Think Tanks in the U.S. Media

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This article examines the relative media visibility of expertise from a sample of fifty-one public policy think tanks in six national newspapers between 1991 and 1998. We consider media visibility in relation to hypotheses developed from the interest group, media studies, and policy sciences literature and, using regression and descriptive analysis, establish that Washington-based think tanks and think tanks of no identifiable ideology have a distinct advantage in gaining media visibility. Ideologically conservative think tanks are cited with a substantially higher frequency than identifiably liberal ones in the aggregate but not once we control for their greater budget resources, except in more conservative news outlets, where they continue to be advantaged. Disparities in the budget resources of think tanks account for substantial variation in their media visibility, as do ideological and geographic biases linking specific think tanks and media outlets.

Achieving media visibility has become an important goal of nongovernmental groups in their efforts to effect change in American politics. In a contemporary political environment characterized by open "issue networks" (Heclo 1978) in which large numbers of organized interests and conflicting ideologies compete (Berry 1989; Hodgson 1996), groups trying to affect public policy regularly seek to "greatly expand their visibility in the national media" (Cigler and Loomis 1995:393). Their efforts reflect a recognition that media attention can provide "a means to communicate quickly and directly across and within branches in a way otherwise denied to officials" (Cook 1998:1).

Media visibility has become an especially important priority for nongovernmental research organizations whose principal mission is to produce and promote their expertise among policymakers. Without a public constituency backing their efforts, the influence of expertise-providing organizations often depends on the visibility their research obtains. Policymakers are known to be influenced by and to pay attention to issues and ideas covered by the news media (Cook 1989), and for those who might fund their activities, the media visibility of research organizations is often assessed as a proxy for organizational viability and success.

A variety of studies have been published in the last decade about the ways that visibility is achieved and its importance in the policy-making efforts of members of Congress (Cook 1989; Kendrowski 1996) and presidents (Hertsgaard 1988). However, there has been little empirical investigation of

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what accounts for media visibility among nongovernmental organizations generally, much less expertise-providing groups in particular (for exceptions, see Danielian and Page 1994; Soley 1992). This study examines the nature and extent of media visibility received by members of one important type of expert organization: independent nonprofit public policy research institutes, commonly known as think tanks.

Think tanks have a long history of supplying social science expertise to policymakers, dating to the beginning of the twentieth century. As the overall number of groups involved in the political process has ballooned since the 1960s (Walker 1991), the number of think tanks has proliferated as well, and the nature of their efforts, products, and organization has come to vary considerably. More than three hundred think tanks were operating in American politics by 1996, representing a substantial increase from a total of fewer than seventy think tanks three decades earlier (Rich and Weaver 1998).

In their expanded numbers, think tanks have been remarked upon as much for their skill and technique in securing publicity and attention for their products as for the substance of their research (Ricci 1993; Rich 1999; Weaver 1989). As one commentator remarked, "The metaphors of science and disinterested research that informed the creation and development of the first think tanks, have now given way to the metaphor of the market and its corollaries of promotion, advocacy, and intellectual combat. And the market metaphor has brought professionals in public relations and marketing onto the staffs of most think tanks" (Smith 1991:194).

In this analysis, we examine the relative media visibility of fifty-one national and regionally focused think tanks, representative of the 306 public policy–oriented think tanks operating in American politics in the 1990s. We consider the nature and extent of think-tank visibility by analyzing references to each of the fifty-one think tanks in six national newspapers between 1991 and 1998. We begin by elaborating several contending explanations for what might account for the relative visibility of different think tanks. We then explain our measures and models and present and analyze the implications of our findings for these explanations. In the last section of the analysis, we return to our data to draw conclusions about the cumulative media visibility of the various types of think tanks and potential biases in the types of overall information that public policy makers receive as a result.

Alternative Explanations for the Media Visibility of Think Tanks

Our analysis is organized around three general understandings of media visibility drawn from the media studies, interest group, and policy sciences literature: namely, that media visibility is accounted for by (1) the general attributes and behavior of think tanks as they relate to the regular conventions of the news

media, (2) the unique characteristics and biases of specific media outlets, and (3) factors independent of both think tanks and news outlets but instead endemic to the changing political environment.

Regular Institutional Features of Think Tanks and the News Media

The most straightforward set of arguments about variation in the media visibility of think tanks is that any differences are likely to result from differences among the institutions themselves—in how they seek and are granted visibility by the media. The organizational and media studies literature suggests a number of specific hypotheses along these lines. Studies of interest groups have shown that the single most important organizational attribute leading to media visibility is the economic resources or budget size of the organizations seeking it. Edie Goldenberg, in her study of "resource-poor groups," finds that more resources equate with a better ability of groups to gain media visibility (1975). Lucig H. Danielian similarly finds the economic strength (i.e., larger size) of interest groups to be among the strongest predictors of their visibility in network news (1989). Thus, all other things being equal, we could expect organizations of equal size to have relatively equal visibility.

All other things need not be equal, however. Larger think tanks, for example, may receive disproportionately higher media visibility for several reasons: (1) because they are likely to be seen by busy reporters and editors as sources of "one-stop shopping" for commentary, (2) because larger think tanks have the resources to publish and promote media guides that reporters and editors may use in soliciting comment for stories and editorials, and (3) because their very size can lead to greater familiarity with editors who are soliciting, or deciding whether to accept or reject, opinion pieces from think-tank staff whom they know personally.

In her study of the mass media and American politics, Doris A. Graber observes that journalists rely extensively on personal networks and established contacts for information and that "sources who have gained recognition as 'experts' through media publicity tend to be used over and over again" (1993:112). Herbert J. Gans concurs in his study of network news and news organizations, observing that "staff and timing being in short supply, journalists actively pursue only a small number of regular sources who have been available and suitable in the past, and are passive toward other possible news sources" (1980:116). All of these considerations suggest that there may be scaled effects for think tanks in obtaining media visibility, with larger think tanks receiving disproportionately greater media visibility than smaller ones.

These same potential biases might lead also to think tanks with research interests spanning a wide range of topics (e.g., both foreign and domestic policy) attracting disproportionately greater visibility than more specialized organizations of equal size. To be sure, the latter may benefit from becoming

"the usual suspects" to which journalists turn in seeking information on particular topics, but the former may benefit even more from journalists' greater overall familiarity with these broader-based institutions and from the opportunities they provide journalists for easily obtaining expertise on a variety of subjects.

The age and location of think tanks may also contribute to differences in media visibility. Older organizations have had a longer period over which to establish familiarity and contacts with journalists. In addition, age may confer a degree of credibility that newer institutions lack. With regard to location, most reporting on national politics and policy making is done by Washington-based reporters, even when their media outlets are based elsewhere. Danielian finds in her study of the network news coverage of interest groups that, because of strains on the time and resources of journalists, organizations with Washington offices tend to receive more television coverage than interest groups with offices elsewhere, which would require more effort for journalists to reach (1989). One could easily expect a similar advantage to be enjoyed by Washington-based think tanks in the print media.

