is traditionally conceptualized (uni-dimensional, liberal to conservative), does seem to have significant drawbacks. Conceptually, it is difficult to theorize about without invoking vagaries and abstractions like "schema." How is the researcher to know the particular set of ideas to which an individual is referring when she calls herself a liberal or conservative? Converse (1964) convincingly demonstrated that individuals cannot be relied upon to supply meaningful definitions of the terms or use them in cogent ways. Beyond the conceptual and definitional problems, contemporary political fights are often described in ideological terms

by the mass media and other elites. It is becoming increasingly likely that the average citizen understands "liberal" as simply a synonym for "Democrat" and "Conservative" for "Republican." A more ideologically aligned party system, blurs the distinctions between ideology and partisanship (Carsey and Layman 2006). Indeed, an individual may call himself liberal precisely because he holds views that are presented as liberal by elite actors, presenting researchers with an endogeneity problem that seems impossible to untangle.

One attractive feature of the moral foundations framework as an alternative to ideology is that it provides a way for average citizens to apply tools they have already developed in other parts of their social lives into the political realm. If we accept the theory, moral foundations are deeply engrained in the human experience. Indeed, responses to political events and framing by elites come naturally and almost reflexively. As a consequence of our social evolution, we come equipped with the ability to respond to a complicated and constantly shifting social environment. *Hypotheses*

As I will be employing new measures and a dataset that has not been analyzed previously (at least the moral foundations questions have not yet received scholarly attention), my first task will be to confirm that the same relationship holds between the moral foundations and political identification. Several previous studies using different datasets have shown that liberals tend to have higher scores on the Harm/Care and Fairness/Reciprocity (also called "individualizing") foundations while conservatives have relatively higher scores on the Ingroup/Loyalty, Authority/Respect, and Purity/Sanctity (also called "binding") foundations (Graham et al. 2011; Haidt and Graham 2007; Haidt, Graham, and Joseph 2009). Psychologists have generally focused only on self-placements on the standard liberal-conservative scale (see Jost [2006] for their justification). Political scientists have traditionally been wary of ideology measures

(Cormack and Nagler 2010; Schiffer 2000; Stenner 2009) and view partisanship as the *sine qua non* of individual political behavior. I expect to see the same patterns between the moral foundations and partisanship as have been demonstrated with ideology.

H1a: Individuals who are relatively high on the Harm and Fairness scales will tend to identify as

Democrats

H1b: Individuals who are relatively high on the Ingroup, Authority and Purity scales will tend to identify as Republicans

Studies of individual political attitudes have repeatedly shown differential effects based on political knowledge and attention. Zaller's (1992) classic treatment demonstrated the importance of accounting for political attention by pointing out the logical prerequisite of receiving information. Those who are least interested in politics will be unmoved by elite framing and rhetoric simply because they do not receive it. In an interesting experimental study of the interaction between values, attention and partisanship, Kam (2005) showed that only the attentive were able to align their values with their partisanship. In a similar way, I expect that relationships between moral foundations and partisanship will be strongest among the politically attentive.³

H1c: The relationships between the moral foundations and political orientation outlined in H1a and H1b will be strongest among the political interested

The 2008 National Election Study was administered in multiple waves over the course of the campaign. Individuals were asked their partisanship in January, September, October, and November of 2008. Given the panel design, I can also test hypotheses about the stability of

³ The moral foundations perspective raises the intriguing possibility that interest itself is endogenous to the individual's particular constellation of moral values. We might expect individuals with relatively uncommon configurations of moral foundations to be least interested in politics. These individuals might be unable to find a good "fit" in either of the parties and so may tune out all together. I do not test this alienation claim in this paper. For simplicity's sake, I make the common assumption that political interest can be treated as exogenous.

individual partisan orientation. Several studies have documented unusually high stability in individual partisanship. Green, Palmquist, and Schickler (2004) articulate this stability argument and conclude that party identification is the most stable component of American political life at the individual level, but to say that partisanship is stable is not the same as insisting that it be immobile. Indeed, innovative new work has revealed some of the weaknesses in earlier empirical techniques and considerable more variation over time (Clarke and McCutcheon 2009).

I make no claims of settling the partisan stability debate here, but the moral foundations measures paired with panel data give us an opportunity to observe the dynamics of individual partisanship over the course of the campaign. Several studies have suggested that campaigns serve to activate partisan identities in the electorate (Finkel 1993; Gelman and King 1993; Grant, Mockabee, and Monson 2009; Hillygus and Jackman 2003). I expect that respondents who score highly on the individualizing foundations will be drawn toward the Democratic Party and those who are high on the binding foundations will be drawn toward the Republican Party. This effect should be strongest among those who pay closest attention to the campaign.

H2a: Individuals who are high in the Harm and Fairness foundations will be pulled in a Democratic direction over the course of the campaign.

H2b: Individuals who are high in the Ingroup, Authority, and Purity foundations will be pulled in a Republican direction.

H2c: The relationship between moral foundations and partisan change will be strongest among the politically attentive

In general elections, partisanship is a strong predictor of vote choice and a powerful heuristic, but primary elections force individuals to choose between candidates of the same party. The literature on individual vote choice in primary elections is a little thin, but scholars have

traditionally focused on some combination of individual ideology, strength of partisanship, the candidate's electability, and issue positions (Aldrich and Alvarez 1994; Bartels 1987; Norrander 1986; Stone, Rapoport, and Abramowitz 1992). Especially within a two-party system, there is room for a great deal of intraparty heterogeneity between potential nominees in terms of the moral foundations. I would expect supporters of different candidates in a primary election to be distinct in terms of their moral foundations scores.⁴

H3a: Moral foundations scores will discriminate between primary supporters of candidates within each party

As noted above, general election voting is strongly related to individual partisanship. It is no great achievement to explain voting behavior by an appeal to partisanship. That Republicans will vote for Republicans and Democrats for Democrats is a given in American politics. Moral foundations theory gives us tools to understand how politically independent voters make their decisions as well as understanding partisan defections. In line with the earlier hypotheses, I expect that the individualizing foundations (Harm and Fairness) will lead to more Democratic voting even after controlling for partisanship, and the binding foundations will lead to more Republican voting. Republicans (Democrats) who have relatively high scores on the individualizing (binding) foundations will be most likely to defect.

H3b: Individuals with no partisan attachments or leanings will vote for the candidates that best reflect their own moral foundations

H3c: Cross-pressured partisans (those with moral foundation scores incongruous with their partisanship) will be most likely to not vote for their party's nominee

⁴ I do not develop specific expectations with respect to the foundations that should affect voting for particular candidates beyond noting that they should differ. In principle, it would be possible to analyze campaign communications and candidate rhetoric to get a sense for the specific profile of moral foundations that a candidate is most likely to appeal to, but for the purposes of this paper, I am content to simply use the moral foundations as a way of discriminating between candidates.

These hypotheses only scratch the surface of the potential effects of the moral foundations on individual political behavior and attitudes. A host of other dependent variables could be added to the list, but by way of introduction, these three factors—partisanship, partisan stability, and vote choice—will be sufficient to show the promise of this new perspective for political science.

