Abstract

Kinder and Nelson examine two complementary sets of question wording experiments contained in the 1989 Pilot Study. In the first experiment, Kinder and Nelson compare responses to questions that refer explicitly to the rival frames that dominate elite discourse -- "framed" items -- and responses to similar questions that do not use contextual frames -- "stripped" items. Kinder and Nelson find that frames facilitate the expression of opinion, through responses to framed items are generally no more extreme, stable, rooted in antecedents, or consequential for evaluations of the dominant political figures of the moment than stripped questions. Frames, however, do present certain advantages. Kinder and Nelson find that frames can affect the nature of public opinion in "locally sensible ways." Attitudes on assistance to blacks, for example, have greater political effects when relevant NES items are presented in framed versions. The second experiment undertaken by Kinder and Nelson compares responses to questions based on rival frames employed in elite discourse. Kinder and Nelson find small, but consistent, framing effects. Alternate frames occasionally shift the overall balance of opinion, highlight certain antecedents at the expense of others, and enhance or reduce the political relevance of opinions. In addition, the authors find that certain framing effects are consistent across issue areas. In particular, it seems that frames which allude to the moral shortcomings of social groups tap a natural way of thinking about public policy.
Experimental Investigations of Opinion Frames and Survey Responses

A Report to the National Election Studies Board

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The University of Michigan

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DRAFT # 1

*We express our thanks to Judith Ottmar for heroic and meticulous assistance in preparing the manuscript and our gratitude to the Rackham School of Graduate Studies at Michigan, which provided support in the form of a Research Partnership Grant. The data reported here were originally collected by the Center for Political Studies of the Institute for Social Research for the National Election Studies (NES). Neither CPS nor NES bears any responsibility for the analysis or interpretation we present here. In the end, we have only each other to blame.
Experimental Investigations of Opinion Frames and Survey Responses

Introduction

This report sets its sights on a problem that has both broad significance for democratic theory and specific practical implications for the design and implementation of surveys. We are concerned with how -- and how well -- Americans form and express opinions on vital matters of public policy.

Central to our understanding and assessment of this process is the concept of "frame." Defined in somewhat various ways, the idea of frame is currently at the center of a variety of theoretical projects scattered across the social sciences (e.g., Goffman 1974; Minsky 1975; Bruner 1986; Tversky and Kahneman 1981). Our analysis borrows most (this is a polite term for it) from the work of Gamson and his colleagues (Gamson and Lasch 1983; Gamson and Modigliani 1987). In their account of the discourse that envelopes public issues, Gamson and company portray a frame as "a central organizing idea or story line that provides meaning to an unfolding strip of events, weaving a connection among them. The frame suggests what the controversy is about, the essence of the issue".

In our view, frames lead a double life: they are structures of the mind that impose order and meaning on the problems of society, and they are interpretive structures embedded in political discourse, rhetorical devices employed by political elites, often to promote their own interests. At both levels, frames provide narrations for social problems: they tell stories about how problems come to be, and what (if anything) needs to be done about them. Our claim -- tested in a set of experimental comparisons described in detail below -- is that public opinion depends in a systematic way upon how issues are framed. By
sponsoring and promoting rival opinion frames, political elites may alter how issues are understood and, as a consequence, what opinion turns out to be.

At a practical level, we embarked on our project with the hope of demonstrating that framing experiments can also provide remedies for one of the most vexing problems faced by survey researchers in general and by the NES Board in particular: the proper design of issue questions. We thought that, for the most part, NES has measured opinion on issues badly, either by misrepresenting frames in the text of questions or by stripping questions of reference to frames altogether. From our perspective, proper design requires that question text incorporates the frames that prevail in the ongoing political debate of the times. Questions must faithfully represent the frames in operation in public discourse. Because such discourse is almost always partisan and contentious, our recommendations generally move against suggestions that would have us compose innocuous and clean questions; our taste, instead, runs to questions that are provocative and dirty.

**Background Assumptions**

At stake here are classic considerations about the quality and autonomy of public opinion. In this respect our research can be located squarely within the empirically-grounded debate initiated by Converse (1964) a quarter century ago. Converse concluded that most Americans approach the political world innocent of ideology and in possession of only a handful of settled opinions. Converse's forceful claim of ideological innocence has been largely sustained over the years (at least according to Kinder 1983 and Luskin 1987), but with the addition of several important qualifications. In particular, it is now clear that although Americans may be innocent of sweeping ideological principles, they are hardly innocent of political ideas of more modest scope, a point made well in Hochschild’s (1981) in-depth discussions with ordinary Americans about justice in politics, the workplace, and
the home. On the one hand, Hochschild's respondents richly display the symptoms of the Converse diagnosis: inconsistency, hesitation, diffidence, and more. On the other hand, their fundamental problem is not that they have no ideas about taxes or unemployment or income distribution, but that they have too many. The people Hochschild interviewed suffered not so much from a shortage of relevant considerations, but from an impoverished ability to integrate and compare considerations, negotiate internal conflicts, and reach clear resolutions. What they lacked, perhaps, were frames.

We believe that for many Americans, on many issues of public policy, confusion prevails. Americans are not blind to the momentous issues of the day, but they are often perplexed -- at least uncertain -- how to think about them. We are not claiming that Americans have no views on policy, it is just that, as occasions arise, they must construct their views. Such constructions can be quite meaningful: most Americans have in mind an assortment of raw ingredients out of which genuine and serious opinions can be fashioned. If asked about the desirability of a particular government policy, various of these ingredients may float to mind: the tangible consequences likely to be set in motion should the policy be put in place; sympathy or contempt for the policy's intended beneficiaries; various principles that the policy appears to advance or repudiate; and more. Just which opinion emerges from this mental soup depends upon which of the many ingredients come most prominently to mind. Not only because opinions on public issues are typically rather lightly-considered, but also because the complete set of relevant ingredients is too cumbersome to consider all at once, opinions tend to reflect less the full repertoire of what citizens believe and feel and more which aspects of their beliefs and feelings happen to come to attention (Feldman and Zaller 1988; Iyengar and Kinder 1987; Kinder and Sanders 1986, 1990; Zaller and Feldman 1987).
Our essential claim is that which ingredients Americans pay attention to and which they ignore has partly to do with the ongoing political debate, with the ensemble of frames promoted by rival elites. As particular frames rise to prominence, some opinion ingredients are highlighted and made more accessible, while others are shunted to the side. Ingredients come and go, we argue, partly as frames come and go. By sponsoring and successfully promoting alternative opinion frames, advocates may successfully shift how issues are understood, and, as a consequence, what public opinion turns out to be -- or so we claim.

Method and Hypotheses

How can such a claim be tested? We assume that by examining the kinds of alterations in opinion that are induced by systematic alterations in the way that questions are posed -- or framed -- within the survey, we can learn how changes in public opinion are induced by changes in the setting beyond the survey, in the ongoing, intermittent conversation between elites and publics that is central to the democratic process. By framing issue questions in different ways, we intend to mimic or re-enact this natural process of political debate. Alternative survey questions, like the alternative frames actively promoted by political elites, should, according to our perspective, shift the foundations of public opinion.

In examining the interplay between elite frames and public opinion in this way, we are following the precedent set by Kinder and Sanders in the 1985 Pilot Study (1990). In the 1989 Pilot Study, we undertook two complementary series of question wording experiments. In the first, we compared public opinion on three major policy disputes elicited in one of two ways: either by questions that refer explicitly to the rival frames that dominate elite discourse (the "framed" condition), or by questions that do not (the
"stripped" condition). The questions appeared in the first wave of the pilot study and then repeated, in identical form, in the second wave. The three policy disputes concerned abortion, relations with the Soviet Union, and government assistance to blacks. Heading in, we expected that opinion elicited under framed conditions would differ systematically from opinion elicited under stripped conditions: that such opinion would be more widespread, more extreme, more stable, better connected to the ingredients pointed to by the rival frames, and more predictive of pertinent political judgments. Framed opinions should look more like the opinions that Converse sought and, for the most part, could not find.

In the second series of experiments, we also compared public opinion on three major policy disputes, also elicited in one of two ways: this time either by questions that refer to one set of frames present in elite discourse, or by questions that refer to an alternative set of frames. The three policy disputes this time concerned affirmative action in employment, government programs that assist the poor, and federal money for AIDS. In this series, we expected to find an enhancement of the importance of the ingredients called up by the rival frames. On all three issue, the questions appeared in the first wave of the pilot study, and then asked again, this time with the issue framed in the alternative way, in the second wave.

