

*The Coming Storm:
Voter Polarization and the Rise of Environmentalism*

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Abstract

Environmental issues appear to be poised to become a major political issue in the coming years, due to fears over global climate change. How will such issues influence the voting behavior of Americans? We explore citizen attitudes on environmentalism to determine whether such issues influence voting in presidential elections. We find that partisanship and ideology are becoming increasingly linked to voter attitudes towards the environment, but that at current, environmentalism has little impact on presidential voting. We test the theories of Judis and Teixeira (2002) that the emergence of post-material issues such as the environment will primarily benefit the Democratic Party. We find some evidence that the post-material thesis theory is correct. Highly educated professionals who are either Democrats or independents and who can correctly place the candidates on environmental issues in 2000 and 2004 were significantly more likely to vote Democratic. In contrast, however, under the same specification, Republicans are much more likely to remain with their party's candidate even when they hold moderate views on the environment. These findings suggest that the rise of environmentalism may lead to continued polarization between the parties even as a new issue rises to prominence.

In recent years, the growing problems associated with global warming have heated up the discussion of environmentalism. Support for “green” companies and policy initiatives is noticeably high, yet such issues rarely appear to take international prominence without the impetus of major disasters. There are nonetheless indications that environmentalism is breaking through as a major concern and will become a defining issue of the next generation. Recently, Al Gore’s *An Inconvenient Truth*, a documentary about the impending ecological crisis caused by global climate change, grossed over \$23 million in the United States alone and recently won an Academy Award. Even President Bush, a lightning rod for criticism by the environmental community, has pledged support for reduced energy consumption.

As previous scholars have suggested, countries with developed prosperous economies should show higher levels of environmental concerns. This is in part due to historically greater levels of support for governmental intervention to deal with social and economic problems (Hartz 1955; Zaller and Feldman 1992). It also may be due to the rise of a “post-industrial” or “post-material” society, in which affluence leads to a greater focus on the quality of life, especially having a clean environment (Dalton, Flanagan, Beck and Alt 1984; Flanagan and Inglehart 1987; Inglehart 1977; Norris 1993; Reich 1970; Rohrschneider 1988).

Yet in the United States, one of the most economically developed nations in the world, little evidence has been found linking political attitudes and environmental support (Davis and Wurth 2003; Dunlap et. al. 2001; Guber 2001, 2003). The lack of a clear impact on political attitudes from environmentalism is a puzzle particularly for the United States. Scholarly and anecdotal evidence has posited that environmental preferences

have not been a strong individual-level determinant in American elections because the link between voting and environmental preference is often obfuscated by other, more salient factors such as partisan identification or prescient issues (Guber 2001, 2003; Johnson et al 2006; Shipan and Lowry 2001).

In recent years, American politics has been characterized by high levels of partisan and ideological polarization, a polarization that extends over a range of issues. Even as some scholars doubt the existence of “culture wars” (Fiorina 2005), numerous studies have demonstrated the ideological polarization between American political parties is currently at historically high levels. This is true in terms of mass partisanship (Abramowitz and Saunders 1998; Hetherington 2001; Kimball and Gross 2007), differences in values and opinions of party activists (Layman and Carsey 2002), and in the roll-call voting behavior of members of Congress (McCarty, Poole and Rosenthal 2006), all of which similarly indicate that parties are polarized to an extent not seen in several generations.

Given a potential increase in the importance of environmental issues and a polarized political environment, there have been relatively few studies in political science that specifically address environmental issues and how such issues might alter the battleground of partisan politics. Most studies indicate that the importance of environmentalism in partisan attachment and voting behavior is weak at best. For example, the environment is only infrequently volunteered as the “most important problem” on opinion surveys (Dunlap 1987; Dunlap and Scarce 1991; Mitchell 1990). Historically, environmental issues have also not been emphasized in presidential campaigns (Davis and Wurth 2003; Dunlap and Scarce 1991; Guber 2001, 2003). For a

variety of reasons, citizen attitudes on such issues have not significantly influenced their voting decisions, even though approval for environmental issues has remained relatively constant (Guber 2003; Kuzmiak 1995; Mitchell 1990).

Consequences of the Rise of Environmentalism

The most important factor that will likely increase the importance of environmentalism is global climate change. Yet, even without a pressing crisis, some scholars posit that long-term demographic shifts would increase the importance of environmentalism. The shift from materialistic, or survival-based concerns to a post-materialistic world, is considered one of the most important factors in determining issue saliency in cultural context (Inglehart 1997; Inglehart et al 2000; Ladd 1982). The most notable advocate of such theories, Inglehart, claims that when groups and individuals no longer have to worry about their basic materialistic, or “survival” needs, they are free to concern themselves with more socially-based concerns, such as the environment, abortion, and women’s rights (Ladd 1982; Inglehart 1997; Inglehart et al 2000; Judis and Teixeira 2002).

The environment is frequently cited as prime example of this change in social and political attention. Such issues emerged in the economically stable era of post-WWII Western nations (Dalton, Flanagan, Beck and Alt 1984; Flanagan and Inglehart 1987; Inglehart 1977; Reich 1970; Rohrschneider 1988). The 1960’s found support for green issues ascending rapidly along with other post-materialist issues such as women’s rights and what Ladd (1982) termed “new materialism.” The environmental movement that resulted from this social upheaval reached a peak with the founding of the first Earth Day

in America in 1970, declined in the 1980's, and again found supporters in the 1990's (Dunlap 1987, 1991; Dunlap et. al. 2001; Kuzmiak 1995; Shipan and Lowry 2001).

