THE MUNDANE AND THE ARCANE: PRESTIGE MEDIA COVERAGE OF SOCIAL AND NATURAL SCIENCE

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This study compares coverage of social and natural science in the New York Times, *the* Los Angeles Times, *and network television news* (ABC World News Tonight, CBS Evening News, *and* NBC Nightly News). *The analysis reveals that journalists demarcate social and natural science, but sometimes fail clearly to demarcate social science and lay perspectives. In comparison to natural science, social science is portrayed in the media as a less distinctive and valid way of knowing.*

Social scientists are rarely afforded the status of natural scientists by either journalists or the lay public. Journalists and their audiences often deem the social sciences less useful and valid than the natural sciences, and occasionally even devalue social science expertise as little different from common sense. Although these views are fairly well documented in the extant literature, there is little evidence regarding how – or even if – these views are reflected in media coverage of science. This study examines how the differences between social and natural science are represented in the *New York Times,* the *Los Angeles Times,* and on network television news. More specifically, this study considers the segregation of science news in newspaper science sections, the textual strategies journalists use when referring to social and natural scientists, and how the inclusion of journal titles in media accounts of science helps maintain the relative authority of social and natural science. Clearly, these aspects of media coverage may be implicated in public skepticism regarding the social sciences.

Science and Common Sense

For the most part, science enjoys high public confidence and support. The public assents to the authority of natural scientists and recognizes science as a legitimate way of knowing (although this respect is often tempered by wariness regarding the risks of new scientific and technological developments).[1] Similarly, while journalists' published accounts of science are typically restrained, in conversation they often enthusiastically praise the work of the scientists they cover.[2]

In contrast, both journalists and the public seem somewhat less inclined to view social science as a unique or especially valid way of knowing. Surveys in Britain and France indicate that adults in those nations conceptually discriminate between the social and natural sciences, ranking the former

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as less scientific than the latter.[3] Moreover, a substantial portion of the public may not readily distinguish social science from mere common sense.[4] In one U.S. survey, 83 percent of respondents agreed that "day-to-day life provides training in psychology."[5] It seems unlikely that a similar percentage of the public would agree that everyday life provides training in, say, physics. To the extent that a discipline's issues and subject matter are seen by the public as being part of everyday life, inquiry in that discipline may be seen as mundane – the public may believe that no special training or expertise is required to understand the phenomena typically examined within the discipline. Certainly, the public has direct and daily contact with phenomena of concern to psychologists, sociologists, media researchers, and other social scientists. Many laypersons believe themselves capable of deep understanding of their own and others' beliefs and behavior.[6] Researchers who claim to discover in public belief and behavior more than is readily apparent to those they study often meet with public skepticism and may even be ridiculed as presumptuous eggheads for questioning or going beyond lay understandings of the social world.

Many science journalists seem to share the public's skepticism about social science. Science journalists have complained that social science is "extraordinarily subjective" or even "garbage science."[7] While such overt hostility is rare, Dunwoody reports that prominent science journalists typically express little interest in covering the social sciences.[8] These journalists may see the findings of social research as commonplace and banal. They may assume that no special training or knowledge is required to understand social research.[9] For example, McCall and Stocking complain that many journalists inappropriately consider themselves somewhat learned in psychology; journalists may feel they understand psychological concepts like depression, although their equating of depression with sadness has little in common with psychologists' understanding of depression.[10] Similarly, Noelle-Nuemann suggests that media coverage of survey research is often flawed because journalists presume they need no special training to understand question-order and question-wording effects, statistical correlation, and other methodological issues.[11]

News Routines and the Invisibility of Social Science

The structure of news organizations reflects and perhaps reinforces journalists' devaluation of the social sciences relative to the natural sciences. Most major news organizations have institutionalized a science "beat"; these organizations boast a staff of journalists charged primarily with covering science and medicine. Social science is typically neither included in the purview of the science staff nor assigned to a specialized social science staff. In their analysis of national media coverage of social science, Weiss and Singer report that only 7 percent of social science stories were written by science journalists. The bulk of social science stories were written by journalists who defined themselves as general-assignment, political, or feature reporters, among other things.[12] It might be said that in the journalist's view, there are no social science stories. Stories about research on marriage rates, murder rates, or aggressive behavior in children are seen by journalists as stories about relationships, crime, and parenting, not as examples of social science per se.[13] Unlike natural science stories, social science stories are not categorized by journalists primarily in terms of the methodological approach used to generate the reported findings. The journalists' world is organized in such a way as to render social science relatively less visible than natural science as a distinctive way of knowing.