To get both series of experiments off the ground, we first had to identify the frames prevailing in public discourse. This required consulting the text of Supreme Court decisions in pivotal cases, speeches delivered by public officials and prominent activists, the views expressed in political journals, and more. Better yet, it required taking advantage of such investigations done by others, particularly Gamson and Modigliani (1987), Gamson and Lasch (1983), and Luker (1984). Based on this work, we took the relevant frames to be (with the supportive frame or frames coming before the "/" and the oppositional frame or frames coming after):
Framed versus Stripped Comparisons

1. abortion (choice/murder)

2. Soviet Union (reduce the risks of war/Communists and cannot be trusted)

3. government aid to blacks (blacks lack opportunities/undeserved advantage)

Alternative Frames Comparisons

4. affirmative action in employment (just compensation/undeserved advantage or reverse discrimination)

5. poor (poor are unlucky and need help/don't give away money to poor who don't really need the help or we can't afford to help)

6. AIDS (grave health risk to nation/victims should have been more careful or other problems more pressing)

Our next task was to translate these frames into vernacular appropriate to a national survey. The essential wordings follow immediately; exact question wordings and response options can be found in Appendix A.
Framed Questions versus Stripped Questions

1. Abortion

**Framed:**

There has been some discussion about abortion during recent years. Some Americans oppose abortion; they think of themselves as "pro-life;" they believe that abortion is murder. Other Americans believe that a woman should have the right to an abortion; they think of themselves as "pro-choice;" they believe that whether or not to have an abortion must be the woman's choice, not the government's. Which one of the opinions I am about to read you best agrees with your view on abortion?

**vs. Stripped:**

There has been some discussion about abortion during recent years. Which one of the opinions I am about to read you best agrees with your view on abortion?

2. Soviet Union

**Framed:**

Our next question concerns the relationship between the United States and the Russia. Some Americans feel that we should try to cooperate more with Russia, in order to reduce the chances of a nuclear war. Other Americans believe that we should be much tougher in our dealings with Russia because Russian leaders are communists and they still want to take over the world. Do you have an opinion on this, or haven't you thought much about it?

**vs. Stripped:**

Our next question concerns the relationship between the United States and the Russia. Some people feel we should try to cooperate more with Russia, while others believe we should be much tougher in our dealings with Russia. Do you have an opinion on this, or haven't you thought much about it?

3. Government Assistance to Blacks

**Framed:**

Some people feel that the government in Washington should make a special effort to improve the social and economic position of blacks, because blacks still don't have the same opportunities to get ahead as everyone else. Others feel that the government should not make any special effort to help blacks; that blacks should help themselves, just as other groups have done. Do you have an opinion on this issue, or haven't you thought much about it?
Some people feel that the government in Washington should make a special effort to improve the social and economic position of blacks, while others feel that the government should not make any special effort to help blacks. Do you have an opinion on this issue, or haven't you thought much about it?

**Alternative Frames**

4. **Affirmative Action in Employment**

**Frame A:**

Next is a question about whether employers should favor blacks when they decide who to hire and promote. Some people say that because of past discrimination, employers should give preference to qualified blacks. Others disagree, saying that *favoring blacks gives them advantages that they haven't really earned.* Do you have an opinion on this issue, or haven't you thought much about it?

**vs. Frame B:**

Next is a question about whether employers should favor blacks when they decide who to hire and promote. Some people say that because of past discrimination, employers should give preference to qualified blacks. Others disagree, saying that *favoring blacks amounts to discrimination against whites.* Do you have an opinion on this issue, or haven't you thought much about it?

5. **Assistance to Poor**

**Frame A:**

Our next question deals with government programs to assist the poor. Some people say that government spending on such programs for the poor needs to be increased, to help those who, through no fault of their own, simply cannot earn enough to take care of themselves and their children. Others say that government spending on such programs for the poor should be decreased, *because they give away money to people who don’t really need the help.* If you had a say in making up the federal budget this year, would you like to see spending on programs that assist the poor increased, decreased, or stay the same?

**vs. Frame B:**

Our next question deals with government programs to assist the poor. Some people say that government spending on such programs for the poor needs to be increased, to help those who, through no fault of their own, simply cannot earn enough to take care of themselves and their children. Others say that government spending on such programs for the poor should be decreased, *because given the huge budget deficit, we simply can’t afford it.* If you had a say in making up the federal budget this year, would you like to see spending on programs that assist the poor increased, decreased, or stay the same?
6. AIDS

Frame A:

Our next question deals with the disease AIDS. Some Americans believe that AIDS is a very serious threat to public health, that too many people have already died from AIDS, and that the government in Washington should spend more money trying to stop the spread of AIDS and taking care of those people who already suffer from the disease. Other Americans believe that most people who get AIDS -- primarily homosexual men and intravenous drug users -- should have been more careful in the first place. If you had a say in making up the federal budget this year, would you like to see spending increased, decreased, or stay the same for the fight against AIDS?

vs. Frame B:

Our next question deals with the disease AIDS. Some Americans believe that AIDS is a very serious threat to public health, that too many people have already died from AIDS, and that the government in Washington should spend more money trying to stop the spread of AIDS and taking care of those people who already suffer from the disease. Other Americans believe that the government has more important things to spend money on, like cancer research. If you had a say in making up the federal budget this year, would you like to see spending increased, decreased, or stay the same for the fight against AIDS?

Let us see whether such frames make a difference for the opinions Americans express on fundamental matters of public policy.

Results

Just a second. Before our hypotheses about frames and opinions can be tested, it is necessary first to establish that respondents randomly assigned to different conditions were in fact comparable to one another. It would of course complicate things if it turned out that one group was more liberal, or more educated, than others. Thus, we undertook a series of comparisons across the four forms of the pilot study using a roster of standard demographic and political variables.

As a general matter, respondents assigned to the four forms were indeed comparable: we found no differences on age, gender, education, race, income, turnout in 1988, ideological identification, or political information (measured in Zalleresque style; all these
variables come from the 1988 NES). One clear difference did emerge, however, and it is an annoying one: Form C includes too many Democrats. Combining strong, weak, and leaning identifiers, the Form C group was 55.8% Democratic; in the other three groups, the percentage Democratic was 37.1% (A), 46.0% (B), and 48.1% (D). This difference is annoying not only because it is statistically and substantively significant, but because partisanship is central to other key political variables. Sure enough, Form C respondents were also more critical of President Reagan's performance ($p < .01$); sure enough, had the 1988 presidential election been confined to Form C respondents, Dukakis would have won in a landslide (57.3% of Form C respondents reported voting for the Duke, compared to 43-48% in the other three groups). The importance of this difference for our analysis is mitigated by the fact that all our comparisons combine the four conditions into two: some of our analyses compare Forms A and B versus C and D; others compare A and C versus B and D. None of our comparisons rests on Form C respondents by themselves. This diminishes the importance of Form C respondents unusual taste for the Democrats, but we must keep the difference in mind; where appropriate, analyses that follow will include partisanship as a control variable.

**Framed vs. Stripped Experiments**

We expect that opinions elicited under framed conditions will differ systematically from opinions elicited under stripped conditions: that such opinions will be more widespread, more extreme, more stable, better connected to the ingredients pointed to by the rival frames, and more consequential for other political judgments.

**The expression of opinion**

Many Americans are reluctant to provide answers to at least some of the questions they encounter in the course of an attitude survey. We suspect that such reluctance is due
in part to the way questions are posed to them. In particular, respondents might not know quite how to approach an issue when it is set forth free of context, as many NES items are. On the other hand, when the issue is presented within a specified context, or frame, respondents might more readily give an answer, should they find the handles we have provided them useful. The "framed" vs. "stripped" experiments provide a test of this hypothesis. The three issues were presented either context-less (i.e. respondents were told merely that there were substantial numbers of supporters on both sides of the issue), or embedded within relatively enriched context (rationales for the two opposing positions were provided). We expected that by reminding respondents of the reasons why they might take a position, more would be coaxed into providing answers.

