Global Angling with a Local Angle:
How U.S., British, and Dutch Newspapers
Frame Global and Local Terrorist Attacks

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The 9/11 terrorist attacks and later attacks such as those in London and Madrid shocked the world and found their way into the newspapers of many countries. The authors study the international coverage of these events in the context of globalization versus localization and the creation of the dominant post–cold war frame of the War on Terror. Using automatic co-occurrence analysis based on the notion of associative framing, they investigate whether these events were mainly framed in a local or global way in the American, British, and Dutch press. The authors found that although proximity is still a strong determinant of attention for events, the framing of these events was more affected by the global event of 9/11 than by local considerations.

9/11 happened in New York but found its way into every local rag around the world. These happenings form a clear example of Wolfsfeld's (1997) argument that events determine media coverage to a great extent. However, journalists give the events meaning by transforming them into words and images. In other words, journalists create a "window on the world" (Tuchman 1978: ix). During this selection and presentation process, journalists decide what is important, making the complex reality understandable for their audiences. Moreover, through their coverage, media can influence public attitudes. Lippmann (1922: 16) already made this connection between mass communications and public attitudes preferences when he stated, "The way in which the world is imagined determines at any particular moment what men will do."

Following the attacks on the World Trade Center in New York, there has been an accelerating trend toward a global polarization of society into

"Western" cultures on one hand and Islam on the other, epitomized in the "War on Terror" against the "Axis of Evil." Within this process, we can see an increasingly important role for the media. The fall of the Berlin Wall has loosened the coherence and narrative power of the safe cold-war frame that helped journalists clearly distinguish "us" from "them" for several decades. After 9/11, journalists enthusiastically embraced the new framework of the War on Terror to interpret the "friends" and "enemies" of a state, easily expanding the notion of "enemy" to include all Muslims both in the Middle East and the West (see also Lippmann 1922; Norris et al. 2003).

In the context of these events, a school of hyperglobalizers argues that the national public sphere is replaced by McLuhan's (1960) "global village," in which citizens are informed of global issues and receive the same information around the world. According to this view, the media have transcended the nation and now functions on a global level (Hjarvard 2001: 20). Another school of thought argues that although we learn a lot about the world around us, this is still from a domestic point of view. Media continue to preserve traditional culture despite internationalizing forces (Hjarvard 2001: 22). Especially after 9/11, familiar local, domestic contexts are being used to integrate the global event in increasingly local discourses—in a process of "regionalization" (Volkmer 2002: 239).

In this study, we will look at the way in which a number of terrorist attacks including 9/11 and the London bombings were covered in U.S., British, and Dutch newspapers. Using associative framing, we will determine the extent to which the media coverage is globalized or domesticated. Moreover, we will look at the extent to which Muslims are associated with terrorism in the newspapers in relationship with the global and local events.

Associative Framing

In the 1990s, framing theory gained an important place in the field of communication research. Entman (1993) defined *framing* as selecting "aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described" (p. 52). The definition shows already the multifaceted nature of framing research. It is about selection, salience, and recommendation, including not only the communicator but also the audience. As Entman (1993) points out, there are at least four locations of framing that can be studied: the communicator, the text, the receiver, and the culture. The research on framing so far shows a division between studies examining media frames and research into audience frames (Cappella and Jamieson 1997; Entman 1993; Scheufele 1999). The former branch of research focuses on how issues are presented in

the news (Norris 1995; Patterson 1993; Semetko and Valkenburg 2000), while the latter branch of research focuses on how individuals perceive and interpret issues presented to them (Domke et al. 1998; Nelson et al. 1997; Price et al. 1997; Rhee 1997; Valkenburg et al. 1999). A combination of these branches is found in few studies examining both media frames and the effects of these frames on the public (e.g., Cappella and Jamieson 1997; Iyengar 1991; Neuman et al. 1992). Within framing research, there are two critical questions: "What are frames?" and "How are frames transferred between media and audience?"

News Frames, Equivalency Frames, and Emphasis Frames

With respect to the question of what frames actually are, a distinction is made between equivalency frames and emphasis frames. Equivalency frames present an issue in different ways with "the use of different, but logically equivalent, words or phrases" (Druckman 2001: 228). In experiments, researchers found systematic changes in audience preference when the same problem was presented in different wordings, such as rescuing some versus sacrificing others (Quattrone and Tversky 1988; Tversky and Kahneman 1981). Emphasis frames, later called "issue framing" (Druckman 2004), on the other hand, highlight a particular "subset of potentially relevant considerations" (Druckman 2004: 672). In line with Entman's definition, *issue framing* can be defined as a process of selecting and emphasizing certain aspects of an issue on the basis of which the audience can evaluate the issue described or the protagonists associated with the issues.

We will focus on issue framing rather than equivalency framing, since we are interested in the relationship between different concepts and their attributes rather than in the different descriptions of a certain concept. Issue frames form a substantial part of the research on news frames. Cappella and Jamieson (1997: 39–40) describe news frames as "those rhetorical and stylistic choices, reliably identified in news, that alter the interpretations of the topics treated and are a consistent part of the news environment." Examples of news frames are "strategic" or "game" frames, which are often found in coverage of political campaigns (Patterson 1993). Other examples of news frames are "conflict" and personalization frames (Price and Tewksbury 1997) or episodic versus thematic frames as distinguished by Iyengar (1991).