So, while environmental issues have largely had little effect on voting patterns, the potential is clearly in place for such issues to rise in importance, perhaps to the same level as civil rights in the 1960s and 1970s, or abortion in the 1990s. If environmentalism does become a major division in American politics, there are at least two potential consequences. The first theory is addressed in Judis and Teixeira (2002). In the *Emerging Democratic Majority*, the authors argue that the rise of a post-material society will largely benefit the Democrats. A new set of workers who are mostly concerned with the production of ideas and services rather than goods should, they claim, be more attracted to the Democratic Party's social liberalism and moderate-left economic policies, largely making irrelevant the old conflict between labor and management. Professionals - those with advanced and often specialized degrees - have traditionally been Republican voters. They point out however that the traditional class of doctors and lawyers is now increasingly made up of software engineers, designers, architects, academics and freelancers, and in the New Economy constitute an increasingly crucial voting bloc.

There are, however, reasons to doubt the validity of this thesis. Certainly, no one is "for" pollution and global warming. However, no one (or most no one) is "for" poverty or racism either; despite this, Americans have long been ambivalent or downright hostile to government intervention aimed at bringing about racial and economic equality (Morone 1991; Zaller and Feldman 1984; Sniderman and Carmines 1999). It is well-within the realm of possibility that efforts to promote and sustain a clean environment will provoke opposition rooted in Americans' historic fear of big government.

Environmental policies may place restricts on individual freedom, and result in higher taxes and more bureaucratic red tape. Moreover, public morality in the U.S. can be both liberal and conservative (Morone 2004). Efforts to compel “green” behavior, whether in the form of strict recycling regulations or increased product costs due to tougher emissions standards, may produce the same backlash caused by affirmative action or welfare policies (Edsall and Edsall 1991).

One possibility, therefore, is that as the environment becomes more salient, party elites and activists will take contrasting stands and “issue evolution” will occur. Just as with race and abortion (Carmines and Stimson 1989; Adams 1997; Carmines and Woods 2002), increasingly distinct positions among elites and activists send cues to the mass public, whose party identification changes to match the new alignment on these issues. As Carmines and Stimson (1989) argue, the capacity of an issue to change the political system depends on the persistent salience of the issue and its ability to cut across existing party lines to change mass partisan identification. The importance of the environment, then, lies in its potential to polarize the electorate due to battles over the extent of governmental intervention to bring about what may be drastic changes in public policy to deal with the potential impending crisis.

Pre-existing social or political cleavages may affect the dynamic of this new issue. For example, Layman and Carmines (1997) point out that secularism is weaker in the United States due to a strong religious traditionalism. The increasing importance placed on social issues may only serve to exacerbate the conflict between the secular and religious. Many of America’s fundamentalist faithful that scientific research demonstrating that global climate change is occurring is in fact valid. This may be

particularly important since many religious traditionalists are hostile to governmental intervention in the marketplace (McCright and Dunlap 2000).

For many reasons, then, the environment may ultimately become an example of “issue evolution” (Carmines and Stimson 1989). Partisan stances have yet to be clearly drawn as numerous Republicans, such as Christine Todd Whitman and George Pataki are liberal on environmental issues, and may be cross-pressured as such issue rise in importance. If environmentalism takes on the characteristics of issue evolution, then we would expect that the correlation between environmental attitudes and ideology should increase, resulting in more (or continued) polarized voting patterns. At the same time, defections will occur on both sides, as the public reevaluates their own partisanship in light of the new primary issue cleavage.

Many studies of public opinion indicate attitudes on a range of disparate issues are becoming more consistently organized around a unitary ideological spectrum. Layman and Carsey (2002) for example, find that variance in the attitudes of party activists can be explained by a single ideological dimension. While new issues have entered the political debate—most notably the rise of social issues since the 1980s—old issues, such as battles over race and entitlements, have persisted. The result is that the political landscape is today one of highly polarized ideological positions, even on seemingly unconnected issues. As such, it is very possible that environmentalism will be absorbed into this unidimensional issue alignment.

This does not mean that social or post-material issues will not alter the partisanship of the public or the positions of the parties. Past elections have seen the electorate and candidates activated by high salience, spatial issues – most notably

abortion and, in 2004, gay marriage. Abortion and gay marriage were not always of high importance or clearly associated with liberal or conservative positions on other issues; this shift appears to have taken place after the rise of the cultural conservative movement and the activation of preferences by political elites (McCaffrey and Keys 2000). While there is still debate over just how important these “moral” issues were in influencing citizen voting in 2004, abortion and gay marriage have nevertheless received considerable attention from candidates and the electorate (Burden 2004; Fiorina 2004; Hillygus and Shields 2005).

Even if environmental issues do increase in importance, there are potentially two reasons why environmental issues will not necessarily become a significant determinant of voting behavior. One reason is that if such issues are valence issues, they will not divide voters along liberal-conservative lines. Rather, much like the economy, voting is determined by performance and salience (Fiorina 1981). All citizens want a clean environment; the extent to which this determines voting patterns will be a function of each candidate’s relative performance in providing a clean environment or economic growth, and the relative importance of environmental or economic issues at a particular moment. On balance, the research has tilted towards concluding that the environment is a valence issue, or those issues for which there is little “spatial” variation between the major party positions (Inglehart 1995; Guber 2001, 2003).

