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*Partisan groups, highly important actors in public discourse and the democratic process, appear to see mass media content as biased against their own point of view. Although this hostile media effect has been well documented in recent research, little is understood about the mechanisms that might explain it. Three processes have been proposed: (a) selective recall, in which partisans preferentially remember aspects of content hostile to their own side; (b) selective categorization, in which opposing partisans assign different valences to the same content; and (c) different standards, in which opposing partisans agree on content but see information favoring the other side as invalid or irrelevant. Using new field-experiment tests with groups of partisans who either supported (*n = *87) or opposed (*n = *63) the use of genetically modified foods, we found evidence of selective categorization and different standards generally. However, only selective categorization appeared to explain the hostile media effect.*

Keywords: *hostile media effect; mass media; biased perceptions; cognitive processing; partisans; genetically modified foods*

The mass media audience, once thought to be a vast but vulnerable sea of sameness, appears instead to be composed of diverse and active individuals who react in very different ways to the same messages (Bauer, 1973). No group better exemplifies the active-audience paradigm than partisans, those highly involved individuals who hold strong and deeply felt opinions on an issue. For some issues, large numbers of people may have partisan viewpoints; for other, often less salient topics, partisan numbers may be smaller. However, partisan groups and their members are important beyond their numbers. Their viewpoints can powerfully influence public opinion and public policy; they are the ones who campaign and lobby, who demonstrate,

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parade, and picket, who promote their viewpoints in countless ways, and when they feel marginalized or alienated, may resort to extreme or antisocial actions.

These partisan individuals pose a particular problem for mass media, for recent research has shown that neutral news reports—news reports an impartial observer would assess as fair and balanced—will be seen by partisans on opposing sides of the issue as biased in favor of the other side. This "biased perception of media bias" (Vallone, Ross, & Lepper, 1985, p. 578), also known as the hostile media perception, has been replicated often enough to qualify as a robust finding (see, e.g., Christen, Kannaovakun, & Gunther, 2002; Giner-Sorolla & Chaiken, 1994; Perloff, 1989); however, little research has examined underlying psychological mechanisms. This report describes research designed to test three different explanations for partisans' perceptions of media bias.

It is likely that editors and reporters have been uncomfortably aware of the hostile media perception since the first collisions between press coverage and partisan opinion. However, only in 1985 was this phenomenon empirically described in an inventive field experiment (Vallone et al., 1985). After a false start with the 1980 presidential campaign,[2] Vallone and his colleagues searched for a political controversy with "fiercer and more enduring" partisans. They found it in the conflict between Palestinians and Israelis. The experiment showed that groups of Arab and Israeli partisans saw broadcast news coverage of Mideast conflict as consistently biased, and each group saw the bias in favor of the other side.

The profound and ongoing conflict in Israel provided a context for two more empirical studies of the hostile media effect (Giner-Sorolla & Chaiken, 1994; Perloff, 1989). Beginning in the later 1990s, additional field experiments identified hostile-media-perception findings for other issues, including the 1997 UPS strike (Christen et al., 2002), the controversy over lab research using primates (Gunther, Christen, Liebhart, & Chia, 2001), and presidential performance (D'Alessio, 2003). Other research, some of it based on national probability samples (Dalton, Beck, & Huckfeldt, 1998; Gunther, 1992; Gunther & Christen, 2002) also showed results consistent with this bias.

Although many of these recent studies have addressed theoretical issues, none of them has pursued the underlying psychological processes with the attention of the earliest field experiments. Vallone et al. (1985) speculated about two potential mechanisms that might explain the audience bias—selective perception versus selective evaluation—and presented data that appeared to support both processes. Giner-Sorolla and Chaiken (1994) expanded on this approach, attempting to identify and test three mecha-

nisms. To distinguish these processes, it is helpful to begin with a baseline representation of information distribution in what a neutral observer would see as a balanced news story, with equal proportions of anti (A), neutral (N), and pro (P) content, as illustrated in Figure 1a.

Figure 1a. Information Distribution in a "Balanced" News Story

One proposed processing mechanism, termed *selective recall*, argues that partisans on both sides of an issue pay attention particularly to unfavorable content or use more elaborative thinking when they encounter aspects of a news story contrary to their own views. The contrary information is therefore more salient, and, as a result, partisans remember it as more prominent or dominant. Figure 1b illustrates how selective recall might cause a partisan on the pro side of the issue to perceive a different version of the information in the Figure 1a distribution and lead to the perception of unduly hostile content.

Figure 1b. Selective Recall: Propartisans Remember Disproportionately More Unfavorable Content

A second mechanism, *selective categorization*, proposes that partisans on opposing sides might attend to, process, and recall the same content in an article; however, each side tends to categorize the same aspects of a story differently—as contrary to their own position. Figure 1c illustrates how a propartisan engaged in selective categorization would interpret or evaluate relatively more of the content as favorable to the antiside of the issue and therefore as excessively hostile.