To test this hypothesis, we simply dichotomized answers into opinions and non-opinions, analyzed across the framed and stripped versions of each of the three questions. The results appear in table 1. They largely, but not entirely, conform to our expectations. Two out of the three issues -- relations with Russia and assistance to blacks -- show the expected framing effect, with significantly fewer "don't know" responses when the issue is framed. The lack of a framing effect for the abortion issue can be written off to the virtual absence of "don't know" responses: only 9 out of 614 respondents failed to provide an answer to this question.¹

We cannot settle decisively here whether the additional opinions that were expressed under the framed condition should properly be thought of as real opinions or merely as momentary fabrications. We are inclined toward the former characterization, in part because when we repeated the analysis summarized in table 1, controlling either on

¹. Notice that of the three issue questions, only the abortion item does not include an explicit filter, asking respondents whether or not they had thought about the issue.
Table 1

Percentage Expressing an Opinion on Abortion, Relations with Russia, and Aid to Blacks as a Function of Question Frame

<table>
<thead>
<tr>
<th></th>
<th>Framed (n = 314)</th>
<th>Stripped (n = 300)</th>
<th>Chi-square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framed</td>
<td>98.4%</td>
<td>98.7</td>
<td>.071</td>
<td>N.S.</td>
</tr>
<tr>
<td>Cooperate with Russia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framed</td>
<td>73.7</td>
<td>66.9</td>
<td>3.38</td>
<td>&lt; .07</td>
</tr>
<tr>
<td>Aid to Blacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framed</td>
<td>68.0</td>
<td>58.6</td>
<td>8.35</td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>
whether or not the respondent expressed an opinion on the comparable issue question asked in the 1988 NES survey, or on level of political information (the Zaller scale), we found that frames supplied more opinions even among those who expressed a view in 1988, and even among the comparatively well-informed. Another way to put this point is that frames facilitate the expression of opinions generally, and not just among the "know-nothings". In short, frames -- at least the frames we chose -- seem to help citizens "find" their views.

The distribution of opinion

We expected that the distinction between a framed presentation and a stripped presentation would have less to do with persuading citizens to adopt a particular position than with altering the quality and structure of thought surrounding the issue (which might, but might not, have implications for opinion change). After all, we had attempted to identify the frames prevailing in public discourse on both sides of each of the three issues. Such frames had already passed various tests of credibility and persuasiveness. Therefore, if we had identified them properly, and evoked them reasonably adeptly in our survey questions, then we should not see dramatic differences in opinion as a function of their (joint) presence; the rival frames are, or should be, roughly equally effective.

Table 2 confirms this expectation: the central tendency of opinion on each of the three issues is essentially unaffected by whether the issue was presented in framed or stripped fashion. On the question of abortion, public opinion generally favored the pro-choice position, and this was so regardless of whether or not the issue was presented embedded in the arguments and vocabulary of the opposing camps. Likewise, public opinion on relations with the Soviet Union was tilted towards those who emphasized cooperation against those who pressed for a tougher stance, but again, quite independently
# Table 2

The Distribution of Opinion on Abortion, Relations with Russia, and Aid to Blacks as a Function of Question Frame

## Abortion

<table>
<thead>
<tr>
<th></th>
<th>Pro-life</th>
<th>Pro-choice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Framed</td>
<td>19</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>(6.3)</td>
<td>(31.9)</td>
</tr>
<tr>
<td>Stripped</td>
<td>25</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>(8.6)</td>
<td>(29.5)</td>
</tr>
</tbody>
</table>

Chi-square = 1.76, N.S.  
Student $t = -0.035$, N.S.

## Russia

<table>
<thead>
<tr>
<th></th>
<th>Cooperate More</th>
<th>Get Tougher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Framed</td>
<td>39</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>(17.6)</td>
<td>(23.5)</td>
</tr>
<tr>
<td>Stripped</td>
<td>43</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>(20.5)</td>
<td>(26.7)</td>
</tr>
</tbody>
</table>

Chi-square = 4.27, N.S.  
Student $t = 0.371$, N.S.

## Aid to Blacks

<table>
<thead>
<tr>
<th></th>
<th>Special Effort</th>
<th>No Special Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Framed</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(7.4)</td>
<td>(10.8)</td>
</tr>
<tr>
<td>Stripped</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>(6.7)</td>
<td>(18.0)</td>
</tr>
</tbody>
</table>

Chi-square = 5.55 $p < .24$  
Student $t = 1.21$, $p < .23$
of whether or not the issue was framed. Finally, public opinion was a bit stronger against
government assistance to blacks under the framed condition -- when the issue was
presented in the context of the opposing arguments that either blacks still don't have equal
opportunities or that blacks should move ahead on their own without government
assistance -- than under the stripped presentation, but the difference does not reach
statistical significance (Chi-square = 5.55, p = .24). As we anticipated, framing the issue
does not seem to shift the balance of opinion in one direction or another.

But perhaps frames shift opinion in both directions at once. Frames might produce
more extreme opinions. Should survey respondents take the rationales provided by the
frames as added ammunition to their preexisting, but ill-formed views, then the presence of
frames might amplify their initial inclinations in more extreme directions. To see if this
was so, we coded responses to each issue as "extreme" when either endpoint of the opinion
scale was chosen, and "moderate" when they fell at some point in between (for the purpose
of this analysis, "don't know" responses were excluded). We performed a contingency table
analysis where extremity was crossed with frame, for each of the three issues.

The results, summarized in table 3, reveal no consistent effect of frame on extremity.
In only one case are opinions more extreme in the framed condition than in the stripped
condition, and even there, on government assistance to blacks, the difference is not entirely
reliable (Chi-square = 1.97, p < .16).

Perhaps it is impressive that even intimations of this effect emerge, since we know
from an earlier analysis that frames induce more people to express opinions in the first
place, opinions that seem likely to lie more in the center of the distribution than at the
edges. Thus the presence of frames might generally yield more opinions, and, holding
Table 3

Percentage Expressing an Extreme Opinion on Abortion, Relations with Russia, and Aid to Blacks as a Function of Question Frame

<table>
<thead>
<tr>
<th></th>
<th>Framed</th>
<th>Stripped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion</td>
<td>44.7%</td>
<td>49.0</td>
</tr>
<tr>
<td>Chi-square</td>
<td>1.07</td>
<td>(p &lt; .31)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Framed</th>
<th>Stripped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate with Russia</td>
<td>23.1</td>
<td>27.1</td>
</tr>
<tr>
<td>Chi-square</td>
<td>.948</td>
<td>(p &lt; .34)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Framed</th>
<th>Stripped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid to Blacks</td>
<td>47.1</td>
<td>39.9</td>
</tr>
<tr>
<td>Chi-square</td>
<td>1.99</td>
<td>(p &lt; .16)</td>
</tr>
</tbody>
</table>
constant that effect, more extreme opinions. Here we have not separated the two possible
effects operating, perhaps, at cross purposes. At a practical level, we can say that
formulating issue questions in framed fashion does not seem to produce a harvest of low-
grade responses that pile up in the center, responses that are better interpreted as non-
attitudes.

The stability of opinion

Roughly the same point is made here, in our analysis of the stability of opinion. Since
Converse's (1964) analysis of the 1956-58-60 election study panel, stability of opinion over
time has of course become a standard barometer of attitude authenticity. To the extent
that instability is a product of shifting frames of reference across time, framing an issue in
consistent fashion should improve attitude stability. Part of our working model of the
survey response is that respondents may answer issue questions using different criteria on
different occasions. A person's perspective on abortion might be shaped at one time by
concerns for human life, and at another time by considerations of political rights. By
framing the abortion issue consistently as a question of "life" vs. "choice", as we do here, we
should have diminished the complicating effect of fluctuating frames, thereby enhancing
the stability of opinion.

As a first test of the stability hypothesis, we simply computed the Pearson correlation
coefficient $r$ between wave 1 and wave 2 responses, separately for framed and stripped
conditions. As is revealed in Table 4, the Pearson correlations for all three issues are
substantial, ranging from .67 to .82, and appear unaffected by the presence or absence of a

2. The results on abortion run against this interpretation, since in this case the presence of
frames produced neither more opinions nor more extreme opinions.
Table 4

Stability of Opinion on Abortion, Relations with Russia, and Aid to Blacks as a Function of Question Frame

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlations</th>
<th></th>
<th>Chi-Squares</th>
<th></th>
<th>Percentage Consistent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Framed</td>
<td>Stripped</td>
<td>Framed</td>
<td>Stripped</td>
<td>Framed</td>
<td>Stripped</td>
</tr>
<tr>
<td>Abortion</td>
<td>.82</td>
<td>.78</td>
<td>324.3</td>
<td>279.5</td>
<td>73.7</td>
<td>69.8</td>
</tr>
<tr>
<td>Cooperate with Russia</td>
<td>.67</td>
<td>.70</td>
<td>130.7</td>
<td>115.5</td>
<td>54.3</td>
<td>53.7</td>
</tr>
<tr>
<td>Aid to Blacks</td>
<td>.71</td>
<td>.71</td>
<td>129.0</td>
<td>92.1</td>
<td>59.6</td>
<td>55.3</td>
</tr>
</tbody>
</table>
frame. Indeed, in two out of the three issues, the correlation is actually higher for respondents in the stripped condition, though the differences in all cases are trivial.