Linear versus Interactive Frame Setting

The second question mentioned above—how are frames transferred from the media to the audience?—also leads to a number of different hypotheses. Some researchers consider the transfer of salience a linear process, straight from the

sender into the audience (Eagley and Chaiken 1998; Zaller 1992, 1994). Research in this field is based on the mathematical model of a one-way, linear transmission of messages (Shannon and Weaver 1948). Other researchers, however, suggest a more complex situation in which meanings are produced and exchanged between the sender, the receiver, and the larger community in which they operate (Nelson et al. 1997). In other words, the framing process can be regarded as an interaction between message content and the interpreter's social knowledge. This interaction process leads to a construction of a mental model as a resulting state of interpretation (Rhee 1997). Besides the creation of these mental models, the framing process can trigger a mental model or frame that already exists within the receiver's perception. Graber (1988) describes the way people use schematic thinking to handle information. They extract only those limited amounts of information from news stories that they consider important for incorporation into their schemata. Snow and Benford (1988) state in this respect that media frames and audience frames interact through "frame alignment" and "frame resonance" (see also Snow et al. 1986).

The Cognitive Paradigm

D'Angelo (2002) divides framing research into a critical, constructivist, and cognitive paradigm. Our ultimate interest lies in the interaction of messages and thought processes, placing us in the latter paradigm. The construction of mental models, schemata, or frames is a central part of this cognitive approach to framing. Grounded in cognitive psychology, the approach uses the associative network model of human memory (Collins and Quillian 1969), proposing that the concepts in semantic memory are represented as nodes in a complex hierarchical network. Each concept in the network is directly related to other related concepts. Minsky (1975) connected this view to framing when he defined a frame as a structure containing various pieces of information. These discursive or mental structures are closely related to the description of a schema, which is "a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relation among those attributes" (Fiske and Taylor 1991: 98). These cognitive structures are based on prior knowledge (Fiske and Linville 1980).

As discussed above, framing study contains many perspectives and research lines. We perceive, however, a common denominator in that many studies base the idea of a frame on associations, either between concepts, concepts and attributes, or on more complex networks of concepts. In this study, therefore, we will focus on what we call "associative framing." In a wider context, these associative frames can be seen as a generalization of the model used by second-level agenda setting (McCombs and Estrada 1997; McCombs and Ghanem 2001), which extends agenda-setting theory by assuming the transfer of

salience of object-attribute links as well as the original transfer of salience of issues (cf. Dearing and Rogers 1996; McCombs and Shaw 1972). Contrary to (second-level) agenda setting, we do not hypothesize a linear, "hypodermic" transfer of these frames but are interested in examining different possible interactions and transfer hypotheses.

Associative frames consist of associations between concepts and other concepts, where *concepts* is a general term that can denote actors, issues, and attributes. From the point of view of the cognitive perspective, these frames refer to the earlier described schemata of interpretation (Goffman 1974), and the main associations in a message can be seen as its "central organizing idea" (Gamson and Modigliani 1987). We conjecture that these media frames interact with associative networks in the receiver, as described by Collins and Quillian (1969), and can thus be termed *associative audience frames*.

Globalization, Domestication, and Glocalization of the News

A news item must be meaningful for the audience before becoming news. Proximity, as Galtung and Ruge (1965) labeled it in their seminal study into news values, makes an event more meaningful for a country and its audiences. Researchers found that proximity affects both news selection as well as the coverage and framing of news items (Entman 1991; Grundmann et al. 2000; Kaid et al. 1993). Gurevitch et al. (1991: 207) conclude that to be judged newsworthy, an event has to be anchored "in a narrative framework that is already familiar to and recognizable by newsmen as well as by audiences." Within the discussion about the globalization of the news, Timothy Cook (1994) illustrates tellingly the notion of "domestication" of news by considering a French and an American report of a diplomatic event that took place before the Gulf War. He states that in the French report, "the world was first globally constructed, then ideologically constructed. By contrast, for the American broadcast, the world was first domestically constructed, then institutionally constructed" (p. 105).

In contrast to this localization, hyperglobalizers argue that we are entering one "global village," replacing the national public spheres (Clausen 2004; Volkmer 2002). Citizens are informed of global issues and receive the same information around the world. According to this view, the media have transcended nation-states and exist on a global level (Hjarvard 2001: 20).

The new term *glocalization* was coined to indicate the synthesis of domestication and globalization. Robertson (1995) argues that *glocalization*, a term that originated in the Japanese business sector to describe a global outlook adapted to local conditions, can serve as a more precise term for globalization. Ritzer (2004: 77) defines *glocalization* as "the interpenetration of the global and local resulting in unique outcomes in different geographic areas." Lee et al. (2002)

studied glocalization in media coverage while looking at the handover of Hong Kong. The researchers demonstrated how a global event was glocalized by media in different countries, how the notion of glocalization "captures the global media production of the local and the local media productions of the global" (p. 53).

Framing Terrorist Attacks:
Domestication, Official Slant, and Islam

Studies into the news coverage of terrorism support the observation of a domestic culture filter (Simmons and Lowry 1990; Van Belle 2000; Weimann and Winn 1994). Weimann and Winn (1994) examined the news coverage of terrorist events in the *New York Times* and the three major U.S. networks from 1972 to 1980. The researchers found that the location of the event and the nationality of the victims were both significant, especially for television news.

A study into the news coverage in a Swedish newspaper of terrorist attacks in Kenya and Tanzania in 1998 and Madrid in 2004 showed a significant difference in the amount of attention paid to both events (Persson 2004). Madrid received far more attention than the African countries. Moreover, the study reveals differences in the interpretation of the events. Kenya and Tanzania were framed as a tragedy and crime, while Madrid was a moral outrage everyone should care about; terrorism was labeled as something "'new," "'Islamic," and "global," increasing the association between Islam and terrorism. The description of the causes of terrorism remained very limited in the news (Persson 2004: 36).