Figure 1c. Selective Categorization: Propartisans Evaluate Relatively More Content as Unfavorable

Selective categorization and selective recall are similar in that opposing partisans perceive and/or evaluate the information in articles—and subsequently the articles themselves—as fundamentally different.[3] In contrast, a third conjecture, called *different standards*, suggests that opposing partisans may agree on the proportions of content and the valence of that content. However, when considering the full spectrum of information, ideas, and arguments, all of which a balanced news report would presumably represent, partisans still judge news stories to be biased. This is because each side has a different standard, believing that its opponents' claims, largely clustered at the other end of the spectrum, are not valid or relevant to the debate and should not be included. To a propartisan, in this case, a fair treatment of the issue would include the Ns and Ps only. Therefore, a presentation that includes the dubious A elements "would appear to be unfairly biased toward the opposition" (Giner-Sorolla & Chaiken, 1994, p. 166). Figure 1d illustrates the different-standards perspective that would lead a propartisan to see the original information distribution as unfairly biased in favor of the antiside of the issue.

Figure 1d. Different Standards: Propartisans Consider Anticontent to Be Invalid or Irrelevant

Evidence for these various theoretical explanations, however, has been inconclusive. In their 1985 study, Vallone and colleagues interpreted the evidence as supporting perceptual and evaluative mechanisms. They noted, for example, that different partisan groups reported different percentages of the news broadcasts as either favorable or unfavorable and argued that this meant pro-Arab and pro-Israeli partisans actually "saw" different news programs. The authors were unclear, however, as to whether they believed this outcome was because of different perceptions regarding the type of content available or the valence of specific aspects of the content; their data could be interpreted as supporting either selective recall or selective categorization. Giner-Sorolla and Chaiken (1994) proposed all three mechanisms and interpreted the evidence in their sample of students as support only for the different-standards explanation.[4]

These two early studies made significant progress in theorizing about mechanisms associated with this partisan bias. It is important to note, however, that in both studies selective categorization was tested without careful control for content. In addition, neither study attempted to measure different

standards. However, both concluded that this mechanism must be operating because significant differences in perceptions of bias between partisan groups could not be entirely accounted for by variables representing other proposed mechanisms.

One of our goals in designing this research was to develop tests that would more cleanly distinguish between the various mechanisms that might underlie the hostile media perception. To do so we set up a two-part field experiment: Phase 1 was designed to establish conditions in which the hostile media perception does, and does not, occur (Gunther & Schmitt, 2004); Phase 2 tested various processing mechanisms. Our purposes in this second phase were to determine which processing mechanisms people actually demonstrated and, more important, which were distinctive to the hostile-media-effect.

Study Context and Hypotheses

To test hostile-media-effect hypotheses, we searched for an issue with a moderately high profile in the mass media, a durable shelf life, and identifiable groups of partisans with strong feelings on one side or the other. We settled on the controversy over genetically modified food (GMF), a biotechnology application that has produced fervent reactions from opponents who cite ethical, health, and environmental concerns and also from supporters who see GM food as a potential solution to major global health, nutrition, and sustainability problems.

We identified two groups of potential partisans with high involvement in this issue and, equally important, annual meetings where we could efficiently recruit research participants. In spring of 2001, we solicited anti-GMF participants at the annual meeting of North Farm Cooperative, an organic foods distributor where member sentiments against genetic modification of agricultural products were quite high. One week later we recruited at a meeting of the National Agricultural Biotechnology Council (NABC), comprising faculty from 30 universities who research and/or teach in biotechnology fields and are generally sympathetic or supportive of GMF development.

Making use of the partisan involvement of these two groups in the GMF controversy and the theoretical literature reviewed above, we tested a number of hypotheses. In Phase 1 of this study, we posed a hypothesis that had not been definitively tested before: that information presented in a mass media context will arouse the hostile media perception while the same information in a nonmedia source will not. To carry out this test we created an informational stimulus on GMF but prepared it in two formats—either a newspaper

