

A Note on the Endogeneity of Ideological Placements of Government Institutions*

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by

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Abstract

Much public opinion research considers the effects of issue distance or broad ideological distance on political judgments of political actors. The research typically assumes that individuals' placements of the actors are exogenous to political judgments, i.e., that approval of actors does *not* structure placements themselves. However, there is good reason to think that the placements are endogenous (Markus and Converse, 1979). This manuscript addresses the possibility, focusing particularly on broad ideological placements of the three government institutions in the US. The author outlines a simple model of ideological placements and political judgments and then provides a basic diagnostic analysis, one that is not complicated by issues of identification and specification. Specifically, the author estimates the effects of two different components of self-institution distance—a clearly exogenous component that reflects differences in self-placement and the potentially endogenous component that reflects differences in institutional placements—on judgments of the institutions. Although the pattern of results cannot tell us whether institutional placements are exogenous, it can tell us whether they are endogenous, at least under certain circumstances. The results of the analysis indicate that ideological placements of certain institutions are structured by political judgments, particularly for the Supreme Court and, to a lesser extent, the Congress. This also may be true of other liberal-conservative placements, including those of political parties, social groups, and politicians themselves. It may be the case for issue placements of political actors as well.

For a long time, the American National Election Studies (ANES) has asked respondents to place themselves, the political parties, and selected politicians on a seven-point liberal-conservative scale. With the exception of the president, however, survey respondents have not been asked to provide placements of government institutions in the United States (US), that is, until the 1997 Pilot Study. There, the ANES asked respondents to place the president, Congress, and the Supreme Court (and government policy itself) on a seven-point ideological scale.¹ In previous research, Carman and Wlezien (1998) found these placements to be quite meaningful: Respondents were likely to place the three government institutions and policy on the ideological scale, the distribution of means is sensible, and the placements are related in understandable ways. They also showed that measures of self-institution ideological distance nicely predict judgments of each government institution. However, we do not know from the research whether ideological placements of government institutions are themselves endogenous to political judgments, i.e., that approval of an institution actually structures individuals' placements of the institution. This is of obvious importance and has been recognized for some time (Markus and Converse, 1979), though it has been ignored in much academic research.

This manuscript addresses the endogeneity of ideological placements of government institutions in the US. Actually disentangling reciprocal causality is not straightforward using cross-sectional data and I do not do so in the usual way—by specifying structural equations models of ideological placements and political judgments. Instead, I rely on a straightforward and very basic technique, one that is not complicated by issues of identification and

¹ Inter-University Consortium for Political and Social Research Study No. 2282. The study is a one-wave reinterview of a randomly selected subset of 1996 ANES respondents with telephones.

specification. Specifically, I estimate the effects of two different components of self-institution distance—a clearly exogenous component that captures distance from the mean institutional placement and the potentially endogenous, residual component—on judgments of the institutions. Although the pattern of results cannot tell us whether institutional placements are exogenous, it can tell us whether they are endogenous, at least under certain circumstances.

A Simple Model of Ideological Placements and Political Judgments

There is a long-standing tradition in political science that conceives of and models political judgments in terms of issue distance. Beginning with Downs (1957), a stream of scholars have relied on the classic spatial model, which posits that an individual's utility is greatest for candidates or parties closest to their own issue positions (see, e.g., Alvarez 1997; Enelow and Hinich 1984; 1989; Enelow, Hinich, and Mendell 1986; Erikson and Romero 1990; Jackson 1975; Rabinowitz, Prothro, and Jacoby 1982; Rivers 1988). For any one particular political actor and a single issue dimension, the model is straightforward.² Each individual's utility (U_i) for the political actor, say the president, is a simple function of the absolute distance between each individual's position (S_i) and the president's position (I):

$$(1) \quad U_i = a_o + \beta |S_i - I| + u_i,$$

where a_o represents the intercept and u_i is a normally distributed disturbance term that captures other non-issue sources of utility for the president. As is clear in the equation, the effect (β) of

² The term "political actor" is used to refer to any of a broad range of individual and institutional actors, e.g., candidates, parties, and government institutions.

