A study investigated the effects of viewing the made-for-television film "The Day After" on the perceived prominence of issues surrounding nuclear war and disarmament on the public agenda. Telephone interviews were conducted with 92 adults in Knoxville, Tennessee, prior to the broadcast of the program and 232 after the broadcast (including both viewers and non-viewers of the program). Subjects were first asked whether they intended to watch the film, and then to compare their concern for nuclear war with four other major issues—infrastructure, unemployment, United States military involvement in other countries, and crime. In addition, they were asked whether they had discussed nuclear war or disarmament in the past few weeks and to indicate their attitudes toward the likelihood of war, the nuclear freeze, placing missiles in Europe, and demonstrations in support of a freeze on nuclear weapons. Results indicated that viewing the film was (1) causally related to nomination of nuclear issues as a primary concern, (2) unrelated to the importance assigned to nuclear war in comparison with other issues, and (3) related, via selective exposure, to the discussion of nuclear issues. (FL)
Dramatic Television and Agenda Setting:  
The Case of "The Day After"

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Presented to the Theory and Methodology Division  
Association for Education in Journalism and Mass Communication  
Gainsville, Fla., August, 1984

ABSTRACT: This study investigates the effects of viewing the made-for-television movie, "The Day After," on the perceived prominence of issues surrounding nuclear war and disarmament on the public agenda. Data gathered via telephone interviews (N = 324) indicates that viewing the movie was (A) causally related to nomination of nuclear issues as a primary concern, (B) unrelated to the rank assigned to nuclear war in comparison with other issues, and (C) related via selective exposure to discussion of nuclear issues.

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On Nov. 20, 1983, 100 million Americans tuned to the ABC television network to watch the world being blown away by nuclear war. This event -- the broadcast "The Day After" -- was remarkable in many respects.

Probably no made-for-television movie ever generated as much public comment. Before the movie's broadcast, its ramifications were discussed frequently not only by ABC, but also by competing broadcasters. Print journalists also provided substantial coverage of the movie and the controversy surrounding it. The movie was called a new media form, "nuclear entertainment," and one report prophesied a large viewing audience for the film would "change prime-time TV for years to come." [1]

While some concern focused on potential psychological damage of the movie's graphic portrayal of death and destruction, much of the notoriety undoubtedly was due to its topical content. The broadcast occurred while officials were debating a record national defense budget, discussing a freeze of the U.S. nuclear arsenal, and engaging in international disarmament talks. Also, the broadcast was on the eve of American deployment of Pershing II nuclear missiles in Europe.

Numerous groups and individuals expressed concern about the movie's potential impact on political attitudes. The Moral Majority and other "peace-through-strength" groups branded the "The Day After" blatant propaganda while pro-freeze organizations
mounted newspaper and television advertising campaigns to use the movie as a vehicle for garnering support for their cause. [2]

Before the broadcast, several members of the U.S. Congress commented on the film and the issues it raised. Following the broadcast, the U.S. Secretary of State, two former cabinet members and several scientists stayed up past midnight to discuss the made-for-television movie and its implications.

Many studies have examined attitudinal and political ramifications of television drama. Among the television programs investigated are the series "All in the Family," and several mini-series, "Roots," "Roots II," and "Holocaust." [3]

In general, past investigations of television programs conclude that there is little evidence that they change attitudes. Following a review of literature and her own investigation, Ball-Rokeach concluded that "dramatic productions such as Roots II generally have little or no impact." [4] Researchers generally explain the lack of effects in terms of selectivity processes by which viewers interpret television content as being supportive of their a priori attitudes.

Because of the consistent pattern of minimal effects revealed by past research, the current research investigated attitude change only minimally. Instead, it focused on agenda setting.

Since publication of McCombs and Shaw's seminal work on agenda setting in 1972, researchers have repeatedly shown that
the degree of stress given to issues in news media correlates with the level of importance the public attaches to those issues. [5] The agenda setting phenomenon has been studied frequently with reference to news; however, a review of literature reveals no previous research relating it to television drama. This focus on agenda setting fits well with ABC President Anthony Thomopoulos' stated intent for "The Day After:" "...to cause and create discussion." [6]

The study reported here addresses four research questions:

1. Did viewers of "The Day After" attach more importance to issues of nuclear war than did non-viewers?
2. Did viewers discuss issues of nuclear war more than non-viewers?
3. Were there systematic attitudinal differences between viewers and non-viewers?
4. Are revealed differences attributable to selectivity processes?