Newspaper science sections may also contribute to the relative devaluation of social science to the extent that science sections further segregate the social and natural sciences, legitimating the latter as distinctive and important enough to warrant their own section of the newspaper. Weiss and Singer report that only 2 percent of social science stories in the *New York Times* appeared in the *Times'* weekly "Science Times" section, but Weiss and Singer do not examine the coverage of natural science in the *New York Times*, and therefore do not provide the comparative data required to conclude that the *Times* treats the social and natural sciences differently.[14]

The social sciences may also be said to be relatively less visible than the natural sciences in that they lack journals widely recognized by journalists and public alike as authoritative sources of research. News of science and medicine, Jones and Meadows claim, "consists of what is happening in 'elite' areas of science as reported in 'elite' journals."[15] Jones and Meadows report that British science journalists "typically scrutinise only a very restricted range of journals," limiting their attention to prominent journals such as *Nature*, *Science*, and the *Lancet*.[16] A similar situation is said to prevail in the United States, where it has been suggested that medical news originates primarily from the *New England Journal of Medicine* and *Journal of the American Medical Association*.[17] Certainly, prominent physical and medical science journals spend a good deal of money and effort in shaping and maintaining media relations.[18] The *New England Journal of Medicine* may be the only scientific journal to attain household-word status, familiar to millions and serving as a convenient media shorthand for what one might call "establishment medical science."[19] However, the extent to which the imprimatur of a prominent journal influences science news selection has been only tentatively documented.[20]

While just a few journals may dominate media coverage of physical and medical science, one study suggests that there are no similarly prestigious social science journals. Weiss and Singer searched diligently but found not a single news story on research featured in the Spring 1986 editions of five major social science journals: *American Anthropologist*, *American Economic Review*, *American Political Science Review*, *American Psychologist*, and *American Sociological Review*.[21] Especially in comparison to the natural sciences, then, it seems there is no media consensus about where newsworthy social science is likely to be found.

This study attempts to provide content-analytic evidence concerning these and other claims pertaining to the media representation of social and natural science. It should be stressed that this study is not meant to suggest that journalists should accord social science the same status as natural science. The journalistic and public segregation of social and natural science is in many ways reasonable. Philosophers, scientists, and laypersons alike have long viewed the natural sciences as relatively more autonomous than the social sciences, which are seen as more closely tied to the broader sociopolitical arena.[22] It is laudable that journalists acknowledge the role of political interests in social science research (although journalists have been slow to recognize that political interests pervade the natural sciences as well), and a dearth of publicly prominent social science journals may even be desirable to the extent that the plurality of social science perspectives reach the public. This study explores only the extent to which the media construct a hierarchy of scientific value in which social science is subordinate to natural science.

Method

Story Selection. The *New York Times* and the *Los Angeles Times* were, when data were collected for this study, the two largest circulation daily newspapers with weekly science sections (the *Los Angeles Times* has since discontinued its weekly science section). The three network television evening newscasts – *ABC World News Tonight, CBS Evening News,* and *NBC Nightly News* – are the most popular sources of television news for which public videotape archives exist.

Every issue of the *New York Times* and the *Los Angeles Times* and each night's telecasts of *ABC World News Tonight, CBS Evening News,* and *NBC Nightly News* from July through September 1989 were examined for this analysis. This included both weekday and weekend newspaper editions and television newscasts, representing ninety-two issues or telecasts of each news outlet.

