

## **The War of the Words: How Linguistic Differences in Reporting Shape Perceptions of Terrorism**

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*In four studies, we demonstrate that subtle linguistic differences in news reporting are sufficient to influence whether people interpret violent acts as patriotism or terrorism. In Study 1, a content analysis of newspaper articles describing violence in Iraq revealed that words implying destruction and devious intent were typically used in reference to violent actions associated with Iraq and opponents of the United States, while more benign words were used in reference to the United States and its allies. These observed differences in word usage establish schemas that guide perception of violence as terrorism or patriotism, thereby affecting people's attitudes toward (Study 2) and memory for (Studies 3 and 4) violent events. Implications for the media's impact on public policy are discussed.*

Perception and categorization of objects and events is so routine that it is often experienced by the observer as providing an unadulterated transfer of the world into the mind. One of psychology's major insights is that perception, categorization, and memory are not direct reflections of life outside the mind, but are actively shaped by expectancies and prior experience. As a consequence, what feels like an ordinary and definitive interpretation of an event may be profoundly shaped by

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subtle cues that draw on past experience and alter one's subsequent judgments, evaluations, and actions. The everyday act of reading the news is one arena in which nuances in reporting may shape how events are perceived, and ultimately judged and remembered.

Since the devastating attacks on New York City and Washington, DC on September 11, 2001, terrorism has moved to the forefront of American news coverage. Most Americans therefore possess a considerable body of knowledge, feelings, and attitudes regarding terrorism, influencing their perceptions of international violence. Yet, terrorism is not necessarily simple to define or identify. As a result, slight differences in the way violent events are described in the media may influence whether they are perceived and remembered as acts of terrorism or acts of patriotism.

Defining terrorism is a subjective task (Ruby, 2002; Schaffert, 1992; Shamir & Shikaki, 2002; Whitaker, 2001; Whittaker, 2001). A recent U.S. State Department (2004a) report on global patterns of terrorism acknowledged that, "No one definition of terrorism has gained universal acceptance" (p. 8). The report draws its working definition of terrorism from Title 22 of the United States Code, Section 2656f(d), defining terrorism as "premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience" (p. 8). "Noncombatants" include off-duty/unarmed military personnel and armed military personnel who are attacked at a time and place where there is no state of hostilities. While describing several aspects of terrorism that are widely accepted (e.g., its clandestine nature), this definition is consistent with the interests of the American government—according to this definition, the American government cannot be the perpetrator of terrorism, but American soldiers (as well as civilians) can be the victims of terrorism (Shamir & Shikaki, 2002; Whitaker, 2001). The U.S. government is not alone in using self-interest to guide its definition of terrorism. For example, while addressing the United Nations in 1974, Yassir Arafat (then chairman of the Palestinian Liberation Organization) argued that, "whoever stands by a just cause and fights for the freedom and liberation of his land from the invaders, the settlers and the colonialists, cannot possibly be called 'terrorist'" (Hoffman, 1998, p. 26). These definitional variations suggest that identifying terrorism is a motivated process that distinguishes justified acts of violence committed by the ingroup from unjustified acts of violence committed by outgroups.

Beyond subjectivity in defining terrorism, self-serving biases also powerfully influence the categorization of specific acts of violence as terrorism. U.S. President George Bush, for example, sometimes labeled assaults on American military targets in Iraq as acts of terrorism, even when these attacks did not meet his State Department's own definition of terrorism (see U.S. State Department, 2004b). Similarly, in a systematic assessment of self-serving labeling of terrorism, Shamir and Shikaki (2002) found that the vast majority of Palestinians described violent

acts committed by Israelis as terrorism, while only a small minority identified acts committed by their own group as terrorism. Conversely, Israelis generally rated the Palestinian acts, but not the Israeli acts, as terrorism. This ingroup bias in identification of terrorist acts is reflected in media reports as well. In a content analysis of weekly American newsmagazines from 1980 to 1988, Simmons (1991) found that the word “terrorist” was used in reference to the perpetrators of violence significantly more often when U.S. citizens were victimized than when they were not. Thus, recent events and research lend support to the contention that “terrorism is violence committed by those we disapprove of” (Whitaker, 2001, p. 4).

Acts of violence may be viewed as terrorism even when this label is not explicitly applied; subtle differences in the words used to describe actions by one’s own side versus actions by an opposing side may influence whether the actions are perceived as terrorism. Schaffert (1992) noted that the media “shows a remarkably casual interchange of the terms *atrocious*, *incident*, *act*, *event*, and *attack*” in describing political violence (p. 62). In the wake of September 11, the American mainstream media rushed to display its patriotism, with major news stations displaying the colors of the flag and anchorman Dan Rather announcing his readiness to take orders from the President (Waisbord, 2002). Given this swell of patriotism and apparent alignment of the media with government interests, it seems likely that journalists would exhibit linguistic differences in referring to the U.S. and its allies versus the stated enemies of the War on Terror. Thus, such differences would be expected to emerge in coverage of the U.S. invasion of Iraq, which had been justified as an important component of the War on Terror. These linguistic differences, in turn, may influence whether readers perceive acts of violence as terrorism or patriotism.