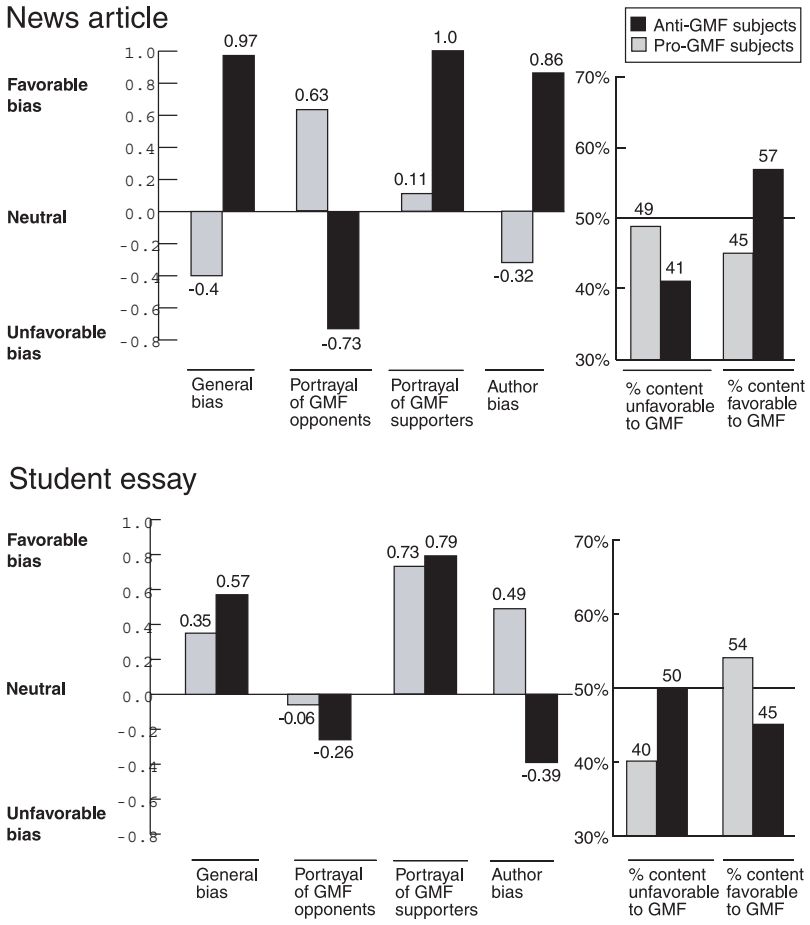

Figure 2. Pro- and Anti-Genetically Modified Foods Partisans' Mean Estimates of Perceived Bias in Information Presented as News Article or College Student's Composition

story or a college student's essay. This manipulation allowed us to examine questions about the boundaries of the hostile media effect and determine that it is indeed a media effect. Figure 2 presents a graphic illustration of the result. We found that when the information was presented in a mediated (newspaper story) form, partisans saw it as disagreeably biased, either absolutely or in a relative sense.[5] However, for identical information in a nonmediated (college student's essay) format the hostile media perception disappeared, and there was some evidence of the reverse effect—biased assimilation.[6]

This article-essay component of the design gave us a convenient context in which to compare partisan's information processing in conditions where the hostile media perception is aroused with conditions where it is not. As noted above, we wished to carefully examine and distinguish between the three possible mechanisms by which the hostile media effect may occur. Hence, we looked for evidence supporting the three hypotheses posed below in mediated and nonmediated conditions. Processes contributing to the hostile media perception should be evident in the news article condition but not the essay condition.

The first mechanism tested was selective recall. If selective recall contributes to the perceptual bias, then participants should perceive and recall from the stimulus material more items—facts, arguments, or ideas—that are opposed to their own point of view. Thus, the two groups would perceive two very different stimulus stories, and each would recall an article with more hostile content:

Hypothesis 1: In the article but not the essay condition, partisans will recall more items that oppose their position than items that support their position.

The second possible explanation for the hostile media effect is selective categorization. This explanation suggests that even if partisans attend to and recall the same content, they will perceive it differently because each group will classify identical content as more hostile to their own point of view. Selective categorization argues that in the mediated stimulus condition, highly involved partisans will find more of the facts, arguments, or ideas on the issue to be hostile to their position, rather than neutral or supportive of their views:

Hypothesis 2: In the article but not the essay condition, partisans will differ in judgments about the perceived valence of information—each side will classify more information as unfavorable rather than favorable to their position.

In the third case, termed different standards, partisan individuals may recall the same content, and they may evaluate the valence of that content in the same way. However, because each group believes its own position—fairly represented by a different subset of all available facts and arguments—is the only valid position, more of the disagreeable content will be rejected as invalid or inaccurate. Thus, partisans may perceive the same content and

valence in the same information but make different judgments about its validity.

Hypothesis 3: In the article but not the essay condition, partisans who agree on the valence of information on the GMF issue will disagree on the accuracy of that information, each side classifying more of the information favorable to its position as accurate and the information unfavorable to its position as inaccurate.

Finally, as a research question, we wished to examine the relationships between these hypothesized processing mechanisms and partisans' perceptions of bias.

Method

We tested these hypotheses in an experimental design in which participants were randomized to the stimulus in either a news article or student essay format. In the former condition, the stimulus information, taken largely from existing news stories, was formatted and presented as an article from *USA Today*. For the latter condition, the identical information was presented as an essay from a college composition class. The information was composed to be as fair and balanced as possible, and a group of disinterested pretest participants, plus a nonpartisan control group, judged it to be essentially neutral.