Undeterred by these discouraging results, we also carried out a parallel contingency table analysis. These results are also summarized in table 4, and they show -- as indexed by Chi-square, and as predicted -- that opinion is more consistent over time under the framed mode of presentation than under the stripped frame of presentation for all three issues.

What might account for the discrepancy between these two sets of results? Perhaps the inconsistent responses in the stripped condition were close in scale value to one another, thus maintaining substantial over-time correlations. In other words, the contingency-table analysis was more sensitive to changes of even a small degree in response than was the correlational analysis. To investigate this possibility further, we coded responses as simply consistent or inconsistent over time, ignoring whether the inconsistency was large or small, and then repeated the contingency table analysis. These results appear in the bottom panel of table 4. Our original prediction is borne out in all three cases: framed responses are more consistent than stripped responses. But the differences are small and in statistical terms difficult to distinguish from no difference at all (Chi-square < 1.0 in each case).

We conclude that framing an issue in consistent fashion may increase the stability of expressed opinion, but that the gains, at least as we have been able to realize them here, are likely to turn out to be unimpressive, if they are detectable at all.

The antecedents of opinion

Our next analysis examines the extent to which opinions are rooted more firmly in their putative antecedents under framed conditions, where respondents are guided to
consider those antecedents implied or evoked by the rival frames, than under stripped conditions, where respondents are much more on their own. Our general expectation is that the pattern of antecedent relationships discovered in the framed condition would resemble the pattern of relationships in the stripped condition but in amplified form. Tiny relationships would grow more visible, modest relationships would become strong, strong relationships would become stronger still. Moving from the stripped condition to the framed should be the equivalent, so we thought, of turning from a black and white television to color: we would be looking at the same picture, but presented in a more vivid and arresting way.

To find out if this was so, we undertook two identical regression analyses for each of the three issues. Within each pair, one regression was based on those respondents who were presented with the issue embedded in rival frames, while the other was based on those respondents who were presented with the issue without frames. Each pair of equations included the same set of plausible antecedents. For the purpose of analyzing the antecedents of opinions on abortion, for example, these included measures of religious traditionalism, moral conservatism, Catholicism, attitudes toward the pro-life movement, attitudes toward feminists, views toward the propriety of government intervention as a matter of principle, and, at a more programmatic level, attitudes toward government services. Comparable and in some respects overlapping sets of antecedent variables were developed for the issues of relations with the Soviets and government assistance to blacks as well (see table 5). In most cases, these antecedent variables were represented in the regressions by multiple-item scales, described in detail in Appendix B, taken in almost all cases from the 1988 NES. Each equation also included, for purposes of control, a standard set of demographic and political variables: age, region (South), education, race (black),
gender (male), level of political information, ideological identification, and party identification.\textsuperscript{3} For the sake of convenience, we coded all variables on the 0-1 interval.

Table 5 presents the results for each of the three issues in the form of unstandardized regression coefficients. For each issue, there are two columns of coefficients, one (on the left) corresponding to respondents in the framed condition, and one (on the right) corresponding to respondents in the stripped condition. Given our general expectation, we should see coefficients decreasing in absolute magnitude as we move from the framed column to the stripped. But, as a general matter, we do not see that. Sometimes the coefficients get bigger, sometimes they get smaller, often they stay about the same size. Likewise, neither R-squared, nor the standard error of the regression (both found at the base of table 5), imply the kind of result we had in mind. Adding frames to the elicitation of opinion does not simply produce a clearer, more amplified view of antecedent relationships.

Our general expectation was roundly disconfirmed, but there are other results in table 5 that nonetheless suggest frames at work. For the most part these results are confined to the issues of US-Soviet relations and government assistance to blacks. Notice first that the cold war rhetoric of the US-Soviet frame appeared to enhance the importance of citizens' views toward Gorbachev and communism (for Gorbachev, the relevant coefficients are -.300 in the framed condition versus -.204 in the stripped condition; for anti-communism, the relevant coefficients are .210 versus .128). Framing the issue in this way appears to have turned cooperation with the Soviets into a referendum on Soviet intentions; to the extent that citizens approved of Gorbachev and were reluctant to see

\textsuperscript{3} We include these demographic and political variables in the equations but we do not report their effects in the tables, primarily for aesthetic reasons. When something interesting turns up, we will report it in the text.
Table 5
Antecedents of Opinion on Abortion, Relations with Russia,
and Aid to Blacks as a Function of Question Frame

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Abortion Framed</th>
<th>Abortion Stripped</th>
<th>Cooperate with Russia Framed</th>
<th>Cooperate with Russia Stripped</th>
<th>Aid to Blacks Framed</th>
<th>Aid to Blacks Stripped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gov't services</td>
<td>.232</td>
<td>.244</td>
<td>---</td>
<td>---</td>
<td>.045</td>
<td>.167</td>
</tr>
<tr>
<td>Gov't intervention</td>
<td>-.001</td>
<td>-.119</td>
<td>---</td>
<td>---</td>
<td>.088</td>
<td>.041</td>
</tr>
<tr>
<td>Moral conservatism</td>
<td>-.233</td>
<td>-.185</td>
<td>---</td>
<td>---</td>
<td>-.013</td>
<td>.080</td>
</tr>
<tr>
<td>Religious traditionalism</td>
<td>-.371</td>
<td>-.396</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Attitude toward feminists</td>
<td>.442</td>
<td>.410</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Ev. of pro-life movement</td>
<td>-.199</td>
<td>-.270</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Catholic</td>
<td>-.115</td>
<td>-.051</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Patriotism</td>
<td>---</td>
<td>---</td>
<td>.044</td>
<td>-.056</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Anti-communism</td>
<td>---</td>
<td>---</td>
<td>.210</td>
<td>.128</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Att's toward the military</td>
<td>---</td>
<td>---</td>
<td>.098</td>
<td>.221</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Ev. of Gorbachev</td>
<td>---</td>
<td>---</td>
<td>-.300</td>
<td>-.204</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Fear of war</td>
<td>---</td>
<td>---</td>
<td>.017</td>
<td>-.111</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>National economy</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>.017</td>
<td>.030</td>
</tr>
<tr>
<td>Ident. as white</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-.048</td>
<td>-.035</td>
</tr>
<tr>
<td>Equal opportunity</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>.424</td>
<td>.204</td>
</tr>
<tr>
<td>Attitudes toward blacks</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>.505</td>
<td>.260</td>
</tr>
<tr>
<td>Att's toward the poor</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-.066</td>
<td>-.230</td>
</tr>
</tbody>
</table>

Number of cases: 293 282 265 285 259 266
R-squared: .39 .38 .32 .33 .29 .20
Standard error of regression: .26 .28 .20 .20 .24 .23

Note: Table entry is the unstandardized regression coefficient, with standard errors underneath in parentheses. Blanks indicate that variables were excluded from the equation. Each equation also included measures of age, region (South), education, race (black), gender (male), level of political information, ideological identification, and party identification, all taken from the 1988 NES. On the issue of aid to blacks, the analysis is based on whites only. All variables coded on 0-1 interval.
communism as the evil empire, to that extent they were willing to support cooperative relations. At the same time, framing the issue in this way appears to have diminished the relevance of evaluations of US military to the issue (the relevant coefficient is .098 in the framed condition and .221 in the stripped condition). This pattern suggests that invoking a particular frame may both highlight certain considerations and push other considerations aside.