### *Present Research*

We sought to examine whether American newspapers used different words in referring to the United States versus Iraq during the 2003 invasion and whether these linguistic differences could influence the extent to which ambiguous acts of violence were viewed as terrorism or patriotism. In Study 1, we conducted a content analysis on American newspaper articles published during the U.S. invasion of Iraq, examining differences in the terminology used in reference to each side. We predicted that words implying malicious intent and serious destruction would be used more often in reference to Iraq, whereas relatively benign words would be used in reference to the United States and its allies. We further expected that such linguistic differences would have consequences for readers’ perceptions of the reported violence. Thus, using both student and community samples, we examined whether differences in terminology observed in Study 1 would influence participants’ attitudes toward (Study 2) and memory for ambiguous acts of violence (Studies 3 & 4).

**Table 1.** Randomly Selected Newspaper Sources by Region

Region	Newspaper
Midwest	<i>Chicago Daily Herald</i>
	<i>Omaha World Herald</i>
	<i>Star Tribune</i> (Minneapolis MN)
Northeast	<i>Connecticut Post</i>
	<i>Times Union</i> (Albany, NY)
	<i>Village Voice</i>
Southeast	<i>Florida Times-Union</i> ,
	<i>Knoxville News-Sentinel</i> (Knoxville, TN)
	<i>Washington Times</i>
Western	<i>Albuquerque Journal</i>
	<i>Colorado Construction</i>
	<i>Seattle Times</i>

## Study 1: Content Analysis

### Method

*Article Search.* Articles were selected using the LEXIS/NEXIS electronic database that categorizes news sources by U.S. region. As shown in Table 1, three newspapers were randomly selected from each region to be included in the search, with the constraint that each selected newspaper had both news and editorial sections. From these sources, we searched for articles that included the key words “soldier,” “dead,” and “Baghdad.” These words were used in order to promote retrieval of articles describing violence in Iraq in which Americans were both the targets and perpetrators of violence. The article search was conducted in February 2004 and included articles from the previous 6 months (July 30, 2003 through January 30, 2004). During this period, the United States was involved in active military engagement with Iraq as part of the War on Terror, and a number of violent acts were committed by both groups. Articles retrieved using this system that did not include any mention of aggression by or against Americans were excluded from analysis. In total, 62 articles were included in the content analysis.

*Coding.* Four undergraduate students conducted a computerized word search on the 62 articles selected, with the source (newspaper, author, title, and date) of each removed; three of the four coders were unfamiliar with the purpose of the study. The coders were instructed to search for the following words: *action(s)*, *reaction(s)*, *explosion(s)*, *blast(s)*, *attacker(s)*, *forces*, *threat(s)/threaten(s)/threatening*,<sup>1</sup> *hostile/hostilities*, *nonhostile*, *plot(s)*, *strategy/strategies*,

<sup>1</sup> This word was coded by two undergraduates in a subsequent round of coding.

*campaign(s)*. These words were chosen based on the authors' hypotheses that words implying destruction (e.g., *explosion*, *blast*) and malicious motivation (e.g., *hostile*, *plot*, *threat*) would be associated with anti-U.S. violence, while more benign words (e.g., *strategy*, *forces*, *campaign*, *action*, *reaction*, *nonhostile*) would be used in describing U.S.-perpetrated violence. Whenever one of the target words appeared, coders were instructed to report whether the word was being used in reference to the United States/U.S. allies or Iraq/non-U.S. allies. The coders were instructed to use this objective classification system rather than rating whether the words were being used to describe patriotic or terrorist acts to prevent the coders' own biases from influencing the results. Words used for an irrelevant topic (e.g., a presidential *campaign* rather than a bombing *campaign*) were not included in the analysis. For each article, the coders tallied the number of times that each word was used in reference to each group (U.S./allies vs. Iraq/non-U.S. allies). Thus, individual articles served as the unit of analysis.

### Results

We averaged the coders' ratings of the number of times each word appeared in reference to each side within each article. Overall, the coders agreed in their ratings of the word frequencies across articles (mean  $\alpha = .78$ ). For each target word, we conducted a paired-samples *t*-test comparing the number of times the word appeared in reference to the United States/allies versus Iraq/non-allies. As shown in Table 2, the words *explosion*, *blast*, *threat*, and *plot* appeared significantly more often in reference to Iraq/non-allies than in reference to the United States/allies, all  $p$ 's < .05. Conversely, the words *forces* and *campaign* appeared significantly more often in reference to United States/allies than Iraq/non-allies,  $p$ 's < .05. The words *attacker* and *hostile* were somewhat more likely to appear in reference to Iraq/non-allies, while *action* and *strategy* were somewhat more likely to appear in reference to United States/allies, although these trends were not significantly different from the null hypothesis of no difference,  $p$ 's > .06. No differences emerged for *reaction* or *nonhostile*,  $t$ 's < 1.

### Discussion

By content analyzing newspaper articles describing violence in Iraq that involved Americans, we found reliable differences in the words used in reference to the United States and its allies versus Iraq/non-U.S. allies. As hypothesized, relatively benign words (e.g., *forces*) were used more often in reference to the former, whereas words implying destruction (e.g., *explosion*) and malicious motivation (e.g., *plot*) were used more in reference to the latter.