Think-tank administrators, of course, also have the option of deciding whether achieving media visibility in national news outlets is even among their chief priorities, and think tanks based outside of Washington may, in fact, put less effort into cultivating contact with the D.C.-based national news media. Think tanks with a state-level research focus, which happen to constitute the fastest growing segment of the think-tank sector (Rich and Weaver 1998), may have little interest in achieving national media attention, and the national news outlets may have little interest in covering them.

Variation in the ideological predispositions of think tanks is another possible source of difference in media visibility. A long-running dispute exists about whether the media, particularly the elite media, have a liberal bias. Based on a national survey of print journalists, David H. Weaver and G. Cleveland Wilhoit conclude that newspaper journalists, particularly those employed by elite publications (e.g., the *New York Times, Washington Post, Christian Science Monitor*), identify themselves as Democrats and liberals at a disproportionately higher level than do members of the public (1991:29). The extent to which these affiliations bias news reporting and journalists' choices of sources is unclear, however. In reporting on campaign finance issues in elite newspapers, Frank J. Sorauf finds that "there is no singling out of Democrats or Republicans, liberals or conservatives," but rather only biases rooted in the professional norms of journalists (e.g., standards of evidence) that should not affect the visibility of think tanks in a nonrandom way (1987:26).

Complicating the matter further, several studies argue that whatever liberal bias may exist among journalists is offset by the conservative orientation of news executives. Robert P. Vallone and colleagues observe that the whole no-

tion of media bias is itself biased by those who are judging the objectivity of reporting (1985). They find that people generally evaluate the news as being systematically biased against their partisan leanings, whatever those leanings may be. Liberals view the media as conservative, and conservatives view the media as liberal. A plausible alternative hypothesis is that journalists may discount information from "biased" sources and rely disproportionately on centrist or nonideological think tanks from which they may receive seemingly balanced and objective information consistent with the professional norms for journalists to strive for "neutrality" (Cook 1998:5–7). Which (if any) of these possible effects of think-tank ideology is strongest is unresolved.

Think-tank visibility may also be related to an institution's allocation of resources. Danielian's study suggests that the proportion of resources that an organization devotes to public affairs and media-related efforts affects its visibility (1989). It is difficult to get measures of institutional resource allocation that are comparable across institutions, but these effects may show up in relation to ideological predispositions. Niels Bjerre-Poulsen has argued that avowedly ideological think tanks are likely to be more visible than think tanks with no identifiable ideology because ideological think tanks are collectively more aggressive and promotion-oriented than their counterparts (1991). Edwin J. Feulner Jr. (1986) and Sally Covington (1997) contend that conservative think tanks devote substantial resources and effort to promoting their products and securing visibility, while David Callahan (1995, 1999) and Michael H. Shuman (1998) claim that, by contrast, liberal think tanks are generally both more resource-poor and less supportive of visibility-generating efforts.

A final organizational explanation of differences in media visibility across think tanks relates to the source of an organization's funding. Think tanks that rely heavily on contract research with the government, like the RAND Corporation and the Urban Institute, may have lower media visibility per dollar of budget because their contracting agencies may not want their work to be broadly discussed in public, especially work in the defense sector. Moreover, visibility-enhancing activities like writing opinion pieces may be less highly valued by managers at contract think tanks than the timely, on-budget completion of sponsored research projects.

Distinctive Interactions of News Sources and News Outlets

There are a number of important ways in which general media routines may interact with the attributes of think tanks in ways that could result in differences in media visibility. However, the general observation made in many studies of the news media—that journalists repeatedly use sources they know and with whom they feel comfortable—suggests that the attributes of individual media outlets may also affect the institutions to which they give coverage. Two at-

tributes in particular stand out. The first is ideological proximity between the newspaper and the think tank. Newspapers differ substantially in terms of their guiding editorial philosophies and political ideologies. As Denis McQuail points out in his review of the mass media literature, the media, after all, are not "merely neutral 'message-carrying' networks" but are rather "themselves separate institutions with their own place in society, their own objectives to pursue, their own power and institutional dynamics" (1977). We might expect the conservative Heritage Foundation, for example, to be particularly visible in the conservative *Washington Times,* a pairing in which the newspaper and think tank would seem to be ideologically similar.

A second media characteristic that might affect coverage is geographic proximity. Although most coverage of national policy making is done by Washington-based reporters, editors are usually based in the city where the newspaper is published, and reporters for the newspaper are probably more likely to have lived and worked in that city than elsewhere. Moreover, reporters may seek to insert a "local angle" into their stories. All of these considerations suggest that although think tanks based outside of Washington are less likely to get coverage than those based in the nation's capital, media outlets may make an exception for those institutions based in their home city or region, particularly when think tanks are focused on the state or regional issues relevant to where the newspaper is published.

Independent Characteristics of the Political Environment

Beyond the institutional features of think tanks and the characteristics of individual media outlets, a third and final category of explanation for media visibility views visibility as a product of autonomous developments in the political environment, rather than of any particular efforts or attributes of the media or visibility-seeking organizations. Carol H. Weiss and Eleanor Singer conclude in their study of reporting about the social sciences by the national media, "Reporters [a]re apt to select social science studies for reporting if their subject [i]s related to topics already in the news" (1988:51). More generally, Stephen Hess finds that about 80 percent of what Washington-based reporters focus on relates to "breaking news," subjects upon which they are compelled to focus because of developing events, rather than the promotion efforts of organizations (1981).

Two distinct hypotheses emerge from this line of analysis. First, newspapers will decide which think tanks to consult based on whether the organizations have expertise and information that satisfy the needs brought on by external events. Second, political events are likely to influence citations: Newspapers are more likely to cite think tanks that are perceived to be close to powerful political leaders (e.g., presidents and new congressional leaders), especially when there are turnovers in leadership.

Data and Methods

All three of the categories of explanations just discussed have some plausibility. Our interest is in assessing the relative importance of each in accounting for the media visibility of think tanks. We analyze the media visibility associated with 51 think tanks chosen from among the 306 think tanks identified as operating in American politics in 1996. The larger group of 306 organizations was reached after a review of directories, books, and scholarly articles about think tanks as well as scores of newspaper and magazine clippings.[1]

The 51 think tanks selected for our study match the full count of 306 organizations in relation to their locations, ideologies, and focus of research. The majority of think tanks in our sample (35 of the 51) are nationally focused organizations; the remainder focus on state and regional issues. Sixty percent of the nationally focused organizations (21 think tanks) are based in Washington, D.C., with the rest based elsewhere in the country. With regard to ideology, 38 percent of the think tanks included in our study are broadly conservative (fitting into what we call the conservative cluster); 19 percent fit into a liberal cluster, and 43 percent are left as being centrist or having "no identifiable ideology."[2] Each of these proportions is within 2 percent of the number of think tanks with these attributes among the full set of 306 organizations.