Methods

In order to develop the key measures of the dependent variable, I rely on a multidimensional item response model for ordinal data. Treier and Jackman (2002) demonstrate the advantages of item response models over traditional factor analytic techniques especially when the items being analyzed are not continuous. The item response framework provides a theoretically sound method of analyzing responses to survey batteries and, it is growing in popularity among psychologists (Reise and Henson 2003) and political scientists (Delli Carpini and Keeter 1993; Huber and Lapinski 2008; Jacoby 2008; Mondak 2001; Treier and Hillygus 2009; Treier and Jackman 2002; Treier and Jackman 2008). The model assumes that individual responses to each survey item are governed by a latent ability parameter. With a few unrestrictive assumptions,⁵ we can estimate the value of the latent variable given the individual's response pattern. Compared to the sometimes-used technique of simply summing responses or taking the average, 6 item response models allow each question in the battery to have different weights in relating it to the underlying latent parameter. The cut points for the ordinal questions are also modeled separately in a manner similar to ordered probit.⁷

⁵ See the methodological appendix for more details on the specifics of the model and its estimation.

⁶ Throughout the analyses, I check the results obtained from using the estimated moral foundation scores against using more traditional measures. The estimated scores produce more precise estimates, but the substantive conclusions do not change when substituting in the less sophisticated measure.

The description of the less sophisticated measure.

questions in survey research. In an effort to ameliorate the problems associated with these kinds of scales, my model

The 2008 NES panel was administered by Knowledge Networks. Knowledge Networks has set the standard for internet polling and goes to extraordinary lengths to ensure a representative sample. During the seventh wave of the panel in July 2008, respondents filled out the 20 item Moral Foundations Questionnaire. The first part of questionnaire asks respondents to identify how relevant different considerations are when they are deciding "whether something is right or wrong." In the second part of the questionnaire, respondents are asked to indicate how much they agree or disagree with several statements related their feelings and behavior. All questions on the questionnaire have six response options, ranging from "Not relevant at all" to "Extremely relevant" on the first part and "Strongly disagree" to "Strongly agree" on the second part.

The Moral Foundations Questionnaire has the advantage of being largely removed from overtly political considerations. As discussed above, ideology can be too proximate to political issues to be of much analytical use for understanding how individuals understand the political world. With scores constructed from items that have little political content, we can be more confident that the factor itself is driving the attitude and not the other way around.

Results and analysis

The results of the MIRT model produced estimates of each individual's scores on the moral foundations. A cursory examination of the data reveals that the predicted moral foundations relate in the hypothesized way to self-identified partisanship. Democrats are generally higher on the Harm and Fairness dimensions, and Republicans are higher on Ingroup, Authority, and Purity scales. Table 2 below shows the mean score for each of the moral

allows for individual heterogeneity in response style. Specifically, I implement a solution proposed by Johnson (2003) which allows for individual differences in the way the response scales are interpreted.

⁸ The questionnaires are available for download at Jonathan Haidt's website. The 20 item version can be found at http://faculty.virginia.edu/haidtlab/mft/MFQ20.doc

⁹ The methodological appendix includes details of the model and estimation.

foundations scores by self-reported partisan identification. ¹⁰ The first seven rows of the table report the mean moral foundation scores for each scale point individually. The next two lump together all partisans (including identifiers), and the final three rows show the scores broken out by answer to the first question in the party identification sequence. No matter how they are defined, Democrats have the highest scores on the Harm and Fairness scales and the lowest scores on the other three. Independents show up almost dead center on average (with a few exceptions), and Republicans have the highest scores on the Ingroup, Authority, and Purity measures. This result supports other work done with the moral foundations scores. Work with other datasets (and operationalizations of the moral foundations scores) has consistently found a similar relationship (Haidt, Graham, and Joseph 2009). Hypotheses *H1a* and *H1b* find strong support in Table 1.

[Table 2 here]

Figure 2 breaks out these differences further by political attention. Individuals who reported being "extremely" or "very" interested in politics are shown by the filled black circles. Those who answered "moderately," "slightly," or "not at all" are indicated by the open circles. Each panel of the plot is sorted by the average values of one of the moral foundations for the respondents high in political interest. The plot supports my expectations in *H1c*. In every case, the expected relationships between partisanship and the moral foundations are stronger among individuals who reported being interested in politics. Interested Democrats of all stripes score higher on both individualizing foundations than interested Republicans. The same pattern holds among the binding foundations with the exception of the reversal of the weak Democrats and pure independents in the Ingroup and Authority foundations. Individuals who report not being interested in politics were much less likely to line up in the expected way.

 $^{^{\}rm 10}$ A very similar pattern holds for ideological placement.

Although the data do not permit me to make strong causal claims about the relationship between partisanship and the moral foundations. Theory suggests that individual differences in moral outlook should be causally prior to political orientation. The fact that individuals were asked their partisanship at several points over the course of the panel allows us to apply the same logic to changes in partisanship over the course of the campaign. Specifically, I will look at the difference in self-reported partisanship between January and November of 2008.

Thirty-seven percent of the sample gave a different response to the party identification question in January and November. Nearly half of those differences (17 percent) involved individuals giving a different response to the first question in the sequence (where they are asked to indicate which party they "identify" with). Some of this variance can surely be explained by appealing to measurement error (Achen 1975), but there are reasons to be skeptical of relying too heavily on error as the major source of instability with the party identification items. First, the measure of partisanship is really a composite of several different questions. We might expect more instability if respondents were asked to indicate their position on the full seven point scale, but breaking the questions down into several parts guards against some of this variance.

Secondly, surveys that are administered online can avoid problems with interviewer bias and simple data entry errors. Finally, some studies have shown that online survey administration can actually reduce the amount of acquiescence and satisficing on the part of respondents (Chang and Krosnick 2009; Schonlau et al. 2004).

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¹¹ Goren (Goren 2005; Goren, Federico, and Kittilson 2009) offers one possible alternative explanation. Using panel data with measures on core values and partisanship and structural equation modeling, his analysis suggests that the causal arrow may run the other direction. He found evidence that—at least on the margins—partisanship affected core values. As I only have measurements of the moral foundations at one point during the panel study, I am not able to apply the same kinds of causal analysis to these data. However, Goren's analysis is open to the same criticisms Clarke and McCutcheon (2009) leveled against Green, Palmquist, and Schickler's (2004) structural equation modeling of partisan identity.

In the analyses that follow, I use a simple indicator of party stability. The dependent variable takes a value of -1 for respondents who moved in the Democratic direction, 0 for the majority who showed no differences between the January and November partisanship, and +1 for individuals who moved in the Republican direction. I ran a simple OLS regression with the moral foundations scores as independent variables. I also controlled for whether or not an individual was at one of the extreme poles in January (as these individuals could only have moved in one direction). I ran separate regressions for each partisan grouping (including "leaners" as partisans) and the two levels of political interest used earlier. Table 3 below summarizes the results. The cell entries "R" ("D") indicate that increases in the foundation score were associated with movement in the Republican (Democratic) direction. Bolded entries indicate statistical significance at the 0.10 level (two-tailed test). Given the relative stability of individual partisan attachments, this presents a challenging test for moral foundations theory.