The second reason is a problem with how voter attitudes are operationalized. The low salience levels may be an artifact of the way environmental preferences are measured; as a trade-off between economic growth and a clean environment (Davis and Wurth 2003; Guber 2001, 2003; Ladd 1982). Such formats beg the question as to

whether voters in fact see these as a trade-off at all, or if other factors might influence how voters perceive such issues. On numerous issues, voter opposition or support of welfare or abortion is correlated with attitudes towards individualism, authoritarianism, or egalitarianism (Zaller and Feldman 1992; Craig, Martinez, Kane, Gainous 2005; Gilens 1995; Kinder and Sanders 1996). Yet we know very little about how the jobs-environment scale correlates with other underlying schemas or predispositions, making it hard to know if the scale is valid.

If the environment becomes more important and controversial, what pattern emerge on “green” issues? In this paper, we test the validity of the post-materialism thesis by analyzing what impact environmentalism is having on political behavior in the general electorate. First, we examine how environmental attitudes correlate with partisanship and ideology. Then, we test the relative impact of environmental issues on voting in the 2000 and 2004 Presidential elections. Finally, we examine the impact of environmental issues on a specific set of voters; namely those whom Judis and Teixeira (2002) identified as the typical post-material voter: young well educated professionals, the “knowledge workers” which they argue will be the vanguard of the emerging Democratic majority.

While we find that environmentalism does not appear to have significantly influenced voting behavior in recent elections, we do find evidence that on a range of spending and policy questions, environmental issues show signs of increasing voter polarization, but also high levels of voter uncertainty. We find some support for the post-material thesis – well educated, young professionals tend to be more strongly influenced by such issues. At the same time, we also find that the effects are weaker for conservative

voters, and that voter ideology and partisanship may be strong influences on how voters perceive and respond to environmental issues.¹ Greater salience of environmental issues may in fact further polarize the electorate along partisan and ideological lines and influence voting behavior in elections.

Data and Methods

We use the 2000 and 2004 NES to analyze voter attitudes on environmental issues. The NES asks respondents to place themselves on a scale of environmentalism:

Some people think it is important to protect the environment even if it costs some jobs or otherwise reduces our standard of living. (Suppose these people are at one end of the scale, at point number 1) Other people think that protecting the environment is not as important as maintaining jobs and our standard of living. (Suppose these people are at the other end of the scale, at point number 7). And of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6). Where would you place YOURSELF on this scale, or haven't you thought much about this?

As Davis and Wurth (2003) point out, the question presupposes that voters see a tradeoff between environmentalism and economic growth. As a result, voters who do not see such a tradeoff may find it difficult to place themselves on the scale.² In 2000, the NES asked an additional question about the environment³:

Some people think we need much tougher government regulations on business in order to protect the environment. Others think that current regulations to protect the environment are already too much of a burden on business. Which is closer to the way you feel, or haven't you thought much about this?

¹ Fredriksson and Svensson (2003), for example, note that environmental policy has a “relatively low priority in the political debate.”

² In addition, questions are asked about whether spending on environmental cleaning should be increased, and how respondents views environmentalists. The questions reveal similar patterns as those analyzed here, but are not appropriate for evaluation of some questions we examine in this paper.

³ It is worth noting at the outset that the questions analyzed below contain multiple question wordings. The wording of both forms of the environmental question were slightly altered for the 2000 NES because the survey was conducted by both telephone and face to face. We use the combined results to maximize the number of respondents and because the question wording contained only minor differences. The major change is that the scale for the seven-point traditional environmental question contains only five options when the various forms of the question were combined.

1. Toughen regulations a lot
2. Toughen regulations a little
3. Other/depends/neither
4. Regulations somewhat of a burden
5. Regulations way too much burden

What explains differences in responses to these questions? There is evidence of partisan and ideological lenses filtering individual attitudes towards environmental regulations. Table 1 shows some indication that Republicans are less likely to support strong environmental regulations, while Democrats prefer strengthening the regulations, and independents mirror Democrats. In fact, similar to the pattern observed in the 2006 midterm elections, independents line up along with Democrats, in some cases, even further to the left on environmental issues. In contrast, Republicans show mild opposition to environmental regulations.

[TABLE 1 ABOUT HERE]

The most telling aspect of the distribution of responses is that the most common the answer is that it “depends”, suggesting a strongly level of ambivalence about the proper way to solve important environmental problems. In fact, for almost every type of partisanship, the modal response (or the second most picked response) is the middle, ambivalent answer. For the traditional question, more than one in ten respondents picked “haven’t thought much about it” as their response, and in the experimental question, nearly one in four respondents selected this option. There is also a considerable amount of uncertainty with regard to each candidate’s position on the environment.⁴ In truth, this

⁴ In 2000, respondents were asked about how certain they were of the placement of each candidate on three issues: the environment, abortion and gun control. The environment scored in between the other two controversial issues. Sixty-five percent claimed they were certain about Bush’s environmental position compared to 74 percent on gun control and 67 percent on abortion. For Al Gore, 73 percent stated they were certain or very certain of his position on the environment, while 81 percent were certain of his position on gun control and 72 percent were certain about his position on abortion.

may reflect an artifact of the question wording; voters are primed in presidential elections to see each candidate as “pro-growth”; their confusion then may stem from messages that repeatedly assert each candidate is better for the economy (Fiorina 1981; Erikson 1989). At the very least, if environmental issues increase in salience, the response of much of the electorate is at best uncertain at this moment.

[TABLE 2 ABOUT HERE]

At the same time, environmentalism also shows some evidence of being increasingly linked to other issues and voters underlying ideological predispositions. As the simple correlations in Table 2 indicates, the link between citizens’ environmental attitudes and partisanship and ideology show signs of being closely linked.⁵ Across different years and question wordings, citizen environmental attitudes are significantly correlated with their views on abortion, welfare, defense spending, as well as their partisan and ideological leanings. Importantly, professionals, those identified by Judis and Teixeira as the crucial part of the Democratic Party’s future base, have significantly more liberal environmental attitudes than non-professionals.