The same point is made with public opinion on government assistance to blacks. Remember that in the framed condition, citizens were reminded that opponents of government assistance believed that blacks should help themselves "like other groups", while supporters of government assistance were inclined to argue that blacks needed special help because they "still do not have the same opportunities as whites". Accordingly, citizens attitudes toward blacks and their views on equal opportunity made a much larger difference to their opinions on government assistance to blacks in the framed condition than in the stripped condition (for attitudes toward blacks, the relevant coefficients are .505 in the framed condition versus .260 in the stripped condition; for equality, the relevant coefficients are .424 versus .204). At the same time, framing the issue in this fashion -- turning the issue into a referendum on the character of blacks and the importance of equality as an ideal -- also appeared to operate so as to diminish the relevance of other considerations. In particular, under the framed condition, attitudes toward the poor and support for government services in general became much less important (for attitudes toward the poor, the coefficients are -.066 versus -.230; for government services, the coefficients are .045 versus .167). So once again, there is a suggestion that frames operate in hydraulic fashion: that by drawing attention to some considerations, they seem necessarily to subtract attention from others.
The consequences of opinion

The next and final analysis of our framed versus stripped experiments treats opinions on issues as potentially determinative of other political assessments. In particular, we estimated the impact of opinions on abortion, US-Soviet relations, and government assistance to blacks on evaluations of George Bush, Michael Dukakis, Jesse Jackson, and Ronald Reagan (measured by thermometer ratings in the pre-election wave of the 1988 NES), as well as vote in the 1988 presidential contest (as reported in the post-election wave of the 1988 study). We generally expected that to the extent our frames captured the essential nature of the debate during the campaign, framed opinions should better predict sentiments towards the principal figures of the 1988 contest as well as vote itself.

Following our customary procedure, we estimated a pair of identical equations for each of the three issues, one corresponding to the impact of opinion when the issue was framed, the other corresponding to the impact of the opinion when the issue was stripped. For purposes of control, each equation also included a standard set of demographic and political variables: age, region (South), education, race (black), gender (male), level of political information, ideological identification, and party identification. Table 6 summarizes the results: they reward our general expectation quite unevenly.

First of all, presenting the issue of abortion as framed appears to make little difference for the impact of the issue in the 1988 campaign. Only in the case of Dukakis does the difference become visible (and in the expected direction), but in no case are the differences large enough to take seriously. By these results, abortion was of little moment to the 1988 contest, regardless of how the issue was put. Things are quite different for the issue of US-Soviet relations (the middle two columns in table 6). Without exception, views on whether the US should take a cooperative versus a tougher posture toward the Soviet
Table 6
Consequences of Opinion on Abortion, Relations with Russia, and Aid to Blacks as a Function of Question Frame

<table>
<thead>
<tr>
<th>Consequences</th>
<th>Abortion Framed</th>
<th>Abortion Stripped</th>
<th>Cooperate with Russia Framed</th>
<th>Cooperate with Russia Stripped</th>
<th>Aid to Blacks Framed</th>
<th>Aid to Blacks Stripped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bush</td>
<td>-.033 (.042)</td>
<td>-.035 (.040)</td>
<td>.113 (.051)</td>
<td>.146 (.058)</td>
<td>.138 (.055)</td>
<td>.087 (.055)</td>
</tr>
<tr>
<td>Dukakis</td>
<td>.082 (.044)</td>
<td>-.023 (.044)</td>
<td>-.123 (.067)</td>
<td>-.240 (.060)</td>
<td>-.126 (.060)</td>
<td>-.079 (.059)</td>
</tr>
<tr>
<td>Jackson</td>
<td>-.054 (.049)</td>
<td>-.009 (.050)</td>
<td>-.058 (.075)</td>
<td>-.202 (.069)</td>
<td>-.314 (.066)</td>
<td>-.162 (.065)</td>
</tr>
<tr>
<td>Reagan</td>
<td>-.051 (.047)</td>
<td>-.093 (.045)</td>
<td>.011 (.069)</td>
<td>.084 (.065)</td>
<td>.141 (.061)</td>
<td>.135 (.060)</td>
</tr>
<tr>
<td>Presidential vote</td>
<td>-1.206 (.651)</td>
<td>-.093 (.639)</td>
<td>1.170 (1.013)</td>
<td>2.063 (.880)</td>
<td>1.096 (.872)</td>
<td>1.211 (.770)</td>
</tr>
</tbody>
</table>

Note: Table entry is the unstandardized regression coefficient, except in the case of vote, where the entry is the logit coefficient, with standard errors in parentheses. Each of the equations also included measures of age, region (South), education, race (black), gender (male), level of political information, ideological identification, and party identification, all taken from the 1988 NES. When estimating the consequences of opinion on aid to blacks, the analysis is based on whites only. Each of the dependent measures -- evaluations of Bush, Dukakis, Jackson, and Reagan, as well as presidential vote -- is taken from the 1988 NES. All variables coded on 0-1 interval.
Union mattered more when the issue was presented *unencumbered* by frames. The differences are especially noteworthy for the Democrats, doubling in the case of Dukakis (the coefficient is -.123 in the framed condition and -.240 in the stripped condition) and more than tripling in the case of Jackson (-.058 versus -.202). Evidently, by turning the issue into a judgment of the intentions of Gorbachev and the Soviets, the cold war rhetoric of the frame blunted its relevance, particularly for the Democrats. Perhaps for Democratic leaders, the issue is one of *our* resolve and strength, not the intentions of the other side. Finally, when framed in terms of black deservingness and equality of opportunity, opinions on assistance to blacks generally took on greater significance in 1988, especially so in assessments of Jackson (there the coefficient was -.162 in the stripped condition and -.314 in the framed).

**Alternative Frames Experiments**

In our second set of experiments, the object was to assess the impact on opinion of alternative frames. On the issue of affirmative action for blacks, respondents were reminded that opposition to affirmative action might be justified *either* on grounds that such policies hand to blacks advantages they have not earned *or* on grounds that such policies amount to reverse discrimination; in both conditions, respondents were reminded that support for affirmative action might be justified as compensation for past discrimination. On the issue of assistance to the poor, respondents were reminded that opponents argue *either* that such assistance gives away money to people who really don't need the help *or* that the huge budget deficit makes such assistance impossible; in both conditions, respondents were reminded that programs for the poor are necessary to help people who, through no fault of their own, cannot earn enough to take care of their families. Finally, on our third issue, dealing with AIDS, respondents were reminded that opposition to government funding for AIDS might be justified *either* on grounds that the
victims of the disease should have been more careful in the first place or on grounds that the government has more important health problems to spend money on, particularly cancer; in both conditions, respondents were reminded that spending on AIDS made sense in light of the grave threat the disease posed to the nation.

In this second set of experiments, we are interested especially in three questions. To what extent do rival frames affect what opinions people express on matters of policy (the distribution of opinion question); how people put their opinions together (the antecedents question); and what implications people draw from their opinions for their assessments of political leaders (the question of consequences).

The distribution of opinion

We expected frame effects on the balance of opinion to be more likely to show up here, in comparisons between rival frames, than in our first set of experiments. Such effects seem more likely when comparing alternative rationales: perhaps one would simply turn out to be more compelling to our respondents than the other, either because it was in fact more compelling or because we represented it more deftly.

As it happens, we do find some indications of shifts in overall opinion as a function of alternative frames. These results are displayed in table 7. As revealed there, public opinion ran a bit more strongly against affirmative action when the issue was framed as reverse discrimination rather than unfair advantage (the relevant figures are 79.5% and 75.3%). The difference is not large, and it does not reach statistical significance, but it is virtually identical in size to the differences observed in three comparable experiments carried out on previous NES surveys. In all four cases, opposition to affirmative action is stronger when the issue is framed as reverse discrimination. On government programs targeted for the poor, the rival frames made a more decisive difference. By better than 10
Table 7
The Distribution of Opinion on Affirmative Action, Assistance to the Poor, and Spending on AIDS as a Function of Alternative Question Frames

### Affirmative Action

<table>
<thead>
<tr>
<th>Favor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Opposed</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not earned</td>
<td>29</td>
<td>30</td>
<td>87</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(12.1)</td>
<td>(12.6)</td>
<td>(36.4)</td>
<td>(38.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reverse discrim.</td>
<td>20</td>
<td>24</td>
<td>74</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(9.3)</td>
<td>(11.2)</td>
<td>(34.6)</td>
<td>(44.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi-square = 2.04, N.S.  
\( t = -1.33, p < .19 \)

### Assistance to the Poor

<table>
<thead>
<tr>
<th>Increase</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Decrease</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t need help</td>
<td>59</td>
<td>63</td>
<td>158</td>
<td>13</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(19.3)</td>
<td>(20.7)</td>
<td>(51.8)</td>
<td>(4.3)</td>
<td>(3.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget deficit</td>
<td>77</td>
<td>74</td>
<td>118</td>
<td>13</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(26.5)</td>
<td>(25.4)</td>
<td>(40.5)</td>
<td>(4.5)</td>
<td>(3.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi-square = 9.17, \( p < .06 \)  
\( t = -2.51, p < .02 \)