Todd Schaefer (2003), in his research into the framing of the U.S. embassy bombings and 9/11 attacks in African and U.S. newspapers, found differences between the American and African media. Schaefer concludes that "because journalists searched for local angles and reflect the biases in their societies, American and African newspapers were ethnocentric in putting their own concerns and structural frames first and not challenging what they already thought about the other" (p. 110).

Clausen (2003: 113) found the same domestication of the news, researching the coverage of the first commemoration of 9/11: "Stories were framed, angled, geared and worded to suit the emotional and cognitive framework of audiences at home." There is no such thing as "global" news congruent in theme, content, and meaning.

Following the Official Slant

An important aspect when looking at the domestication of the news is a focus on official sources. Numerous studies show the importance of official sources, especially with regard to foreign policy and security issues (Bennett and Paletz 1994; Hallin 1986; O'Heffernan 1991, 1994). Micheal Ryan (2004)

came to the same conclusion studying the editorials of ten U.S. newspapers after 9/11. Bush's "war on terror" frame was accepted without any counterarguments and even reinforced by a selective choice of sources. According to Norris et al. (2003: 4), 9/11 forms a "symbolizing critical culture shift in the predominant news frame used by the American mass media for understanding issues of national security etc." Research into news coverage on CNN right after the attack supports these findings (Reynolds and Barnett 2003). Relying heavily on official sources, CNN's coverage showed a clear, dominant frame consisting of three thematic clusters that involved war and military response, American unity, and justification. Keywords within the war and military response and justification cluster included statements referring to the United States more frequently as "America" instead of "the United States" and using the words *war* and *an act of war* to describe the attack, labeling the event as "horrific" and "unbelievable." In the coverage, words such as *cowards* and *madmen* were used to describe the terrorists. Moreover, journalists made atypical references to God and the need to pray or for prayer and used words such as *freedom*, *justice*, and *liberty* as simple descriptors of America and its ideals. Finally, symbolic comparisons to Pearl Harbor were made. Political leaders, both Democratic and Republican, were unified in their support for the president, their use of catchphrases such as "God bless America" and their emphasis on the American way of life giving the impression that the entire country was unified. Not once did anyone, source or journalist, suggest that an option other than supporting the president would exist.

Framing Islam before and after 9/11

Already, in the early eighties, Edward Said, in his writing about Islam in America, states that the media have "portrayed it (Islam), characterized it, analyzed it, given courses on it . . . based on far from objective material" (1981: x–xi). Other research shows that this bias is not confined to the United States. The Australian media's reporting on Muslims and Islam during the first Gulf War focused on themes such as terrorism and disloyalty. Richardson (2001) shows the same tendencies in the British broadsheet press. British Muslims are largely excluded from British broadsheet coverage, and if included, Muslims are presented within a negative context such as violence, terrorism, fundamentalism, or villainy.

After 9/11, several new studies investigated the portrayal of Muslims in the media and found different results. Nacos and Torres-Reyna (2003: 151) found a shift from "limited and stereotypical coverage in the pre-9/11 period to a more comprehensive, inclusive, and less stereotypical news presentation." The researchers not only found that more access was granted to Muslims, they also found a difference in the content of the news. Whereas the media associated Muslims with negative and stereotypical topics before 9/11, afterward, they

focused on a bigger range of topics. Moreover, Nacos and Torres-Reyna found a shift from the episodic framing toward more thematic framing patterns. As one expert in the field pointed out as early as 1981, the cultures and peoples of the Middle East "are not easily explained in quick two-minute network news stories" (Shaheen 1981).

Other researchers, however, argue that after the initial period of disorientation, news coverage recaptured the old frames in which they shaped the news about Arabs, associating them with violence, terror, and Islam (Karim 2002; see also Persson 2004). These findings are in line with the research of Brosius and Eps (1995), who studied the impact of four key events on news selection in the case of violence against aliens and asylum seekers in Germany. They found that the amount as well as the shape of coverage increased significantly after these key events. According to Brosius and Eps (1995: 40), key events have prototyping qualities that "point to an interactionist view of news selection. Both reality, represented by key events, and journalists' schemata and routines work together in creating the media's picture of the world."

Hypotheses

From the theoretical overview, we define a number of hypotheses.

First, with respect to the local versus global events, we expect that the news factor of proximity remains important:

Hypothesis 1: The newspapers pay more attention to local events than global events.

Moreover, the literature has shown that localization of the event affects news selection. In other words, all the news is framed from a local perspective:

Hypothesis 2: All news is local: Global news is linked to audience's world.

On the other hand, we expect in the globalized world that journalists will also present the local events within a wider, global framework:

Hypothesis 3: Local news is globalized.

With respect to newspaper journalists, we expect that their focus will be heavily patriotic: They will support government statements and have a "rally around the flag" function.

Hypothesis 4: The local media will perform a "rally around the flag" role.

When looking at the portrayal of Muslims before and after 9/11, we found contesting opinions. On one hand, researchers argue there is more positive

coverage of Muslims, while other researchers argue that the key event just emphasizes already existing stereotypes:

> *Hypothesis 5a:* Muslims are portrayed more negatively after a local event.
> *Hypothesis 5b:* Muslims are connected with terrorism more strongly after a local event.

Methodology

This study focuses on the coverage of four events in three countries. The four events are (1) the attacks on the World Trade Center on September 11, 2001; (2) the bombing on the Madrid subway on March 11, 2003; (3) the murder of the film producer Theo van Gogh in the Netherlands on November 2, 2004; (4) and the bombings on the London subway on July 7, 2005. The three countries are the United States, Great Britain, and the Netherlands.