As noted above, we recruited partisans at two meetings: pro-GMF participants from a National Agricultural Biotechnology Council conference and anti-GMF participants from a North Farm Coop annual meeting. To verify their partisan position, we used a filter question asking participants how much they supported or opposed the development of GMFs. We then selected the subset who took the most extreme positions on one side or the other. This procedure yielded 63 anti-GMF and 87 pro-GMF participants. More detail on subjects and procedures can be found elsewhere (Gunther & Schmitt, 2004).

Measures

Following the essay-article stimulus in the experimental packet was a section that tested selective recall. In this section, we asked participants to list up to five facts or arguments they could recall from the article or essay (without turning back to the original information). On the page following the recall section, participants were asked to turn back and rate the recalled items based on whether each item favored, opposed, or was neutral to the issue of genetically modified food.

In addition to participants' own subjective evaluation of the valence of their recall items, we made an objective evaluation. To do this, two coders who were neutral on the GMF issue first independently classified all recalled items from the first 30 surveys as pro-GMF, anti-GMF, or neutral using preestablished criteria. The two coders' classifications of the first 30 surveys were found to have 89% agreement. The coders reconciled disagreements with a third person acting as mediator. Coders then assembled the verbatim statements in a master list by category and then classified recall items from every questionnaire. In a random sample of 31 questionnaires after this final round, the coders achieved 88% agreement.[7]

The next section contained six questions focusing on the concept of perceived bias or slant in the articles. These were selected or adapted from previous research on hostile media perceptions, primarily Vallone and colleagues (1985), Perloff (1989), and Gunther and Christen (2002). Conceptually, bias may have several dimensions including accuracy of information, content balance, and trustworthiness of sources, and we selected items to reflect these factors. The first question read, "Would you say that the portrayal of genetically modified foods in this (article/essay) was strictly neutral, or was it biased in favor of one side or the other?" Then, two questions were asked about portrayal of supporters, and opponents, of GMF. These three items were each followed by an 11-point scale anchored by –5 (*strongly biased against*) and +5 (*strongly biased in favor*), and 0 as the neutral midpoint. Two additional questions asked the participants to estimate what percentage of the story was favorable and unfavorable, respectively, to the issue of GMF, followed by a list of percentages in increments of 10. A final question in this section asked about the author: "Would you say that the (reporter/student) responsible for this (article/essay) was strictly neutral, or was he or she biased in favor of or against genetically modified foods?" followed by the same 11-point scale described above. After appropriate recoding, we summed these items and divided by 6 to create a bias index that also demonstrated good reliability ($\alpha = .86$).

To test selective categorization, we listed six excerpts taken from the stimulus story and asked participants to indicate whether each excerpt favored, opposed, or was neutral to the issue of GMF. Finally, to provide a test of the different-standards hypothesis, we asked participants to indicate whether they thought the information in each excerpt was accurate or inaccurate.

We also asked for standard demographic information, including age, gender, education, and income.

Results

As noted earlier, the results of Phase 1 of this study produced striking evidence that the hostile media perception is distinctive to mediated information. Phase 2 of the study examined three possible mechanisms for the hostile media effect. Hypothesis 1, referring to the selective recall mechanism, predicted that in the news article condition partisans would remember more items that oppose their position than items that support their position. We tested this mechanism (after a technique employed by Giner-Sorolla & Chaiken, 1994) by asking participants to list up to five facts or arguments they could recall from the stimulus information. As described above, these free-recall items were then rated by the participants themselves and also by nonpartisan coders as either supporting, opposing, or neutral to GMF.

The first two rows of Table 1 show the mean valence of recalled items, with objectively coded data (categorized by neutral coders) in Row 1 and subjectively coded data (categorized by the partisan participants themselves) in Row 2; positive values indicate more favorable items recalled and negative values more unfavorable items recalled. These results did not support the selective recall hypothesis. None of the differences was significant, and in all four cases differences tended in the opposite direction—toward assimilation rather than contrast effects.

The second mechanism, the selective categorization hypothesis, predicted that when they considered the same content, partisans would categorize identical items from the stimulus story differently: Partisans supporting GMF would categorize more items as opposed to GMF whereas partisans opposed to GMF would categorize more items as supporting GMF. Giner-Sorolla and Chaiken (1994) tested selective categorization using participants' evaluations of items they recalled from the stimulus. As a result, different participants were evaluating different content, and the valence of those items tended to be congruent with, rather than counter to, their attitudes. Hence categorization was potentially confounded with recall. To avoid this problem, we presented participants with six excerpts from the stimulus story and asked them to rate the excerpts as either supporting, opposing, or neutral to GMF. In this way, we could assess categorization while holding content constant.