### Spending on Aids

<table>
<thead>
<tr>
<th>Increase</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Decrease</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Blame victim</td>
<td>132</td>
<td>55</td>
<td>105</td>
<td>6</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(42.7)</td>
<td>(17.8)</td>
<td>(34.0)</td>
<td>(1.9)</td>
<td>(3.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spend on cancer</td>
<td>136</td>
<td>57</td>
<td>93</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Row%)</td>
<td>(46.1)</td>
<td>(19.3)</td>
<td>(31.5)</td>
<td>(1.4)</td>
<td>(1.7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi-square = 3.15, N.S.  
\( t = .312, N.S. \)
percentage points, Americans were more likely to support assistance to the poor when they were reminded of the deficit than when they were reminded that the poor "don't really need the help", a large and statistically reliable difference. Whether we can afford to help the poor appears to take a back seat to whether we ought to. Finally, virtually all Americans want at least to maintain current levels of spending on AIDS, and this is so pretty much regardless of how the question was posed. Recommendations that spending be cut were quite uncommon, but they did show up somewhat more frequently in the blame victim frame (5.5% versus 3.1%).4

The antecedents of opinion

The alternative frame experiments were set up with a special interest in seeing whether differences in the content of rival frames can make a difference to the pattern of ingredients that go into the opinion. The results of our framed versus stripped experiments suggest that the particular rhetoric utilized in the frame can influence the considerations brought to bear on an issue. The alternative frame experiments put this possibility to a more stringent test. The analyses that follow are intended to provide a more detailed story about how opinions change with alterations in question frame. Their practical relevance is to indicate the extent to which selecting frames for question wording is a consequential act

4. Although we had no clear expectation how things would turn out, we did of course look to see whether rival frames affected the willingness of respondents to express an opinion in the first place. There is a faint suggestion that they did. In each of the three cases, it was the frame that drew attention to the apparent beneficiary of the policy in question -- blacks, the poor, victims of AIDS -- that yielded opinions in greater numbers. The difference approached statistical significance in only one instance, however: on affirmative action, 76.6% of respondents offered an opinion when the issue was framed as undeserved advantage, compared to the 70.9% who did so when the issue was framed as reverse discrimination (Chi-square = 2.62, p = .11).
As before, we undertook two identical regression analyses for each of the three issues. Each pair of equations included the same set of plausible antecedents. For the purpose of analyzing the antecedents of opinions on assistance to the poor, for example, these included measures of moral conservatism, assessments of the national economy, attitudes toward the poor, views toward the propriety of government intervention as a matter of principle, and, at a more programmatic level, attitudes toward government services, views on equal opportunity, and attitudes toward blacks. Comparable lists of antecedent variables were developed for the issues of affirmative action and government spending on AIDS as well (see table 8 for the lists and Appendix B for details on the measures). Each equation also included our standard set of demographic and political variables, and as before, we coded all variables on the 0-1 interval.

Table 8 presents the results, once again in the form of unstandardized regression coefficients. Just what you need: another avalanche of coefficients. We do not pretend to understand everything that appears in table 8, but we do understand some of it, and for the moment we will stick to that.

When it came time actually to specify the determinants of public opinion on our three issues -- affirmative action, assistance to the poor, and AIDS -- we developed one clear expectation: that opinion on each was partly a judgment about the deservingness of the intended beneficiaries of the policies. And, because in each case one version of the oppositional frame emphasized this theme -- blacks should get ahead on their own, the poor don’t really need the help, AIDS victims should have been more careful -- while the other version did not, we expected that evaluations of the beneficiaries would be more important in the former conditions than in the latter. And so it was, as table 8 reveals.
Table 8
Antecedents of Opinion on Affirmative Action, Aid to the Poor, and Spending on AIDS as a Function of Alternative Frames

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Affirmative Action</th>
<th>Aid to the Poor</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Earned</td>
<td>Reverse</td>
<td>Don't Need</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discrim.</td>
<td>the Help</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deficit</td>
</tr>
<tr>
<td>Moral conservatism</td>
<td>.322 (0.101)</td>
<td>.064 (.108)</td>
<td>.078 (.076)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.081 (.063)</td>
</tr>
<tr>
<td>National economy</td>
<td>-.174 (.112)</td>
<td>-.022 (.112)</td>
<td>-.081 (.083)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.081 (.087)</td>
</tr>
<tr>
<td>Gov't services</td>
<td>.260 (.110)</td>
<td>.007 (.109)</td>
<td>.209 (.081)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.200 (.051)</td>
</tr>
<tr>
<td>Gov't intervention</td>
<td>(.068)</td>
<td>.084 (.069)</td>
<td>(.017)</td>
</tr>
<tr>
<td></td>
<td>(.095)</td>
<td>(.104)</td>
<td>(.074)</td>
</tr>
<tr>
<td>Att's toward poor</td>
<td>-.149 (.068)</td>
<td>-.088 (.069)</td>
<td>-.427 (.051)</td>
</tr>
<tr>
<td></td>
<td>(.095)</td>
<td>(.104)</td>
<td>(.074)</td>
</tr>
<tr>
<td>Equal opportunity</td>
<td>.148 (.114)</td>
<td>.181 (.121)</td>
<td>.214 (.089)</td>
</tr>
<tr>
<td></td>
<td>(.114)</td>
<td>(.121)</td>
<td>(.089)</td>
</tr>
<tr>
<td>Att's toward blacks</td>
<td>.393 (.205)</td>
<td>.373 (.203)</td>
<td>-.041 (.151)</td>
</tr>
<tr>
<td></td>
<td>(.205)</td>
<td>(.203)</td>
<td>(.151)</td>
</tr>
<tr>
<td>Aff. act. as threat to whites</td>
<td>-.206 (.077)</td>
<td>-.199 (.077)</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>(.077)</td>
<td>(.077)</td>
<td>---</td>
</tr>
<tr>
<td>Aff. act. as threat to family</td>
<td>-.062 (.061)</td>
<td>.064 (.066)</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>(.061)</td>
<td>(.066)</td>
<td>---</td>
</tr>
<tr>
<td>Ident. as white</td>
<td>-.077 (.062)</td>
<td>.021 (.069)</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>(.062)</td>
<td>(.069)</td>
<td>---</td>
</tr>
<tr>
<td>Religious traditionalism</td>
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<td>---</td>
</tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Att's toward gays</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cases 253 245 265 263 300 292
R-squared .32 .15 .30 .30 .18 .14
Standard error of regression .26 .28 .21 .22 .25 .24

Note: Table entry is the unstandardized regression coefficient, with standard errors underneath in parentheses. Blanks indicate that the variables were excluded from the equation. Each equation also included measures of age, region (South), education, race (black), gender (male), level of political information, ideological identification, and party identification, all taken from the 1988 NES. On the issue of affirmative action and aid to the poor, the analysis is based on whites only. All variables coded on 0-1 interval.
The surprise, at least to us, is that the difference is not more sizable. Attitudes toward the poor, it is true, played a considerably larger role in public opinion on government programs for the poor when respondents were reminded that the poor might not need the help than when they were reminded about the deficit (-.427 versus -.309). And attitudes toward gays loomed somewhat larger in public opinion on AIDS when the question hinted that AIDS victims were responsible for their own demise than when the question suggested that we had more important health problems to spend money on (.195 versus .119). But attitudes toward blacks were only slightly non-significantly more important to opinion on affirmative action when respondents were reminded that blacks might not deserve special help than when they were reminded that affirmative action for blacks might infringe upon the rights of whites (.393 versus .373). It is true that this tiny difference grows to a more respectable size in less elaborate specifications. And it is also true that perhaps the most dramatic contrast in the entire table is to be found in the differential impact of moral conservatism on the public's views on affirmative action. Moral conservatism is powerfully associated with views on affirmative action, but only under the unfair advantage frame (.322 versus .064). Evidently, the implication that blacks are getting something for nothing arouses moral apprehensions in a much more potent way than does the prospect of discrimination against whites.

The consequences of opinion

In our final analysis, we estimated the extent to which alternative frames affect the political consequences of opinions on government policy. As before, we looked for the consequences of opinion in citizens' evaluations of Bush, Dukakis, Jackson, and Reagan, and on their vote in the 1988 presidential contest. In light of the results on the antecedents of opinion, reported above, we anticipated that opinion would matter more when the issue was framed in terms of desert, when affirmative action, assistance to the poor, and
spending on AIDS were represented as referenda on the moral standing of the policy's beneficiaries.