Environmentalism and Presidential Voting

In order to more systematically assess the impact of environmentalism on voter behavior, we created a model of presidential voting that includes measures of environmental attitudes and environmental knowledge. We ran three probit models - one model using each environmental question in 2000 to test the impact of different question wordings and only one model in 2004, since the alternate question was not asked in that

⁵ It is worth noting that Goren (2005) finds evidence that partisanship exerts a strong influence in constraining issue attitudes rather than the other way around.

year. Our goal is two-fold: 1) to analyze the impact of environmentalism relative to other variables; 2) to assess how environmentalism might impact voting if the salience of this issue increases. Specifically, we test how increased salience influences the voting patterns for specific sets of voters. Even if environmental attitudes are not currently a significant determinant of vote choice in presidential elections, under different specifications we can test the theories of post-materialism and conflict extension to ascertain how the increased salience of environmentalism might impact citizen voting patterns.

We include other issue and policy variables as controls, since they have been shown to be linked to presidential voting. For consistency between years, we included variables on abortion, defense spending, welfare and affirmative action, all of which have been shown to influence voter decisions in presidential elections (Hillygus and Jackman 2003). This also ensures we are capturing a range of attitudes on social, economic and foreign policy issues.

The model accounts for several additional control variables. We incorporate a variable for marriage, as substantial evidence shows that a “marriage gap” favoring the G.O.P. had been present in 2004.⁶ We also include gender due to the persistence of a gender gap in presidential voting (Norrander 1999; Kaufmann and Petrocik 1997). Additional variables control for union membership, which may tap into voting on environmental issues due to the potential tradeoff between environmentalism and job growth, and race, due to its continuing importance in party identification and presidential voting (Sniderman and Carmines 1997).

⁶ In fact, within the 2004 NES sample, 58 percent of married persons voted for President Bush compared to 41 percent of unmarried persons. In contrast, men voted for Bush at a rate of 53 percent compared to a female rate of 47 percent.

Additionally, standard measures of pocketbook and sociotropic voting act here as control variables. It is possible that voters with a negative personal economic outlook or an overall evaluation of the economy will be less supportive of environmental regulations. Such evaluations have also been consistently shown to influence presidential voting, with sociotropic evaluations typically exerting a stronger influence (Fiorina 1981; Kinder and Kiewiet 1981). We also incorporate a measure of political sophistication. Levels of political sophistication vary considerably across the public (Page and Shapiro 1992; Delli Carpini and Keeter 1996). The measure is a scale ranging from 0 to 6 for the correct identification of political figures and which party controls the most seats in the House and Senate (Gomez and Wilson 2001; Godbout and Belanger 2005). Citizens with more political knowledge may be more affected by environmentalism in terms of their voting behavior than less knowledgeable voters.

In order to test the post-material thesis, we include a dummy variable for professionals, measured by respondent self-identified occupation.⁷ Professionals should be more likely to be concerned about post-material issues (Judis and Teixeira 2002). Additionally, age is included, as younger voters should be more attentive to environmental issues. Education and income are part of the model as well; higher levels of education and income should increase attentiveness to post-material issues.

Results

The models reveal that relative to other concerns, environmentalism has little to no impact on presidential voting in both years, regardless of how the question is phrased.

⁷ Professionals are defined as respondent self-reported occupation; NES occupational codes are taken from the U.S. Census.

While the alternative question wording performs slightly better—a feeling that environmental regulations are a burden is positively associated with voting for Bush in 2000—it fails to reach statistical significance. In contrast, nearly all of the other variables measuring policy preferences are significant and in the expected direction.

[TABLE 3 ABOUT HERE]

Table 4 presents the impact on the probability for a standard deviation change in the “issue” variables centered around their mean with all other variables set to their mean. The tables shows the increase in the probability of a Bush vote as attitudes move from more liberal to more conservative positions. The impact of environmental attitudes is weak in comparison to the other issues variables for the average voter. Partisanship and ideology clearly overwhelm other variables in determining voting during what was a highly polarized Presidential election. In 2000, environmental issues come close to affirmative action in influencing vote choice, but overall remain well behind nearly all other issues. In 2004, while the impact of a one unit change in environmentalism nearly quadruples in strength, it pales in comparison to the effects of nearly all other variables.

[TABLE 4 ABOUT HERE]

Increased Salience and the Knowledge Worker

If environmental issues rise in importance, what effect will this have on partisan polarization? As stated above, there are two interesting hypotheses to consider. One is that if the environment is a valence issue, partisan polarization might decrease. While activists are fiercely divided over issues such as abortion and the Iraq War, greater attention to environmental issues might produce a less polarized politics, similar to the consensus that emerged on foreign policy in the early Cold War. Alternatively,

environmental issues may benefit the Democrats in the long run as weak partisans and independents are attracted to the party's pro-environmental positions. Though this propensity to associate green support with the Democratic party seems obvious, Layman and Carsey (2002) and Abramowitz and Saunders (1998) have demonstrated that a range of disparate issues are now aligned into the liberal-conservative spectrum. The other side of the coin to this theory is that conservative voters or those who fear "big government" may be more attracted to the GOP.