Any story dealing primarily with findings from physical, biological, medical, or social research was included in this analysis. Background or feature stories about scientists and their work were included only if the story focused on the results of specific research efforts. Stories only incidentally mentioning or quoting a scientist or merely reporting the planning of scientific projects were not included. In other words, to be codable, a story needed primarily to report research findings. In addition, only those newspaper stories in primarily "hard" news and science sections were analyzed. Editorials, letters to the editor, reviews, and syndicated columns were excluded from the analysis, as were magazine supplements and travel, classified, and real estate sections.

All ninety-two issues of each newspaper were obtained on microfilm. With the exceptions of the items and sections listed above, the author examined every story to locate relevant articles. To provide reliability estimates for this selection procedure, two composite weeks of both the *New York Times* and *Los Angeles Times* were independently examined by one additional coder. An intercoder agreement of 98.9% was obtained.

Relevant television stories were located with the Vanderbilt University Television News Archive's *Television News Index and Abstracts.* This publication provides brief summaries of all stories appearing on the three major networks' evening newscasts. All stories whose summaries clearly indicated a focus on the results of a scientific study were included in the analysis. As a reliability check, the author and an additional coder independently selected all relevant stories (as defined above) from the *Television News Index and Abstracts.* An intercoder agreement of over 99% was obtained, suggesting that stories about scientific research, as defined in this study, can be reliably selected from the *Index and Abstracts* summaries. All relevant television stories were obtained on videotape from the Vanderbilt Television News Archives.

Content Analysis. All stories were analyzed in terms of two questions. First, how did the story refer to the persons responsible for the reported research, that is, were these persons labeled as "scientists" or "researchers," or was some other description (e.g., "author") used? Second, was a journal named as the source of the reported research, and, if so, what journal? In addition, newspaper stories were coded as to whether they appeared in science or general news sections.

All stories were coded by the author. To provide reliability estimates, a randomly selected subset of stories – forty-five stories each from the *New York Times* and the *Los Angeles Times,* and fifteen stories from each television network – was independently coded by one additional coder. Intercoder reliability, as measured by Krippendorf's *agreement coefficient*,[23] exceeded .88 for all items.

Results

A total of 377 stories were identified as focusing on scientific research. Of these, 150 (or 39.8%) appeared in the *New York Times*, 136 (or 36.1%) in the *Los Angeles Times*, 35 (or 9.3%) on *NBC Nightly News*, 32 (or 8.5%) on *ABC World News Tonight*, and 24 (or 6.4%) on *CBS Evening News*. Because the three network television newscasts differed very little in terms of the variables in this study, they are combined in the analysis that follows.

Both social science and natural science were routinely covered in these news outlets. Across all news outlets, social science stories accounted for 36.6% of all science stories; the remaining 63.4% of stories covered research in the physical, biological, or medical sciences.[24] In the interests of analytical clarity, the physical, biological, and medical sciences are combined under the rubric of natural science in the discussion that follows.

Story Segregation. Social science was much less likely than natural science to appear in the weekly science sections of the *New York Times* and the *Los Angeles Times*. Social science stories accounted for just 11.4% of stories in the *New York Times'* "Science Times" section. Similarly, social science stories accounted for just 8.2% of stories in the *Los Angeles Times'* "Science/Medicine" section. In both newspapers' general news sections, social science accounted for a significantly larger percentage of science news. Social science stories accounted for 41.5% of science stories in the *New York Times'* general news sections ($X^2 = 14.25$, d.f. $= 1$, $p < .001$) and for 48.3% of science stories in the *Los Angeles Times'* general news sections ($X^2 = 20.78$, d.f. $= 1$, $p < .001$).[25] In short, although common in both newspapers, social science was relatively uncommon in newspaper science sections.