Following our customary procedure, we estimated a pair of identical equations for each of the three issues. For purposes of control, each equation also included the standard demographic and political variables. As before, all variables were coded on to the 0-1 interval. Table 9 summarizes the results: they show small differences running, with a single trivial exception, uniformly in the expected direction. On 19 of 20 occasions, opinion on policy made a larger difference when the issue was framed in moral terms. The differences are seldom large, but their consistency is impressive. We should remember here also an earlier result from the framed versus stripped experimental series. Of the three issues we examined there, government assistance to blacks resembles most in form the distinction we believe is implicit in the alternative frames experiments. In the framed version of the government assistance to blacks issue, remember, respondents were provoked to think about whether blacks are still denied equal opportunity and whether blacks should move ahead on their own, just as other groups had done before them. Thus the framed version highlights the question of deservingness, just as our alternative frame experiments do, and, turning back to table 6, we notice again that the framed version of the government assistance to blacks question is generally more powerful than the stripped version.

Nowhere are the results overwhelming, but they are very consistent. Portraying an issue as if it were a moral judgment on the worth of the intended beneficiary appears to enliven the issue for politics. In this light, citizens appear to be participating in politics as rough and ready normative theorists. They seem, that is, to be asking not only what do I like or what have you done for me or the country lately, but what is right?
Table 9
Consequences of Opinion on Affirmative Action, Aid to the Poor, and Spending on AIDS as a Function of Alternative Question Frames

<table>
<thead>
<tr>
<th>Consequences</th>
<th>Affirmative Action</th>
<th>Aid to the Poor</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Earned</td>
<td>Reverse Discrim.</td>
<td>Don't Need the Help</td>
</tr>
<tr>
<td>Bush</td>
<td>.106</td>
<td>.062</td>
<td>.106</td>
</tr>
<tr>
<td></td>
<td>(.048)</td>
<td>(.050)</td>
<td>(.056)</td>
</tr>
<tr>
<td>Dukakis</td>
<td>-.086</td>
<td>-.012</td>
<td>-.143</td>
</tr>
<tr>
<td></td>
<td>(.051)</td>
<td>(.053)</td>
<td>(.060)</td>
</tr>
<tr>
<td>Jackson</td>
<td>-.181</td>
<td>-.112</td>
<td>-.192</td>
</tr>
<tr>
<td></td>
<td>(.057)</td>
<td>(.059)</td>
<td>(.067)</td>
</tr>
<tr>
<td>Reagan</td>
<td>.152</td>
<td>.079</td>
<td>.193</td>
</tr>
<tr>
<td></td>
<td>(.052)</td>
<td>(.055)</td>
<td>(.061)</td>
</tr>
<tr>
<td>Presidential vote</td>
<td>.663</td>
<td>.338</td>
<td>3.227</td>
</tr>
<tr>
<td></td>
<td>(.659)</td>
<td>(.766)</td>
<td>(.931)</td>
</tr>
</tbody>
</table>

Note: Table entry is the unstandardized regression coefficient, except in the case of the vote equation, where the entry is the logit coefficient, with standard errors in parentheses. Each of the equations also included measures of age, region (South), education, race (black), gender (male), level of political information, ideological identification, and party identification, all taken from the 1988 NES. When estimating the consequences of opinion on affirmative action and on aid to the poor, the analysis is based on whites only. Evaluations of Bush, Dukakis, Jackson, and Reagan, as well as presidential vote, are taken from the 1988 NES. All variables coded on 0-1 interval.
Conclusion and (hardly any) Recommendations

Do frames matter? Absolutely.

Do framed opinions, compared to their stripped counterparts, resemble more the opinions Converse looked for and could not find? Not really. In our first set of experiments, we found that frames did facilitate the expression of opinion, but that such opinions were generally no more extreme, or stable, or rooted in antecedents, or consequential for evaluations of the dominant political figures of the moment. Frames matter, but in more locally sensible ways. Thus when respondents were reminded (in the framed condition) that government assistance to blacks could be thought about in terms of whether blacks deserved special assistance and the importance of equality of opportunity, opinions on that issue turned out to reflect more the views respondents held toward blacks and equality, and less the views they held toward the poor and social welfare programs in general; moreover, such opinions, framed in that way, tended to count for more in evaluations of the contending candidates, particularly Jackson.

In the second set of experiments, the general rule was small but consistent frame effects. Alternative frames (occasionally) shift the balance of opinion, highlight certain antecedents at the expense of others, and enhance or reduce the political relevance of the opinion, apparently by warming up the issue or cooling it off.

We are encouraged to have witnessed some consistency in framing effects. In particular, it seems that frames which allude to the moral shortcomings of social groups tap a natural way of thinking about public policy -- a point made some time ago by Converse (1964). Various lines of research in social psychology point to the seemingly fundamental advantage enjoyed by considerations of character over considerations of circumstance
(Nisbett and Ross 1980). For better or for worse, "deservingness" appears to be a primary metric by which the worthiness of social programs is measured.

Frame effects can also be subtle (perhaps unintelligible). Consider the difference between the "budget deficit" frame in the aid to the poor issue, and the "spend on other things, like cancer" frame in the AIDS question. On the surface, both appear to allude to considerations of fiscal or budgetary restraint, yet they have opposite effects (table 8). Perhaps the insertion of a single specific program -- i.e. cancer, in the AIDS frame -- put respondents in a state of mind where they considered trading off worthwhile programs against one another. By contrast, the "budget deficit" frame seems to have accessed respondents' views about government spending in general.

Some might look at out various results and concede that we did not put words in respondents' mouths, but still might find the whole framing exercise distasteful, thinking of it as a veiled persuasion attempt. While we wouldn't advocate that all questions be enclosed in frames, we believe such hypothetical objections cut to the theoretical question of how well survey questions simulate the typical circumstances under which the respondent considers issues like government assistance to blacks, spending on the AIDS question, and cooperation with the Russians. Is it true that such issues merely "occur" to the individual, unaffected by the larger political context? Or is it more likely that the individual will encounter such problems cloaked in some sort of frame, whether it be a blatant slanting of the issue for the benefit of some framing agent, or perhaps a more innocent but nevertheless biased presentation? Some might still resist, claiming that we should not be so bold as to presume we know the most appropriate frames to use. Again, we would not claim that "stripped" questions solicit meaningless responses, but we would maintain that framing is an ongoing and natural process, which is replicated closely or distantly by the framing experiments reported here.
Finally, when we embarked on this project, we did not imagine that we would come out the other side with a crisp recipe for question writing. Certainly we are in possession of no such recipe now. Nor do we expect that one will emerge from the further thinking and deeper analysis that our experiments require. But we have come out the other side more convinced that experiments of the sort we have undertaken are highly useful tools for probing the nature of public opinion and political choice -- and that NES should continue to commission such experiments. We believe that experiments can help us understand better what it is we as survey researchers are doing to respondents when we pose questions to them in particular ways; in the longer run, experiments can also help illuminate what public discourse does to all of us in our roles as citizens.
APPENDIX A
Experimental Series I:
Framed Questions versus Stripped Questions

1. Abortion [NES core question adapted to telephone]

Framed:

There has been some discussion about abortion during recent years. Some Americans oppose abortion; they think of themselves as "pro-life;" they believe that abortion is murder. Other Americans believe that a woman should have the right to an abortion; they think of themselves as "pro-choice;" they believe that whether or not to have an abortion must be the woman's choice, not the government's. Which one of the opinions I am about to read you best agrees with your view on abortion?

One: By law, abortion should never be permitted

Two: The law should permit abortion only in case of rape, incest or when the woman's life is in danger

Three: The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established

Four: By law, a woman should always be able to obtain an abortion as a matter of personal choice

Other, specify: 

Don't know

Stripped:

There has been some discussion about abortion during recent years. Which one of the opinions I am about to read you best agrees with your view on abortion?

One: By law, abortion should never be permitted

Two: The law should permit abortion only in case of rape, incest or when the woman's life is in danger

Three: The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established

Four: By law, a woman should always be able to obtain an abortion as a matter of personal choice
Other, specify: ______________________________

______________________________

Don't know

2. Soviet Union  [NES core question adapted for telephone]

Framed:

Our next question concerns the relationship between the United States and the Russia. Some Americans feel that we should try to cooperate more with Russia, in order to reduce the chances of a nuclear war. Other Americans believe that we should be much tougher in our dealings with Russia because Russian leaders are communists and they still want to take over the world. Do you have an opinion on this, or haven't you thought much about it?