**Table 2.** Average Number of Times (Per Article) Each Word Appeared in Reference to the United States/allies versus Iraq/Non-allies with *p*-value and Effect Size for the Difference in Frequency of Appearance

Word	Reference Group		<i>t</i>	<i>p</i>	<i>d</i>
	United States/allies M(SD)	Iraq/non-allies M (SD)			
Explosion	.04 (.11)	.29 (.62)	-3.27	.002	.42
Blast	.04 (.16)	.23 (.70)	-2.22	.03	.28
Threat	.02 (.13)	.50 (1.3)	-2.90	.005	.37
Plot	.01 (.04)	.08 (.22)	-2.53	.01	.32
Attacker	.02 (.12)	.08 (.24)	-1.58	.12	.20
Hostile	.04 (.23)	.09 (.29)	-1.07	.29	.14
Forces	.99 (.94)	.21 (.44)	7.42	.0005	.95
Campaign	.25 (.68)	.11 (.32)	2.03	.05	.26
Action	.15 (.40)	.06 (.17)	1.89	.06	.24
Strategy	.13 (.47)	.06 (.18)	1.19	.24	.15
Reaction	.03 (.15)	.02 (.11)	.47	.64	.06
Nonhostile	.02 (.09)	.02 (.09)	-.38	.71	.05

## Study 2: Attitudes

In Study 2, we examined whether the subtle wording differences observed in Study 1 had implications for readers' attitudes. Because of the prominent coverage terrorism has received in recent years, many people are likely to possess a considerable framework of knowledge about terrorism. This body of knowledge, a terrorism schema, may guide people's perceptions of ambiguous acts of violence. Most people also have a well-developed framework of knowledge about what they consider to be legitimate military actions, providing the basis for a contrasting patriotism schema. Exposure to just a few relevant words may trigger the activation of the terrorism or the patriotism schema. Thus, given that activated schemas can shape the way people perceive and remember events (e.g., Alba & Hasher, 1983), subtle differences in the words used to describe acts of violence may powerfully shape whether people perceive the acts as reflecting terrorism or patriotism.

Importantly, these differences in perceptions of violence may emerge even if readers do not know who was responsible for the violence; simply reading relevant words may activate the terrorism or patriotism schema, affecting attitudes toward and memory for an act of violence. This idea is supported by recent social cognition research showing that stereotypes (which are a type of schema) can be activated by exposure to relevant words, shaping perception, judgment, and action (e.g., Bargh, Chen, & Burrows, 1996; Devine, 1989; Lepore & Brown, 1997). For example, exposing participants to words associated with the stereotype of Blacks affects interpretations of a passage describing ambiguously hostile behaviors by a race-unspecified person—activation of the Black stereotype increases the likelihood that the ambiguous behavior will be interpreted as hostile (Devine, 1989; Lepore

& Brown, 1997). Similarly, then, exposing participants to words associated with terrorism or patriotism may activate the relevant schema, affecting interpretations of a passage describing an ambiguous act of violence committed by an unspecified group.

To test this hypothesis, we constructed two versions of a brief article describing the bombing of a building. One version of the article included words that Study 1 showed were typically used in reference to the United States and its allies (“us” version), while the other version included words that were typically used in reference to Iraq/non-U.S. allies (“them” version). College students (Study 2a) and community members (Study 2b) read one of the two versions and then reported their attitudes toward the act of violence and its perpetrators. We predicted that participants who read the “us” version of the article would be more likely to believe that the United States or its allies were responsible for the bombing, whereas participants who read the “them” version of the article would be more likely to believe that terrorists were responsible. In addition, we predicted that participants who read the “us” version of the article would view the moral character of the bombing more positively than participants who read the “them” version. These results would provide evidence that the nuanced differences in the terminology used by newspapers (observed in Study 1) can shape perceived responsibility for and legitimacy of a violent event, even when the identity of the perpetrator is ambiguous.

### **Study 2a: Attitudes (Student Sample)**

#### *Method*

*Participants.* Thirteen male and 25 female undergraduates completed this study in groups of one to five in partial fulfillment of a course requirement. All were U.S. citizens.

*Materials.* We constructed two versions of an article describing the bombing of a building (see Appendix). Although the event was the same across versions, the words used to describe the event differed. One version of the article (the “us” version) included words that were used more often in reference to the United States/allies, as shown in Study 1. The other version (the “them” version) included words that were used more often in reference to Iraq/non-allies. To maximize parallelism across versions, some of the terms that were not significantly different in Study 1 were used. In addition, some irrelevant words differed between articles to maintain grammatical structure and clarity.

*Procedure.* Participants volunteered for a laboratory experiment described as a study of current events. After signing consent forms, participants were asked to

read three articles that were ostensibly clipped from front page newspaper sections. To make the brevity of the article clips plausible, participants were told that the articles continued on another page of the newspaper. All participants first read an article describing an Oscar party for *The Lord of the Rings*, followed by the target article describing a bombing, and finally an article about the stock market. Half the participants were randomly assigned to read the “us” version of the bombing article, while the other half read the “them” version of the article. After reading the articles, participants were asked to recall the main idea and specific details from the Oscar party article, as well as rating their agreement with six statements regarding the article on a scale ranging from (1) *strongly disagree* to (6) *strongly agree*. This exercise, along with the time spent reading the third article, provided a brief delay between when participants read and responded to the target article. Following this delay, participants recalled the main idea and specific details from the target article and then completed the main dependent measure of attitudes. On the 6-point scale, participants rated their agreement with two filler statements and eight critical statements regarding the bombing, including who was responsible for the action, whether it was necessary and legitimate, whether it was an act of terrorism or patriotism, and whether it was brave or cowardly (see Table 3). Finally, participants reported their age, gender, race, and citizenship, as well as