The specific institutions included in our study were selected as a one-sixth sample from among the set of 306 organizations stratified by location, focus, and ideology so that they include most of the largest and best known institutions. Given the small size of both the sample and the population of institutions being examined, we decided against taking a simple random sample to avoid the risk of ending up with a sample that did not reliably capture the combined variation among think tanks in regard to all three stratified dimensions along which organizations were selected: ideology, location, and research focus.[3] As a means of confirming the validity of our sample, after finalizing our analysis, we collected visibility data for all 306 think tanks for three newspapers (the *Washington Post, New York Times,* and *Wall Street Journal*) for the year 1996. Not only did the percentage of citations within each sample category of institutions closely mirror those for the population as a whole, but the one-sixth sample of think tanks accounted for approximately two-thirds of all citations for the entire think-tank population.

Data

We explore the nature and extent of think-tank visibility by analyzing citation data gathered for eight calendar years, 1991 through 1998. Citations were drawn for six newspapers that are "national" either in the sense of having a nationwide circulation or being based in the nation's capital—specifically, the *Christian Science*

Monitor, New York Times, USA Today, Wall Street Journal, Washington Post, and *Washington Times.* These are among the news sources most often cited as shaping other Washington journalists' perceptions of what is worth covering. In his study of news coverage of Capitol Hill, Timothy E. Cook notes the comment of one network correspondent who observed, "You start out with an idea of the story of the day by looking at the *Washington Post,* the *New York Times,* the *Wall Street Journal,* the *Washington Times, USA Today.* I guess I read five papers every day" (1989:48). Our data were drawn from the ProQuest compact disk system, which uses the Nexis database, for the *Washington Post, New York Times,* and *Wall Street Journal.* The Dialog and Nexis on-line databases were used to obtain citations in the other newspapers.

Dependent Variable

Three problems are encountered in choosing an indicator of think-tank visibility. The most readily available measure is simply a count of the number of articles in which an institution's name is mentioned in a publication in a particular year. However, these counts are imperfect as a comparative indicator of think-tank presentation of social science expertise because, along with citations that fairly unambiguously reflect the role of think tanks as expert organizations and information providers (stories reporting on or citing think-tank research and opinion pieces that reflect the views of think-tank researchers), they also include articles that are more ambiguous (commentary by think-tank staff in news stories) and those that are predominantly "noise" (stories about former staff members that mention their prior institutional affiliation, as well as nonrelevant stories about think-tank staff and institutional activities like fundraising, the obituaries and wedding announcements of staff, and speeches at the institution by nonaffiliated policymakers). The pure "noise" items are a relatively modest share of citations for most think tanks, but they are not inconsequential to the overall visibility that organizations receive.

A second problem results from differences in the use of think tanks generally as a source across newspapers. Newspapers vary dramatically in the extent to which they cite think tanks. In an average year, for example, the *Washington Times* cites think tanks about four times as often as the *Christian Science Monitor,* the *Washington Post* three times as often, and the *New York Times* more than twice as often. In part, these differences reflect whether or not think tanks are a "source of choice" in particular newspapers, but they also reflect the simple arithmetic of how frequently different newspapers are published and how many column-inches of news and opinion coverage they carry.

A third and final problem with a simple comparison of citation counts stems from the relationship between think-tank budgets and their media visibility. For most of the hypothesized independent variables that we discuss below (e.g., location in Washington), the effects of a unit increase in the value of the variables depend on the size of the organization. A Washington location may

create greater visibility for larger think tanks than for smaller organizations, for example. These differences can be detected by constructing a series of interaction terms between budget and the various independent variables, but the coefficients of these interaction terms are difficult to interpret.

To overcome each of these problems and to provide more reliable estimates of the factors that account for think-tank visibility, we analyze the predictors of think-tank visibility in relation to two slightly different dependent variables. We deal with the last problem, related to the effects of budget size, by dividing our citation counts for each think tank in each newspaper for each year by the organization's annual budget that year, adjusted for inflation. The resulting model tests for the factors that predict visibility per $1 million spent by a think tank in 1991 dollars—what can roughly be thought of as the efficiency with which think tanks achieve media visibility. This is an appropriate manipulation given the roughly linear relationship between think-tank size and visibility once other factors are taken into account, and the adjustment permits a more parsimonious and easily interpreted model.[4]

To address the first problem identified above (citations with no substantive content), we content-coded all articles that mention our sample of think tanks in 1991, 1993, and 1995 in the *New York Times, Wall Street Journal,* and *Washington Post.* The coding disaggregates whether think tanks are mentioned because of articles authored by think-tank researchers, because of mentions to think-tank studies, research, or commentaries, or for some other reason. Whereas our first equation includes all references to the think tanks in all six newspapers for all eight years (2,502 cases), the dependent variable in Equation 2 excludes all "other" references discovered in the content coding and includes only references to the think tanks in three newspapers for three years (450 cases).[5]

In the end, our hypothetical "base case" in the first two models is the number of citations in the *Christian Science Monitor* per million dollars of budget for a nationally focused, nonspecialized think tank based outside of Washington that is neither conservative nor liberal in orientation and is less than one year old. In both equations, the unequal propensities of newspapers to cite think tanks are accounted for by a series of dummy independent variables that test differences between the newspapers.

The models are analyzed using a random-effects generalized least squares regression technique, which overcomes problems of autocorrelation in the variables and makes the standard errors of our estimators efficient. Each think tank's number of citations in each newspaper for each year represents a separate case in the analysis. In both equations, we ignore differences in circulation between the newspapers. In these analyses, we are concerned with how think tanks gain visibility in news stories, regardless of how many readers these stories may reach. We consider the question of circulation-adjusted visibility of think-tank citations in the last portion of this article.

Independent Variables

Many of the independent variables in our models are dummy variables, coded "1" if a condition holds and "0" otherwise. These include location in Washington, conservative or liberal ideological orientation, state-focused research, and whether an organization is "full-service" in its research agenda or specialized. Additionally, we include a measure of the percentage of institutional budgets from government contracts to evaluate differences in visibility between contract and noncontract research think tanks. Institutional age is measured using the fourth root of each organization's age because we expect that although age may be significantly related to think-tank visibility, the advantages associated with age are not fully proportional to increases in age differences. That is, an organization that is sixteen years old is not expected to receive sixteen times more visibility than a similarly sized organization that is one year old. Rather, it might be only twice as visible (and an eighty-one-year-old institution three times as visible).

A series of interaction terms have been used to measure the "specific media outlet" variables. To measure the relative importance of shared ideologies between newspapers and think tanks, we have constructed ten terms with the liberal cluster and the conservative cluster of think tanks interacting with five of the six newspapers. Similarly, separate interaction terms have been added for the *Washington Post* and *Washington Times* with Washington-based think tanks, and the *New York Times* and *Wall Street Journal* with New York–based think tanks.