Do you feel we should try to cooperate more with Russia, get tougher in our dealings with Russia, or is your opinion somewhere in between?

Should we try to cooperate a lot more or somewhat more? / Should we get a lot tougher or somewhat tougher?

Stripped:

Our next question concerns the relationship between the United States and the Russia. Some people feel we should try to cooperate more with Russia, while others believe we should be much tougher in our dealings with Russia. Do you have an opinion on this, or haven't you thought much about it?

Do you feel we should try to cooperate more with Russia, get tougher in our dealings with Russia, or is your opinion somewhere in between?

Should we try to cooperate a lot more or somewhat more? / Should we get a lot tougher or somewhat tougher?

3. Government Assistance to Blacks  [Close to NES core question adapted for telephone]

Framed:

Some people feel that the government in Washington should make a special effort to improve the social and economic position of blacks, because blacks still don't have the same opportunities to get ahead as everyone else. Others feel that the government should not make any special effort to help blacks; that blacks should help themselves, just as other groups have done. Do you have an opinion on this issue, or haven't you thought much about it?

Do you feel the government should or should not make a special effort to help blacks, or is your position somewhere in between?
Should the government help blacks to a great extent or only to some extent? / Should the government make any effort at all to improve the position of blacks?

Stripped:

Some people feel that the government in Washington should make a special effort to improve the social and economic position of blacks, while others feel that the government should not make any special effort to help blacks. Do you have an opinion on this issue, or haven't you thought much about it?

Do you feel the government should or should not make a special effort to help blacks, or is your position somewhere in between?

Should the government help blacks to a great extent or only to some extent? / Should the government make any effort at all to improve the position of blacks?
Experimental Series II:
Alternative Frames

1. Affirmative Action in Employment

Frame A:

Next is a question about whether employers should favor blacks when they decide who to hire and promote. Some people say that because of past discrimination, employers should give preference to qualified blacks. Others disagree, saying that favoring blacks gives them advantages that they haven't really earned. Do you have an opinion on this issue, or haven't you thought much about it?

Are you for or against employers favoring blacks when they decide who to hire and promote?

Do you support/oppose favoring blacks strongly or not strongly?

Frame B:

Next is a question about whether employers should favor blacks when they decide who to hire and promote. Some people say that because of past discrimination, employers should give preference to qualified blacks. Others disagree, saying that favoring blacks amounts to discrimination against whites. Do you have an opinion on this issue, or haven't you thought much about it?

Are you for or against employers favoring blacks when they decide who to hire and promote?

Do you support/oppose favoring blacks strongly or not strongly?

2. Assistance to Poor

Frame A:

Our next question deals with government programs to assist the poor. Some people say that government spending on such programs for the poor needs to be increased, to help those who, through no fault of their own, simply cannot earn enough to take care of themselves and their children. Others say that government spending on such programs for the poor should be decreased, because they give away money to people who don’t really need the help. If you had a say in making up the federal budget this year, would you like to see spending on programs that assist the poor increased, decreased, or stay the same?

Increased/Decreased a little or a lot?

Frame B:
Our next question deals with government programs to assist the poor. Some people say that government spending on such programs for the poor needs to be increased, to help those who, through no fault of their own, simply cannot earn enough to take care of themselves and their children. Others say that government spending on such programs for the poor should be decreased, because given the huge budget deficit, we simply can’t afford it. If you had a say in making up the federal budget this year, would you like to see spending on programs that assist the poor increased, decreased, or stay the same?

Increased/Decreased a little or a lot?

3. AIDS

Frame A:

Our next question deals with the disease AIDS. Some Americans believe that AIDS is a very serious threat to public health, that too many people have already died from AIDS, and that the government in Washington should spend more money trying to stop the spread of AIDS and taking care of those people who already suffer from the disease. Other Americans believe that most people who get AIDS -- primarily homosexual men and intravenous drug users -- should have been more careful in the first place. If you had a say in making up the federal budget this year, would you like to see spending increased, decreased, or stay the same for the fight against AIDS?

Increased/Decreased a little or a lot?

Frame B:

Our next question deals with the disease AIDS. Some Americans believe that AIDS is a very serious threat to public health, that too many people have already died from AIDS, and that the government in Washington should spend more money trying to stop the spread of AIDS and taking care of those people who already suffer from the disease. Other Americans believe that the government has more important things to spend money on, like cancer research. If you had a say in making up the federal budget this year, would you like to see spending increased, decreased, or stay the same for the fight against AIDS?

Increased/Decreased a little or a lot?
APPENDIX B
Scales and Their Constituent Elements

I. Equal opportunity: alpha = .664
1. Do whatever necessary for equality (5927)
2. Pushed equal rights too far (5928)*
3. Should worry less about how equal people are (5929)*
4. It’s not a problem if some people have more of a chance (5930)*
5. Fewer problems if people treated more equally (5931)
6. One of the big problems is not equal chances (5932)

II. Attitudes toward blacks: alpha = .674
1. Racial Prejudice
   A. Irish, etc got ahead on their own; blacks should do same (6011)*
   B. Blacks have gotten less than they deserve (6012)
   C. Blacks should try harder (6013)*
   D. Slavery and discrimination have done in blacks (6014)
2. Thermometer rating of whites - thermometer rating of blacks
3. Thermometer rating of civil rights leaders (5215)*

III. Moral conservatism: alpha = .618
1. The world is always changing and we should adjust our view of morality to these changes (6001)
2. We should be more tolerant of those with differing moral standards (6002)
3. More emphasis on family ties (6003)*
4. Newer lifestyles breaking down society (6004)*

IV. Religious traditionalism: alpha = .766
1. Does religion give a great deal of guidance in your life? (5936)
2. Literal interpretation of the bible (5937)*
3. How often do you pray? (5938)
4. Identification with Christian fundamentalists (6507; 6517)
5. Consider yourself a born-again Christian? (1213)

V. National economic outlook: alpha = .673
A. Has the level of unemployment improved? (427)
B. Has inflation improved? (429)
C. Has the economy overall improved? (431)

VI. Government services: alpha = .608
1. Should government provide more services? (601)*
2. Should there be a government health insurance plan? (617)
3. Should government provide a job and standard of living? (622)
4. Government should provide jobs etc. vs. government should not get involved in this (7365)

VII. Government intervention: alpha = .586
1. Government regulation of business is important vs. government regulation does more harm than good (7364)
2. We need a strong government vs. free market (7501)
3. Less government the better vs. government should do more (7502)
4. Business should earn big profits vs. profits should be restricted (7505)
5. Government is doing too much these days vs. problems are getting larger (7506)
VIII. Patriotism: alpha = .862
1. Does the American flag make you feel good? (6018)
2. How strong is your love of country? (6019)
3. How emotional does the national anthem make you feel? (6020)
4. How proud are you to be an American? (6021)

IX. Anti-communism: alpha = .722
1. The US should maintain its position as the world's most powerful nation even if it means going to the brink of war (6022)
2. Any time a country goes communist, it should be considered a threat to the vital interests and security of the US (6023)
3. The US should do everything it can to prevent the spread of communism to any other part of the world (6024)

X. Attitudes toward feminists: alpha = .468
1. Thermometer rating of feminists (5214)
2. Identification with feminists (6506)
3. Women's role (726)*

XI. Attitudes towards gays: Pearson r = .561
1. Thermometer rating of gays (5236)
2. Support for gay rights (5809)*

XII. Fear of war: Pearson r = .563
1. Concern over conventional war (5814)
2. Concern over nuclear war (5815)

XIII. Attitudes towards the military: Pearson r = .345
1. Is important for US to have strong military forces? (6017)*
2. Thermometer rating of the military (5227)

XIV. Attitudes towards the poor: alpha = .492
1. Thermometer rating of the poor (5219)
2. Thermometer rating of welfare recipients (5216)
3. Poor are poor because they don't work hard vs. circumstances beyond control (7369)

XV. Affirmative action's threat to whites: Pearson r = .387
1. Whites left out of jobs because of Affirmative Action (7431)
2. Whites left out of jobs, schools, promotions because of Affirmative Action (7435)

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1 Alpha = Cronbach's reliability coefficient.
2 Number in parentheses = variable number taken from 1989 National Election Pilot Study Codebook.
* Item reversed for purposes of scale construction.
REFERENCES