References to Scientists. It was also uncommon to find social scientists accorded the same authority as natural scientists – the labels "scientist," "social scientist," and "researcher" were commonly withheld from social scientists. In all five news outlets, persons responsible for the reported research were labeled either "scientists" or "researchers" in more than 80% of natural science stories, while fewer than 20% of social science stories referred to researchers as "scientists," "social scientists," or "researchers." This difference was significant in the *New York Times* ($X^2 = 50.54$, d.f. $= 1$, $p < .001$), the *Los Angeles Times* ($X^2 = 47.65$, d.f. $= 1$, $p < .001$), and network television news ($X^2 = 31.51$, d.f. $= 1$, $p < .001$). Social scientists responsible for reported research were often described with phrases that emphasized the act of writing, such as "the authors of the study" or "the writers of the report."

Journal Citations. A journal was named as the source of 39.3% of research reported in the *New York Times* and in 33.8% of *Los Angeles Times* science stories. Network television news named a journal in just 8.8% of science stories, a significantly lower percentage than found in either the *New York Times* ($X^2 = 24.82$, d.f. $= 1$, $p < .001$) or *Los Angeles Times* ($X^2 = 17.49$, d.f. $= 1$, $p < .001$).

In all news outlets, social science stories were less likely than natural science stories to name a journal as the source of the reported research. In the *New York Times*, a journal was named in 51.4% of natural science stories, while only 14.3% of social science stories named a journal as the source of the reported research ($X^2 = 17.61$, d.f. $= 1$, $p < .001$). In the *Los Angeles Times*, a journal was named in 47.8% of natural science stories, while only 6.5% of social science stories named a journal ($X^2 = 21.23$, d.f. $= 1$, $p < .001$). On television, 16.7% of natural science stories named a journal but no social science story did so.

Natural science journal citations were dominated by just four journals: *Science, Nature,* the *New England Journal of Medicine,* and the *Journal of the American Medical Association.* In both newspapers, one of these four journals was named in more than 69 percent of natural science stories that named a journal.[26] On television, one of these journals was named in six of the eight stories in which journals were named. In three of these television stories a journal masthead was visually displayed while the research was being reported (two stories displayed the *New England Journal of Medicine* masthead, one displayed the masthead of the *Journal of the American Medical Association*).[27]

In striking contrast, there were no similarly prominent social science journals. In fact, across all social science stories, only the *Journal of Clinical and Consulting Psychology* received more than one mention. Unlike natural scientists, then, social scientists cannot boast of having journals that receive extensive media coverage.

Discussion

As Gans notes, journalists tend to conceptualize the nation as a web of symbolic complexes such as Government, Business, Law, Education, Science, and Medicine.[28] News beats and formats roughly correspond to these symbolic complexes; thus there are science beats, science reporters, and newspaper science sections. Science is newsworthy in and of itself, whereas social science is largely excluded from newspaper science sections and may be considered newsworthy only when it can be linked to such symbolic complexes as Government, Family, or Education. While newspaper science sections celebrate science, social science remains relatively less visible as an approach to understanding the world. Social science appears in the news "disguised" as stories about public opinion, human relations, and so forth.

By routinely referring to physical and medical scientists as "scientists" and "researchers" journalists bestow a special status on these scientists; scientists' specialized training and expertise are implicitly invoked, and they are thereby demarcated from laypersons. In social science news, however, the phrase "social scientist" is seldom used. Even the seemingly unproblematic designation "researcher" is uncommon when referring to social scientists. By stressing only the act of writing in identifying social scientists (e.g., "the authors of the study"), journalists fail to demarcate social scientists from others who may write, argue, or otherwise enter the fray of the broader, interest-laden sociopolitical arena. In public conceptions, *writing* is a more subjective and less exclusive activity than *researching.* To refer to someone's research finding as being *written* rather than *reported* (or *discovered*) is to call attention to the role of human interests in the production of knowledge, to make the finding seem relatively less fact-like.[29] The distinction between social scientist and layperson, while not entirely effaced by journalists, is not as rigorously defended as is the scientist-layperson distinction. Journalists typically treat social scientists with respect, but journalists nonetheless seem unwilling to accord social and natural scientists equal status as practioners of an arcane rather than mundane craft.