In each of these countries, we analyzed two newspapers, one quality broadsheet newspaper and one popular newspaper. For the United States, these will be the *Washington Post* and *USA Today*; for the United Kingdom, the *Guardian* and the *Sun*; and for the Netherlands, *de Volkskrant* and *de Telegraaf*.

From these newspapers, we analyzed all articles between January 1, 2001, and January 1, 2006, that contain one or more of the keywords indicating one of the four key events, terror, or Islam—resulting in a total of 140,456 articles. In principle, this is a census of the population of articles in these newspapers, but it can also be seen as a stratified sample of the whole media supply in the three countries under investigation.

Apart from the four key events, terror, and Islam, we defined a number of concepts and related keywords to measure the associations with actors in the four countries, here confined to members of the executive and legislative branches of the government, and reference events in the four countries and the broader world (here Pearl Harbor and the African Embassy bombings, the 1993 World Trade Center bombing in the United States, the IRA bombings in the United Kingdom, the ETA in Spain, the Moluccan train hijackings in the Netherlands, the Palestinian Intifada, and the Kurdish independence movement in Turkey) as global related events. Finally, we define three categories of symbolic or emotional associations: positive (innocent, peace, freedom), negative (violence, madmen, fundamentalist), and patriotic (unity and support but also government jargon such as "war on terror").

Method

In this study, we will use a unified framework for measuring visibility, associative framing and symbolic framing, which is for a large part based on the

method described in Van Atteveldt et al. (2006). For the different hypotheses, we used a computer content analysis to measure the visibility of concepts (Hypothesis 1), associations between concepts (Hypotheses 2 and 3), and symbolic or evaluative framing of concepts (Hypotheses 4 and 5).

Visibility, Co-occurrence, and Symbolic Associations

The core notion of our framework is that a document, in our case, an article, mentions a number of concepts. The visibility of a concept can be defined as the chance of reading about that concept, which is the average reading chance of that concept over all news articles. The association between two concepts, A and B, is defined as the chance of reading about B given that one reads about A in a random article, which is equal to the proportion of articles about A that are also about B. Although this measure is related to more traditional measures of association such as cosine distance, correlation, and χ^2 values, it differs substantively on two counts. First, this is a deliberately asymmetric measure since, for example, Hamas might be strongly associated with terrorism while terrorism is more strongly associated with other concepts such as Al Qaeda. Second, we are not interested in associations compared to what one would predict based on independent distribution but rather in the associations themselves. If all articles are framed in a dominant frame, say, the patriotic frame, this still means that the individual articles are framed that way. Apart from these desirable substantive features, using this asymmetric measure has the convenient methodological property that all associations of a concept can be calculated based only on the articles in which that concept occurs, while symmetric measures such as correlation would also require all articles containing the concepts with which the first concept might co-occur.

To extend this methodology to symbolic framing, we needed a measure of the symbolic content of a document. We took Pennebaker et al. (2001) as a starting point, believing that these symbolic frames can be captured by using certain keywords and catchphrases. We could then define these symbols as pseudoconcepts and use the association score between a concept and a symbolic frame as the strength with which that concept is framed using that symbolic frame.

We decided to use the article as the unit of co-occurrence because we are not just interested in direct connections between objects, in which case, paragraphs or sentences would be a more meaningful unit. Rather, we are interested in seeing associations in a whole line of argument, which necessitates the larger associative context. In other words, we are interested in the general organizing themes of an article rather than the manifest connections made in sentences.

Results

For the first four hypotheses, we are interested in the framing of an event and only consider the two months after each event. For the last hypotheses, we are interested in the long-term effect of events on the framing of a group, so we consider the whole data set. Actors and media are considered local to an event if they are officials, institutions, or residents of the country the event happened in. Analogously, an event is local to a medium if it happened in the country in which that medium is produced and global otherwise.

Attention Paid to Global and Local Events

Figure 1 gives an overview of the number of articles per newspaper over time. A first striking aspect in the graph is the similarity between the different newspapers. They all show the same pattern in their news coverage of terrorism. Differences, however, are found with respect to the quantity of the news. By far, most news coverage is found in the *Washington Post*, with 50,000 out of the total number of 140,000 articles. The other quality newspapers investigated, *The Guardian* and *de Volkskrant,* follow at a distance with about 25,000 articles each. The popular press gives the investigated events even less coverage, with 11,000 to 16,000 articles each.

We can clearly see that most news is found around the World Trade Center attacks in September 2001. One year later, the first commemoration of the events caused another peak in the attention over time, followed with a summit of attention in the building-up phase to the war in Iraq, in April 2003. After that, we see a decline of attention in the *Washington Post* and *USA Today*, with a small revival of attention when the bombs in Madrid exploded. For both the Dutch and British newspapers, we see the same pattern, although with smaller differences in the amount of attention. The British newspapers follow the same line as the other newspapers, with a revival in July 2005 with the bombings in London. In both the *Sun* and the *Guardian*, we see an increase of attention in this month.

The most striking difference between the countries is that at the end of 2004, there is a sharp peak in Dutch coverage after the assassination of Theo van Gogh, in which the amount of attention in *de Volkskrant* even exceeds the number of articles found in the *Washington Post*. Also, *de Telegraaf* shows a peak in this month. The other newspapers do not mention the murder at all (the *Sun* and *USA Today*) or only minimally (the *Washington Post* and the *Guardian*). One month later, on the first of December, Prince Bernhard of the Netherlands died, and the assassination of Theo van Gogh also disappeared from the Dutch newspapers.