distance is expected to be negative, so that the greater (smaller) the distance between the individual's position and the president's position, the lower (higher) the utility for the president.³

We might conceive of the effects of broad ideological distance in much the same way. That is, the evaluation of a political actor is a function of the distance between one's liberal-conservative self-placement and the liberal-conservative placement of the actor. There is good reason to suppose that this unidimensional model oversimplifies reality, however. We already know that the meaning of ideological labels varies across individuals (Converse, 1964; Knight 1999): For some individuals, ideology reflects issue-based concerns; for other individuals, it reflects group-related ones; for yet others still, ideology reflects more transitory factors.⁴ Of course, the weights (or salience) that individuals place on different issues or groups also can vary. The main point is that individuals may rely on a variety of different dimensions when placing themselves or political actors on a broad liberal-conservative continuum. For example, we can conceive of an individual's own position on this continuum as $\sum b_{ij} S_{ij}$, which is the sum of placements on dimensions j weighted by the salience (b_{ij}) of the different dimensions. Note that the sum of the weights for each individual equals 1.0. Likewise, we can conceive of the position of the political actor as $\sum b_{ij} I_j$. Thus, from this perspective, the institutional placement varies meaningfully across individuals due to the different weights they attach to different dimensions. This is of obvious importance. Substituting into equation 1 produces the following equation:

$$(2) \quad U_i = a_o + \beta |S_i - I_i| + u_i,$$

³ Scholars typically assume that the effects are not linear and instead take the form of quadratic loss, which simply involves squaring the distance term in equation 1.

⁴ Also see Brady and Sniderman (1985) and Miller, Wlezien, and Hildreth (1991).

where I_i represents each individual's ideological placement of the institutional actor. The only difference from equation 1 is that the institutional placement varies across individuals. Of course, the model only captures distance broadly defined, the equivalent of the *net effect* of distance across different underlying dimensions. In effect, political judgments are a function of the distance between the weighted sums of placements on the dimensions, not the weighted sum of distance between these placements. The ideological distance model thus is very general. This is by definition.⁵

Now, the model presumes that the measures of ideological distance are exogenous, i.e., that distance is not caused by judgments of the institutions themselves. There is good reason to think that perceived ideological distance is not exogenous, and that individuals' placements of an institution—given their own self-placements—reflect approval of the institution (see Markus and Converse 1979). Specifically, we might expect that the more (less) an individual approves of an institution, the closer (further) the individual places the institution to (from) oneself. From this perspective, the placement of an institution is as follows:

$$(3) \quad I_i = a_o + \beta (S_i - \bar{I}) U_i + e_i,$$

where \bar{I} represents the mean location of the institution and $-1 \leq U_i \leq 1$ and β is greater than 0.⁶

This may be true despite Carman and Wlezien's (1998) diagnostic analyses, which show that respondents' institutional placements add up quite nicely, though imperfectly, in placements of

⁵ In practice, the model only offers a baseline estimate of the effects of distance across issues and other non-issue dimensions. It conceals effects when the direction of distance varies across dimensions, that is, when individuals place an institution to the left of self-placements on some dimensions and to the right on others. In effect, distances on the different dimensions cancel out.

⁶ If institutional placements are perfectly endogenous, β would be equal to 1 and the intercept would be equal to \bar{I} .

policy and thus seem to capture meaningful information about institutional behavior. Indeed, Carman and Wlezien actually provide strong evidence of “contrast” effects (King 1977; Granberg 1985), where institutional placements are negatively-related to self-placement, as endogeneity would imply.⁷ Whether placements directly reflect political judgments themselves still is not clear based on these analyses. The possibility that they do seriously complicates the analysis of political judgments. It ultimately may be that ideological distance does not cause but is instead caused by respondents’ judgments of the institutions.

Disentangling (Some of) The Endogeneity

How can we tell whether one or the other model in equations 2 and 3 (or both) is at work? Given the potential endogeneity, estimating either equation tells us absolutely nothing. One way to proceed is to estimate a simultaneous equations model of ideological distance and political judgments. This is a logical course to take, but not entirely straightforward (see, e.g., Wlezien, Franklin, and Twiggs 1997; Evans and Andersen, 2001). The problem centers on model identification, both structural and empirical. What is the underlying structural model? Does it allow us to proceed to estimation? Can we identify appropriate exogenous instruments? It is difficult to answer these questions in a satisfactory way, which is important. After all, the assumptions one makes tutor the results one gets.