We have also constructed interaction terms to evaluate the importance of changes in the news and political environment between 1991 and 1998 for the relative visibility of think tanks. The events we consider are the 1991 Gulf War, Bill Clinton's first election as president in 1992 and 1993, and the Republican takeover of Congress in 1994 and 1995. We construct interaction terms of these events with think tanks with Middle East expertise, Democratic connections, and Republican connections, respectively. Both sets of variables are coded "0" or "1," so the interaction terms take values of "1" only for observations when the event is occurring (e.g., 1991 for the Gulf War) and where the think tank is suited to the event (e.g., having Middle East experts).

Findings

Results from both equations, as reported in Table 1, are essentially consistent. Largely because of the reduced number of observations in Equation 2, its coefficients are frequently not statistically significant even when they are significant in the results for Equation 1. With few exceptions, however, their size and direction are similar to those of an equation using the same 450 observations with the dependent variable from Equation 1 (all citations / think tank budget). We concentrate here on reporting the findings from Equation 1, in which all 2,502 observations are analyzed, since it is our most unrestrained model.

Table 1
Regression results

	Equation 1: All Articles Citations/Budget		Equation 2: Coded Articles Citations/Budget	
INSTITUTIONAL VARIABLES				
TT budget scaled effects	–0.01	(0.02)	–0.00	(0.06)
TT policy specialization	–0.41	(0.52)	–0.83	(1.15)
TT age	0.54	(0.34)	–0.41	(1.01)
TT location	1.93***	(0.61)	2.79*	(1.46)
TT state focus	0.26	(0.67)	0.71	(1.54)
TT conservative	0.27	(0.61)	–0.74	(1.48)
TT liberal	0.75	(0.68)	0.33	(1.61)
TT contract research	–0.95	(1.51)	–2.83	(4.97)
MEDIA-SPECIFIC VARIABLES				
Conservative TT × *WT*	1.31***	(0.31)		
Conservative TT × *WSJ*	0.37	(0.31)	0.50	(1.17)
Conservative TT × *NYT*	–1.77***	(0.31)	–3.96***	(1.19)
Conservative TT × *WP*	–0.41	(0.31)		
Conservative TT × *USA*	–0.74**	(0.30)		
Liberal TT × *WT*	–1.23***	(0.36)		
Liberal TT × *WSJ*	–1.21***	(0.37)	–1.88	(1.35)
Liberal TT × *NYT*	–1.74***	(0.37)	–3.49***	(1.36)
Liberal TT × *WP*	–0.90**	(0.36)		
Liberal TT × *USA*	–1.69***	(0.36)		
Wash. Post × D.C.	0.57**	(0.22)	1.67*	(0.93)
Wash. Times × D.C.	0.04	(0.22)		
WSJ × New York	–0.10	(0.35)	–0.73	(1.57)
NYT × New York	–0.32	(0.42)	–2.33	(1.84)
NYT × New York focus	14.42***	(0.66)	33.90***	(2.59)
New York Times	0.89***	(0.23)		
Wall Street Journal	0.33	(0.22)	–1.71**	(0.85)
Washington Times	–0.31	(0.24)		
USA Today	0.89***	(0.21)		
Washington Post	0.11	(0.24)	–2.43**	(1.03)
ENVIRONMENTAL VARIABLES				
Gulf War	1.94***	(0.49)	2.67	(1.72)
Clinton election	1.31***	(0.32)	1.35	(1.50)
Republican takeover	0.64	(0.49)	1.99	(2.11)
	$r^2 = 0.27$		$r^2 = 0.40$	
	$n = 2{,}502$		$n = 468$	

*$p < 0.10$. **$p < 0.05$. ***$p < 0.01$.

Independent variables associated with each of our three hypothesized explanations are statistically significant. Among institutional variables, think-tank location demonstrates strong effects on media visibility. Our hypothesis predicting that a Washington location would advantage think tanks in securing visibility is confirmed by the results. Washington-based think tanks receive on average, all else being equal, almost two additional references (1.93) than non-D.C.-based think tanks (roughly twice as many) for every million dollars in annual budget resources. In fact, the D.C.-based think-tank variable is highly significant not only across all results in Table 1 (Equations 1–2), but also in five of six regressions in which observations from each newspaper were separated out and regressed independently on our explanatory variables (excluding, of course, the interaction terms for media-specific effects). Table 2 reports these individual newspaper results.

All of the other institutional variables fail to achieve statistical significance in our results in Table 1. State-focused think tanks are not less likely than otherwise comparable nationally focused think tanks based outside of Washington to gain visibility in these national newspapers; both are seriously disadvantaged relative to Washington-based institutions. Contract researchers do not have significantly lower visibility per dollar spent than other think tanks, although there is some tendency in that direction. Research specialization, age, and scale effects of budget size also fail to achieve statistically significant relationships with media visibility.

We test the effects of ideology in relation to each newspaper separately with interaction terms. In the base case, the *Christian Science Monitor,* neither identifiably conservative nor liberal organizations are more or less efficient overall in achieving newspaper visibility than those that profess no particular ideology. Many of the interaction terms for the other newspapers with ideology bear strongly significant results. Conservative think tanks receive more than one and a quarter additional citations (1.31) in the *Washington Times* for every million dollars in budget resources than think tanks with no identifiable ideologies, and two and a half more citations than think tanks in the liberal cluster (2.54). Liberal think tanks are disadvantaged as well in the *Wall Street Journal* by more than one citation per million dollars in budget resources relative to conservative think tanks and organizations of no identifiable ideology (–1.21). Most striking—and unexpected—of all, both conservative and liberal think tanks are disadvantaged in *USA Today* and the *New York Times* relative to think tanks of no identifiable ideology. In *USA Today,* both conservative and liberal think tanks are disadvantaged relative to think tanks of no identifiable ideology, with liberal think tanks disadvantaged more than conservative think tanks. In the *New York Times,* both conservative and liberal think tanks receive close to two fewer citations than think tanks of no identifiable ideology per million dollars in budget resources (–1.77 and –1.74, respectively). Finally, liberal think tanks are