Our first hypothesis states that local events will be covered more extensively than global events. Figure 2 visualizes the ratio of local to global coverage
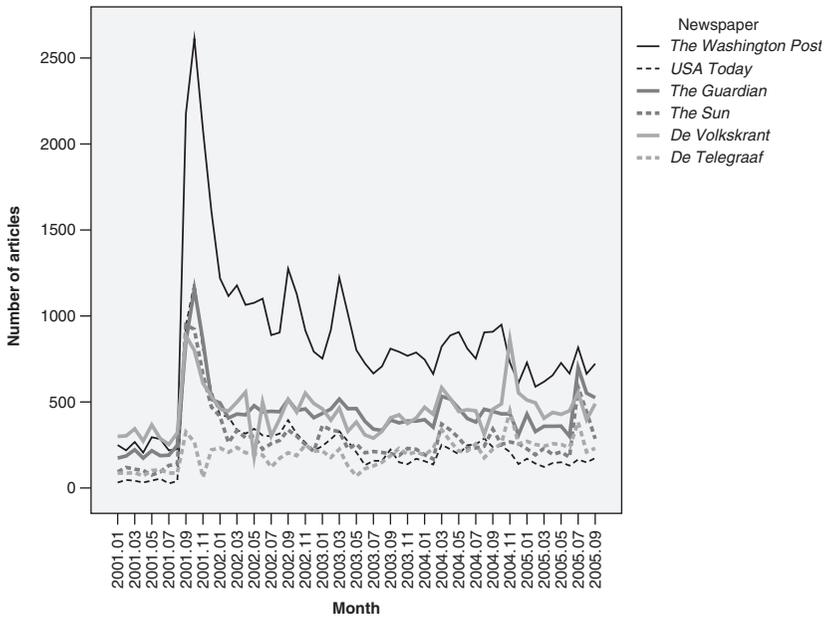
Figure 1
Number of Articles in the Sample per Newspaper per Month
Note: N = 140,456.

of the three events for which we analyzed the local coverage. A chi-square test shows that local newspapers paid significantly more attention to the local event than did the other newspapers ($p < .01$). This is especially clear in the Dutch newspapers, in which the localization factor on average is more than twenty, with the international press's showing an almost total lack of interest in the assassination of Theo van Gogh. The localization factor in the U.S. newspapers is also higher than the localization factor of the British newspapers. Apparently, American journalists pay far less attention to the events in London than the other way around. The total amount of attention paid to the events in London decreased rapidly in the days and weeks following the attack. However, the locality increased until the 5th/6th week. Apparently, the framework in which the events could be presented on the international level was a ready-made one, under the influence of 9/11 and Madrid. In this way, internationally, London would not attract much attention for a longer period. From a local point of view, this is different. After all, terrorism had hit home, and therefore, the global framework from 9/11 had to be redefined to local standards.
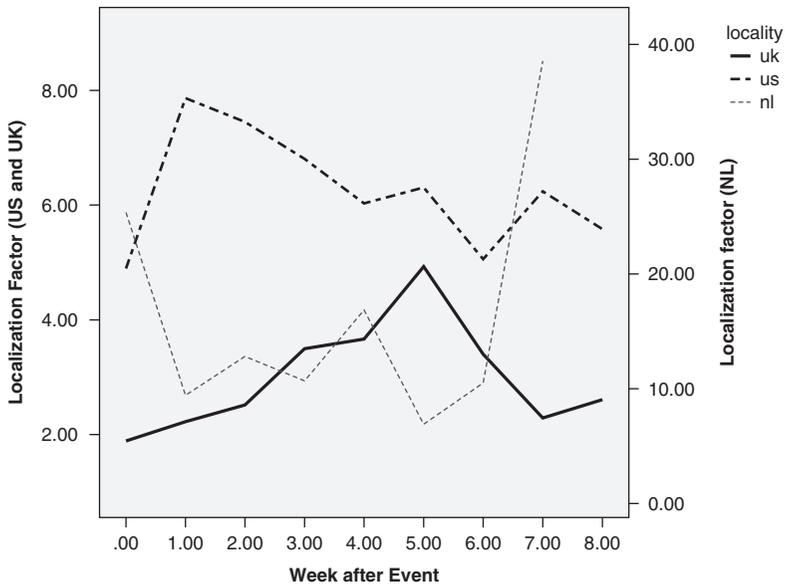
Figure 2
Relative Attention Paid to Events by the Local Press
Note: N = 7,967 articles; U.S. = 6,022; Netherlands = 656; U.K. = 1,289.

Globalization versus Localization

After the news value of geographical proximity, we now focus on the extent to which the events were either localized or globalized, as stated in Hypotheses 2 and 3. The absolute localization can be seen as the association between an event and local actors or reference events. This is compared to the international association with these actors to make sure that it is a local association rather than a local actor playing a global role. It is also compared to the association with global actors and reference events to obtain a relative measure.

Analogous to the domestication of global events, the globalization of local events is considered to be the association of that event with global actors and other global events of the past by the local newspaper. Figure 3 shows the results of both hypotheses during the four events. The lines represent the ratio between the localization and the globalization of the respective event in the different countries' media.