It is tempting to avoid the issue altogether by using the mean institutional placement in measures of distance. Since the mean placement is exogenous, measures of self-institution distance also are exogenous. Political judgments of an institution then can be modeled as a function of the absolute distance between one’s self-placement and the mean placement of the

⁷ Put directly, the more conservative (liberal) one’s self-placement, the more liberal (conservative) one’s placements

institution. The approach is fairly standard in analyses of issue distance and presidential judgments (see, e.g., Alvarez 1997) and surely would offer insight into the effect of ideological distance, as Wlezien and Carman (2001) have already shown. The approach still is limited: It assumes that all differences in individuals' institutional placements are endogenous. The approach nevertheless does provide useful information, that is, when compared with analyses using the original measures of perceived distance.

Consider that perceived distance is the sum of: (1) the clearly exogenous component that measures the distance between self-placements and the mean institutional placement ($|S_i - \bar{I}|$); and (2) the potentially endogenous component that measures the residual distance owing to differences in individuals' placements of the institution ($|S_i - I_i| - |S_i - \bar{I}|$).⁸ The residual component strictly reflects differences in individuals' institutional placements only when S_i is not between I_i and \bar{I} . If $I_i \leq S_i \leq \bar{I}$ or $\bar{I} \geq S_i \geq I_i$, the residual tells us little about the respondents' placements of an *institution* relative to the mean placement (and their own self-placements). For expository purposes, let me put aside these cases.⁹

Now, we are interested in whether the second, residual component is exogenous or endogenous. How can we tell? It is possible to glean some information by including both components into models of institutional judgments and comparing the two coefficients. Specifically, we can estimate the following equation:

$$(4) \quad U_i = a_o + \beta_1 |S_i - \bar{I}| + \beta_2 [|S_i - I_i| - |S_i - \bar{I}|] + u_i,$$

of the institutions.

⁸ The residual component thus can take both positive and negative values.

⁹ If we are interested in the endogeneity of ideological *distance* per se, then it would make sense to include the cases.

where β_1 and β_2 are assumed to be less than or equal to 0. We are interested in the relative size of these two coefficients. Specifically, we want to know whether β_1 is smaller than β_2 in absolute terms. Such a pattern would be strong evidence of endogeneity: There is no other reason to expect residual distance to matter more than the clearly exogenous component.¹⁰

We obviously are interested in those cases where β_2 is significantly different from 0—where perceived distance predicts political evaluations. Now, if the coefficient (β_1) for the exogenous component is not statistically significant, we can safely conclude that ideological distance does not matter for political judgments. Indeed, we can conclude that political judgments actually cause individuals' placements of the institution, i.e., that the placements are endogenous. Recall that there is no other reason to expect such a pattern. If β_1 is significant, conversely, we can conclude that ideological distance does structure political judgments. Then what matters is the relative size of the two coefficients. In the extreme, β_1 and β_2 are equal. Here we might suppose that perceived distance causes political judgments. Such a pattern would only be suggestive, however: It could be that the evident effect of the residual component ultimately reflects endogeneity in institutional placements that happens to exactly match the real effect of exogenous distance. We still could conclude that directly estimating the effect of perceived ideological distance would make little difference—the estimated effect would not be an artifact of endogenous institutional placements.¹¹ The strategy thus is limited, for it cannot tell us whether respondents' placements are exogenous. It nevertheless can tell us whether they are endogenous. Let us see how it works in practice.

¹⁰ The approach is equivalent to estimating the separate effects of perceived ideological distance and exogenous distance in the same model.

¹¹ In the middling case, β_1 is less than 0 but significantly different from β_2 . Here we can conclude that institutional placements are *at least* partly endogenous, that is, proportionate to the difference between the two coefficients.