Methods and Results

A telephone survey was conducted to investigate the questions concerning effects of viewing "The Day After" on the perceived importance of nuclear war and attitudes toward nuclear war. Interviews were conducted with one sample prior to the broadcast and another sample following the broadcast. This design allows for comparison of three groups: (1) pre-broadcast respondents who had no opportunity to watch the film; (2) post-
broadcast respondents who elected not to watch the film, and (3) post-broadcast respondents who elected to watch the film. This design eliminates sensitization effects due to reinterviewing a panel of respondents. Also the design guards against spurious causal inferences that might be due to selective exposure by allowing explicit contrasts among the three groups. To infer that viewing caused some phenomenon, two conditions would logically have to be met: (A) the level of the phenomenon under consideration would be highest in the viewing group, and (B) the levels of the non-viewing groups would be the same. To infer selective exposure, (A) the level of the phenomenon under consideration in the combined post-broadcast groups would be the same as the level in the pre-broadcast group; (B) the level would be highest in the viewing group, and (C) the level would be lowest in the post-broadcast non-viewing group. Of course, there could be no significant differences among groups; or ambiguous patterns could occur.

Fixed interval samples of 150 for the pre-broadcast group and 350 for the post-broadcast group were drawn from the current Knoxville, Tenn., telephone book. Knoxville is a trade and manufacturing center of 200,000 and provides a rich demographic mix. As the home of the University of Tennessee and headquarters of the Tennessee Valley Authority, Knoxville is educationally diverse. More important to this study, the city is 20 miles east of Oak Ridge -- a major manufacturing center of American nuclear
arms components. This proximity to Oak Ridge may account for the high viewership of the movie and the high levels of concern about nuclear issues reported below.

Because the study was designed to examine effects of actually watching the movie (as opposed to effects of publicity surrounding the it) interviews were conducted as close to the actual broadcast as practical. Pretest interviews were conducted during the three days immediately before the broadcast and post-test interviews were completed three days after. Interviews were completed with 92 persons in the pre-broadcast sample and 232 persons in the post-broadcast sample. After elimination of disconnected and inappropriate telephone numbers, the response rates were 71 percent for the pre-broadcast sample and 73 percent for the post-broadcast sample.

Inspection of demographic data from the interviews revealed that efforts to balance the sample by sex resulted in an overcompensation with 45 percent of the total sample female and 55 percent male. The sample also tended to overrepresent the young and college educated.

In addition to standard demographic questions, the questionnaire contained items designed to measure viewing of the movie, perceived importance of nuclear war, and attitudes toward issues surrounding nuclear war.

The viewing question asked of the post-broadcast sample was: "Did you watch the movie, "The Day After?" To avoid sensitiza-
tion, the questions was asked after agenda setting and attitude items. In this sample 144 (60 percent) reported that they watched and 96 (40 percent) that they did not watch. This viewership exceeded the national average of 46 percent reported by Nielson.

The prominence of nuclear war on the public agenda was assessed first by an open-ended question phrased: "There are many problems facing our country today and we'd like to get your views on some of them. What do you think is the most important problem facing the country today?" A follow-up question asked: "What do you think is the second most important problem?" These questions elicited a bewildering variety of responses. However, the responses were coded only with regard to whether or not respondents volunteered nuclear war, nuclear disarmament, or some synonym. Responses on the two open-ended questions were combined into an index indicating whether respondents volunteered nuclear war as either their first or second concern.

A crosstabulation of this variable by the three groups -- pre-broadcast non-viewers, post-broadcast non-viewers, and viewers -- is shown in Table 1. The Chi-Square value associated with this table, 16.45, with 2 degrees of freedom, is significant beyond the .001 level. Viewers are nearly twice as likely to volunteer nuclear war as an important issue than are non-viewers. Further, the pre-broadcast respondents and the post-broadcast non-viewers have very similar response patterns indicating that
selective exposure does not account for the finding. If the difference were due to selective exposure, the post-broadcast non-viewers should manifest a lower level of concern than the pre-broadcast sample. In fact, post-broadcast non-viewers show a trivially higher level of concern.

Respondents were also asked to compare their concern about nuclear war with four other major issues -- inflation, unemployment, U.S. military involvement in other countries, and crime. These comparisons were presented in pairs and respondents were asked of the two: "which one concerns you most?" The number of nuclear war choices were counted yielding a rank-order variable ranging from one (nuclear war was chosen above all other issues) to five (nuclear war was not chosen above any other issue).