Looking at 9/11, we see that the U.S. press localized the event to a great extent, with an average of ten, meaning that the local actors were associated with 9/11 ten times more often than global actors. In the other newspapers,
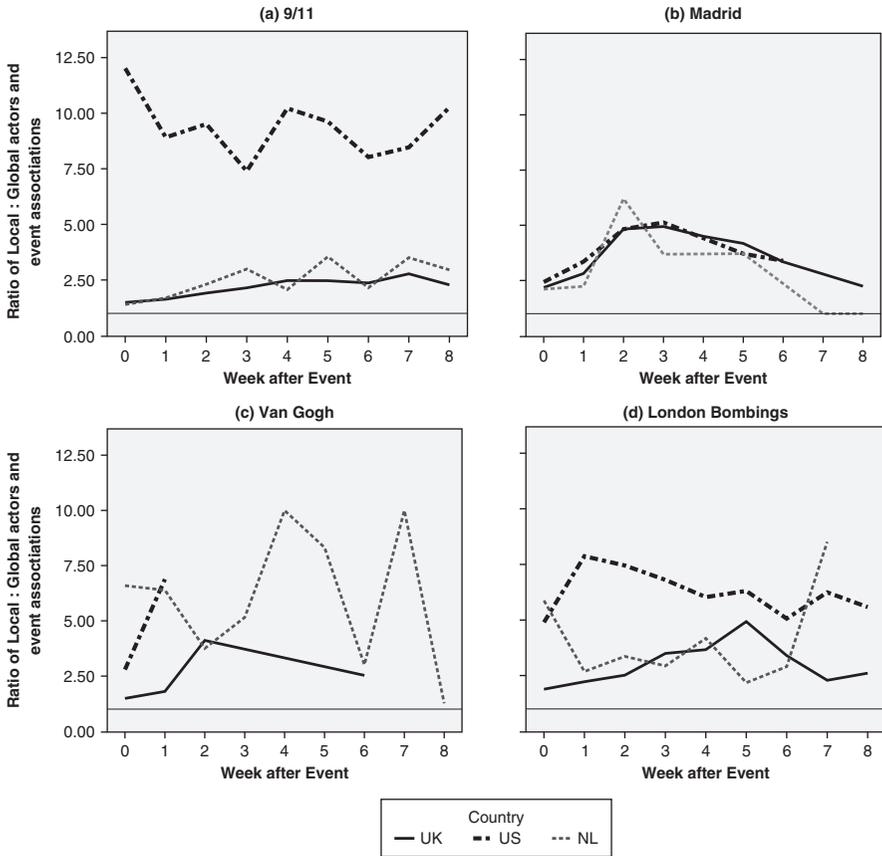
Figure 3
Globalization and Localization of the Four Events

Note: a. $N = 6,022$, U.S. = 4,494, U.K. = 1,140, Netherlands = 338; b: $N = 580$, U.S. = 172, U.K. = 223, Netherlands = 185; c: $N = 656$, U.S. = 17, U.K. = 17, Netherlands = 622; d: $N = 1,289$, U.S. = 322, U.K. = 759, Netherlands = 208.

we see that this global event was domesticated, especially after the first week, although international actors stay important as well, receiving about one-third of the attention in the first weeks, which drops to about one-quarter in the later weeks. Apparently, after the first week in which the global framework was determined in the news, with a focus on the protagonists' reactions, the media turned to the local actors in giving the events a domestic meaning. Chi-square tests show that local actors were used in the local newspapers significantly more often than in the other news for all countries and weeks ($p < .01$).

The attacks in Madrid show a similar picture. The newspapers in all three countries follow the same pattern: After an initial focus on Spanish actors, the news media turned especially to local sources for their news, strongly domesticating the event in the following weeks. After a few weeks, the attention paid to Madrid decreased rapidly, especially in the U.S. papers. Significance tests show that the localization is significant overall and for the first three weeks; after that period, the frequencies are too low for the use of local actors to be significantly different from the global use of these actors.

Figure 3c (the van Gogh murder) is less informative because hardly any attention was paid to the event by the international newspapers. The event was globalized by the Dutch press slightly more than 9/11 was in the American press, but still, only one nonlocal event or actor was mentioned for every six local mentions. The overall localization by the British press was significant at the $p < .05$ level, but because of the limited number of articles, none of the weekly subsamples showed significance, and the U.S. coverage did not show any significance at all.

The London attacks, presented in graph 3d, show an interesting result: The event was more localized in the United States than in the United Kingdom itself. For the U.S. media, the attacks fitted within the earlier formed framework of 9/11 and focused more on local actors than the actors directly affected by the attack. In the British press, the globalization was almost 25 percent, with one international actor mentioned for three national actors or reference events. It should be noted that because of our operationalization, this strong "Americanization" of the London bombings depends on the qualification of 9/11 as an American event.

This tendency is also seen when we look in detail at the associations of the events with previous events (not presented here as a graph). When the bombs exploded in Madrid , both the British and the Dutch newspapers refer mostly to the ETA, while the U.S. press mentions most often 9/11 in its coverage. When we look at the London bombings, we see that both the British and the U.S. press refer mainly to 9/11, followed by references to Madrid. In the Dutch press, we see an inverse picture, with newspapers' comparing the London bombings more often with Madrid than with 9/11. It seems that all media place these events in the global "war on terrorism" frame but with each retaining their own local focus through the events they use as a frame of reference.