[Table 3 here]

With only three (insignificant) deviations from my expectations, Table 3 provides support for *H2a* and *H2b*. The moral foundations give us a theoretically exogenous measure of predispositions. Over the course of a presidential campaign and controlling for their initial partisanship, individuals move closer to their natural partisan homes. The individualizing foundations move people toward the Democratic Party, and the binding foundations move them toward the Republican Party. Those most interested in politics showed the strongest and most significant relationships between the moral foundations and changes in their party identification. This is especially striking given that partisanship is more stable overall for those who are interested in politics when compared to those who are less interested (i.e., there is less variation to explain).

Finally, I turn to the question of vote choice in primary and general elections. I expect that within each party, individual differences in moral foundations among primary voters will serve to discriminate between supporters of different primary candidates. To test this hypothesis, I ran separate multinomial logistic regressions for Democratic and Republican primary voters. The dependent variable in each case was the choice of primary candidate. For the Democrats, the choice set included Obama, Clinton, and a third catch-all category for any other Democratic candidate. Similarly for the Republicans, the choice set included McCain, Huckabee, Romney, and a catch-all category for the other Republican candidates. The models control for party identification and ideology. Given the previous analysis that showed the relationships between political orientation and the moral foundations and the argument that moral foundations determine one's political orientation, the inclusion of party and ideology on the right-hand side of the regression equation will be a conservative test of the effects of the moral foundations on primary vote choice.

[Figure 2 here]

Figure 2 displays the results of these regressions graphically. ¹⁴ Each panel of the figure shows the predicted probabilities of supporting one of the primary candidates moving across the range of one of the moral foundations with the other variables in the model held constant. ¹⁵ For Democratic primary voters, the Harm and Ingroup foundations significantly discriminate between supporters of Obama and Clinton. Primary voters who were relatively high on the

 $^{^{12}}$ Among respondents who have scores for the moral foundations and reported voting in the Democratic presidential primary in 2008 (n = 355), 170 reported supporting Obama, 157 supported Clinton, and 28 choose some other candidate.

¹³ There were 245 respondents who reported voting in the Republican primary, and my data include 103 McCain supporters, 61 Romney supporters, 49 Huckabee supporters and 32 who supported some other candidate.

¹⁴ The full regression tables are available from the author on request.

¹⁵ Each of the other moral foundations was held constant at 0. The party variable was set to the value corresponding to a weak partisan and the ideology variable was set to leaning liberal for Democrats and leaning Conservative for Republicans.

Harm/Care foundation or low on the Ingroup/Loyalty foundation were significantly more likely to support Obama. The Republican side is a little more difficult to interpret as there are four potential outcomes, but the explanatory power of the moral foundations seems to be substantially greater on the Republican side. The most significant relationships showed up between McCain and Huckabee supporters in all except the Authority/Respect foundation. Republican primary voters who had higher scores on the Harm and Purity foundations were significantly more likely to support Huckabee. The same holds for those with lower scores on the Fairness and Ingroup foundations. Huckabee's gains were most often Romney's losses (especially in the Harm and Purity dimensions). Even after controlling for differences in partisan strength and ideology among partisan primary voters, the moral foundations scores exert a substantive and significant effect on primary vote choice.

Party identification has long been shown to be a powerful predictor of vote choice. Indeed, it is close to a tautology to say point out that Republicans tend to vote for Republican candidates and Democrats for Democrats. In the 2008 sample, about 80 percent of partisans (and partisan leaners) reported voting for their party's candidate. Less than ten percent defected to vote for the opposing party. The remainder reported either not voting or voting for one of the minor party candidates. ¹⁶ To formally investigate the role of the moral foundations in partisan defection, I ran three similarly specified multinomial logistic regressions with vote choice in November as the dependent variable for self-reported Democrats, self-reported Republicans, and those who refused to affiliate with either party (independents who indicated leaning toward one of the major parties were classified as partisans). The moral foundation scores serve as the only

¹⁶ As with all studies that rely on self-reported turnout, these figures are inflated due to some combination of over-reporting and a sample that is biased toward political activity (Burden 2000; Highton 2005).

independent variables. The results are displayed in Figure 3 (which is similar in construction to Figure 2^{17}).

[Figure 3 here]

As the figure plainly shows, individuals who do not fit the general moral mold of their parties are the most likely to defect. The first row of panels shows the predicted probabilities for Democrats who are low on the Harm foundation or especially those who had high scores on the Ingroup foundation were most likely to vote against support the Republican candidate in November. The second row (pure independents) mostly confirms my expectations. The relatively small group of independents (n = 99) cautions against reading too much into the results reported here, but the patterns generally line up as expected. The last row of the figure shows the results for the Republicans. The Fairness, Ingroup, and Purity foundations were most important in explaining Republican defections. Overall the results confirm my expectations concerning partisans and vote choice.

Discussion and Conclusion

In this paper, I have shown how a new theory of individual moral judgment—moral foundations theory—can give structure and meaning to individual predispositions and identities. I focused on party identification and vote choice and showed how a small set of deeply-rooted intuitions explains a great deal of the variance we see in self-reported partisanship and candidate selection in both primary and general elections. The analyses could easily be extended to specific issue positions, and in this area, moral foundations theory has the potential to provide much needed nuance to the meaning of self-reported issue positions.

The spatial model of politics developed here has broad implications for many other areas of political science as well. Beyond the study of individual attitudes, moral foundations theory

¹⁷ The regression tables are available upon request.

has the potential to provide credible "microfoundations" for a wide range of "macro-level" findings. Most importantly, the theory suggests that the foundations of individual partisanship and ideology are indeed rooted in something that is secure. It seems as though we may finally have an answer to Converse's problem of the ideologically innocent citizenry. Given the fundamentally multidimensional nature of the moral foundations, we should not expect individuals to line up neatly into "liberal" and "conservative" camps as Converse might have hoped. Instead of nicely fitting into artificially constructed institutions, the guiding force of individual ideology varies along multiple dimensions. It is then no mystery how people could prove so inept at using ideological labels. As one of Converse's contemporaries observed, the voice of the people is only an echo of what is fed to them (Key and Cummings 1966). The fact that individuals will pick and choose from the elite discourse to match their personal moral perspective rather than buying the entire package should not surprise us.

Moral foundations theory has tremendous potential for the discipline because it addresses the foundational questions of public opinion. The theory suggests several profitable paths for future research. I will outline only three here. First, more work needs to be done to clarify the relationship between elite actors and the mass public. Content analyses of elite communications and discourse could test hypotheses about the appeal of specific political figures and their constituencies, as similar work with individual narratives has done already (McAdams et al. 2008). This kind of work could extend backwards in time through archival work in the historical development of the major parties and the ways in which they engaged the public. Studies consistently show differences between liberals and conservatives in terms of their rhetorical style and content (Jerit 2004; Tetlock 1981), and historical variation between the major parties should show an evolving dialectic between the two major parties.

A second profitable area of research would investigate more thoroughly the specific ways in which individuals apply their particular moral perspective to politics. Personal interviews can be a richer source of information than the large sample surveys I relied on in the paper for these kinds of questions. Specifically, this kind of research would be interested in learning how individuals frame political issues in terms of the moral foundations. Political debates can be framed in different terms. What frames are spontaneously adopted? How do individuals react when presented with competing frames?