Table 2
Regression results by newspaper

	Citations/Budget											
	New York Times		*Washington Post*		*Wall Street Journal*		*Washington Times*		*USA Today*		*Christian Science Monitor*	
INSTITUTIONAL VARIABLES												
TT budget scaled effects	0.01	(0.04)	–0.02	(0.02)	–0.02	(0.02)	0.00	(0.02)	0.00	(0.04)	0.01	(0.02)
TT policy specialization	–1.41	(0.91)	0.03	(0.54)	–0.09	(0.65)	–0.43	(0.35)	–0.69	(0.93)	0.04	(0.37)
TT age	0.80	(0.69)	–0.06	(0.42)	0.11	(0.48)	0.11	(0.31)	0.23	(0.75)	–0.27	(0.36)
TT location	2.52*	(1.22)	2.04**	(0.63)	1.18	(0.86)	1.58**	(0.41)	2.66*	(1.09)	1.44**	(0.44)
TT state focus	1.96	(1.28)	–0.46	(0.70)	0.75	(0.89)	–0.50	(0.46)	0.39	(1.21)	0.08	(0.49)
TT conservative	–1.36	(1.08)	–0.49	(0.60)	0.25	(0.76)	1.49**	(0.40)	–0.48	(0.05)	–0.21	(0.43)
TT liberal	–0.99	(1.18)	–0.32	(0.67)	–0.70	(0.84)	–0.46	(0.44)	–1.09	(1.16)	0.62	(0.46)
TT contract research	–2.15	(3.12)	–0.13	(1.88)	–0.73	(2.15)	–0.93	(1.41)	–2.49	(3.37)	–2.45	(1.67)
MEDIA-SPECIFIC VARIABLES												
NYT × New York	–0.53	(1.96)										
NYT × New York focus	14.58**	(2.68)										
WSJ × New York					–0.74	(1.13)						
ENVIRONMENTAL VARIABLES												
Gulf War	1.73	(1.09)	0.55	(0.68)	1.91*	(0.74)	2.30**	(0.60)	2.71*	(1.26)	2.35**	(0.88)
Clinton election	1.49*	(0.72)	1.56**	(0.45)	1.68**	(0.49)	0.87*	(0.40)	1.10	(0.83)	1.05*	(0.58)
Republican takeover	0.64	(1.10)	0.65	(0.69)	0.86	(0.75)	0.17	(0.60)	1.34	(1.27)	0.24	(0.89)
	$r^2 = 0.49$		$r^2 = 0.30$		$r^2 = 0.17$		$r^2 = 0.38$		$r^2 = 0.14$		$r^2 = 0.23$	
	$n = 417$		$n = 417$		$n = 417$		$n = 417$		$n = 417$		$n = 417$	

*$p < 0.05$. **$p < 0.01$.

disadvantaged in the *Washington Post,* where they receive almost one fewer citation per million dollars in budget resources (–0.90) than think tanks of no identifiable ideology.

In separate regressions for each newspaper (Table 2), the liberal ideology variable does not remain significant for any newspaper; the conservative ideology variable remains significant only for the *Washington Times.* The results for the other newspapers drift in the direction of our results for Equation 1, falling short of statistical significance, probably because of the smaller number of observations ($n = 417$). We also analyze the data aggregated for all newspapers where variables for the independent effects of ideology in each newspaper are not included. In this analysis, not reported in table form here, when we include only one variable for conservative and one for liberal for all of the newspapers combined, ideology appears to have no effect, either. These varied results suggest that while journalists and editors within newspapers may discriminate in favor of or against think tanks on the basis of ideology after controlling for budget size, newspapers may vary enough in the direction of their biases that the cumulative product of think-tank visibility across sources may be ideologically balanced.

With regard to geographic biases, the *Washington Post* has a higher propensity to cite D.C.-based think tanks than the other newspapers in the study by a rate of roughly one additional citation for every two million dollars in budget resources. By contrast, the *Washington Times* demonstrates no such bias toward D.C.-based think tanks, and the *New York Times* and *Wall Street Journal* demonstrate no such bias in relation to New York–based, nationally focused think tanks. The *New York Times* does demonstrate, however, a particularly strong tendency to cite the New York–based, New York–focused think tanks in our sample: the Citizens Budget Commission (CBC) and the Manhattan Institute. (The Manhattan Institute splits its effort between national issues and New York–specific concerns.) All other things being equal, the CBC and the Manhattan Institute were likely to receive more than fourteen additional citations per million dollars of budget in the *New York Times,* where they are frequent sources in their "Metro" section, than in the other newspapers in the study.[6]

Among the variables associated with the political environment, the coefficients for two of the three events for which we control are strongly significant, suggesting that think tanks with expertise in subjects independently important in the news obtain proportionally greater visibility than think tanks without familiarity with or expertise about news-making events. During 1991, for example, the year of the Gulf War, think tanks with Middle East expertise, like the Washington Institute for Near East Policy and the Brookings Institution, on average received almost two more citations (1.94) for every million dollars in budget resources than think tanks without Middle East expertise (and than their own organizations in other years). Results in Table 2 illustrate that this is a particularly strong effect in the *Wall Street Journal, Washington Times, USA Today,* and

Christian Science Monitor. Connections with policymakers (and the political agenda) had similar positive effects for think tanks. Organizations like the Progressive Policy Institute, Institute for International Economics, Economic Policy Institute, and Brookings Institution gained visibility from their connection to Clinton in 1992 and 1993, overall and individually in all six newspapers except *USA Today.*[7] By contrast, there was no definitive relationship between increased visibility for three think tanks closely associated with the new Republican majority in Congress and the Republican takeover of Congress in 1995 (the Cato Institute, Empower America, and Heritage Foundation), although the coefficient did drift in the direction of a boosted effect, falling just short of statistical significance.

Discussion and Aggregate Findings

The analysis to this point has focused on explaining variations in the media visibility of individual think tanks. We now shift to a discussion of the implications of these results for patterns and differences in aggregate levels of think-tank visibility. Table 3 lists the 51 think tanks in our sample and groups them in relation to their research focus and geographic location. The table records their founding year, the ideological cluster in which our coding scheme places them, and their budgets for 1996. In addition, the right-hand column of the table records the total percentage of visibility that each organization received as a proportion of the total visibility of the sample in 1996. Citations in each newspaper are weighted for their relative circulation in these cumulative figures. Apparent in the results is the strong bias favoring the citation of Washington-based think tanks overall.

Table 4 breaks these results down further, recording the proportion of coverage think tanks receive in each of the six newspapers by the think tanks' research focus and geographic locations. Consistent with Table 3, these results further illustrate the heavy reliance on Washington-based think tanks as sources in all six of the national newspapers included in the database. Three of the six newspapers (the *Christian Science Monitor, USA Today,* and the *Washington Post*) drew more than 80 percent of their think-tank citations from Washington-based think tanks between 1991 and 1998, and almost all of the rest from think tanks with a national focus based outside of Washington. The other three national papers—the *New York Times, Wall Street Journal,* and *Washington Times*—rely somewhat more on think tanks outside of Washington but are still dependent overwhelmingly on Washington-based institutions.