A crosstabulation of the rank-order importance of nuclear war compared with other issues is shown in Table 2. The Chi-Square value associated with this table is 29.5. With 8 degrees of freedom this value is significant beyond the .01 level; however, the pattern of results offers only marginal support for the proposition that watching the movie increased levels of concern. A large portion of the deviation from expectation occurs among respondents who rank nuclear war either first or second. For the first rank, the response pattern supports the proposition; however, for the second rank, the pattern is reversed. Collapsing these ranks results in a non-significant Chi-Square value mitigating against the conclusion that viewers
generally rank nuclear war higher than non-viewers.

The third method of assessing the prominence of nuclear war on the public agenda focused on discussion of the topic. Respondents were asked: "In the last few weeks, have you discussed nuclear war or disarmament with your family or friends?" If respondents answered "yes," they were asked: "Would you say you've had 'many discussions,' 'several discussions,' or 'just a few discussions?'" This combination of questions initially was coded such that zero indicated no discussions and 3 indicated many discussions. However, to avoid small cell sizes in the Chi-Square analysis, the "several discussions" and "many discussions" categories were collapsed.

A crosstabulation of the amount-of-discussion variable by group is shown in Table 3. The Chi-Square value with four degrees of freedom, 26.7, is significant beyond the .001 level. The pattern of results is precisely what would be expected if selective exposure accounts for the underlying processes. Viewers are far less likely than chance to be in the non-discussion group and far more likely than chance to be in the high-discussion group. The reverse pattern occurs for the post-broadcast non-viewers. The distribution of the pre-broadcast group closely approximates that expected by chance.

Apparently persons who discussed the movie were more motivated to watch it than were persons who did not talk about
it. This interpretation fits well with a strand of the uses and gratifications literature that holds anticipation of discussion is a key determinant of media exposure. [7]

To investigate the possibility that viewing the movie was associated with attitude change, five items were posed to respondents which asked them to indicate their own attitude positions on seven-point scales. Exact wording of these items is shown in Table 4. These items were assumed to be at the interval level of measurement and subjected to analysis of variance by viewing group. This analysis, shown in Table 4, shows no consistent pattern attributable to viewing the movie. The question concerning level of support for demonstrations for anti-nuclear demonstrations shows significant mean differences which may be indicative of selective exposure. However, this finding could be due to randomness attributable to the number of significance tests run.

Discussion

The results of this study provide a mixed picture. The analysis of the open-ended question concerning "important issues facing America today" points to a causal agenda-setting effect. However, differences between groups are far less systematic with regard to the items which ask respondents to rank concern about nuclear war against other issues.

Perhaps this inconsistency can be attributed to the nature of the task posed to respondents by the two types of questions.
When faced with an open-ended question, respondents may well answer "off the top of the head." Recent and graphic exposure to a portrayal of nuclear war would have made this topic fresh in the respondents' minds and, therefore, increased the likelihood of volunteering it as a response. But when faced with the pair-comparison questions, respondents may think more analytically and are less susceptible to recent communications. This interpretation suggests that agenda setting as indicated by open-ended questions is a superficial phenomenon. Such superficiality would result in rapid decay of the effect -- a possibility that should be investigated in subsequent research.

Another difference between the open-ended and pair-comparison questions is that the former asked about "important issue facing our country," while the latter asked of two issues "which concerns you most." Thus, the open-ended question elicited perceptions of the national agenda while the pair-comparison question asked about the personal agenda. While the two questions both aim at overarching public issues, several researchers have noted that the two types of agendas may not be the same. [8]

The results with regard to frequency of discussion appear to be due, at least in part, to selective exposure. Members of the post-broadcast non-viewing group discussed the issue less than members of the pre-broadcast group, and far less than the viewer group. Either prior discussion or anticipation of discussion
may have been the impetus for watching the movie. If it were known when discussions occurred, the causal sequence might be disentangled.

The study showed almost no attitudinal differences among the viewing groups. While this may be due to a lack of sensitivity in the attitude measures used, another interpretation is readily available. The movie generated substantial commentary from all shades of the political spectrum. Pro-armament groups said the movie underlined the need for a strong deterrent; nuclear freeze groups said it demonstrated the need to control nuclear arms, and advocates of the "high frontier" said it showed the need for high technology defense systems in space. Such comments were amply covered by the news media and provided viewers with interpretations of the movie compatible with any a priori attitude and counter arguments against other interpretations. Thus, viewers could approach the movie well-armed to indulge their selective perception proclivities.