Finally, experimental work provides an excellent avenue for testing some of the specific hypotheses of an intuitive model of politics. While the theory lends itself to many different kinds of tests, I believe that framing experiments will be most instructive. By systematically varying individuals' exposure to different issue frames (the content of which could be informed by the interviews from mentioned above and large-n surveys like used in this paper) and examining how individual responses differ conditional on their scores from the moral foundations questionnaire, we will be able to demonstrate a direct causal link between moral intuitions and political attitudes.

Reconsidering the foundations of micro-level political behavior and attitudes does not mean disregarding the decades of research conducted under the old paradigm. Quite to the contrary, I believe that a more stable foundation will enable us to stitch together the findings of a previous era of research. Moral foundations theory represents one possible, and I believe profitable, way of rethinking the way we approach the study of public opinion.

- Abramson, Paul R., and Ronald Inglehart. 1986. "Generational Replacement and Value Change in Six West European Societies." *American Journal of Political Science* 30 (1) (February): 1-25.
- Achen, Christopher H. 1975. "Mass Political Attitudes and the Survey Response." *The American Political Science Review* 69 (4) (December 1): 1218-1231. doi:10.2307/1955282.
- Aldrich, John H., and R. Michael Alvarez. 1994. "Issues and the Presidential Primary Voter." *Political Behavior* 16 (3): 289-317.
- Alford, John R., and John R. Hibbing. 2007. "Personal, Interpersonal, and Political Temperaments." *The ANNALS of the American Academy of Political and Social Science* 614 (1) (November 1): 196-212. doi:10.1177/0002716207305621.
- Alford, John R., Carolyn L. Funk, and John R. Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" *American Political Science Review* 99 (2) (May): 153-167.
- ——. 2008. "Beyond Liberals and Conservatives to Political Genotypes and Phenotypes." *Perspectives on Politics* 6 (02): 321-328. doi:10.1017/S1537592708080638.
- Amodio, David M, John T Jost, Sarah L Master, and Cindy M Yee. 2007. "Neurocognitive correlates of liberalism and conservatism." *Nat Neurosci* 10 (10) (October): 1246-1247. doi:10.1038/nn1979.
- Barker, David C., and James D. Tinnick. 2006. "Competing Visions of Parental Roles and Ideological Constraint." *The American Political Science Review* 100 (2) (May): 249-263.
- Barnea, Marina F., and Shalom H. Schwartz. 1998. "Values and Voting." *Political Psychology* 19 (1) (March): 17-40.
- Bartels, Larry M. 1987. "Candidate Choice and the Dynamics of the Presidential Nominating Process." *American Journal of Political Science* 31 (1) (February): 1-30.
- ——. 1996. "Uninformed Votes: Information Effects in Presidential Elections." *American Journal of Political Science* 40 (1) (February): 194-230.
- ——. 2002. "Beyond the Running Tally: Partisan Bias in Political Perceptions." *Political Behavior* 24 (2) (June 1): 117-150.
- Bilsky, Wolfgang, and Shalom H. Schwartz. 1994. "Values and personality." *European Journal of Personality* 8 (3): 163-181. doi:10.1002/per.2410080303.
- Bock, R. Darrell, and Murray Aitkin. 1981. "Marginal maximum likelihood estimation of item parameters: Application of an EM algorithm." *Psychometrika* 46 (4) (December): 443-459. doi:10.1007/BF02293801.
- Burden, Barry C. 2000. "Voter Turnout and the National Election Studies." *Political Analysis* 8 (4) (July 18): 389 -398.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Campbell, Angus, Gerald Gurin, and Warren E. Miller. 1954. The voter decides. Row, Peterson.
- Carsey, Thomas M., and Geoffrey C. Layman. 2006. "Changing Sides or Changing Minds? Party Identification and Policy Preferences in the American Electorate." *American Journal of Political Science* 50 (2) (April): 464-477.
- Chang, Linchiat, and Jon A. Krosnick. 2009. "National Surveys Via Rdd Telephone Interviewing Versus the Internet." *Public Opinion Quarterly* 73 (4) (December 21): 641 -678. doi:10.1093/poq/nfp075.

- Claggett, William J. M., and Byron E. Shafer. 2010. *The American Public Mind: The Issues Structure of Mass Politics in the Postwar United States*. Cambridge University Press.
- Clarke, Harold D., and Allan L. McCutcheon. 2009. "The Dynamics of Party Identification Reconsidered." *Public Opinion Quarterly* 73 (4) (December 21): 704 -728. doi:10.1093/poq/nfp051.
- Conover, Pamela Johnston. 1988. "The Role of Social Groups in Political Thinking." *British Journal of Political Science* 18 (1) (January): 51-76.
- Conover, Pamela Johnston, and Stanley Feldman. 1981. "The Origins and Meaning of Liberal/Conservative Self-Identifications." *American Journal of Political Science* 25 (4) (November): 617-645.
- Converse, Philip E. 1964. Nature of belief systems in mass publics. In *Ideology and Discontent*, ed. David Ernest Apter, 5:206-261. International yearbook of political behavior research. London: Free Press of Glencoe.
- ———. 2006. "Researching Electoral Politics." *American Political Science Review* 100 (04): 605-612. doi:10.1017/S0003055406062484.
- Cormack, Lindsey, and Jonathan Nagler. 2010. "Comparing Opinions and Preferences Across States and Regions: The Fallacy of Using Ideological Responses." *SSRN eLibrary*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1644448.
- Cushman, Fiery, Liane Young, and Marc Hauser. 2006. "The Role of Conscious Reasoning and Intuition in Moral Judgment." *Psychological Science* 17 (12) (December 1): 1082 -1089. doi:10.1111/j.1467-9280.2006.01834.x.
- Delli Carpini, Michael X., and Scott Keeter. 1993. "Measuring Political Knowledge: Putting First Things First." *American Journal of Political Science* 37 (4) (November): 1179-1206.
- Easton, David. 1985. "Political Science in the United States: Past and Present." *International Political Science Review / Revue internationale de science politique* 6 (1) (January 1): 133-152.
- Eaves, Lindon J., and H. J. Eysenck. 1974. "Genetics and the development of social attitudes." *Nature* 249 (5454) (May 17): 288-289. doi:10.1038/249288a0.
- Feldman, Stanley. 1988. "Structure and Consistency in Public Opinion: the Role of Core Beliefs and Values." *American Journal of Political Science* 32 (2) (May): 416-440.
- ———. 2003. "Enforcing Social Conformity: A Theory of Authoritarianism." *Political Psychology* 24 (1) (March): 41-74.
- Feldman, Stanley, and John Zaller. 1992. "The Political Culture of Ambivalence: Ideological Responses to the Welfare State." *American Journal of Political Science* 36 (1) (February): 268-307.
- Finkel, Steven E. 1993. "Reexamining the 'Minimal Effects' Model in Recent Presidential Campaigns." *The Journal of Politics* 55 (1) (February 1): 1-21. doi:10.2307/2132225.
- Fiorina, Morris P. 1977. "An Outline for a Model of Party Choice." *American Journal of Political Science* 21 (3): 601-625. doi:10.2307/2110583.
- Franklin, Charles H. 1984. "Issue Preferences, Socialization, and the Evolution of Party Identification." *American Journal of Political Science* 28 (3): 459-478. doi:10.2307/2110900.
- Franklin, Charles H., and John E. Jackson. 1983. "The Dynamics of Party Identification." *The American Political Science Review* 77 (4) (December): 957-973.