Notably, the newspapers tend to rely on the same think tanks as sources. The Brookings Institution is the most commonly cited in all except the identifiably conservative *Washington Times,* where it is the fifth most commonly cited. The Heritage Foundation and the American Enterprise Institute (AEI) are

Table 3
Characteristics of think-tank sample

Think Tank	Founding	Ideological Cluster	1996 Budget	1996 CWVI
D.C.-BASED, NATIONALLY FOCUSED				
American Enterprise Institute	1943	Conservative	$13,033,786	8.96%
Brookings Institution	1916	Not identifiable	$21,944,000	16.09%
Carnegie Endowment for International Peace	1910	Not identifiable	$11,227,172	3.53%
Cato Institute	1977	Conservative	$11,264,791	6.69%
Center on Budget and Policy Priorities	1981	Liberal	$3,778,016	2.42%
Center for Strategic and International Studies	1962	Not identifiable	$16,413,247	2.83%
Center for Responsive Politics	1983	Not identifiable	$1,711,040	6.12%
Economic Policy Institute	1986	Liberal	$3,110,391	2.67%
Economic Strategy Institute	1989	Not identifiable	$1,890,756	2.90%
Empower America	1993	Conservative	$3,868,625	4.40%
Ethics and Public Policy Center	1976	Conservative	$1,098,349	0.47%
Heritage Foundation	1973	Conservative	$24,195,189	9.13%
Institute for International Economics	1981	Not identifiable	$4,758,609	2.84%
Institute for Research on the Economics of Taxation	1977	Conservative	$627,381	0.11%
Institute for Policy Studies	1963	Liberal	$1,333,996	0.31%
Joint Center for Political and Economic Studies	1970	Liberal	$7,046,206	1.73%
National Planning Association	1934	Not identifiable	$1,938,425	0.18%
Progressive Policy Institute	1989	Not identifiable	$3,259,023	1.76%
Resources for the Future	1952	Not identifiable	$7,168,437	0.40%
Urban Institute	1968	Not identifiable	$36,643,687	3.72%
Washington Institute Near East Policy	1985	Not identifiable	$1,972,096	0.98%
Worldwatch Institute	1974	Liberal	$2,171,743	0.74%
NON-D.C.-BASED, NATIONALLY FOCUSED				
Committee for Economic Development (NY)	1942	Not identifiable	$3,865,706	0.52%
Council on Foreign Relations (NY)	1921	Not identifiable	$17,197,400	3.80%
Hoover Institution (CA)	1919	Conservative	$19,500,000	2.97%
Hudson Institute (IN)	1961	Conservative	$6,566,498	2.83%
Institute for Food and Development (CA)	1975	Liberal	$647,516	0.03%
Manhattan Institute (NY)	1978	Conservative	$7,042,492	2.57%
Manpower Demonstration Research Corp. (NY)	1974	Not identifiable	$18,341,419	0.40%
National Center for Policy Analysis (TX)	1983	Conservative	$3,210,610	0.93%
RAND Corporation (CA)	1946	Not identifiable	$117,606,889	3.93%

Think Tank	Founding	Ideological Cluster	1996 Budget	1996 CWVI
Reason Foundation (CA)	1978	Conservative	$3,999,000	0.98%
Rocky Mountain Institute (CO)	1982	Liberal	$4,118,927	0.12%
Russell Sage Foundation (NY)	1907	Not identifiable	$6,995,699	0.19%
Upjohn Institute (WI)	1945	Not identifiable	$6,136,284	0.10%
STATE AND REGIONALLY FOCUSED				
Barry Goldwater Institute (AZ)	1988	Conservative	$355,459	0.08%
Center of the American Experiment (MN)	1990	Conservative	$733,749	0.01%
Citizens Budget Commission (NY)	1932	Not identifiable	$1,140,118	0.89%
Commonwealth Foundation (PA)	1988	Conservative	$441,746	0.00%
Heartland Institute (IL)	1984	Conservative	$723,096	0.02%
Independence Institute (CO)	1985	Conservative	$557,929	0.02%
Institute for Southern Studies (NC)	1970	Liberal	$524,361	0.08%
James Madison Institute (FL)	1987	Conservative	$1,308,060	0.10%
North Carolina Center for Public Policy Analysis (NC)	1977	Not identifiable	$526,670	0.00%
Pioneer Institute (MA)	1988	Conservative	$852,822	0.13%
Public Affairs Council of Louisiana	1950	Not identifiable	$569,019	0.00%
Public Policy Institute of California	1994	Not identifiable	$3,007,839	0.01%
Texas Center for Policy Studies	1983	Liberal	$558,353	0.12%
Utah Foundation	1945	Not identifiable	$266,779	0.10%
Washington Institute for Policy Studies (WA)	1985	Conservative	$542,072	0.00%
Woodstock Institute (IL)	1973	Liberal	$496,816	0.10%

Table 4
Visibility of think tanks by geographic location and research focus by newspaper

Newspaper	D.C.-based, nationally focused	Non-D.C.-based, nationally focused	State/regionally focused
Christian Science Monitor	80.6%	17.7%	1.7%
New York Times	68.7%	24.3%	7.0%
USA Today	86.1%	12.3%	1.7%
Wall Street Journal	74.6%	24.0%	1.4%
Washington Post	83.0%	16.6%	0.4%
Washington Times	77.5%	21.8%	0.7%

ranked in the top three in all but the *Washington Times,* where AEI is fourth. Think-tank citations in all of the national newspapers show a striking concentration in just a few organizations, with the frequency of mention of the top three think tanks cited ranging from 32.2 percent (*New York Times*) to more than 41 percent (*USA Today*) of total think-tank citations.[8]

In contrast to the heavy coverage of D.C.-based think tanks, state or regionally focused think tanks are almost invisible. The relatively strong showing of state and regionally focused think tanks in the *New York Times* (7 percent of coverage) is accounted for by the inclusion of the frequently cited New York–based Citizens Budget Commission in our sample. In the other papers, however, coverage of state and regionally focused think tanks averages around 1 percent of all citations. These figures are consistent with the eminently plausible hypothesis that nationally focused media have neither a substantial interest in what is going on in state capitals nor established linkages to state-focused think tanks that are likely to increase the latter's visibility. In addition, state-focused think tanks may expend little effort on achieving national media visibility.

Nationally focused think tanks based outside of Washington likewise receive far less media visibility than their D.C.-based counterparts (although more than the state-focused organizations). These organizations also may be at a disadvantage by being located beyond the easy reach of national journalists. In some cases, they also might devote less effort to obtaining national media attention than D.C.-based think tanks. The Indianapolis-based, nationally focused Hudson Institute, for example, has become increasingly involved in pilot programs for policy change in states around the country. In their own regions, these non-D.C.-based think tanks do tend to receive greater media visibility. In an analysis of the visibility of think tanks in state and regional newspapers, Weaver finds that non-D.C.-based think tanks—both state and nationally focused organizations—receive substantially greater visibility in newspapers published in the media markets where those think tanks are located than in national media outlets. However, they are no more likely to be cited in regional newspapers outside of their home markets than they are to be cited in the sample of national newspapers (Weaver 1993).[9]

Table 5 summarizes results of aggregate think-tank visibility broken down by their ideological clusters (as recorded in Table 3). A first obvious conclusion is that institutions in the centrist, or "no identifiable ideology cluster," either because they have an ideological balance, no discernible ideology at all, or an ideology that does not fit easily into a left-right spectrum (the Economic Strategy Institute, for example) are the loudest voices in four out of the six newspapers. The exceptions in this sample of newspapers are the *Wall Street Journal* and the *Washington Times,* both of which have strongly conservative editorial positions. It is equally clear, however, that conservative voices cumulatively speak more loudly than left, liberal, minority, or environmentalist voices (all of which are included in our "liberal cluster" of institutions). The much louder collective

Table 5
Visibility of think tanks by ideological cluster by newspaper

Newspaper	Conservative Cluster	Liberal Cluster	No Identifiable Ideology Cluster
Christian Science Monitor	29.7%	13.1%	57.2%
New York Times	28.5%	9.2%	62.3%
USA Today	34.0%	9.9%	56.1%
Wall Street Journal	48.2%	7.1%	44.8%
Washington Post	30.4%	11.4%	58.3%
Washington Times	62.1%	4.1%	33.8%

voice of think tanks in the "conservative cluster" seems due at least in part to the greater financial resources available to those institutions (see, for example, Moore 1992). The budget of the entire "liberal cluster" of think tanks is slightly less than that of the Heritage Foundation alone. Bigger budget size allows institutions to be more visible and cover a broader range of issues.