We can conclude that the localization of all foreign events shows the same pattern, with an increase of the localization after the first week. September 11 was a local American event in U.S. newspapers and was least domesticated by the international press. In contrast, the London bombings were strongly localized by the American newspapers, while it was the event that was most globalized by the local British press. The van Gogh murder was an almost exclusively Dutch event, with low globalization by the Dutch press and almost no coverage by the other newspapers.
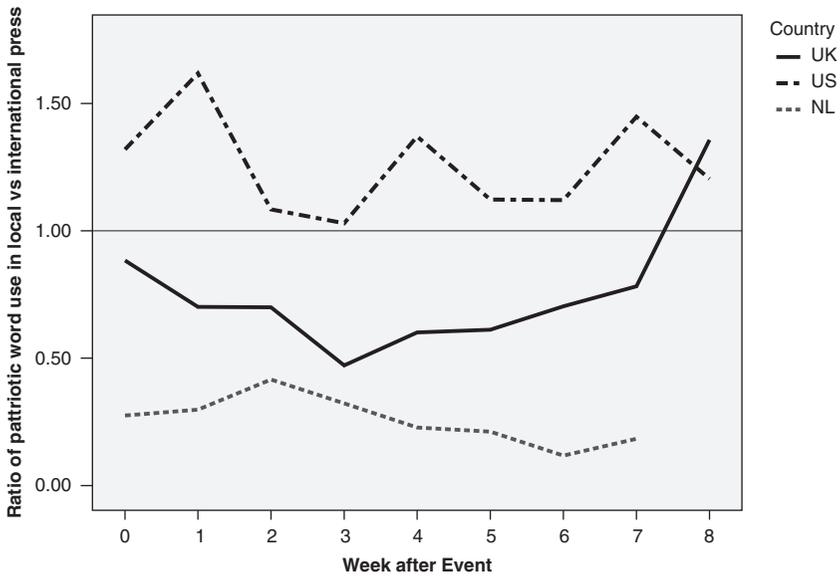
Figure 4
Relative Association with Patriotic Terms of the Local Events
Note: N = 7,967; U.S. = 6,022; U.K. = 1,289; Netherlands = 656.

Rally around the Flag

"Rallying around the flag," in our study, is measured as associating the event with words indicating patriotism. Since this hypothesis predicts that this will happen in the local media more often than in other media, we can compute the ratio between the associations in these newspapers as a descriptive. Analogous to Hypothesis 2, we can test significance by testing the independence of an article about the event mentioning a patriotic word from the locality of the medium.

For 9/11, we see that the highest local patriotism is found in the U.S. newspapers. Especially in the first week after the event, we see an increase of patriotism in U.S. papers compared to the other countries' press. A chi-square test confirms that the overall U.S. local patriotism is significantly local for 9/11 ($p < .01$), while weekly tests show significance only for the first two weeks and week four ($p < .05$; see Figure 4).

Interesting in this respect is the figure about patriotism around the attacks in London. Here, we see that the ratio in British newspapers is below one during the first seven weeks after the event. The U.S. newspapers associate the

London attacks with American patriotism more often than the British news-papers do. Apparently, for the U.S. press, the London attack fit well in the framework of the war on terror. These findings suggest that patriotism is more related to the country of the newspaper than the happening of a local event, contrary to our fourth hypothesis.

Muslims in the News Coverage

In the theoretical discussion, we saw contradictory findings with respect to whether Muslims and Islam were covered differently before and after 9/11 and after the events that were local, as far as the British and Dutch newspapers are concerned. In this section, we look at associations with Muslims and Islam in the news.

The evaluative portrayal of Muslims is measured as the ratio of associations with negative compared to positive terms. The connection with terrorism is measured as their association with terrorist terms. We can again use a chi-square test to test whether using a negative word is independent of the article's being before or after the event for all articles mentioning Muslims.

Interestingly, although Muslims were portrayed much more negatively imme-diately after both 9/11 and the local key events, after the first months, the neg-ativity dropped to a level slightly but not significantly higher than it was before the event. Only the British press is overall significantly more negative after the event, but this might simply be because "their" event is still relatively recent.

The association of Muslims with *terrorism* is more interesting, as shown in Figure 5. In all countries, Muslims were strongly associated with terrorism immediately after 9/11, and although this level dropped, it stayed significantly higher than before 9/11. In the United Kingdom, the association with terror also increased significantly after the London bombings, although the long-term effects are not clear since the bombings are fairly recent. In the Netherlands, the associ-ation with terror actually decreased significantly after the murder of van Gogh, even though the negativity increased slightly (not shown here). Apparently, even though the murder was often called a terrorist attack by the press, this did not cause a framing of Muslims as terrorists afterward (all significances $p < .01$).

Concluding, it seems that the associative frame between Muslims and ter-rorism was created not by local events, but rather, by 9/11 as a global event. This association was reinforced in the United Kingdom after the London bombings but decreased in the Dutch press after the murder of van Gogh.

Conclusions and Discussion

September 11 had a major impact in the world, and this impact is also reflected in the news coverage in the following years. With this study, we
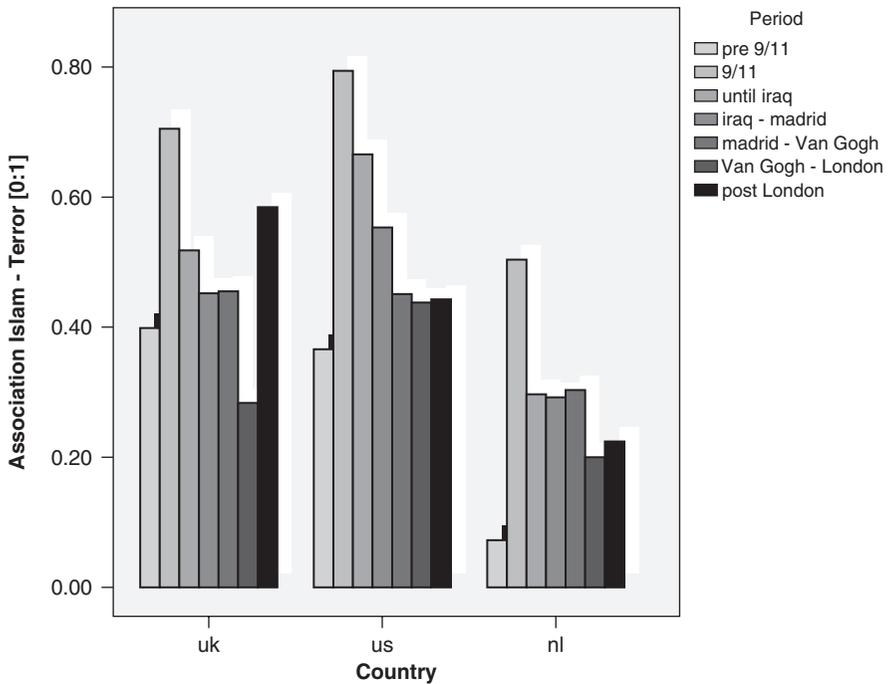
Figure 5
Associations of Muslims with Terrorism per Country per Period
Note: N = 43,868; U.S. = 16,929; U.K. = 12,258; Netherlands = 14,681.