The third row in Table 1 shows that, in a relative sense, Hypothesis 2 was supported. In the article condition, both partisan groups rated more excerpts as supporting GMF; however, the anti-GMF participants rated significantly more excerpts in this manner than did the pro-GMF participants. However, participants demonstrated no such categorization differences in the student

Table 1
Mean Estimates[a] *of Valence of Recalled Items and Excerpts as a Function of Stimulus Type and Group Membership*

	News Article			Student Essay		
	Pro-GMF Participants	Anti-GMF Participants	*t*	Pro-GMF Participants	Anti-GMF Participants	*t*
Recall items (objective coding)[b]	.46 (1.5) *n* = 37	.09 (1.7) *n* = 35	.98	.52 (1.8) *n* = 48	–.11 (1.7) *n* = 27	1.47
Recall items (subjective coding)[c]	.75 (1.5) *n* = 36	.12 (2.2) *n* = 34	1.40	.25 (1.5) *n* = 44	–.44 (2.3) *n* = 25	1.49
Excerpts (subjective coding)[c]	.35 (1.1) *n* = 37	1.10 (1.2) *n* = 35	–2.58*	.59 (1.4) *n* = 49	.18 (1.5) *n* = 28	1.19

Note: GMF = Genetically modified food. Standard deviations are in parentheses.
a. Values were calculated by assigning a +1 to items categorized as favoring GMF, 0 to items categorized as neutral to GMF, and –1 to items categorized as opposed to GMF and then separately summing the five recall items and six excerpts. Thus, positive values indicate valence favorable to GMF; negative values indicate valence unfavorable to GMF.
b. Evaluated as favorable, neutral, or opposed to GMF by disinterested coders.
c. Evaluated as favorable, neutral, or opposed to GMF by participants.
*$p < .05$.

essay condition. Both partisan groups rated the excerpts slightly on the favorable side of neutral; however, mean scores, although not significantly different in the essay condition, actually went in the opposite direction from those in the news article condition. Hence, in this aggregate view differences in selective categorization between partisans were apparent in the media condition but absent in the nonmedia condition.

It is important to note, however, that participants in the pro- and anti-GMF groups in this field experiment were significantly different on a number of demographic traits—education, income, age, and gender. Hence, we used ANCOVA to reanalyze the between-group categorization relationships described above. Although results in the essay condition were unchanged, in the article condition, age and education were significant predictors of excerpt evaluations, and when we included them in the model, selective categorization differences between pro- and anti-GMF groups dropped slightly below the standard significance threshold, $F(1, 68) = 3.80, p < .06$. These group differences require us to be somewhat more cautious about attributing the categorization bias to partisan attitude because an alternative explanation for the categorization mechanism is also possible.[8]

The final mechanism tested was the different-standards explanation. Hypothesis 3 proposed that even if partisans agreed on the content and the valence of information on the GMF issue they would disagree on the accuracy of that information, each side classifying more of the information favorable to its position as accurate and more of the information unfavorable to its position as inaccurate.

Previously, this mechanism has only been tested by default—by examining the remaining influences on bias judgments after statistically controlling for perceived content. We devised a new approach to more directly test the different-standards hypothesis. The first difficulty was to hold selective recall and selective categorization constant. We controlled for content recall differences, as above, by using the preselected excerpts. Then, to control for categorization differences we compared accuracy judgments only among participants in both groups who agreed on the valence of each particular excerpt. Most participants rated Excerpts 2 and 3 as favorable toward GMF; Excerpts 1 and 4 produced a split between favorable and neutral; most participants rated Excerpts 5 and 6 as opposed. Because neutral ratings do not provide a good test of the different-standards mechanism[9] and there were too few participants in the minority categories to permit statistical comparisons, we omitted those cases. Hence, we focused our analysis on respondents who rated Excerpts 1 through 4 as favorable and Excerpts 5 and 6 as unfavorable.

To evaluate different standards as a possible explanation for the hostile media effect, relationships between content accuracy and partisan attitude

Table 2
Phi Correlations Within Stimulus Conditions Between Perceived Excerpt Accuracy[a] *and Partisan (Pro- or Anti-GMF) Attitude.*

Excerpt	Valence Consensus	News Article		Student Essay	
1	Favorable	.38*	(32)	.41*	(31)
2	Favorable	.48***	(65)	.14	(59)
3	Favorable	.34**	(65)	.53***	(58)
4	Favorable	.25	(25)	.30	(28)
5	Opposed	–.45***	(69)	–.36**	(67)
6	Opposed	–.58***	(57)	–.46***	(60)

Note: GMF = Genetically modified food. *n*s are given in parentheses.
a. Evaluated as accurate (+1) or inaccurate (–1) by participants.
b. Including all participants who agreed with the consensus on valence for that excerpt; higher values were assigned to more positive attitudes toward GMF.
*$p < .05$. **$p < .01$. ***$p < .001$.