Journalists do relatively little to publicize social science journals as sources of authoritative research on social issues. Social science stories were much less likely than natural science stories to name a journal as the source of the reported research, and no social science journal enjoyed the same media prominence as *Science, Nature,* the *New England Journal of Medicine,* or the *Journal of the American Medical Association* – journals that attentive readers and viewers of science news will quickly come to recognize as authoritative.

It is possible that the higher media visibility of natural science journals in comparison to social science journals may simply indicate that more natural than social science stories are culled from journals. Perhaps social science stories are more likely than natural science stories to be based on unpublished research. After all, social scientists generally face relatively fewer restrictions against publicizing research before it has undergone peer review; as a result, social scientists may be more likely than natural scientists to make their unpublished work available to journalists.

It must also be noted that the data reported here show only that certain journals enjoyed media prominence; this does not necessarily indicate that journalists neglected research appearing in less prominent journals. Recall that journals were named as the source of reported research in fewer than 40 percent of newspaper science stories and in fewer than 10 percent of television science stories. It seems likely that a somewhat higher percentage of stories were culled from journals, but that journalists failed to specify the title of the journal. Perhaps prominent journals like the *New England Journal of Medicine* are simply more likely than lesser-known journals to be mentioned in the media, even though lesser-known journals may nonetheless be the source of some reported research. Additional research is needed to determine more precisely the extent to which journalists rely on science journals for their stories. It would also be useful to learn how frequently and why journalists deem certain journals newsworthy enough to name in reports of research culled from their pages.

While future research may illuminate the causes of this disparity, it is clear that social science journals are eclipsed in the media by a handful of natural science journals. Social science is often reported in the media, but seldom with the imprimatur of a widely recognized journal. In this respect, the social sciences have a relatively less authoritative public voice.

Of course, it is not only through media coverage that social science is rendered relatively less visible as a distinctive way of knowing. Social scientists themselves typically consider their research to be less scientific than the work of natural scientists,[30] and social scientists are no doubt more likely than natural scientists to use textual and rhetorical strategies that render research findings somewhat less certain, less objective – that is, less scientific. As Bourdieu suggests, social scientists utilize the rhetoric of politics and public affairs more commonly than natural scientists, who have secured the right to use the more autonomous rhetoric of science.[31] In this context, the prestige media are but one of many interrelated social forces that render social science expertise relatively less visible and less valued than natural science expertise.

Conclusion

This study only begins to explore the ways in which the media construct a hierarchy of scientific value. Much work remains to be done on the role of science news in cultivating public frameworks for understanding science. As this study suggests, the media segmentation of reality into news beats and specialized news sections is perhaps implicated in public conceptions of science, as are the textual strategies of science reporters. In addition, one cannot overlook the relationship between journalists and scientific organizations (e.g., the American Medical Association) that claim to represent distinctive communities of experts – claims perhaps legitimized by media attention to research published in the organizations' journals.

The need for additional research goes far beyond the issues touched upon in this study. We know too little about how journalists conceptualize specific social science disciplines (e.g., psychology versus sociology) or about how journalists understand their relationship with the lay audiences for whom they translate social science.[32] For example, future research might usefully explore the extent to which journalists' awareness of lay skepticism regarding social science effects press coverage of social science. In addition, there exists surprisingly little research on the effects of social science news on public opinion. It is well documented that the media perform an agenda-setting function, influencing public conceptions of the importance of various issues,[33] yet little research has focused on the role of mass media in public opinion regarding the status or value of social science. Nor have researchers examined the crucial interaction between media coverage, public opinion, and government policymaking regarding the social sciences, despite evidence that media coverage sometimes influences government policy-makers.[34]

Again, it must be stressed that this study is not meant to suggest that journalists should treat social science like natural science. Rather, this study suggests only that, unlike natural science, social science is not routinely portrayed in the media as a way of knowing distinct from common sense. This study is not meant to suggest that media coverage of social science is insubstantial or irresponsible. On the contrary, social science research receives a good deal of media coverage, little of which is overtly negative. Still, until journalists and social scientists work together to increase public appreciation of the unique value of social scientific theories and methodologies in understanding our world, social scientists will find their research often publicized but seldom legitimized as having roots in a distinctive way of knowing.