**Table 3.** Mean Agreement with Critical and Filler Statements for Participants in the “Them” vs. “Us” Conditions with the Combined Effect Sizes and *p*-values for the Meta-analysis of Studies 2a and 2b

	Student Sample (Study 2a)		Community Sample (Study 2b)		Meta-analysis (Studies 2a & 2b)	
	Them	Us	Them	Us	<i>d</i>	<i>p</i>
The U.S., Britain or other allies were responsible for bombing.	1.94	3.10	1.27	2.83	.94	.00007
This was a legitimate military action.	1.88	3.0	1.86	2.71	.76	.002
This bombing was necessary for national defense.	1.71	2.67	1.32	2.17	.82	.0005
Terrorists were responsible for the described bombing.	4	2.1	3.91	2.83	.94	.0001
This bombing was an act of terrorism.	4.18	2.62	3.95	2.92	.74	.002
This bombing was an act of patriotism.	1.82	2.05	1.59	2.04	.30	.17
I would describe this bombing as brave.	1.41	1.76	1.41	1.79	.39	.09
I would describe this bombing as cowardly.	3.88	3.05	3.19	2.50	.45	.05
Valor composite	-2.47	-1.29	-1.86	-0.71	.57	.01
This was a reaction to a past bombing. (filler)	2.53	2.76	1.91	2.67	.33	.14
It is believed that more bombings will take place in the near future. (filler)	4.12	4.86	3.48	4.21	.46	.04

rating their political orientation on two scales ranging from (1) *Very Liberal* to (6) *Very Conservative* and from (1) *Democrat* to (6) *Republican*.

### *Results*

As expected, participants who read the “us” version of the bombing article agreed more strongly that, “The U.S., Britain, or other allies were responsible for the bombing” than did participants who read the “them” version of the article,  $F(1, 36) = 5.87, p < .02, d = .81$  (see Table 3). Compared to participants in the “them” condition, participants in the “us” condition also agreed more strongly that, “This was a legitimate military action,”  $F(1, 36) = 8.85, p < .005, d = .99$ , and that “This bombing was necessary for national defense,”  $F(1, 36) = 8.63, p < .006, d = .98$ . In contrast, participants in the “them” condition agreed more strongly that “Terrorists were responsible for the described bombing,”  $F(1, 36) = 15.38, p < .0005, d = 1.31$ , and that, “This bombing was an act of terrorism,”  $F(1, 36) = 8.42, p < .006, d = .97$ , relative to participants in the “us” condition. To assess the perceived valor of the bombing, we subtracted participants’ agreement with the statement, “I would describe this bombing as cowardly” from their agreement with the statement, “I would describe this bombing as brave.” Participants in the “them” condition described the bombing as lower in perceived valor, relative to participants in the “us” condition, although this trend was only marginal,  $F(1, 36) = 3.48, p < .07, d = .62$ . As expected, there were no significant between-groups differences on the filler items,  $p$ ’s  $> .12$ , nor were there differences in participants’ ratings of whether “This bombing was an act of patriotism,”  $F(1, 36) = .54, p > .47, d = .24$ .

To examine political attitudes, we averaged the two political orientation items. Participants reported a wide range of political attitudes spanning the 6-point scale, although on average participants reported somewhat more liberal than conservative attitudes ( $M = 3.14, SD = 1.35$ ). We found no evidence, however, that the main effects described above were significantly moderated by political orientation (all  $p$ ’s  $> .29$ ).

## **Study 2b: Attitudes (Community Sample)**

### *Method*

*Participants.* Twenty-one males and 26 females ranging in age from 18 to 84 years ( $M = 36.6, SD = 14.82$ ) volunteered for the study. All participants were U.S. citizens recruited in community settings (e.g., a pedestrian mall) in Virginia.

*Procedure.* The procedure was the same as Study 2a except that the third article was omitted to minimize the time required, and no free recall questions were included.

## Results

The results of Study 2b were consistent with the results of Study 2a (see Table 3). As in Study 2a, participants in the “us” condition agreed more strongly than participants in the “them” condition that, “The U.S., Britain, or other allies were responsible for the described bombing,”  $F(1, 44) = 12.85, p < .001, d = 1.08$ . Relative to participants in the “them” condition, those in the “us” condition agreed significantly more strongly that, “This bombing was necessary for national defense,”  $F(1, 44) = 4.78, p < .03, d = .66$ , and slightly more strongly that, “This was a legitimate military action,”  $F(1, 44) = 3.07, p < .09, d = .53$ . Conversely, participants in the “them” condition agreed somewhat more strongly that “Terrorists were responsible for the described bombing,”  $F(1, 44) = 3.58, p < .07, d = .57$ , and that “This bombing was an act of terrorism,”  $F(1, 44) = 2.98, p < .09, d = .52$ ; although these results were only marginal, they were consistent with the significant results obtained in Study 2a. Assessing perceived valor as in Study 2a, we again found a marginally significant effect, with participants in the “them” condition describing the bombing as less valorous than participants in the “us” condition,  $F(1, 43) = 2.82, p < .10, d = .51$ .