Conclusions

The patterns evident in the descriptive statistics and regression analysis suggest the existence of two very strong, and sometimes reinforcing, sources of bias in the visibility of think tanks in national newspapers. The first is the availability of funding. Money is critical for a think tank to gain visibility and get its message out. Washington-based institutions and institutions that are not part of the "liberal cluster" have major advantages in obtaining funding from the foundations, corporations, and governments that are the dominant sources of funding for think tanks. Our analysis suggests that this funding translates into media visibility, which, in turn, may attract additional financing to visible organizations.

A second major source of bias appears to be the personal networks and editorial judgments (or biases) of newspaper reporters and editors. This is most apparent in the geographic biases associated with media visibility: Washington-based think tanks remain the overwhelmingly dominant players relative to think tanks based outside the Beltway, not just as a function of their size, but also as a function of proximity. Their location promotes the development of personal relationships and networks among social scientists, journalists, and policymakers' staffs, relationships perhaps more regularly and aggressively sought by think tanks based in Washington than those based elsewhere. Ideological biases are evident, too, benefiting conservative think tanks in the *Washington Times* and *Wall Street Journal* and think tanks of no identifiable ideology in the *New York Times,* even after controlling for budget size.

Media visibility is of course only one of several ways by which think tanks may affect the policy-making process, their shared ultimate aim. Social science expertise can enter the policy-making process through several channels, and think tanks may rank the relative priority of each vis-à-vis media visibility quite differently. However, as Cook argues and illustrates, "the news media have direct contact with and influence upon elites" (1998:10). In a densely populated organizational environment, many think tanks have recognized this influence and have made securing media visibility a central feature of their missions. Beyond what visibility may do to influence policy making, it also may affect the funding decisions of potential financial supporters of think tanks. Efforts to make judgments about think-tank influence are very strong among funders of think-tank research, who are concerned with obtaining "value for their money" when they have limited funds to disburse. Following organizational visibility is one relatively easy way to form such judgments. Our findings suggest that budget size, a presence in Washington, and the biases and agendas of news outlets all affect the visibility of researchers and research organizations in the national news media.

Notes

1. More than five hundred think tanks were found to be operating in 1996. Roughly two hundred are excluded from the count, however, because they are not public policy oriented or because they operate as subsidiaries of other organizations. Many of the excluded organizations are primarily oriented toward broad public education on issues not usually relevant to public policy debates (e.g., the occult). Others are subsidiaries of or affiliated with advocacy or interest groups and therefore are not included among our sample of independent organizations. Data about think tank numbers and missions were compiled from three directories (Hellebust 1996; Hollings 1993; Kitfield 1995), four books (McGann 1995; Peschek1987; Smith 1991; Stone 1996), and one article (Chisolm 1990) about think tanks, as well as from a collection of more than three hundred annual reports and mission statements from individual think tanks. See Rich 1999 for a fuller explanation of how the 306 think tanks were identified.
2. Organizations are coded for ideology in relation to how they portray themselves with regard to ideology rather than how they may be perceived by the news media or policymakers. Coding judgments were based on key words in the mission statements or in introductory statements in the 1995 or 1996 annual reports of the 51 organizations. Conservative organizations were coded as such based on the key words "limited government" and "free market system" (in the context of demonstrating an interest and concern for each). Liberal organizations were coded as such based on key words related to a concern for "poor or low-income people," "wage stagnation," "social justice and pluralism," and "progressivism." Although judgments about organizational ideology are difficult to make based on the statements and publications of think tanks, particularly because think tanks are tax-exempt nonprofits prohibited from most partisan activity, it is important to note that the coding results for *portrayed* ideology are highly correlated with two additional measures of the *perceived* ideologies of think tanks. The coding correlates at a remarkably high 0.81 with a scaling of a sample of 35 of these same organizations by journalists and congressional staff with regard to perceived ideologies. Furthermore, the coding correlates at an even higher

0.93 with the ideological labeling of 42 of the 51 think tanks in newspaper stories between 1991 and 1995. See Rich 1999 for a full explanation of the coding process for ideology.

3. Our view was that it neither made sense nor would produce reliable results to execute a study of think tanks that, for example, did not include the Heritage Foundation, Brookings Institution, and the Urban Institute. Not only are these among the best known think tanks (independent of their visibility), but they are also among the best funded. To randomize our selection of think tanks within each category in our selection of such a small sample could have resulted in the selection of Heritage, for example, and the exclusion of Brookings, leaving instead only very small think tanks of "no identifiable ideology" in the sample. These kinds of selection problems would have skewed our findings and prevented us from making valid predictions.
4. In fact, we analyzed additional models that considered both baseline variation in citations and variation for every dollar spent by including a series of interaction terms of independent variables with budget on the right-hand side of the equation. Our results were little different from those reported here with budget size as part of the dependent variable. That is, independent variables revealed statistically and substantively interesting results only in their interaction with budget size.
5. Two of the think tanks in our sample were founded after 1991 and therefore are only included in our data set for the years in which they were operating. These organizations are Empower America, founded in 1993, and the Public Policy Institute of California, founded in 1994.
6. Unlike the *New York Times,* the New York–based *Wall Street Journal* does not have a section that covers local New York news, so we did not hypothesize that it would provide New York–focused think tanks with greater coverage.
7. We selected these four think tanks for the "Clinton election" variable based on the ties between their personnel and the new administration. Recognizing that the strength of these ties varied, we tried our equations with different variations on which think tanks were included in the variable. The Progressive Policy Institute probably had the strongest ties to the Clinton administration; when included alone in the Clinton variable, it falls just short of statistical significance at the $p < 0.05$ level. The Institute for International Economics may have had the weakest links to the incoming administration, and when excluded, the variable with only the Progressive Policy Institute, the Economic Policy Institute, and Brookings remains highly significant.
8. The same pattern of relying on a few institutions was evident for the "outside Washington" institutions that focus on national politics and policy making. The Council on Foreign Relations, Hoover Institution, Hudson Institute, and RAND Corporation form the bulk of the references in most newspapers.
9. Weaver finds that non-D.C.-based think tanks receive substantial media visibility only in the newspapers published close to where they are located, not in the whole state where they are based. The northern California–based Hoover Institution, for example, receives high visibility in the *San Francisco Chronicle* but not in the *Los Angeles Times*. The southern California–based RAND Corporation, by contrast, does well in the *Los Angeles Times* but not in the *San Francisco Chronicle*. This finding lends additional support to the conclusion that journalists favor sources that are close at hand.