were tested within condition. For each excerpt, we calculated correlations between perceived accuracy and partisan attitude using only those participants who saw the excerpt as similarly favorable (Excerpts 1 to 4) or opposed (Excerpts 5 and 6) to GMF (see Table 2). As anticipated in Hypothesis 3, judgments about excerpt accuracy were significantly correlated with the valence of partisan attitude. With few exceptions, when the excerpt was judged to be favorable to GMF, a positive association was observed between the perceived level of accuracy and partisan attitude. For example, a large majority agreed that Excerpt 3 was favorable toward GMF; however, most opponents judged it to be inaccurate although almost one half of supporters thought it was accurate. Similarly, for the two excerpts that most participants saw as opposed to GMF, perceived accuracy was negatively associated with attitude valence. Although most participants, for example, judged Excerpt 6 to be opposed to GMF, 84% of opponents thought it was accurate while 59% of supporters said it was inaccurate.

Hence, the data soundly support the hypothesis that partisans use a different-standards mechanism when processing issue-relevant information in general. However, when these different-standards patterns were analyzed separately, as illustrated in Table 2, they remained significant at approximately the same level for article and essay conditions.[10] We must conclude then that although the different-standards mechanism is generally robust, it does not explain the hostile media perception in these data.

In the theoretical model under study here, we expected the manipulation of channel (mediated or nonmediated) to influence processing and processing, in turn, to influence perceptions of bias. Thus far, this research design has confirmed important new conjectures about the hostile-media-effect

model. Phase 1 showed that partisan perceptions of content bias are indeed apparent in the news article condition but not so in the essay condition. Phase 2 revealed evidence of different-standards and selective categorization mechanisms; however, only the latter was associated with the channel manipulation.

However, a remaining research question concerned whether observed changes in processing mechanisms produced by the stimulus would influence judgments of stimulus bias at the individual level. Using a multiple regression approach to evaluate this question, we found that excerpt categorization was a significant positive predictor of perceptions of stimulus bias ($\beta = .38; p < .001$) and that this association was unaffected by demographic controls.

To further examine the potential mediating role of this mechanism, we tested the significance of the indirect effect of the experimental design on perceptions of stimulus bias through selective categorization. This analysis followed traditional steps for evaluating mediation in experimental contexts (Baron & Kenny, 1986). However, to avoid the typical problem of reduced power in tests of indirect effects, significance was determined using a recommended bootstrapping procedure (Shrout & Bolger, 2002).[11] Reported models included demographic controls that were significant predictors of either the mediating processing mechanism or perceived stimulus bias.[12] A specific test of this indirect effect further supported a mediating role for selective categorization in the hostile media effect ($\beta = .08; p < .01, n = 141$).[13]

However, after this mediator was included in the model, the direct effect of the experimental design on perceived stimulus bias remained significant ($\beta = .22, p < .01$). This latter result suggests that selective categorization may be a partial rather than sole mediator of the hostile media effect, or it may instead reflect error inherent in measuring selective categorization (Shrout & Bolger, 2002). A similar analysis evaluating the different-standards mechanism supported our previous finding that this processing mechanism does not appear to play a role in mediating the hostile media effect.[14]

Discussion

Of the three processing mechanisms tested with these GMF partisans, selective categorization appears to be the one viable explanation for the hostile media effect.

No support was obtained for a selective recall mechanism. In the article condition, both sides recalled more items on the favorable side of neutral, and in the essay condition both groups recalled more items agreeable with their own view. This result was consistent whether based on participants' subjective categorization of the recall items or the objective categorization by

nonpartisan coders. Differences between the groups were not significant; however, they tended in a direction opposite to the hypothesis. To the extent that pattern is meaningful, it would work against perceptions of hostile content. This result also replicates the previously discussed findings of Giner-Sorolla & Chaiken (1994) although with a stronger group of partisans.

By contrast, we found support for the contingent occurrence of a selective categorization mechanism during information processing. Anti-GMF partisans in the article condition rated significantly more of the stimulus excerpts as favorable to GMF than did pro-GMF partisans. More important still, these differences, although significant for the article condition, disappeared in the essay condition. This is an especially notable result, for it argues that partisan's assessment of an excerpt as favorable, neutral, or unfavorable will depend on the context in which it is presented. It is sound evidence for the selective categorization process in the hostile media perception. The evidence is muted slightly when the substantial differences between these two partisan groups are factored in but reinforced by the strong individual-level relationship between selective categorization and bias. What remains a key question here—one that cannot be answered with these data—is whether bias judgments result from the categorization process or precede it.