Averaging the political orientation items as in Study 2a, we found that participants reported a wide range of attitudes, although on average they reported somewhat more conservative than liberal attitudes ( $M = 3.98, SD = 1.25$ ). As in Study 2a, we entered political orientation, article condition, and the interaction into regressions predicting each of the attitude statements. Political orientation significantly moderated the main effect of article condition on agreement with the statement that, “This was a legitimate military action,”  $B = .48, p < .02$ ; conservative participants were more likely to agree that the action was legitimate after reading the “us” version of the article than after reading the “them” version of the article, whereas liberal participants were relatively unaffected by the manipulation. Similarly, article condition had a greater influence on conservatives’ than on liberals’ perceptions of the action’s valor, producing a significant Political Orientation  $\times$  Article Condition interaction on the valor composite,  $B = -.63, p < .03$ . Political orientation failed, however, to moderate the effect of article condition on agreement with any of the other five target attitude statements (all  $p$ ’s  $> .25$ ). Thus, using a broader community sample, we found evidence that conservative participants were driving some of the observed effects, although reading the “us” versus “them” articles had similar overall consequences for both liberal and conservative participants’ attitudes toward the bombing.

## Discussion

We found that simple variations in the words used to describe the bombing of a building led participants to view the act and its perpetrators in very different

ways. When the description of the bombing included words that were relatively benign descriptions of the violent acts, participants were more likely to believe that the United States or its allies were responsible for the bombing, whereas when the description contained words that more strongly indicated harm or destruction, participants were more likely to believe that terrorists were responsible.

Thus, this finding represents the mirror image of Study 1's finding; Study 1 showed that newspaper articles used different words in reference to the United States/allies versus Iraq/non-allies, and Study 2 demonstrated that this differential word use influenced readers' assumptions about which group (United States/allies vs. terrorists) was responsible for the described violence. Furthermore, the words used to describe the bombing influenced participants' beliefs about the moral character of the action; participants who read the "us" version of the article were more likely to view the bombing as a necessary, legitimate act, while those who read the "them" version of the article were more likely to view the bombing as an act of terrorism. Although these findings emerged more clearly in the student sample than the community sample, the findings were quite consistent overall across studies 2a and 2b, despite the fact that these studies used different samples, settings, and procedures. When we combined the two studies meta-analytically,<sup>2</sup> the article manipulation produced significant, medium-to-large effects on almost all of the critical attitude statements (see Table 3).

If the observed effects emerged because the "us" or "them" articles led participants to perceive the bombing through the relevant schema, then we would also expect that memory for the event would be influenced by the article terminology. We tested this hypothesis in Study 3 by comparing the extent to which participants falsely remembered words related to terrorism and words related to patriotism after reading the "us" or "them" articles; the study was conducted with college students (Study 3a) and community members (Study 3b).

### **Study 3a: Memory (Student Sample)**

#### *Method*

*Participants.* Twenty male and 23 female undergraduates participated. Of these, 22 participated for course credit and the rest were volunteers. One participant was not a U.S. citizen and was excluded from the analyses.

*Procedure.* Participants read the same three articles used in Study 2a, including either the "us" or "them" version of the bombing article. After reading the articles, participants answered questions about their memory for the first

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<sup>2</sup> We used simple, unweighted averaging in combining *d*-values and the Stouffer method as described by Rosenthal (1984) in calculating *p*-values.

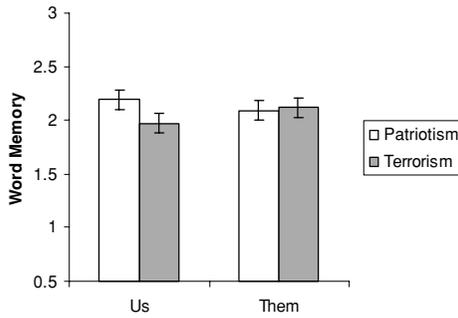
distracter article and the target article, and then completed the demographic items used in Study 2a. On the memory questionnaire, participants indicated whether each of 32 words had appeared in the Oscar party article (14 of these words had in fact appeared, while 18 served as lures). Participants rated their confidence that each word had appeared on a 4-point scale, with 4 = *Sure the word appeared*, 3 = *Probably appeared*, 2 = *Probably did not appear* and 1 = *Sure it did not appear* (see Roediger & McDermott, 1995 for a similar method). Using the same 4-point scale, participants then rated whether each of 32 words had appeared in the bombing article. Nine of these words did in fact appear in both versions of the article, and 23 of the words served as lures. Of the 23 lures, 7 were associated with terrorism, 7 were associated with patriotism, and 9 were neutral lures.