NOTES

1. John R. Durant, Geoffrey A. Evans, and Geoffrey P. Thomas, "The Public Understanding of Science," *Nature* 340 (July 6, 1989):11-14; Amitai Etzioni and Clyde Nunn, "The Public Appreciation of Science in Contemporary America," in *Science and Its Public: The Changing Relationship*, ed. Gerald Holton and William A. Blanpied (Boston: D. Reidel, 1976), 229-243; National Science Board, *Science and Engineering Indicators 1991* (Washington, DC: U.S. Government Printing Office, 1991). However, the public does not necessarily understand in what way science is a distinctive way of knowing. In a recent survey, only 18% of American adults provided a minimally-sophisticated response when asked what it means to study something scientifically (National Science Board, *Science and Engineering Indicators*). It seems the public accepts on authority the distinctiveness of science as a way of knowing.

2. Dorothy Nelkin, *Selling Science: How the Press Covers Science and Technology* (NY: W. H. Freeman, 1987).

3. John R. Durant, Geoffrey A. Evans, and Geoffrey P. Thomas, "Public Understanding of Science in Britain: The Role of Medicine in Popular Representations of Science," *Public Understanding of Science* 1 (April 1992): 161-182.

4. Adrian F. Furnham, *Lay Theories: Everyday Understanding of Problems in the Social Sciences* (NY: Pergamon Press, 1988).

5. Wendy Wood, Melinda Jones, and Ludy T. Benjamin Jr., "Surveying Psychology's Public Image," *American Psychologist* 41 (September 1986): 947-953, 950.

6. Adrian F. Furnham, "Commonsense Theories of Personality," in *Everyday Understanding: Social and Scientific Implications,* ed. Gun R. Semin and Kenneth J. Gergen (Newbury Park, CA: Sage, 1990), 176-203; Furnham, *Lay Theories.*

7. Quoted in Sharon Dunwoody, "When Science Writers Cover the Social Sciences," in *Reporting Science: The Case of Aggression,* ed. Jeffrey H. Goldstein (Hillsdale, NJ: Lawrence Erlbaum, 1986), 67-82.

8. Sharon Dunwoody, "The Science Writing Inner Club: A Communication Link Between Science and Lay Public," in *Scientists and Journalists: Reporting Science as News,* ed. Sharon M. Friedman, Sharon Dunwoody, and Carol L. Rogers (Washington, DC: American Association for the Advancement of Science, 1986), 155-169.

9. Science journalists are unlikely to be especially knowledgeable in the social sciences, having spent most of their careers covering primarily the physical and medical sciences (Dunwoody, "The Science Writing Inner Club"). As one journalist admits, "I'm not very well equipped to evaluate sociology . . . but it can't hurt anybody so I figure it's not going to do too much damage if I get it a little screwed up" (quoted in Dunwoody, "The Science Writing Inner Club," 164-165). The Media Resource Service of the Scientists' Institute for Public Information puts journalists in contact with scientists who can answer questions about specific science issues, including social science issues. However, in 1985 and 1986, only 9.5% of calls to the Media Resource Service requested help with social science stories [Fred Jerome, "Media Resource Services: Getting Scientists and the Media Together," *Impact of Science on Society* 36 (fall 1986): 373-378]. Presumably, journalists feel that social science is more readily comprehensible than natural science.

10. Robert B. McCall and S. Holly Stocking, "Communicating Psychological Research Through the Mass Media," *American Psychologist* 37 (September 1982): 985-995.

11. Elisabeth Noelle-Nuemann, "The Public Opinion Research Correspondent," *Public Opinion Quarte*rly 44 (winter 1980): 585-597.

12. Carol H. Weiss and Eleanor Singer, *Reporting of Social Science in the National Media* (NY: Russell Sage, 1988).

13. Weiss and Singer, *Reporting of Social Science.*

14. Weiss and Singer, *Reporting of Social Science.*

15. G. Jones and A. J. Meadows, "Sources and Selection of Scientific Material for Newspaper and Radio Programs," *Journal of Research Communication Studies* 1 (1978): 69-82.