Following Carman and Wlezien (1998), the dependent variables are the respondents' thermometer evaluations of the government institutions.¹² For each institution, the institutional thermometer rating is regressed on the two components of perceived distance. To be absolutely clear, the "exogenous" component represents the absolute value of the distance between individuals' self-placements and the mean placement of the corresponding institution.¹³ The "residual" component is the difference between perceived distance and the exogenous component itself. Recall that the coefficients are expected to be negative, so that the larger (smaller) the distance the lower (higher) the evaluation of an institution. Also recall that, in order to isolate the differences in individuals' institutional placements, we must exclude those cases where $I_i \leq S_i \leq \bar{I}$ and $\bar{I} \geq S_i \geq I_i$. The frequency of these orderings varies across institutions, which itself is suggestive: For the president, it occurs in 50 of 363 cases; for the Congress, 36 of 363 cases; for the Supreme Court, 23 of 357 cases. The results of analyses excluding these cases for the three institutions are shown in Table 1. (Results including the cases are shown in Table A1.)

– Table 1 about here –

It is clear in the table that the effects of the two components differ quite dramatically across institutions. We can see in the second row that the coefficient for residual distance is appropriately negatively-signed and statistically significant for each of the institutions. This is as expected, though notice that its size (in absolute terms) and significance do decline as we turn

¹² Also following Carman and Wlezien, the thermometers were adjusted using each respondent's average thermometer evaluation of seven groups: blacks, whites, labor unions, big business, people on welfare, gays and lesbians, and Christian fundamentalists. Specifically, the respondent's average rating of these seven groups was subtracted from the respondent's thermometer rating of each of the institutional thermometers. This adjustment helps account for any positivity bias, though it makes little difference in the analyses.

¹³ Using the median institutional placements makes little difference.

from the president to the Congress and then the Supreme Court. The effect of exogenous distance exhibits a different pattern. The coefficient is largest and most significant for the president, smaller and less significant for Congress, and very small and insignificant for the Supreme Court. The relative effect of exogenous distance also declines across the institutions: That is, the ratio between the coefficients for the exogenous and residual components shrinks.

What do these results tell us about ideological placements of the government institutions? To begin with, they indicate that individuals' placements of the Supreme Court are endogenous, i.e., that they do not cause political judgments but are caused by those judgments instead. Since the coefficient for exogenous distance is not significantly different from 0, this would seem fairly obvious.¹⁴ For Congress, things are less clear, as the coefficient for the exogenous component is statistically significant. We nevertheless can see that the estimated effect of residual distance on Congressional judgments is almost twice the effect of exogenous distance. This pattern might be taken to imply that individuals' placements of Congress are at least partly endogenous, proportionate to the difference between the two coefficients. (As noted above, there is no other reason to expect such a pattern.) However, the difference is not statistically significant ($F_{1,326} = 2.23, p = .14$), so we cannot strictly draw the conclusion based on this analysis.

For the President, things are even less clear. The coefficients for the two components of ideological distance are virtually identical ($F_{1,313} = 0.39, p = .53$). There thus is no evidence that individuals' presidential placements are endogenous. We cannot conclude that they are exogenous, however. It may be that the effect of residual distance captures endogeneity in the placements of the president that exactly equals the real effect of exogenous distance. All we can

¹⁴ Directly estimating the effects of perceived distance thus is quite deceiving ($b = -2.90, s.e.=.67$).

say for sure, therefore, is that directly estimating the effects of perceived ideological distance in models of political judgments will not exaggerate the real effect.¹⁵

– Table 2 about here –

Table 2 presents the results of more fully articulated models, containing both ideological self-placement and party identification.¹⁶ Notice that self-placement matters only for evaluations of Congress while party identification matters only for evaluations of Clinton. Understandably, including the variables does tend to dampen the effects of both components of ideological distance, mostly for the president, but leaves the structure essentially unchanged. If anything, the patterns evident in Table 1 are more pronounced. For the Supreme Court, the effect of exogenous distance is smaller and less distinguishable from 0. For Congress, the difference between the two distance coefficients now is larger and statistically significant ($p < 0.05$). This result implies that Congressional placements are endogenous, *at least* in proportion to the difference between the coefficients. The two coefficients in the presidential model now also differ quite considerably, though the difference is not significant ($F_{1,308} = 3.57, p = .07$). We thus cannot tell whether individuals' presidential placements are endogenous (or exogenous).