References

Berry, Jeffrey M. 1989. "Subgovernments, Issue Networks, and Political Conflict." In *Remaking American Politics,* ed. Richard A. Harris and Sidney M. Milkis. Boulder, CO: Westview Press.

Bjerre-Poulsen, Niels. 1991. "The Heritage Foundation: A Second-Generation Think Tank." *Journal of Policy History* 3:152–72.

Callahan, David. 1995. "Liberal Policy's Weak Foundations." *The Nation,* Nov. 13:568–72.

Callahan, David. 1999. *$1 Billion for Ideas: Conservative Think Tanks in the 1990s.* Washington, D.C.: National Committee for Responsive Philanthropy.

Chisolm, Laura Brown. 1990. "Sinking the Think Tanks Upstream: The Use and Misuse of Tax Exemption Law to Address the Use and Misuse of Tax-Exempt Organizations by Politicians." *University of Pittsburgh Law Review* 51: 577–640.

Cigler, Allan J., and Burdett A. Loomis. 1995. "Contemporary Interest Group Politics: More Than 'More of the Same.'" In *Interest Group Politics,* 4th Edition, ed. Allan J. Cigler and Burdett A. Loomis. Washington, D.C.: Congressional Quarterly Press.

Cook, Timothy E. 1989. *Making Laws and Making News: Media Strategies in the U.S. House of Representatives.* Washington, D.C.: Brookings Institution.

Cook, Timothy E. 1998. *Governing with the News.* Chicago: University of Chicago Press.

Covington, Sally. 1997. *Moving a Public Policy Agenda: The Strategic Philanthropy of Conservative Foundations.* Washington, D.C.: National Committee for Responsive Philanthropy.

Danielian, Lucig H. 1989. "Network News Coverage of Interest Groups: Implications for Mass Media and Democracy." Ph.D. diss., University of Texas, Austin.

Danielian, Lucig H., and Benjamin I. Page. 1994. "The Heavenly Chorus: Interest Group Voices on TV News." *American Journal of Political Science* 38(4):1056–78.

Feulner, Edwin J., Jr. 1986. "Ideas, Think Tanks, and Governments." In *The Heritage Lectures.* Washington, D.C.: Heritage Foundation.

Gans, Herbert J. 1980. *Deciding What's News.* New York: Vintage.

Goldenberg, Edie. 1975. *Making the Papers: The Access of Resource-Poor Groups to the Metropolitan Press.* Lexington, MA: Heath.

Graber, Doris A. 1993. *Mass Media and American Politics.* Washington, D.C.: Congressional Quarterly Press.

Heclo, Hugh. 1978. "Issue Networks and the Executive Establishment." In *The New American Political System,* ed. Anthony King. Washington, D.C.: American Enterprise Institute Press.

Hellebust, Lynn, ed. 1996. *Think Tank Directory: A Guide to Nonprofit Public Policy Research Organizations.* Topeka, KS: Government Research Service.

Hertsgaard, Mark. 1988. *On Bended Knee: The Press and the Reagan Presidency.* New York: Farrar Straus Giroux.

Hess, Stephen. 1981. *The Washington Reporters.* Washington, D.C.: Brookings Institution.

Hodgson, Godfrey. 1996. *The World Turned Right Side Up.* Boston: Houghton Mifflin.

Hollings, Robert L. 1993. *Nonprofit Public Policy Research Organizations: A Sourcebook on Think Tanks in Government.* New York: Garland.

Kendrowski, Karen M. 1996. *Media Entrepreneurs and the Media Enterprise in the U.S. Congress.* Cresskill, NJ: Hampton Press.

Kitfield, Eleanor Evans. 1995. *The Capitol Source.* Washington, D.C.: National Journal.

McGann, James G. 1995. *The Competition for Dollars, Scholars, and Influence in the Public Policy Research Industry.* New York: University Press of America.

McQuail, Denis. 1977. "The Influence and Effects of Mass Media." In *Mass Communication and Society,* ed. by James Curran, Michael Gurevitch, Janet Woolacott, John Marriott, and Carrie Roberts. London: Edward Arnold.

Moore, W. John. 1992. "It Pays to Think Right." *National Journal,* Aug. 15:1923.

Peschek, Joseph G. 1987. *Policy-Planning Organizations: Elite Agendas and America's Rightward Turn.* Philadelphia: Temple University Press.

Ricci, David M. 1993. *The Transformation of American Politics: The New Washington and the Rise of Think Tanks.* New Haven, CT: Yale University Press.

Rich, Andrew. 1999. "Think Tanks, Public Policy, and the Politics of Expertise." Ph.D. diss., Yale University.

Rich, Andrew, and R. Kent Weaver. 1998. "Advocates and Analysts: Think Tanks and the Politicization of Expertise." In *Interest Group Politics,* 5th Edition, ed. Allan Cigler and Burdett Loomis. Washington, D.C.: Congressional Quarterly Press.

Shuman, Michael H. 1998. "Why Progressive Foundations Give Too Little to Too Many." *The Nation* 266(2):11–15.

Smith, James Allen. 1991. *The Idea Brokers: Think Tanks and the Rise of the New Policy Elite.* New York: Free Press.

Soley, Lawrence. 1992. *The News Shapers.* Westport, CT: Praeger.

Sorauf, Frank J. 1987. "Campaign Money and the Press: Three Soundings." *Political Science Quarterly* 102(1):25–42.

Stone, Diane. 1996. *Capturing the Political Imagination: Think Tanks and the Policy Process.* Portland, OR: Frank Cass.

Vallone, Robert P., Lee Ross, and Mark R. Lepper. 1985. "The Hostile Media Phenomena: Biased Perception and Perception of Media Bias in Coverage of the Beirut Massacre." *Journal of Personality and Social Psychology* 49(3):577–85.

Walker, Jack L., Jr. 1991. *Mobilizing Interest Groups in America.* Ann Arbor: University of Michigan Press.

Weaver, David H., and G. Cleveland Wilhoit. 1991. *The American Journalist.* Bloomington: Indiana University Press.

Weaver, R. Kent. 1989. "The Changing World of Think Tanks." *P.S.: Political Science and Politics* 22(3):563–79.

Weaver, R. Kent. 1993. "Think Tanks, the Media, and the American Policy Process." Presented at the fall meeting of the Association for Public Policy Analysis and Management, Washington, D.C., Oct. 30.

Weiss, Carol H., and Eleanor Singer. 1988. *Reporting of Social Science in the National Media.* New York: Russell Sage Foundation.

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