- Gelman, Andrew, and Gary King. 1993. "Why Are American Presidential Election Campaign Polls So Variable When Votes Are So Predictable?" *British Journal of Political Science* 23 (04): 409-451. doi:10.1017/S0007123400006682.
- Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, and Shang E. Ha. 2010. "Personality and Political Attitudes: Relationships Across Issue Domains and Political Contexts." *American Political Science Review* 104 (01): 111-133. doi:10.1017/S0003055410000031.
- Gerring, John. 1997. "Ideology: A Definitional Analysis." *Political Research Quarterly* 50 (4) (December 1): 957-994. doi:10.2307/448995.
- Golebiowska, Ewa A. 1995. "Individual Value Priorities, Education, and Political Tolerance." *Political Behavior* 17 (1) (March): 23-48.
- Goren, Paul. 2005. "Party Identification and Core Political Values." *American Journal of Political Science* 49 (4) (October 1): 881-896. doi:<doi>10.1111/ajps.2005.49.issue-4</doi><doi>10.1111/j.1540-5907.2005.00161.x</doi>.
- Goren, Paul, Christopher M. Federico, and Miki Caul Kittilson. 2009. "Source Cues, Partisan Identities, and Political Value Expression." *American Journal of Political Science* 53 (4) (October 1): 805-820.
- Graham, Jesse, Brian A. Nosek, Jonathan Haidt, Ravi Iyer, Spassena Koleva, and Peter H. Ditto. 2011. "Mapping the moral domain." *Journal of Personality and Social Psychology*. doi:10.1037/a0021847. http://psycnet.apa.org/psycinfo/2011-01014-001/.
- Grant, J. Tobin, Stephen T. Mockabee, and J. Quin Monson. 2009. "Campaign Effects on the Accessibility of Party Identification." *Political Research Quarterly* (May 15): 1065912909336269. doi:10.1177/1065912909336269.
- Green, Donald P., and Bradley Palmquist. 1990. "Of Artifacts and Partisan Instability." *American Journal of Political Science* 34 (3): 872-902. doi:10.2307/2111402.
- ———. 1994. "How stable is party identification?" *Political Behavior* 16 (4) (December 1): 437-466. doi:10.1007/BF01498826.
- Green, Donald P., and David H. Yoon. 2002. "Reconciling Individual and Aggregate Evidence Concerning Partisan Stability: Applying Time-Series Models to Panel Survey Data." *Political Analysis* 10 (1) (February 1): 1-24. doi:10.1093/pan/10.1.1.
- Green, Donald P., Susan L. Goldman, and Peter Salovey. 1993. "Measurement error masks bipolarity in affect ratings." *Journal of Personality and Social Psychology* 64 (6): 1029-1041. doi:10.1037/0022-3514.64.6.1029.
- Green, Donald P., Bradley Palmquist, and Eric Schickler. 2004. *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. The Yale ISPS series. New Haven,
 Conn: Yale University Press.
- Greene, Joshua, and Jonathan Haidt. 2002. "How (and where) does moral judgment work?" *Trends in Cognitive Sciences* 6 (12) (December 1): 517-523. doi:10.1016/S1364-6613(02)02011-9.
- Greene, Steven. 1999. "Understanding Party Identification: A Social Identity Approach." *Political Psychology* 20 (2) (June): 393-403.
- Grynaviski, Jeffrey D. 2006. "A Bayesian Learning Model with Applications to Party Identification." *Journal of Theoretical Politics* 18 (3) (July 1): 323 -346. doi:10.1177/0951629806064352.
- Haidt, Jonathan. 2001. "The emotional dog and its rational tail: a social intuitionist approach to moral judgment." *Psychological Review* 108 (4) (October): 814-834.

- ———. 2007. "The New Synthesis in Moral Psychology." *Science* 316 (5827) (May 18): 998-1002. doi:10.1126/science.1137651.
- Haidt, Jonathan, and Jesse Graham. 2007. "When Morality Opposes Justice: Conservatives Have Moral Intuitions that Liberals may not Recognize." *Social Justice Research* 20 (1) (March 1): 98-116. doi:10.1007/s11211-007-0034-z.
- Haidt, Jonathan, and Craig M. Joseph. 2004. "Intuitive ethics: how innately prepared intuitions generate culturally variable virtues." *Daedalus* 133 (4): 55-66. doi:10.1162/0011526042365555.
- Haidt, Jonathan, Jesse Graham, and Craig M. Joseph. 2009. "Above and Below Left-Right: Ideological Narratives and Moral Foundations." *Psychological Inquiry* 20 (2): 110-119.
- Hannagan, Rebecca J., and Peter K. Hatemi. 2008. "The Threat of Genes: A Comment on Evan Charney's 'Genes and Ideologies'." *Perspectives on Politics* 6 (02): 329-335. doi:10.1017/S153759270808064X.
- Hatemi, Peter K., John R. Alford, John R. Hibbing, Nicholas G. Martin, and Lindon J. Eaves. 2009. "Is There a 'Party' in Your Genes?" *Political Research Quarterly* 62 (3) (September 1): 584-600. doi:10.1177/1065912908327606.
- Hetherington, Marc J., and Jonathan Daniel Weiler. 2009. *Authoritarianism and polarization in American politics*. Cambridge University Press, August 31.
- Highton, Benjamin. 2005. "Self-Reported versus Proxy-Reported Voter Turnout in the Current Population Survey." *The Public Opinion Quarterly* 69 (1) (April 1): 113-123.
- Hillygus, D. Sunshine, and Simon Jackman. 2003. "Voter Decision Making in Election 2000: Campaign Effects, Partisan Activation, and the Clinton Legacy." *American Journal of Political Science* 47 (4) (October): 583-596.
- Hitlin, Steven, and Jane Allyn Piliavin. 2004. "Values: Reviving a Dormant Concept." *Annual Review of Sociology* 30 (1) (August): 359-393. doi:10.1146/annurev.soc.30.012703.110640.
- Huber, Gregory A., and John S. Lapinski. 2008. "Testing the Implicit-Explicit Model of Racialized Political Communication." *Perspectives on Politics* 6 (01): 125-134. doi:10.1017/S1537592708080109.
- Hume, David. 1739. A Treatise of Human Nature. BiblioBazaar.
- Inbar, Yoel, David A. Pizarro, Joshua Knobe, and Paul Bloom. 2009. "Disgust Sensitivity Predicts Intuitive Disapproval of Gays." *Emotion* 9 (3) (June): 435-439. doi:10.1037/a0015960.
- Inglehart, Ronald. 1981. "Post-Materialism in an Environment of Insecurity." *The American Political Science Review* 75 (4) (December): 880-900.
- Jackson, John E. 1975. "Issues, Party Choices, and Presidential Votes." *American Journal of Political Science* 19 (2) (May 1): 161-185. doi:10.2307/2110431.
- Jacoby, William G. 2006. "Value Choices and American Public Opinion." *American Journal of Political Science* 50 (3) (July): 706-723.
- ———. 2008. "Comment: The Dimensionality of Public Attitudes toward Government Spending." *Political Research Quarterly* 61 (1) (March): 158-161.
- Jerit, Jennifer. 2004. "Survival of the Fittest: Rhetoric during the Course of an Election Campaign." *Political Psychology* 25 (4) (August): 563-575.
- Jessee, Stephen A. 2009. "Spatial Voting in the 2004 Presidential Election." *American Political Science Review* 103 (01): 59-81. doi:10.1017/S000305540909008X.