One way to test this is to examine voters who are currently aware of the party positions on the issue. Voters with the most knowledge should most closely mirror the potential effects of a substantial increase in salience. If post-materialism will result in a change in citizen views, we would expect the best informed voters to respond most to environmental issues, controlling for partisanship. We test this by looking specifically at the type of individual that most closely matches the post-material identity: a professional, college-educated voter. In addition, we specified that the voter is 30 years old, as a proxy for what the youngest generation of voters currently think about environmental issues. We also included a variable for whether the respondent could correctly place the candidates on environmental issues. The variable is coded as 1 if the voter placed Bush to the right of Kerry or Gore, and 0 for voters who incorrectly placed the candidates, did not know, or placed the candidates at the same point.

How will differences in environmental attitudes impact the voting patterns of this group of knowledgeable voters? If Layman and Carsey's theory of conflict extension applies to environmental issues, voters with more knowledge about candidate and party positions may be just as influenced by their partisanship and ideology as they are about

their attitudes on other issues. For the typical post-material voters, ideology and partisanship might still trump (or strongly determine) differences in voting . If Judis and Teixeira are correct, we should see that for such voters, ideology and partisanship are less important than the attitudes on a classic issue of the post-material era.

We present the results in Figure 1 below using data from the 2004 NES.⁸ The graphs below demonstrate that there is some evidence that environmental positions will affect voter positions in the manner predicted by Judis and Teixeira. For Democratic voters, environmental attitudes largely serve to reinforce their preexisting liberalism: moving from the most conservative to the most liberal position on environmental issues reduces an already low probability of voting for Bush in 2004 from .31 to .11

[FIGURE 1 ABOUT HERE]

This is not necessarily the case for independents and Republicans. It is important to note that these voters are predisposed by virtue of their age, education and profession to vote Democratic. In spite of this, those independents with moderate attitudes on environmentalism, however, are true swing voters; under these conditions, the probability is .50 that such a voter will cast a vote for Bush. The effect is somewhat powerful; independent “knowledge workers” with the most liberal attitudes on environmentalism have only about a one in three (.35) chance of voting for Bush, but for a similar individual who worry that environmental regulation will harm economic growth, Bush does much better, as the probability of his capturing their vote increases to .65. On the other hand, for Republicans, the effect partisanship subsumes the effect of the issue; the

⁸ For ease of presentation, the results of the model are not shown. The major changes to the model are that the variable for environmental knowledge is included and partisanship was changed to a three-point scale. The overall results and variable effects were consistent between model specifications.

most-pro-environmental young professional Republican knowledge workers still have a probability of .70 of voting for Bush.

This raises the possibility that environmental attitudes may not realign the electorate, but rather will be incorporated into the current ideological division between the parties. The evidence suggests that partisans are likely to respond to cues from elites of their own party. As shown in the graph above, even among the set of Republicans most predisposed to defecting (young, professional, and highly educated voters) who have conservative positions on environmental issues, there is extremely low propensity for such defection; those with a position of 6 or 7 on the scale of environmentalism had a probability of voting for Bush of .87 and .90 respectively.

Certainly, there is a danger we have over-specified the conditions we are examining. To test the effect of environmental knowledge on all respondents, we set the ideology of each type of partisan to match partisans in the electorate. Specifically, the graph below shows the effect of environmental attitudes on a moderately liberal Democrat (ideology = 2 on the 7-point scale), a moderate independent (ideology = 4), and a moderately conservative Republican (ideology = 6).

[FIGURE 2 ABOUT HERE]

If all voters who can correctly place Bush and Kerry are included, Republicans are even less likely to defect. The results reinforce the high importance of partisanship on vote selection. Moderate independents more closely mirror Democratic voters. Their probability of casting a Republican vote is small and only exceeds .50 percent when such voters possess the most conservative environmental positions. The full effect of moving from one end to the other end of the scale does substantially increase probability of a

Republican vote (.24 to .52), but only because the likelihood of voting Republican is so low to begin with.

For Republicans however, there is almost no effect at all. In the 2004 NES, the Republican mean on the 7-point environmental scale is 4.13 (this compares to a mean of 3.42 for independents and 3.25 for Democrats). If Republicans maintain their current position on the scale, then setting the ideology of a voter to the mean for all Republicans in the sample (5.3 on the 7-point scale), Republicans who know each party's position in such issues are still highly unlikely to defect: the probability of a Bush vote under these conditions is approximately .87.

If, however, environmentalism takes on the same ideological tones as other issues, such as abortion or civil rights, we would expect that, consistent with previous findings, conservative Republicans will move with their party accordingly. For conservative Republicans, the model demonstrates the probability of a Bush vote would over .90 if environmental positions were similarly conservative (a '6' on the 7-point scale).

Yet, perhaps not all partisans should be considered to be the same. Voters' ideological and partisan leanings, we know, have become tightly linked in the current era (Abramowitz and Saunders, 1998; Hetherington 2001; Goren 2005). It is probably prudent to assume, however, that the political environment may very well change with the weather. At least, it is not unreasonable to assume that some partisans should be more likely to be swayed by a change in the issues that dominate politics, as issue evolution would predict.

How can we test for such effects? One way is to examine how ideology tempers or exacerbates the impact of environmental attitudes on partisan voting. In this case, we

show the effects on this potentially crosscutting issue on Republicans allowing their ideology to vary. Figure 2 shows the impact of environmentalism on the probability of casting a Bush vote for moderately liberal to strongly conservative Republicans, assuming such voters can correctly place the candidates on environmental issues.