16. Jones and Meadows, "Sources and Selection," 74.

17. For example, see Dorothy Nelkin, "Managing Biomedical News," *Social Research* 52 (autumn 1985): 625-646; Nelkin, *Selling Science;* and David P. Phillips, Elliot J. Kantor, Bridget Bednarczyk, and Patricia L. Tastad, "Importance of the Lay Press in the Transmission of Medical Knowledge to the Scientific Community," *New England Journal of Medicine* 325 (October 17, 1991): 1180-1183. See also Edward Caudill and Paul Ashdown, "The *New England Journal of Medicine* as News Source," *Journalism Quarterly* 66 (summer 1989): 458-462.

18. Nelkin, *Selling Science.*

19. William Evans, "Visualizing Medical Authority: Television News Coverage of Medical Research" (paper presented at the annual meeting of the

International Communication Association, Miami, May 1991).

20. Jones and Meadows, "Sources and Selection."

21. Weiss and Singer, *Reporting of Social Science.*

22. Pierre Bourdieu, "The Specificity of the Scientific Field," in *French Sociology: Rupture and Renewal Since 1968*, ed. Charles C. Lemert (NY: Columbia University Press, 1981), 257-292.

23. Klaus Krippendorf, *Content Analysis: An Introduction to its Methodology* (Beverly Hills, CA: Sage, 1980).

24. Network television newscasts offered a somewhat higher proportion of social science stories – 47.2% of all science stories – than either the *New York Times* or the *Los Angeles Times*, where, respectively, 32.7% and 33.8% of all science stories reported social science. This difference, however, was not statistically significant.

25. Statistical tests are used here and throughout the paper only for heuristic purposes; no claim is made that this study's three-month sample is representative of all 1989 issues or telecasts of all five news outlets analyzed here. However, a preliminary analysis indicated that this three-month period was not in any way atypical in terms of the amount and nature of science news. That is, no unusual or particularly major science stories dominated media coverage of science during this period, unlike, for example, March through May of 1989 when nuclear cold-fusion research dominated media coverage of science. Therefore, the three-month sample seems suitably typical to provide a reliable base for the comparisons made in this analysis.

26. Of the 103 natural science stories in which journals were named, 32.0% named the *New England Journal of Medicine*, 15.5% named *Science*, 13.6% named the *Journal of the American Medical Association*, and 12.6% named *Nature*. No other journal acounted for more than 3% of natural science journal citations.

27. In one curious case, the *Los Angeles Times* reported findings from an unpublished nuclear cold-fusion experiment, noting that researchers "plan to submit their findings to the journal *Nature*" ("Fusion Claims Debunked," *Los Angeles Times*, 28 August 1989, sec. 2 p. 3). Here even the intention to submit research to one of the prominent journals was considered newsworthy.

28. Herbert J. Gans, *Deciding What's News* (NY: Vintage, 1979).

29. Bruno Latour, *Science in Action* (Cambridge, MA: Harvard University Press, 1987).

30. Hailu Yirga, Rick Seltzer, and William Ellis, "Comparing Scientific Attitudes of Natural and Social Scientists," *Sociology and Social Research* 71 (April 1987): 249-251. However, this same study suggests that social scientists are more likely than natural scientists to view social science as a form of scientific inquiry.

31. Bourdieu, "Specificity of the Scientific Field."

32. Ironically, we know more about the social-science-related views of journalists who typically do *not* cover the social sciences (i.e., journalists who specialize in natural science reporting) than we do about the views of the general-assignment reporters who *do* cover the social sciences.

33. David Protess and Maxwell McCombs, eds., *Agenda Setting: Readings on Media, Public Opinion, and Policymaking* (Hillsdale, NJ: Lawerence Erlbaum, 1991); J. David Kennamer, ed., *Public Opinion, the Press, and Public Policy* (Westport, CT: Greenwood, 1992).

34. Martin Linsky, *Impact: How the Press Affects Federal Policymaking* (NY: W. W. Norton, 1986).