This research focused on the possible consequences of viewing the movie itself. There is no doubt that ABC's announcement of its intent to air "The Day After" generated substantial media and public attention to both the broadcast and the issues surrounding nuclear arms. The very high levels of concern about nuclear issues are probably due to an agenda-setting effect of the overall complex of media attention to the issue. In light of the saturation coverage of the movie, it is remarkable that any effects can be attributed to the simple act of viewing it.
References


Table One

<table>
<thead>
<tr>
<th></th>
<th>Pre-Broadcast Non-Viewers</th>
<th>Post-Broadcast Non-Viewers</th>
<th>Post-Broadcast Viewers</th>
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<tr>
<td>Does Not Mention Nuclear War</td>
<td>72%</td>
<td>68%</td>
<td>48%</td>
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<tr>
<td>Mentions Nuclear War</td>
<td>28%</td>
<td>32%</td>
<td>52%</td>
</tr>
<tr>
<td>Number</td>
<td>92</td>
<td>96</td>
<td>144</td>
</tr>
</tbody>
</table>

Chi-Square = 16.44 (2 d.f.), p. < .001

Table Two

<table>
<thead>
<tr>
<th></th>
<th>Pre-Broadcast Non-Viewers</th>
<th>Post-Broadcast Non-Viewers</th>
<th>Post-Broadcast Viewers</th>
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</thead>
<tbody>
<tr>
<td>Rank One</td>
<td>7%</td>
<td>17%</td>
<td>24%</td>
</tr>
<tr>
<td>Rank Two</td>
<td>22%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>Rank Three</td>
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<td>18%</td>
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<td>Rank Five</td>
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<td>28%</td>
</tr>
<tr>
<td>Number</td>
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<td>96</td>
<td>144</td>
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</tbody>
</table>

Chi-Square = 21.95 (8 d.f.), p. < .01
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Table Three
Discussion Level by Viewing Group

<table>
<thead>
<tr>
<th></th>
<th>Pre-Broadcast</th>
<th>Post-Broadcast</th>
<th>Post-Broadcast</th>
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<tr>
<td></td>
<td>Non-Viewers</td>
<td>Non-Viewers</td>
<td>Viewers</td>
</tr>
<tr>
<td>Several/Many Discussions</td>
<td>23%</td>
<td>12%</td>
<td>37%</td>
</tr>
<tr>
<td>Few Discussions</td>
<td>37%</td>
<td>42%</td>
<td>40%</td>
</tr>
<tr>
<td>No Discussions</td>
<td>40%</td>
<td>47%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Number:
- Pre-Broadcast Non-Viewers: 92
- Post-Broadcast Non-Viewers: 96
- Post-Broadcast Viewers: 144

Chi-Square = 26.70 (4 d.f.), p. < .001
Table Four
Means for Attitude Items by Viewing Group

<table>
<thead>
<tr>
<th></th>
<th>Pre-Broadcast</th>
<th>Post-Broadcast</th>
<th>Post-Broadcast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Viewers</td>
<td>Non-Viewers</td>
<td>Viewers</td>
</tr>
<tr>
<td>1. War Worry</td>
<td>4.17</td>
<td>4.28</td>
<td>4.05</td>
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<td>2. War Likely</td>
<td>4.27</td>
<td>4.23</td>
<td>4.13</td>
</tr>
<tr>
<td>3. Missiles</td>
<td>4.55</td>
<td>4.85</td>
<td>5.00</td>
</tr>
<tr>
<td>4. Nuclear Freeze</td>
<td>4.06</td>
<td>4.44</td>
<td>4.25</td>
</tr>
<tr>
<td>5. Demonstrations</td>
<td>4.76</td>
<td>5.57</td>
<td>4.92</td>
</tr>
</tbody>
</table>

(p < .05)

Question Wording

1. Some people are very worried about the possibility of nuclear war someday. Others are not worried at all. On a scale of one to seven, if seven means "very worried" and one means "not worried at all," where would you place yourself?

2. Some people say they are sure there will be a nuclear war. Others say a nuclear war will never happen. On a seven-point scale, if one means "there's sure to be a nuclear war" and seven means "nuclear war will never happen," where would you place yourself?

3. As you probably know, the United States is planning to put nuclear missiles in Europe over the next few months. Some people say this deployment is necessary to preserve peace. Others say it will increase the chance of war. If seven means, "placing missiles is necessary for peace" and one means "placing missiles increases the chance of war," where would you place yourself?

4. As you probably know, the U.S. Congress has been debating a nuclear freeze resolution that would limit our nuclear arms to their current levels. If one means "such a nuclear freeze is a good idea" and seven means "a nuclear freeze is a bad idea," where would you place yourself?
5. Some people in the United States are planning marches and demonstrations over the next few weeks to show their support for a nuclear freeze and their opposition to placing more missiles in Europe. If one means "active participation in such demonstrations" and seven means "active opposition to them," where would you place yourself?