[FIGURE 3 ABOUT HERE]

In this case, it all depends on the ideology of the voter and their attitudes on environmentalism. It should be kept in mind, however, in the 2004 NES, 94 percent of Republicans reported voting for Bush. This type of partisan voting is more evident when examining the conservative Republicans. Among the two most conservative groups of Republicans, those placed at a '6' or a '7' on the ideological scale, the environmental question shows little effect at all. Even at the most liberal position, conservative Republicans are slightly less likely (.85) to have cast a vote for Bush than the overall sample of Republicans would indicate, but placing them at the middle of the environmental scale produces the just about the same rate (.92) of voting for Bush as for Republicans in the 2004 NES. For the two most conservative groups of Republicans, holding similarly conservative environmental views serves to virtually eliminate any chance of crossing party lines; the probability of a Bush vote is over .96 for Republicans at a '6' or a '7' on both the environmental and ideological scales.

On the other hand, for moderate Republicans, there are fairly strong effects for the environmental issues. A moderate (ideology set to '4') Republican is still likely to cast a vote for Bush if they are at the liberal end of the environmental scale, with a .57 chance of voting to reelect Bush, which increases to .82 if moved to the most conservative environmental position. This is, however, noticeably lower than the rate of Bush voting

among more conservative Republicans, suggesting some Republicans may be pulled across party lines should environmental issues become more salient. Those Republicans whose ideology conflicts with their partisanship demonstrate the potential of issue evolution should environmental issues rise in prominence. A moderately liberal Republican has only a .40 probability of voting for Bush if they have the most liberal environmental attitudes. Even moving this voter to the center of the scale makes them only barely more likely to vote for Bush than against him (.50 if placed at a '3' on the environmental scale and .55 if placed at '4').

Conclusion

We admit these results are somewhat hypothetical in nature. We do not know if environmental issues will necessarily divide voters or if the current rise in concerns about global warming will persist over time. Moreover, we acknowledge that abortion, terrorism, health care and the War in Iraq might all produce more powerful effects if we were to simulate voter attitudes on these issues in the same way we did with environmental issues.

On the other hand, environmentalism definitely appears to have seeped into the public consciousness as fears about global climate change have become more pronounced. There are few issues, we would argue, that have the potential to alter the political system, especially voter partisan attachments, at this point in time.

The results presented here provide quite mixed findings about the potential impact of the rise of environmentalism. On the one hand, environmentalism currently has little systematic relationship to voting in either the 2000 or 2004 presidential elections once

other voter characteristics are taken into account. We did show that there is some partisan division already beginning to appear with regard to environmental attitudes. Further analysis may elucidate whether this indicates spatial variation on green issues or is simply the result of a potentially problematic question emphasizing “jobs vs. environment” trade-offs.

We demonstrated that professionals, those defined by Judis and Teixeira as the key swing voters of the “knowledge economy,” do in fact show signs of leaning towards the Democratic Party, and that an increase in the importance of environmentalism may very well be the final straw that makes this group a core Democratic constituency. Conversely, we found evidence that even among moderate to moderately conservative Republicans, the increased importance of environmental beliefs on the other side of the spectrum may actually increase the likelihood of voting Republican. Among all voters who can currently place the candidates on environmental issues correctly, we demonstrated that partisan divisions may remain highly polarized if positions on the environment become more closely correlated with individual ideology.

Despite these insights, more research is necessary. It is possible that environmentalism could tap into deeper fears about excessive government restrictions on individual freedom, namely property rights, but also a deep-seated skepticism about the ability and competence of government to accomplish the goals of regulation (Morone 1998). These more principled objections (or, cynically, irrational fears) may not be adequately measured in today’s mainstream research. The results indicate a possibly serious problem with survey research on environmental issues. Currently, even the additional questions in the 2000 NES frame attitudes to be a trade-off between stronger

environmental controls and economic development. The authors join such scholars as Davis and Wurth (2003) and Ladd (1982) in calling for a better and more probing measures of citizens' attitudes that tap into a range of concerns.

The question of how environmentalism will affect the political system remains to be seen. It would have been difficult to predict the impact abortion would have on the political system in 1979 (Abramowitz 1995; Carmines and Woods 2002). Of course, issue evolution is far from a foregone conclusion. While many contemporary issues have been swallowed into the liberal-conservative polarization of today's politics (Layman and Carsey 2002), not every issue will necessarily become salient, as Lindaman and Haider-Markel (2002) demonstrate. However, given the increasing attention to environmental issues and global climate change, this study demonstrates the correlation between environmental attitudes and ideology may very well increase, resulting in a continuation of polarized voting patterns.

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Table 1: Partisanship and Environmental Attitudes

Question Type	Response	Democrats	Independents	Republicans	Total
2000 Traditional Question	Protect environment	39.2 (233)	39.0 (275)	32.1 (140)	37.7 (648)
	Other and Depends	31.8 (197)	39.2 (276)	41.5 (181)	38.0 (654)
	Jobs more important	14.5 (90)	10.6 (75)	19.54 (85)	14.5 (250)
	Haven't thought much about it	11.9 (74)	9.08 (64)	6.65 (30)	9.5 (168)
2000 Alternative Question	Toughen Regulations	40.4 (247)	45.5 (278)	27.5 (122)	36.9 (647)
	Other and Depends	23.7 (145)	26.8 (187)	30.9 (137)	26.8 (469)
	Regulations a Burden	7.4 (45)	9.6 (67)	22.7 (101)	12.2 (213)
	Haven't thought much about it	28.5 (174)	23.7 (166)	18.9 (136)	24.2 (424)

Note: The traditional question is combined to show answers 1-2 on the scale as the environment is “protect environment”, 3-5 as “other/depends” and answers 6-7 as “jobs more important”. The number of cases for each category are listed in parentheses.