It is tempting to conclude that the endogeneity of ideological placements varies across institutions, that it is most pronounced for the Supreme Court, lower for Congress, and not present at all for the president. Such a pattern would be understandable given the evident differences in the structure, function, and salience of the institutions. After all, independently attributing an ideological position would seem to depend on the ease of assigning political

¹⁵ The coefficient is -9.84 (s.e.=.67). For purposes of comparison, when residual distance is excluded from the model, the coefficient for exogenous distance is -10.35 (s.e.=1.13). Note that the explained variances are quite different—the adjusted R^2 is .40 and .21, respectively.

responsibility, the content of institutional behavior, and the degree to which the behavior is known. Where it is relatively easy to assign political responsibility and decisions have explicit ideological content and are relatively well-known, as for the president, we might expect ideological placements to be exogenous. For the Congress, where it is more difficult to assign political responsibility and decisions, perhaps, are less well known, we might expect placements to be less exogenous. For the Supreme Court, where decisions are even less well known and tend to have less explicit ideological content, we might expect placements to be thoroughly endogenous. These expectations nicely mirror the effect of strictly exogenous distance on political judgments of the institutions themselves; as we have seen, the effect is most pronounced for Clinton, sharply lower for Congress, and not evident at all for the Supreme Court (also see Wlezien and Carman, 2001). While tempting, we still cannot conclude based on our analyses that the endogeneity of institutional placements actually varies across institutions. All we can conclude is that placements of the Supreme Court and, to a lesser extent, Congress are structured by evaluations of the institutions. The nature of presidential placements remains unclear.

Discussion

Endogeneity in responses to survey items is of obvious importance in most political science research relying on survey data. Indeed, there is reason to think that such “contamination” is pervasive (for a recent, very general statement, see van der Eijk, 2002). Unfortunately, it is difficult to actually detect and correct for endogeneity in survey responses, at least when using cross-sectional data. The problem centers on the proper identification of

¹⁶ Including the usual demographic suspects has little effect. Results are available upon request. Results including cases where self placement is between the individual’s institutional placement and the mean institutional placement are shown in Table A2.

simultaneous equations models, which is not straightforward. The assumptions one makes about the underlying structural model and choice of instruments can powerfully tutor the results one gets. However, there are other strategies available—indeed, very basic ones—that can provide us with at least some information. That is the main point of this essay.

As the foregoing analysis of political judgments reveals, simple diagnostics can offer quite useful information about possible endogeneity, at least in respondents' ideological placements of government institutions. By estimating the separate effects of the clearly exogenous component of self-institution distance and the potentially endogenous residual component, we learn quite a lot about the nature of institutional placements. We don't learn everything we want to know, as the approach is limited in a number of ways: it only can tell us whether individuals' responses are endogenous, not whether they are exogenous; it only does so under certain conditions; and, even to the extent we can determine that responses are endogenous, it does not allow us to explicitly correct for the evident contamination. The approach nevertheless can tell us whether estimating the effect of a variable, in our case, perceived ideological distance, would be deceiving. For judgments of the Supreme Court and, to a lesser extent, the Congress, it would be quite deceiving indeed: It would suggest that ideological distance structures political judgments when it actually is true that these judgments structure individuals' placements of the institutions. This also may be the case for ideological placements of other actors, including political parties, social groups, and politicians themselves. It may be the case for issue placements of political actors as well.

Table A1: Regressions of Institutional Feeling Thermometers on Components Of Perceived Absolute Distance – All Cases				
Components of Absolute Distance		Clinton	Congress	Supreme Court
Exogenous Distance	b	-9.90*	-2.94**	-0.72
	(s.e.)	(0.93)	(0.98)	(1.07)
	[β]	[-0.44]	[-0.15]	[-0.03]
Residual Distance	b	-9.85*	-5.45*	-4.81*
	(s.e.)	(0.98)	(0.83)	(0.86)
	[β]	[-0.42]	[-0.32]	[-0.28]
Constant	b	21.44*	4.80*	10.35
	(s.e.)	(1.78)	(1.41)	(1.56)
Adjusted R ²		.38	.12	.08
N		366	365	359