- Johnson, Timothy R. 2003. "On the use of heterogeneous thresholds ordinal regression models to account for individual differences in response style." *Psychometrika* 68 (4) (December): 563-583. doi:10.1007/BF02295612.
- Johnston, Richard. 2006. "Party Identification: Unmoved Mover or Sum of Preferences?" *Annual Review of Political Science* 9 (1) (June): 329-351. doi:10.1146/annurev.polisci.9.062404.170523.
- Jones, Bryan D. 2001. *Politics and the architecture of choice: bounded rationality and governance*. University of Chicago Press.
- Joseph, Craig M., Jesse Graham, and Jonathan Haidt. 2009. "The End of Equipotentiality: A Moral Foundations Approach to Ideology-Attitude Links and Cognitive Complexity." *Psychological Inquiry* 20 (2-3) (August): 172-176. doi:10.1080/10478400903088882.
- Jost, John T. 2006. "The end of the end of ideology." *The American Psychologist* 61 (7) (October): 651-670. doi:10.1037/0003-066X.61.7.651.
- Jost, John T, Christopher M Federico, and Jaime L Napier. 2009. "Political ideology: its structure, functions, and elective affinities." *Annual Review of Psychology* 60: 307-337. doi:10.1146/annurev.psych.60.110707.163600.
- Jost, John T. 2009. "'Elective Affinities': On the Psychological Bases of Left–Right Differences." *Psychological Inquiry* 20 (2-3) (August): 129-141. doi:10.1080/10478400903028599.
- Kam, Cindy D. 2005. "Who Toes the Party Line? Cues, Values, and Individual Differences." *Political Behavior* 27 (2) (June 1): 163-182.
- Key, Valdimer Orlando, and Milton C. Cummings. 1966. *The responsible electorate: rationality in presidential voting, 1936-1960.* Belknap Press of Harvard University Press.
- Kroh, Martin, and Peter Selb. 2009. "Inheritance and the Dynamics of Party Identification." *Political Behavior* 31 (4) (December 1): 559-574. doi:10.1007/s11109-009-9084-2.
- Lakoff, George. 2002. *Moral politics: how liberals and conservatives think*. University of Chicago Press.
- Lazarsfeld, Paul F., Bernard R. Berelson, and Hazel Gaudet. 1944. *The People's Choice; How the Voter Makes up His Mind in a Presidential Campaign*. New York: Duell, Sloan and Pearce.
- Li, Qiong, and Marilynn B. Brewer. 2004. "What Does It Mean to Be an American? Patriotism, Nationalism, and American Identity after 9/11." *Political Psychology* 25 (5) (October): 727-739.
- Markus, Gregory B., and Philip E. Converse. 1979. "A Dynamic Simultaneous Equation Model of Electoral Choice." *The American Political Science Review* 73 (4) (December 1): 1055-1070. doi:10.2307/1953989.
- McAdams, Dan P., Michelle Albaugh, Emily Farber, Jennifer Daniels, Regina L. Logan, and Brad Olson. 2008. "Family Metaphors and Moral Intuitions: How Conservatives and Liberals Narrate Their Lives." *Journal of Personality and Social Psychology* 95 (4) (October): 978-990. doi:10.1037/a0012650.
- McCrae, Robert R., and Paul T. Costa. 1987. "Validation of the five-factor model of personality across instruments and observers." *Journal of Personality and Social Psychology* 52 (1): 81-90. doi:10.1037/0022-3514.52.1.81.
- ——. 2003. *Personality in adulthood: a five-factor theory perspective*. Guilford Press.

- Miller, Alan S. 1992. "Are Self-Proclaimed Conservatives Really Conservative? Trends in Attitudes and Self-Identification among the Young." *Social Forces* 71 (1): 195-210. doi:10.2307/2579973.
- Miller, George A. 2003. "The cognitive revolution: a historical perspective." *Trends in Cognitive Sciences* 7 (3) (March): 141-144. doi:16/S1364-6613(03)00029-9.
- Moll, Jorge, Roland Zahn, Ricardo de Oliveira-Souza, Frank Krueger, and Jordan Grafman. 2005. "The neural basis of human moral cognition." *Nat Rev Neurosci* 6 (10) (October): 799-809. doi:10.1038/nrn1768.
- Mondak, Jeffrey J. 2001. "Developing Valid Knowledge Scales." *American Journal of Political Science* 45 (1) (January): 224-238. doi:10.2307/2669369.
- ———. 2010. *Personality and the Foundations of Political Behavior*. Cambridge University Press, June 30.
- Mondak, Jeffrey J., Matthew V. Hibbing, Damarys Canache, Mitchell A. Seligson, and Mary R. Anderson. 2010. "Personality and Civic Engagement: An Integrative Framework for the Study of Trait Effects on Political Behavior." *American Political Science Review* 104 (01): 85-110. doi:10.1017/S0003055409990359.
- Monroe, Kristen Renwick, Adam Martin, and Priyanka Ghosh. 2009. "Politics and an Innate Moral Sense." *Political Research Quarterly* 62 (3): 614-634. doi:10.1177/1065912909336272.
- Muraki, Eiji. 1992. "A Generalized Partial Credit Model: Application of an EM Algorithm." *Applied Psychological Measurement* 16 (2) (June 1): 159 -176. doi:10.1177/014662169201600206.
- Norrander, Barbara. 1986. "Correlates of Vote Choice in the 1980 Presidential Primaries." *The Journal of Politics* 48 (1) (February 1): 156-166. doi:10.2307/2130931.
- Oxley, Douglas R., Kevin B. Smith, John R. Alford, Matthew V. Hibbing, Jennifer L. Miller, Mario Scalora, Peter K. Hatemi, and John R. Hibbing. 2008. "Political Attitudes Vary with Physiological Traits." *Science* 321 (5896) (September 19): 1667-1670. doi:10.1126/science.1157627.
- Page, Benjamin I., and Calvin C. Jones. 1979. "Reciprocal Effects of Policy Preferences, Party Loyalties and the Vote." *The American Political Science Review* 73 (4) (December 1): 1071-1089. doi:10.2307/1953990.
- Pessoa, Luiz. 2008. "On the relationship between emotion and cognition." *Nat Rev Neurosci* 9 (2) (February): 148-158. doi:10.1038/nrn2317.
- Pinker, Steven. 2003. The blank slate: the modern denial of human nature. Penguin, August 26.
- Reise, Steven P, and James M Henson. 2003. "A discussion of modern versus traditional psychometrics as applied to personality assessment scales." *Journal of Personality Assessment* 81 (2) (October): 93-103.
- Roccas, Sonia, Shalom H. Schwartz, and Adi Amit. 2010. "Personal Value Priorities and National Identification." *Political Psychology* 31 (3) (June): 393-419. doi:10.1111/j.1467-9221.2010.00763.x.
- Schickler, Eric, and Donald P. Green. 1993. "Issues and the Dynamics of Party Identification: A Methodological Critique." *Political Analysis* 5 (1) (January 1): 151 -179. doi:10.1093/pan/5.1.151.
- Schiffer, Adam J. 2000. "I'm Not That Liberal: Explaining Conservative Democratic Identification." *Political Behavior* 22 (4) (December): 293-310.