Table 2: Correlates of Environmental Attitudes			
	2000 Traditional Question	2000 Alternate Question	2004 Traditional Question
Party	.095*** (.000)	.271*** (.000)	.262*** (.000)
Ideology	.186*** (.000)	.283*** (.000)	.312*** (.000)
Race	.019 (.465)	-.073** (.007)	.024 (.453)
Education	-.101*** (.001)	.003 (.913)	-.145*** (.000)
Gender	-.021 (.399)	.116*** (.000)	.043 (.172)
Income	-.026 (.328)	.100*** (.001)	-.027 (.413)
Age	.057** (.024)	.106*** (.000)	.070** (.025)
Union	-.034** (.024)	-.031 (.263)	-.084** (.007)
Abortion	-.112*** (.000)	-.123*** (.000)	-.209*** (.000)
Welfare	-.044 (.082)	-.153*** (.00)	-.109*** (.001)
Defense	.065** (.019)	.153*** (.000)	.205*** (.000)
Sociotropic	.018 (.488)	.175*** (.00)	-.236*** (.000)
Professional	-.055* (.036)	-.070** (.013)	-.107*** (.001)

Note: Entries are Pearson Correlation Coefficients. The environmental variables are coded from low (“protect environment” or “tougher government regulations”) to high (“regulations are a burden” or “jobs more important”).

Significance levels in parentheses.

Significant at $p < .10$; ** significant at $p < .05$; *** significant at $p < .01$

Table 3: Estimates of the Probability of a Bush Vote

	Vote Environment Traditional Question 2000	Vote Environment Alternative Question 2000	Vote Environment Traditional Question 2004
Jobs vs. Environment	-.030 (.076)	--	.063 (.074)
Environmental Regulations		.059 (.075)	
Abortion	-.349*** (.085)	-.300** (.088)	-.389*** (.123)
Defense Spending	.258** (.087)	.176* (.089)	.293*** (.098)
Welfare	-.278* (.128)	-.293* (.133)	-.421** (.166)
Affirmative Action	-.043 (.063)	-.050 (.064)	.240 (.141)
Ideology	.129* (.059)	.120* (.061)	.325** (.116)
Party	.564*** (.050)	.548*** (.050)	.499*** (.074)
Sociotropic	.141* (.070)	.161* (.070)	.377** (.126)
Pocketbook	-.011 (.111)	-.018 (.116)	-.025 (.101)
Sophistication	-.071 (.056)	-.038 (.056)	-.142* (.080)
Race	-.157 (.360)	-.228 (.400)	-1.53** (.595)
Gender	-.001 (.170)	-.040 (.174)	.280 (.232)
Age	.001 (.006)	.001 (.006)	-.006 (.008)
Professional	.055 (.199)	.053 (.204)	-.117 (.353)
Union	-.344 (.211)	-.346 (.215)	-.414 (.291)
Education	-.092 (.067)	-.081 (.069)	.118 (.100)
Income	.035 (.027)	.027 (.027)	.070** (.026)
Married	.203 (.162)	.195 (.167)	-.445 (.269)
Constant	-1.62* (.728)	-1.55* (.748)	-2.54** (1.14)
N	618	579	455
Pseudo R2	.609	.601	.722

Standard errors in parentheses

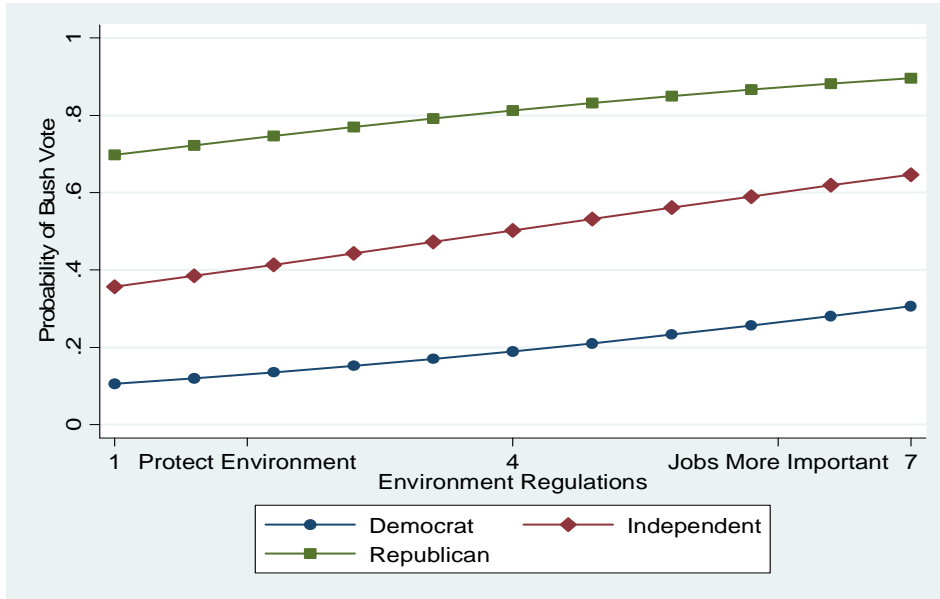
* significant at $p < .05$; ** significant at $p < .01$; *** significant at $p < .001$

Table 4: The Effects of a Mean-Centered Standard Deviation Change in the Independent Variables on the Probability of Casting a Bush Vote

	2000			2004		
	-1/2 SD Below Mean	+1/2 SD Above Mean	Change in Predicted Probability	-1/2 SD Below Mean	+1/2 SD Above Mean	Change in Predicted Probability
Party ID	.23	.69	.46	.30	.72	.42
Ideology	.41	.49	.09	.41	.61	.20
Economic Perception	.42	.48	.06	.43	.59	.16
Abortion	.38	.52	.14	.43	.59	.16
Affirmative Action	.44	.46	.02	.46	.56	.10
Welfare	.41	.49	.08	.45	.57	.12
Defense	.40	.50	.10	.43	.59	.16
Environment	.44	.45	.01	.49	.53	.04
Traditional Environment	.44	.45	.02	--	--	--
Experimental						