* $p < .01$ ** $p < .05$ (two-tailed)

Table A2: Regressions of Institutional Feeling Thermometers on Measures of Perceived Absolute Distance, Self-Placement, and Party Identification – All Cases

Components of Absolute Distance		Clinton	Congress	Supreme Court
Exogenous Distance	b	-5.35*	-2.24**	0.14
	(s.e.)	(1.53)	(1.02)	(1.12)
	[β]	[-0.24]	[-0.11]	[-0.01]
Residual Distance	b	-7.59*	-5.32*	-4.93*
	(s.e.)	(0.97)	(0.83)	(0.86)
	[β]	[-0.32]	[-0.32]	[-0.29]
Self-Placement	b	-0.15	1.46**	0.84
	(s.e.)	(1.26)	(0.68)	(0.75)
	[β]	[-0.01]	[0.14]	[0.07]
Party Identification	b	-4.04*	-0.04	0.60
	(s.e.)	(0.57)	(0.42)	(0.47)
	[β]	[-0.37]	[-0.01]	[0.08]
Constant	b	30.02*	-2.15	3.44
	(s.e.)	(3.50)	(3.04)	(3.34)
Adjusted R ²		.46	.14	.09
N		363	363	357

* $p < .01$ ** $p < .05$ (two-tailed)

References

- Alvarez, R. Michael. 1997. *Information and Election*. Ann Arbor: University of Michigan Press.
- Brady, Henry E. and Paul M. Sniderman. 1985. "Attitude Attribution: A Group Basis for Political Reasoning." *American Political Science Review* 79:1061-1078.
- Brody, Richard A. and Benjamin I. Page. 1972. "Comment: The Assessment of Policy Voting." *American Political Science Review* 66:450-458.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Carman, Christopher and Christopher Wlezien. 1998. "Ideological Evaluations of Government Institutions and Policy." *Reports on the 1997 Pilot Study*. Ann Arbor: National Election Studies.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In David Apter, ed., *Ideology and Discontent*. New York: Free Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper.
- van der Eijk, Cees. 2002. "Design Issues in Electoral Research: Taking Care of (Core) Business." *Electoral Studies* 21:189-206.
- Enelow, James M. and Melvin J. Hinich. 1989. "A General Probabilistic Theory of Elections." *Public Choice* 61:101-113.
- , 1984. *The Spatial Theory of Voting*. New York: Cambridge University Press.
- Enelow, James M., Melvin J. Hinich, and Nancy R. Mendell. 1986. "An Empirical Evaluation Of Alternative Spatial Models of Elections." *Journal of Politics* 48:675-693.
- Erikson, Robert S. 1982. "The 'Uncorrelated Errors' Approach to the Problem of Causal Feedback." *Journal of Politics* 44:863-881.
- Erikson, Robert S. and Kent L. Tedin. 1995. *American Public Opinion*. Boston: Allyn and Bacon.
- Erikson, Robert S. and David Romero. 1990. "Candidate Equilibrium and the Behavioral Model of the Vote." *American Political Science Review* 84:1103-1126.
- Evans, Geoffrey and Robert A. Andersen. 2001. "Endogenizing the Economy: Political Preferences and Economic Perceptions across the Electoral Cycle." Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago.