- Schonlau, Matthias, Kinga Zapert, Lisa Payne Simon, Katherine Haynes Sanstad, Sue M. Marcus, John Adams, Mark Spranca, Hongjun Kan, Rachel Turner, and Sandra H. Berry. 2004. "A Comparison Between Responses From a Propensity-Weighted Web Survey and an Identical RDD Survey." *Social Science Computer Review* 22 (1) (February): 128-138. doi:10.1177/0894439303256551.
- Schwartz, Shalom H, Gian Vittorio Caprara, and Michele Vecchione. 2010. "Basic Personal Values, Core Political Values, and Voting: A Longitudinal Analysis." *Political Psychology* 31 (3) (June 1): 421-452. doi:10.1111/j.1467-9221.2010.00764.x.
- Sears, David O., Colette Van Laar, Mary Carrillo, and Rick Kosterman. 1997. "Is It Really Racism?: The Origins of White Americans' Opposition to Race-Targeted Policies." *The Public Opinion Quarterly* 61 (1): 16-53.
- Shamir, Michal, and Jacob Shamir. 1995. "Competing Values in Public Opinion: A Conjoint Analysis." *Political Behavior* 17 (1) (March): 107-133.
- Shweder, R. A, N. C Much, M. Mahapatra, and L. Park. 1997. "The big three of morality (autonomy, community, divinity) and the big three explanations of suffering."
- Sperry, Roger W. 1993. "The impact and promise of the cognitive revolution." *American Psychologist* 48 (8): 878-885. doi:10.1037/0003-066X.48.8.878.
- Stenner, Karen. 2005. The authoritarian dynamic. Cambridge University Press.
- ———. 2009. "Three Kinds of 'Conservatism'." *Psychological Inquiry* 20 (2-3) (August): 142-159. doi:10.1080/10478400903028615.
- Stimson, James A. 2004. Then and Now: A Commentary on Kinder's "Opinion and Action in Postwar America." In *The Evolution of Political Knowledge: Theory and inquiry in American politics*, ed. Edward D. Mansfield and Richard Sisson, 158. Columbus, OH: The Ohio State University Press.
- Stone, Walter J., Ronald B. Rapoport, and Alan I. Abramowitz. 1992. "Candidate Support in Presidential Nomination Campaigns: The Case of Iowa in 1984." *The Journal of Politics* 54 (4) (November 1): 1074-1097. doi:10.2307/2132109.
- Storbeck, Justin, and Gerald L Clore. 2008. "Affective Arousal as Information: How Affective Arousal Influences Judgments, Learning, and Memory." *Social and Personality Psychology Compass* 2 (5) (September 1): 1824-1843. doi:10.1111/j.1751-9004.2008.00138.x.
- Tajfel, H. 1982. "Social Psychology of Intergroup Relations." *Annual Review of Psychology* 33 (1) (January): 1-39. doi:10.1146/annurev.ps.33.020182.000245.
- Tetlock, Philip E. 1981. "Personality and isolationism: Content analysis of senatorial speeches." *Journal of Personality and Social Psychology* 41 (4) (October): 737-743. doi:10.1037/0022-3514.41.4.737.
- Treier, Shawn, and D. Sunshine Hillygus. 2009. "The Nature of Political Ideology in the Contemporary Electorate." *Public Opinion Quarterly* 73 (4) (December): 679-703. doi:10.1093/poq/nfp067.
- Treier, Shawn, and Simon Jackman. 2002. Beyond Factor Analysis: Modern Tools for Social Measurement. In Chicago, IL.
- ——. 2008. "Democracy as a Latent Variable." *American Journal of Political Science* 52 (1) (January): 201-217.
- Wollack, James A., Daniel M. Bolt, Allan S. Cohen, and Young-Sun Lee. 2002. "Recovery of Item Parameters in the Nominal Response Model: A Comparison of Marginal Maximum

- Likelihood Estimation and Markov Chain Monte Carlo Estimation." *Applied Psychological Measurement* 26 (3): 339 -352. doi:10.1177/0146621602026003007.
- Zaller, John. 1991. "Information, Values, and Opinion." *The American Political Science Review* 85 (4) (December 1): 1215-1237. doi:10.2307/1963943.
- Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge University Press, August 28.

Methodological Appendix

My model is a simple multivariate and ordinal extension of the normal ogive model. Under the standard ogive model, individual (indexed i) responses to items (indexed j) are assumed to take the following form:

$$P(Y_{ij} = 1) = \Phi(\beta_j(\theta_i - \tau_j))$$

Where θ_i is the individual ability parameter, β_j is the item discrimination parameter, and τ_j is the item difficulty parameter.

We can extend this model into k dimensions (when each item is assumed to load onto only one dimension) by simply adding an additional subscript to the ability and item parameters:

$$P(Y_{ijk} = 1) = \Phi(\beta_{jk}(\theta_{ik} - \tau_{jk}))$$

To extend the model to accommodate ordinal responses (as we commonly have from Likert scales in survey data), we can replace the difficulty parameter, τ_i , with a vector of cut points.

Following Johnson (2003), I also introduce a parameter to allow for individual differences in response style. This parameter, α_i , inflates or shrinks the τ_j difficulty parameter to allow for individual heterogeneity in scale usage. The final model is:

$$P(Y_{ijk} = 1) = \Phi(\beta_{jk}(\theta_{ik} - \tau_{jk} * \alpha_i))$$

I estimate the model in a Bayesian framework via Markov-chain Monte Carlo methods.

Bayesian MCMC estimation is especially well suited for IRT models which are often characterized by a very large parameter space. Maximum-likelihood techniques exist to estimate models where the number of parameters is a function of the sample size (Bock and Aitkin 1981; Muraki 1992), but these models are generally concerned with efficient estimation of the item parameters. Bayesian methods naturally estimate the entire parameter space simultaneously and

are not constrained by the same kinds of identification constraints as maximum-likelihood estimation (Wollack, Bolt, Cohen, and Lee 2002).

In my model, I assume the θ_{ik} are drawn from a multivariate normal distribution. The item parameters are drawn from normal distributions as well. I place a directional 18 constraint on the β_{ik} to give the model local identification. ¹⁹ The α_i are drawn from a gamma distribution, and the au_{jk} are drawn from uniform distributions. For further questions as to how the model was implemented, see the the JAGS code used to estimate the model below.

The model was run burned-in for 100,000 iterations. The estimates are based off of every 100th draw from the joint posterior distribution for the next 100,000 iteration. This produced 1,000 separate draws.

```
model {
      for (i in 1:N) {
           alpha[i] \sim dgamma(1, 2)
      for (j in 1:J) {
           y.star[i,j] ~ dnorm(theta[i,qdim[j]] * beta[j], 1)
           y[i,j] ~ dinterval(y.star[i,j], tau[j,]*alpha[i])
      }
      for (j in 1:J) {
            tau0[j,1] \sim dunif(-3,0)
            tau0[j,2] \sim dunif(-3,0)
            tau0[j,3] <- 0
            tau0[j,4] \sim dunif(0,3)
            tau0[j,5] \sim dunif(0,3)
            tau[j,1:cat] <- sort(tau0[j,1:cat])</pre>
```

¹⁸ The β_{ik} are assumed to come from a truncated normal distribution. This requires prior knowledge of how the questions that make up the scales map onto the underlying latent constructs.