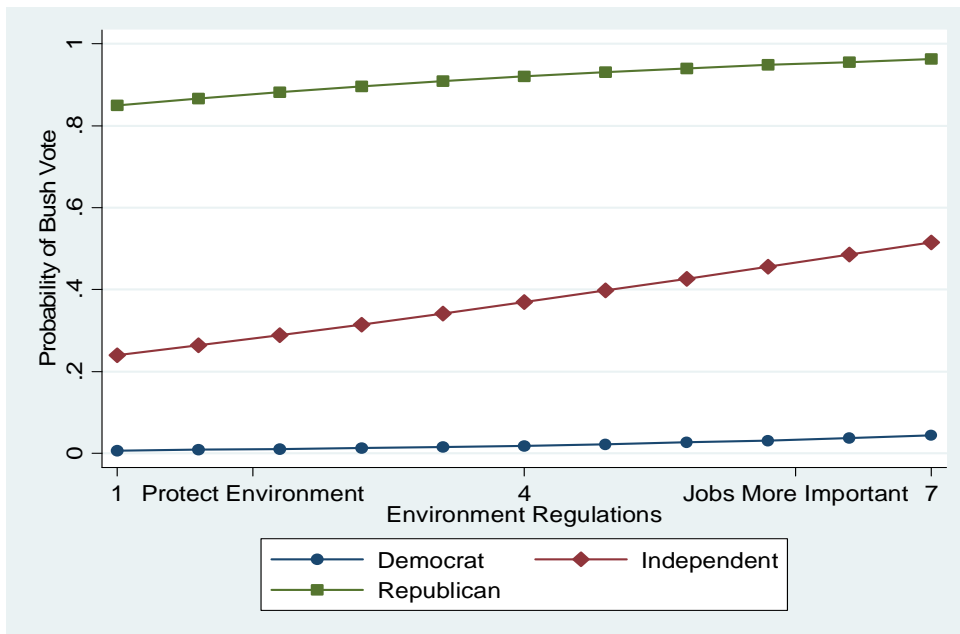
Note: Variables have been rescaled so that the effect measures moving from the most liberal (or Democratic) to the most conservative (or Republican) position

Figure 1: The Impact of Environmental Attitudes on Presidential Voting in 2004 for Professionals



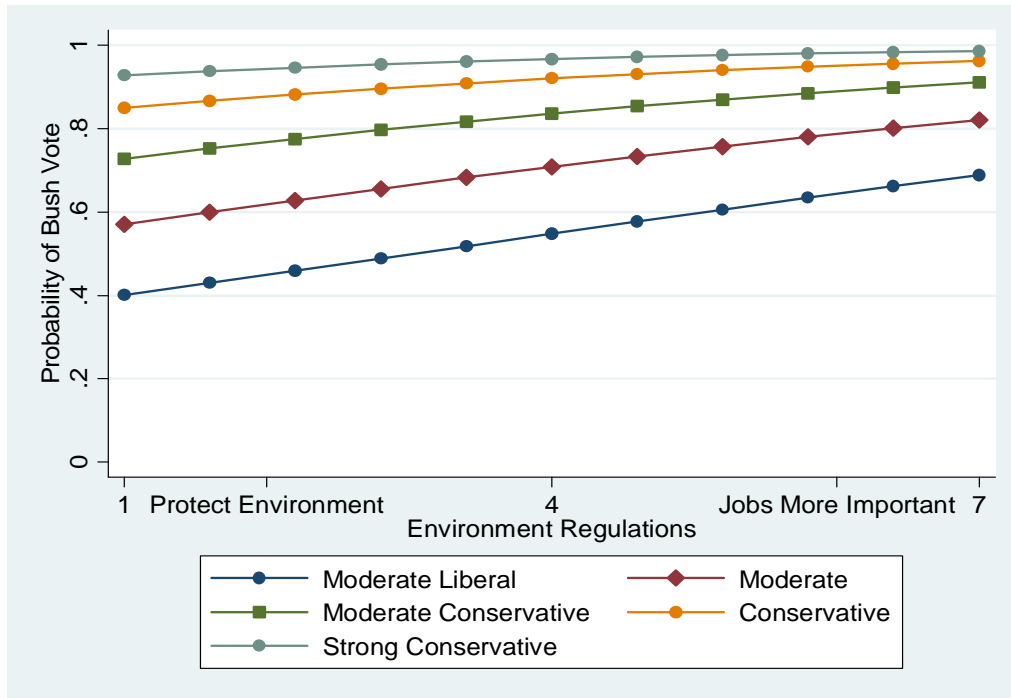
Note: The graph shows the impact of environmental attitudes for a thirty-year old professional with a college degree who can correctly place each candidate on environmental issues, with all other values set to their means.

Figure 2: The Impact of Environmental Attitudes on Presidential Voting in 2004 for Voters Who Correctly Place Candidates on Environmentalism



Note: The graph shows the impact of environmental attitudes for respondents who can correctly place each candidate on environmental issues, with all other values set to their means and ideology set to match voter partisanship.

Figure 3: The Impact of Environmental Attitudes on Republicans' Presidential Voting in 2004



Note: The graph shows the impact of environmental attitudes for Republicans who can correctly place each candidate on environmental issues, with all other values set to their means.