In order to select lure words that were associated with patriotism or terrorism, we first created a list of 18 potential words and then asked a separate group of 10 American undergraduates to rate each word on a scale ranging from 1 = *Strongly associated with patriotic acts or patriotism* to 4 = *Neutral with respect to patriotism/terrorism* to 7 = *Strongly associated with terrorists acts or terrorism*. Based on their responses, we selected 7 words (*extremists, maimed, suicide bomber, Islamic, destruction, terrorist, fear*) that were consistently associated with terrorism ( $M = 5.79$ ,  $SD = .45$ ) and on average were significantly different from the neutral point of 4,  $t(9) = 12.61$ ,  $p < .0005$ . In addition, we selected 7 words (*patriotic, legitimate, Marines, official, soldiers, military, authorized*) that were consistently associated with patriotism ( $M = 2.27$ ,  $SD = .62$ ) and on average were significantly different from the neutral point of 4,  $t(9) = -8.78$ ,  $p < .0005$ .

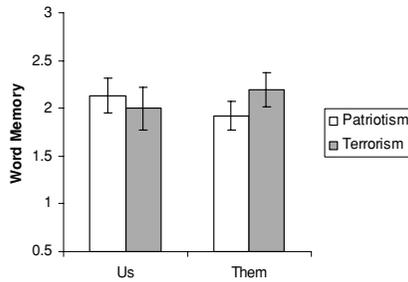
## Results

We predicted that participants in the “us” condition would be more likely to believe that lures related to patriotism had appeared in the article than that lures related to terrorism had appeared, while we expected participants in the “them” condition to show the opposite pattern. To test this hypothesis, we subjected word recognition ratings to a 2 (article: us vs. them)  $\times$  2 (word type: patriotism vs. terrorism) mixed factor ANOVA in which article version was a between-subjects variable and word type was a within-subjects variable. This analysis revealed the expected Article Version  $\times$  Word Type interaction,  $F(1, 40) = 5.35$ ,  $p < .03$ ,  $\eta_p^2 = .12$ . As shown in Figure 1, participants in the “us” condition reported greater belief that the patriotic versus terrorist words had appeared,  $F(1, 40) = 8.44$ ,  $p < .006$ ,  $\eta_p^2 = .17$ , while participants in the “them” condition showed the opposite pattern (though the latter simple effect was not significant,  $F < 1$ ,  $\eta_p^2 = .004$ ). There were no between-group differences in memory for the neutral lures or the words

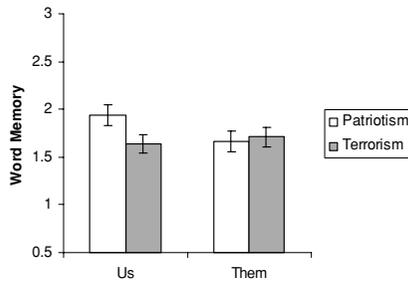
## Student Sample (Study 3a)



## Community Sample (Study 3b)



## Subtle Materials (Study 4)



**Fig. 1.** Mean word recognition for patriotism and terrorism lures in “us” and “them” conditions (Studies 3 & 4). Error bars indicate the standard error of the mean.

that actually appeared,  $F$ 's < 1.15. Participants reported relatively liberal attitudes ( $M = 2.92$ ,  $SD = 1.34$ ), but political attitudes did not significantly moderate the critical Article Version  $\times$  Word Type interaction,  $F(1, 38) = 1.87$ ,  $p = .18$ ,  $\eta_p^2 = .05$ .

### Study 3b: Memory (Community Sample)

#### *Method*

*Participants.* Sixteen males and 14 females ranging in age from 18 to 65 years ( $M = 34.1$ ,  $SD = 14.7$ ) volunteered for the study. All participants were recruited in community settings in Virginia. One female participant failed to report her citizenship and was excluded from the analyses. All remaining participants were U.S. citizens.

*Procedure.* The procedure was identical to Study 3a.

#### *Results*

As in Study 3a, subjecting word recognition ratings to a 2 (article version: us vs. them)  $\times$  2 (word type: patriotism vs. terrorism) mixed factors ANOVA revealed the expected Article Version  $\times$  Word Type interaction,  $F(1, 27) = 5.45$ ,  $p < .03$ ,  $\eta_p^2 = .17$ . The same overall pattern observed with the student sample emerged in the current study (see Figure 1); participants in the “them” condition exhibited greater certainty that the terrorism versus patriotism words had appeared,  $F(1, 27) = 5.76$ ,  $p < .02$ ,  $\eta_p^2 = .18$ , while participants in the “us” condition exhibited the opposite pattern (though the latter simple effect did not reach significance,  $F < 1.1$ ,  $\eta_p^2 = .04$ ). There were no significant between-group differences in memory for the neutral lures or the words that actually appeared,  $F$ 's  $< 1$ . Participants reported a wide range of political attitudes (min = 1, max = 6), with the average falling near the midpoint of the scale ( $M = 3.48$ ,  $SD = 1.54$ ). When we split political attitudes at the midpoint of the scale and entered this variable into a 2 (political orientation: liberal vs. conservative)  $\times$  2 (article version: us vs. them)  $\times$  2 (word type: patriotism vs. terrorism) mixed factors ANOVA, the Article Condition  $\times$  Word Type interaction remained significant  $F(1, 24) = 5.77$ ,  $p < .02$ ,  $\eta_p^2 = .19$ , while a marginally significant Political Orientation  $\times$  Condition  $\times$  Word Type interaction also emerged,  $F(1, 24) = 3.72$ ,  $p < .07$ ,  $\eta_p^2 = .13$ . Follow-up analyses revealed that conservative participants showed the predicted false memory effects to a greater extent than did liberal participants, although this effect should be interpreted cautiously given its marginal significance and its failure to emerge in Study 3a.