We should point out that in an absolute sense, pro-GMF participants did not categorize more excerpts as unfavorable. However, the summary valence of excerpted items, judged by a neutral standard, may have actually been positive, a slant that would bias both groups' estimates in a positive direction (overall, these partisans rated more of the excerpts as positive than negative). Hence, it is the between-group differences more than the absolute judgments that most effectively support the selective categorization hypothesis.

The third processing mechanism, different standards, argues that even when partisans see the same content and evaluate its valence in the same way, they may nevertheless perceive an inherent bias because they assess more of the disagreeable content as invalid. We developed a novel test for this effect, and, as a general processing mechanism, we found different standards to be well supported. When partisans agreed on the valence of an excerpt, they were more likely to say the excerpt was accurate if it was consonant with their position and inaccurate when it disagreed with their position. However, we cannot consider this mechanism as one that contributes to the hostile media perception for it was virtually consistent across article and essay conditions.

One additional explanation, articulated by Giner-Sorolla & Chaiken (1994), is that a partisan's preexisting beliefs about overall media bias toward an issue give rise to perceptions of bias in particular news reports. However, this explanation does not tell us where or how such preconceived beliefs

originate. The processes evident in the partisan responses in the current study may, in a cumulative sense, be the genesis of those prior beliefs. Nevertheless, partisans may develop beliefs about media bias from other sources—from like-minded friends, from politician's rants, even from the occasional mea culpa of the media itself. Any or all of these occurrences could shape generalized beliefs about media bias, which, in turn, may give rise to the categorization bias evident in these data. These and perhaps other explanations are yet to be carefully examined.

The current study, however, focused on processing of specific messages, and the results raise questions about, and suggest some revision of, previous theoretical work on the hostile media effect. Vallone and colleagues (1985) claimed support for a perceptual bias in information processing by partisans, although the claims were based on global measures about the amount of perceived favorable and unfavorable content. Such findings could result from either selective recall or selective categorization and may actually reflect rather than predict judgments of bias. Using more specific measures for these two mechanisms, Giner-Sorolla and Chaiken (1994) did not find a role for either selective recall or selective categorization in the hostile media effect. However, their test of selective categorization did not specifically compare the valence judgments of partisans when content is held constant.

In addition, although the authors of both studies did interpret their data as supporting a different-standards explanation for the hostile media effect, with a more definitive test, we found no such evidence.

Instead, our data support selective categorization: partisans interpreting information as less agreeable, or more disagreeable, when they encounter it in a mass media channel. This result needs further empirical attention, and further interpretations of the present data must necessarily be speculative. However, this result dovetails in an interesting way with the Phase 1 findings of this project.

The Phase 1 data indicated that this contrast effect—where partisans on both sides see information as biased against their own point of view—appears dramatically in a news article format but disappears (or even reverses) when the identical information is presented as a student essay. This result suggests that when viewing mass media, partisans may don a particular set of lenses—lenses with a social-level focus.[15] If the mass media context causes partisans to think about the influence of content on a broader audience, a result suggested in the Phase 1 study, that audience perspective may steer their interpretation and evaluation of content toward hostile latitudes. The media channel may prompt partisans to consider interpretations or implications they think could be misleading to a naïve and vulnerable audience of others. Hence, they interpret the same information in a different, and

more disagreeable, way. This selective categorization process would naturally generate a perception of more biased content overall and quite likely of a more biased source.

More study is certainly in order; however, the patterns in these data perhaps bring us one step closer to understanding the interaction between mass media and a partisan audience that arouses the hostile media perception.

Notes

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2. In a postelection study of Carter and Reagan supporters, Vallone, Ross, and Lepper (1985) found no evidence of a hostile media perception but also few vestiges of strong partisan sentiment.

3. Because the result of selective recall and selective categorization is that opposing partisan groups "see" different stimuli, these two mechanisms have previously been referred to as perceptual processes. Nevertheless, because the level of conscious reasoning (Kahneman, 2003) involved in either of these mechanisms, if any, is unknown, we include the terms *perceptual* and *evaluative* here.

4. These authors did add a caveat—acknowledging that more activist partisans might be more likely to exhibit selective categorization or recall.

5. The relative hostile media perception occurs when both sides see bias in the same direction; however, each side sees it as less agreeable, or more disagreeable, relative to the other. For example, in Figure 2, both groups view portrayal of genetically modified food (GMF) supporters in the news article as favorable; however, anti-GMF partisans see the portrayals as far more favorable than do pro-GMF partisans.

6. Biased assimilation describes the case where partisans interpret information as supporting their own point of view, a phenomenon opposite in outcome to the hostile media perception (see, e.g., Lord, Ross, & Lepper, 1979).

7. Although it is virtually impossible to be sure of an objective coding scheme, this was the best approximation we could devise of a disinterested evaluation of recall items.