To be fully identified, we need to post-process the data to enforce the distributional assumption on the latent

variable. In the analyses that follow, I have adjusted the estimates and estimated coefficients accordingly.

```
for (i in 1:N) {
         theta[i,1:K] ~ dmnorm(mu.th, tau.th)
}
```

Tables and Figures

Table 1: Moral Foundations and Past Research								
Harm/Care	Related to our long evolution as mammals with attachment systems and an ability to feel (and dislike) the pain of others. This foundation underlies virtues of kindness, gentleness, and nurturance.	"Nurturant Parent Morality" (Lakoff 2002) Post-materialism/Environmentalism (Abramson and Inglehart 1986; Inglehart 1981)						
Fairness/Equality	Related to the evolutionary process of reciprocal altruism. This foundation generates ideas of justice, rights, and autonomy.	"Equality of Opportunity" (Feldman 1988; Jacoby 2006)						
Authority/Respect	Shaped by our long primate history of hierarchical social interactions. This foundation underlies virtues of leadership and followership, including deference to legitimate authority and respect for traditions.	"Strict Father Morality" (Lakoff 2002) Authoritarianism (Barker and Tinnick 2006; Feldman 2003; Hetherington and Weiler 2009; Stenner 2005)						
Ingroup/Loyalty	Related to our long history as tribal creatures able to form shifting coalitions. This foundation underlies virtues of patriotism and self-sacrifice for the group. It is active anytime people feel that it's "one for all, and all for one."	Minimal Group Theory (Tajfel 1982) Nationalism/Patriotism (Li and Brewer 2004; Roccas, Schwartz, and Amit 2010; Michal Shamir and Jacob Shamir 1995)						
Purity/Sanctity	Shaped by the psychology of disgust and contamination. This foundation underlies religious notions of striving to live in an elevated, less carnal, more noble way. It underlies the widespread idea that the body is a temple which can be desecrated by immoral activities and contaminants (an idea not unique to religious traditions).	Conservatism-disgust linkage (Inbar et al. 2009)						

Descriptions in the middle column were taken from the Moral Foundations Theory homepage: http://faculty.virginia.edu/haidtlab/mft/index.php

Table 2: Moral Foundations Scores by Partisanship

	Harm	Fairness	Ingroup	Authority	Purity
Str Dem	0.22	0.23	-0.20	-0.21	-0.24
Wk Dem	-0.02	0.03	-0.06	-0.06	-0.19
Ind Dem	0.01	0.18	-0.33	-0.28	-0.28
Pure Ind	-0.10	-0.13	-0.22	-0.08	-0.07
Ind Rep	-0.14	-0.07	0.18	0.02	0.12
Wk Rep	-0.05	-0.14	0.16	0.18	0.22
Str Rep	-0.05	-0.13	0.34	0.35	0.34
All Democrats (inc. leaners)	0.10	0.15	-0.18	-0.18	-0.23
All Republicans (inc. leaners)	-0.07	-0.12	0.24	0.21	0.25
Democratic Identifiers	0.12	0.15	-0.14	-0.15	-0.22
Independents	-0.08	-0.02	-0.11	-0.10	-0.06
Republican Identifiers	-0.05	-0.13	0.26	0.27	0.29

note: Cell entries are means on a standardized scale (mean =0, std. dev. =1). Partisanship was measured in the September wave.

Figure 1

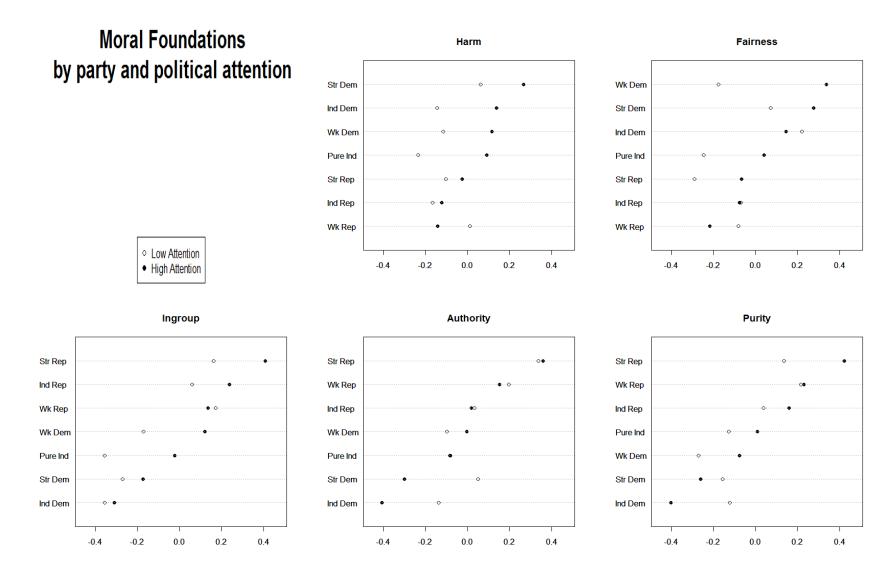


Table 3

Table 3: Directional change in partisanship from January to November

	Low Interest			High Interest		
	Dem/Lean Dem	Pure Ind	Rep/Lean Rep	Dem/Lean Dem	Pure Ind	Rep/Lean Rep
Harm	R	D	D	D	D	D
Fairness	D	D	D	D	D	D
Ingroup	R	R	R	R	R	R
Authority	D	R	R	R	R	R
Purity	R	R	R	D	R	R
n	178	73	183	256	42	249
R-squared	0.10	0.07	0.07	0.12	0.26	0.12

note: Cell entries indicate the direction of movement associated with an increase in the associated foundation. Bolded entries are significant at the 0.10 level.

Figure 2

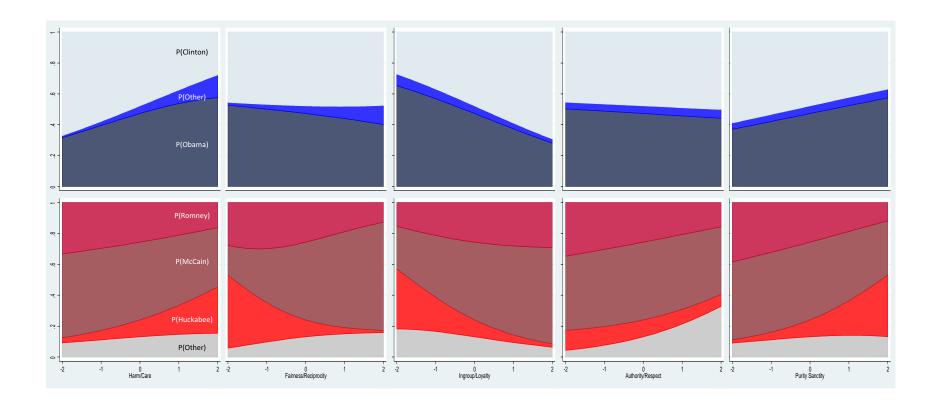


Figure 3: Vote choice by vote intention in September and Moral Foundations