#### *Discussion*

As expected, variations in the wording of the bombing article influenced memory for the description of the violent act. The “them” version of the article was more likely to elicit false recall of terrorism words than patriotism words,

whereas the opposite pattern emerged for the “us” version of the article. This overall pattern of results held for both the student and community samples.

Reading words that newspapers typically use in reference to Iraq/non-allies may automatically trigger people’s terrorism schema, influencing the way they encode and retrieve acts of violence. In contrast, reading words typically used in reference to United States/allies may automatically trigger people’s patriotism schema, leading to contrasting interpretations of and memory for violent acts. If this is the case, then simply changing a few words in an article may be enough to change participants’ interpretation of and resulting memory for an act of violence. Because the preceding studies relied on articles that contained differences in sentence structure and alterations to a number of words, we conducted a more stringent test in Study 4 by revising the target article such that the “us” and “them” versions differed by only three words.

#### Study 4: Subtle Materials (Mixed Sample)

##### *Method*

*Participants.* Eleven male and 27 female American citizens ranging from 18 to 65 years ( $M = 28.6$ ,  $SD = 14.6$ ) volunteered for the study. Twenty-seven participants were recruited from two university campuses while the remaining 11 were recruited from a local business (a travel agency).

*Procedure.* The procedure was identical to Study 3b, except that the differences between the “us” and “them” versions of the article were minimal. As shown in the Appendix, the two articles differed only in the use of three words: *forces* (“us” version) vs. *attackers* (“them” version), *bombing* (“us” version) vs. *explosion* (“them” version), and *strategy* (“us” version) vs. *plot* (“them” version).

##### *Results*

As in the previous studies, submitting participants’ word recognition ratings to a 2 (article version: us vs. them)  $\times$  2 (word type: patriotism vs. terrorism) mixed factors ANOVA revealed the expected Article Version  $\times$  Word Type interaction,  $F(1, 36) = 4.57$ ,  $p < .04$ ,  $\eta_p^2 = .11$ . Consistent with the previous studies, participants in the “us” condition reported greater certainty that the patriotism vs. terrorism words had appeared,  $F(1, 36) = 7.23$ ,  $p < .01$ ,  $\eta_p^2 = .17$ , while participants in the “them” condition showed the opposite pattern (though as in Study 3a, the latter simple effect was nonsignificant,  $F < 1$ ,  $\eta_p^2 = .003$ ). Participants’ political attitudes fell near the midpoint of the scale on average ( $M = 3.62$ ,  $SD = 1.15$ ) and did not moderate the observed two-way interaction,  $F(1, 34) = .75$ ,  $p = .39$ ,  $\eta_p^2 = .02$ .

## Discussion

Study 4 replicated the pattern observed in Studies 3a and 3b; participants were more likely to exhibit false recall for words related to patriotism than terrorism after reading the “us” version of the article, with the opposite tendency emerging for participants who read the “them” version even though the articles differed by only three words. We have suggested that the memory effects observed in these studies occur because reading the “them” version of the article triggers people’s terrorism schema while reading the “us” version of the article triggers people’s patriotism schema, leading to contrasting interpretations of and memory for the event described.<sup>3</sup>

## General Discussion

*Summary of Results.* The present research demonstrates that even subtle differences in the language used to describe acts of violence may influence whether people perceive the acts as terrorism or patriotism. Drawing on a nationwide sample of American newspaper articles covering violence in Iraq, Study 1 showed that benign words were more likely to be used in reference to violent actions associated with the United States and its allies, whereas words implying destruction and devious intent were more likely to be used in reference to violent actions associated with Iraq and non-U.S. allies. When participants in Study 2 read an article describing a bombing that included the words typically used in reference to the United States and its allies (“us” version), they were not only more likely to infer that the United States/allies were responsible for the bombing, but were also more likely to view the action as legitimate and necessary. In comparison, when reading a parallel article that included words typically associated with Iraq/non-allies (“them” version), participants were more likely to view terrorists as responsible for the act of violence. Small differences in wording also have consequences for memories regarding acts of violence, as shown by Studies 3 and 4; participants were more likely to falsely recall words associated with terrorism than patriotism when they read the version of the article containing language typically used in reference to Iraq and non-U.S. allies, whereas the opposite pattern emerged when participants read the version with language typically used in reference to the United States and its allies. Taken together, these findings suggest that minor linguistic differences

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<sup>3</sup> A possible alternative explanation for these findings is that affective rather than semantic differences in the “them” versus “us” terms describing the violent acts led people to view the event more negatively and to falsely recall the terrorism words (which were generally negative) more than the patriotism words (which were relatively positive). However, while concepts are associated in memory in terms of their evaluative qualities (Bargh, Chaiken, Govender, & Pratto, 1992; Fazio, Sanbonmatsu, Powell, & Kardes, 1986), evidence suggests that semantic associations largely overshadow affective associations when both types are present (Storbeck & Robinson, 2004).

in reporting can influence whether the terrorism or patriotism schema is activated, thereby shaping attitudes toward and memories for acts of violence.