8. This slight dip below the significance threshold may be a consequence of a limited level of power available for observing partisan group differences within conditions. If the data are instead analyzed using the entire factorial design in a two-way ANOVA, the interaction term, representing the differences between partisan groups in the mediated versus unmediated stimulus condition, remains significant after covariates are added to the model, $F(1, 134) = 6.35$; $p < .05$.

9. For those who agree an excerpt is neutral, we expected most people to judge it as accurate. In fact, roughly one half the partisan participants rated Excerpts 1 and 4 as neutral, and 89% of them classified those excerpts as accurate. For those who judged Excerpts 1 or 4 as neutral, there was no sign of systematically accurate or inaccurate judgments as a function of partisan attitude.

10. Excerpt 2 was the only exception. Excerpt 4 produced the only nonsignificant relationship, most likely because many participants viewed that excerpt as neutral.

11. Mediation analyses were conducted using Amos 5.0 to obtain maximum likelihood estimates for direct, indirect, and total effects. Significance tests were

conducted using 2000 bootstrap samples to obtain bias-corrected confidence intervals at alpha = .05.

12. For selective categorization, a significant path from income to perceived stimulus bias was included in the reported model. For the different-standards mechanisms, no significant paths were observed for demographic variables. Results were unchanged when all demographic variables were included.

13. Because the individual steps in a mediation analysis prior to testing the significance of the indirect effect (Shrout & Bolger, 2002) were supported by our previous findings, specific results from the model are only presented here for completeness. Consistent with the first step of mediation, the Group × Stimulus interaction, which represents the divergent perceptions of hostile bias by partisan groups in the article but not the essay condition was a significant predictor of stimulus bias ($\beta = .30, p < .01$). Consistent with the second and third steps in mediation, the experimental interaction was also a significant predictor of selective categorization ($\beta = .21, p < .01$), and selective categorization, in turn, significantly predicted judgments of stimulus bias after controlling for the experimental interaction ($\beta = .37, p < .01$).

14. To obtain an overall measure representing the different-standards mechanism, the sum of accuracy judgments for unfavorably valenced excerpts (5 & 6) was subtracted from the sum of accuracy judgments for favorably valenced excerpts (1 through 4). Because this measure was similarly constructed for individuals who saw some excerpts as neutral, it provided a somewhat conservative test.

15. This metaphor is shamelessly borrowed from Vallone and colleagues (1985). However, our view is a somewhat revised version of theirs: Vallone and colleagues described *biased lenses*; however, our interpretation is that these lenses simply refocus partisans' attention outward, to the imagined media audience. That audience-oriented perspective, in turn, results in biased interpretations of content.

References

Baron, R. M., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.

Bauer, R. (1973). The audience. In I. de Sola Pool, W. Schramm, F. Frey, N. Maccoby, & E. B. Parker (Eds.), *Handbook of communication* (pp. 141-152). Chicago: Rand McNally.

Christen, C. T., Kannaovakun, P., & Gunther, A. C. (2002). Hostile media perceptions: Partisan assessments of press and public during the 1997 UPS strike. *Political Communication*, *19*, 423-436.

D'Alessio, D. (2003). An experimental examination of readers' perceptions of media bias. *Journalism and Mass Communication Quarterly*, *80*, 282-294.

Dalton, R. M., Beck, P. A., & Huckfeldt, R. (1998). Partisan cues and the media: Information flows in the 1992 presidential election. *American Political Science Review*, *92*, 111-126.

Giner-Sorolla, R., & Chaiken, S. (1994). The causes of hostile media judgment. *Journal of Experimental Social Psychology*, *30*, 165-180.

Gunther, A. C. (1992). Biased press or biased public? Attitudes toward media coverage of social groups. *Public Opinion Quarterly*, *56*, 147-167.

Gunther, A. C., & Christen, C. T. (2002). Projection or persuasive press? Contrary effects of personal opinion and perceived news coverage on estimates of public opinion. *Journal of Communication*, *52*, 177-195.
Gunther, A. C., Christen, C. T., Liebhart, J., & Chia, C.-Y. S. (2001). Congenial public, contrary press, and biased estimates of the climate of opinion. *Public Opinion Quarterly*, *65*, 295-320.
Gunther, A. C., & Schmitt, K. M. (2004). Mapping boundaries of the hostile media effect. *Journal of Communication*, *54*, 55-70.
Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded reality. *American Psychologist*, *58*(9), 697-720.
Lord, C. G., Ross, L., & Lepper, M. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*, 2098-2109.
Perloff, R. M. (1989). Ego-involvement and the third person effect of televised news coverage. *Communication Research*, *16*(2), 236-262.
Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, *7*(4), 422-445.
Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The hostile media phenomenon: Biased perception and perceptions of media bias in coverage of the Beirut massacre. *Journal of Personality and Social Psychology*, *49*(3), 577-585.

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