- Franklin, Mark, and Christopher Wlezien. 2002. "Reinventing Election Studies." *Electoral Studies* 21:331-338.
- Granberg, Donald. 1985. "An Anomaly in Political Perception." *Public Opinion Quarterly* 49:504-516.
- Granberg, Donald and Edward Brent. 1980. "Perceptions of Issue Positions of Presidential Candidates." *American Scientist* 68:617-25.
- Jackson, John. 1975. "Issues, Party Choices, and Presidential Voting." *American Journal Of Political Science* 19:161-186.
- Jacoby, William G. 1995. "The Structure of Ideological Thinking in the American Electorate." *American Journal of Political Science* 39:314-335.
- King, Michael. 1977. "Assimilation and Contrast of Presidential Candidates' Issue Positions, 1972." *Public Opinion Quarterly* 41: 515-522.
- Knight, Kathleen. 1999. "Liberalism and Conservatism." In John P. Robinson, Philip Shaver, and Lawrence Wrightsman (eds.), *Measures of Political Attitudes*. New York: Academic.
- Markus, Gregory and Philip E. Converse. 1979. "A Dynamic Simultaneous Equation Model Of Electoral Choice. *American Political Science Review* 73:1055-1070.
- Miller, Arthur H., Christopher Wlezien, and Anne Hildreth. 1991. "A Reference Group Theory of Partisan Coalitions." *Journal of Politics* 53:1134-1149.
- Rabinowitz, George, James Prothro, and William Jacoby. 1982. "Salience as a Factor in the Impact of Issues on Candidate Evaluation." *Journal of Politics* 44:41-64.
- Rivers, Douglas. 1988. "Heterogeneity in Models of Electoral Choice." *American Political Science Review* 32:737-758.
- Wlezien, Christopher and Christopher Carman. 2001. "Ideological Placements and Political Judgments of Government Institutions." *Public Opinion Quarterly* 65:550-561.
- Wlezien, Christopher, Mark N. Franklin, and Daniel Twiggs. 1997. "Economic Perceptions and Vote Choice: Disentangling the Endogeneity." *Political Behavior* 19:7-17.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

Table 1: Regressions of Institutional Feeling Thermometers ^a on Components Of Perceived Absolute Distance				
Components of Absolute Distance		Clinton	Congress	Supreme Court
Exogenous Distance ^b	b	-9.38*	-3.31*	-1.05
	(s.e.)	(0.99)	(1.04)	(1.08)
	[β]	[-0.41]	[-0.15]	[-0.05]
Residual Distance ^c	b	-10.31*	-5.34*	-4.12*
	(s.e.)	(1.01)	(0.84)	(0.87)
	[β]	[-0.45]	[-0.32]	[-0.25]
Constant	b	20.14*	5.42*	10.60
	(s.e.)	(1.96)	(1.54)	(1.59)
Adjusted R ²		.40	.13	.06
N		316	329	336

* $p < .01$ ** $p < .05$ (two-tailed)

^a To adjust for positivity bias, the Feeling Thermometers (FT) were centered using the formula:

$$\text{Centered Institution FT} = \text{FT Institution} - [(\text{FT Blacks} + \text{FT Whites} + \text{FT Christian Fundamentalists} + \text{FT Gays and Lesbians} + \text{FT Labor Unions} + \text{FT Big Business} + \text{FT People on Welfare})/7].$$

^b Exogenous Distance = the absolute value of the difference between self-placement and the mean institutional placement on the 7-point liberal-conservative scale.

^c Residual Distance = Perceived Absolute Distance minus Exogenous Distance, where Perceived Absolute Distance equals the absolute value of the difference between self-placement and the individuals=perceived institutional placement on the 7-point liberal-conservative scale.

Table 2: Regressions of Institutional Feeling Thermometers on Measures of Perceived Absolute Distance, Self-Placement, and Party Identification

Components of Absolute Distance		Clinton	Congress	Supreme Court
Exogenous Distance	b	-4.57*	-2.45**	-0.24
	(s.e.)	(1.61)	(1.08)	(1.14)
	[β]	[-0.20]	[-0.12]	[-0.01]
Residual Distance	b	-8.11*	-5.22*	-4.25*
	(s.e.)	(1.00)	(0.83)	(0.87)
	[β]	[-0.35]	[-0.32]	[-0.26]
Self-Placement	b	-0.59	1.66**	0.91
	(s.e.)	(1.30)	(0.70)	(0.75)
	[β]	[-0.04]	[0.16]	[0.05]
Party Identification	b	-3.88*	-0.01	0.36
	(s.e.)	(0.61)	(0.45)	(0.48)
	[β]	[-0.35]	[-0.01]	[0.05]
Constant	b	29.63*	-2.45	4.39
	(s.e.)	(3.55)	(3.17)	(3.33)
Adjusted R ²		.48	.15	.07
N		313	327	334

* $p < .01$ ** $p < .05$ (two-tailed)