The potency of the observed schematic effects on attitudes and memory are notable in light of the subtlety of the experimental manipulations. In Study 2, even though the articles were brief and ambiguous (made apparent by participants' unwillingness to rate strong agreement with any statements), differences in attitudes toward the perpetrators of the acts were still observed (mean  $d = .60$  for critical attitude statements). In Studies 3 and 4, false recognition rates differed between article conditions despite the fact that (a) the materials were short, (b) the time between presentation and test was brief, (c) the articles differed in only a small number of words used to prime the schema, and (d) many of the terrorism and patriotism words were relatively low-frequency words (e.g., maimed, Marines), all of which work against the likelihood of obtaining false recognition.

This research demonstrates that even minor linguistic variations can influence whether an act of violence is perceived as terrorism versus patriotism. The observed effects are likely to be magnified in real-world contexts, where people are exposed over a longer period of time to more information that is probably more extreme. Thus, simple linguistic differences in news reporting may influence the public's support for international policies; if news stories use words that activate the terrorism schema, then the action is more likely to receive moral condemnation, and moderate responses such as engaging in negotiation with the perpetrators may be seen as less acceptable (Crenshaw, 1995).

The present research shows that these effects can emerge even when an action is never explicitly labeled as terrorism. This is important because acts of violence committed by the stated enemies of the War on Terror may often fall well outside commonly used definitions of terrorism. Yet, in part because of the words used to refer to American enemies, people may automatically perceive violence by these groups through the lens of terrorism even if the perpetrators have limited involvement in actual anti-American terrorism. While simply knowing that a nation or group is an enemy of one's own country may have important consequences for how their actions are perceived, attaching the label of terrorism—or terms just associated with such a label—may be more powerful. As journalist Brian Jenkins has argued, “if one party can successfully attach the label terrorist to its opponent, then it has indirectly persuaded others to adopt its moral viewpoint” (quoted in Whittaker, 2001, p. 8).

The attitude and memory effects observed in the present studies may emerge among people with a broad spectrum of political attitudes. While we found mixed evidence that conservative participants showed stronger schema-consistent effects on attitudes (Study 2b) and memory (Study 3b) than more liberal participants, the results emerged even with liberal samples, and political ideology failed to moderate the basic effects in Studies 2a, 3a, and 4. This suggests that news articles containing relevant words may activate terrorism or patriotism schemas quite directly and

automatically, largely bypassing consciously held political attitudes. In line with this idea, previous research has demonstrated that seeing words associated with a stereotype can directly activate the relevant stereotype, influencing subsequent judgments, almost regardless of people's consciously held attitudes (Lepore & Brown, 1997). By contrast, exposure to a stereotyped *category* (e.g., Blacks) may only activate the stereotype for people with particular attitudes (Lepore & Brown, 1997); this suggests that the consequences of knowing that Iraq was responsible for an act of violence may depend on one's political attitudes, while exposure to words associated with the terrorism schema may activate this schema more directly, creating relatively ubiquitous effects on attitudes and memory.

### Conclusions

The present research demonstrates that subtle linguistic differences in news reporting may influence whether people view violent acts as terrorism or patriotism. Because these perceptual effects may occur largely unconsciously, a wide range of people may end up associating American enemies with terrorism, even if the factual basis for this connection is quite tenuous. The consequences of such categorization can be dramatic considering that nearly everyone agrees on the abhorrent moral character of terrorism, while simultaneously disagreeing on how to define and identify it. Thus, linguistic choices that affect whether people perceive an act of violence as terrorism may have important consequences for public policy support concerning specific actions and reactions in response to violence.

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### Appendix: Articles

“Us” and “them” versions of article used in Studies 2 and 3.

“Us” Version	“Them” Version
<i>Forces</i> bombed a prominent building early this morning in an unanticipated offensive.	<i>Attackers</i> bombed a prominent building early this morning in an unanticipated offensive.
The <i>bombing</i> caused the building to collapse in thirty minutes.	The <i>explosion</i> caused the building to collapse in thirty minutes.
Seventeen people died, 11 were seriously injured, and 9 were reported missing.	Seventeen people died, 11 were seriously injured, and 9 were reported missing.
The current <i>campaign</i> is expected to continue.	The <i>threat</i> of more <i>explosions</i> remains high.
Today's <i>bombing</i> is apparently part of a <i>strategy</i> to <b>Continued on A3</b>	This <i>explosion</i> is apparently part of a <i>plot</i> to <b>Continued on A3</b>

*Note:* Due to a typographical error, the word “missing,” which should have appeared in both versions of the article, was left out of the “us” version of the article for all participants in Study 2a and for 12 participants in Study 3a.

(continued)

**Appendix:** (Continued) “Us” and “them” versions of article used in Studies 4 and 5b.

“Us” Version	“Them” Version
<i>Forces</i> bombed a prominent building early this morning in an unanticipated offensive.	<i>Attackers</i> bombed a prominent building early this morning in an unanticipated offensive.
The <i>bombing</i> caused the building to collapse in thirty minutes.	The <i>explosion</i> caused the building to collapse in thirty minutes.
Seventeen people died, 11 were seriously injured, and 9 were reported missing.	Seventeen people died, 11 were seriously injured, and 9 were reported missing.
This event is apparently part of a <i>strategy</i> to <b>Continued on A3</b>	This event is apparently part of a <i>plot</i> to <b>Continued on A3</b>