wanted to investigate to what extent 9/11 had an impact on the creation of one global public sphere in the Western world.

On the level of news selection, we did not discover the existence of this global village. On the contrary, we found that the classic news value of geographical proximity is still dominant: The news coverage increases most clearly the moment an event occurs on a local level. The extreme example of this was the murder of van Gogh, which was widely covered in the Dutch newspapers while relatively neglected on a global level. The other key events discussed also show strong and significant local focus.

However, geographical proximity seems only partly applicable when we look at the framing of the news. All investigated newspapers followed a pattern of fairly globalized initial reporting followed by a more localized period in which the event is analyzed and consequences for the own country are investigated. Whereas 9/11 was mainly seen as an American event by both local and international press, an interesting difference is seen looking at Madrid and London. While Madrid was localized almost to the same extent in the newspapers, the

London bombings were far more localized in the U.S. press, even more so than in the British press. One could say that when Madrid occurred, there was not yet a clear connection with the events and 9/11 because of the possibility of the ETA's committing the attack, while with the London bombings, the similarities with the 9/11 attacks were immediately clear. As a consequence, the U.S. press immediately placed the occurrences within the 9/11 framework. It seems that all investigated media considered the events after 9/11 in the global framework of the war on terror while retaining a local angle and frame of reference.

The portrayal of Muslims also reveals an interesting pattern. Although no significant shifts in negativity were found after 9/11 or after the local key events, 9/11 did create a strong framework of Muslims as terrorists in all investigated media. After the creation of this global frame, the identification of Muslims with terrorism was transformed by local events; it was reinforced in the British press after the London bombings and deconstructed in the Dutch press after the van Gogh assassination, with more attention focusing on domestic rather than international problems with Muslims.

In this article, we have shown that with automatic analysis, we can analyze large amounts of data, tracing significant differences between the news coverage of a certain topic. Associative framing provides a method to conduct a wide range of analysis within one methodological framework. We can indicate how often and in which associative contexts media write about actors and issues involved. Although the method does not determine the way in which two concepts are associated, the two concepts' being associated at all is very informative and a necessary condition for any substantive association. Thus, besides providing an immediate and quantitative analysis for certain research questions such as the ones addressed in this article, it provides for an informative explorative step that can help to direct and focus more in-depth research into a phenomenon.

References

Bennett, L., and D.L. Paletz. 1994. *Taken by Storm: The Media, Public Opinion, and U.S. Foreign Policy in the Gulf War*, ed. L.D.L.P. Bennett. Chicago: University of Chicago Press.

Brosius, H.B., and P. Eps. 1995. "Prototyping through Key Events: News Selection in the Case of Violence against Aliens and Asylum Seekers in Germany." *European Journal of Communication* 10(3):391–412.

Cappella, J., and K. Jamieson. 1997. *The Spiral of Cynicism: The Press and the Public Good*. New York: Oxford University Press.

Clausen, L. 2003. Global News Communication Strategies—9.11.2002 around the World. *Nordicom Review* 3:105-16.

Clausen, L. 2004. "Localizing the Global: 'Domestication' Processes in International News Production." *Media, Culture & Society* 26(1):25–44.

Collins, A.M., and M.R. Quillian. 1969. "Retrieval Time from Semantic Memory." *Journal of Verbal Learning and Verbal Behavior* 8:240–48.

Cook, T.E. 1994. "Domesticating a Crisis: Washington Newsbeats and Network News after the Iraqi Invasion of Kuwait." In *Taken by Storm: The Media, Public Opinion, and U.S. Foreign Policy in the Gulf War*, ed. W.L. Bennett and D.L. Paletz. Chicago: University of Chicago Press.

D'Angelo, P. 2002. "News Framing as a Multi-paradigmatic Research Program: A Response to Entman." *Journal of Communication* 52(4):870–88.

Dearing, J.W., and E. Rogers. 1996. *Agenda Setting*. Thousand Oaks, CA: Sage.

Domke, D., D.V. Shah, and D.B. Wackman. 1998. "Media Priming Effects: Accessibility, Association and Activation." *International Journal of Public Opinion Research* 10:51–75.

Druckman, J.N. 2001. "The Implications of Framing Effects for Citizen Competence." *Political Behavior* (September 2001):225–56.

Druckman, J.N. 2004. "Political Preference Formation: Competition, Deliberation, and the (Ir)relevance of Framing Effects." *American Political Science Review* 98(4):671–86.

Eagley, A.H., and S. Chaiken. 1998. "Attitude Structure and Function." In *The Handbook of Social Psychology*, ed. D.T. Gilbert, S.T. Fiske, and G. Lindzey. New York: McGraw-Hill.

Entman, R.M. 1991. "Framing U.S. Coverage of International News: Contrasts in Narratives of the KAL and Iran Air Incidents." *Journal of Communication* 41(4):6–25.

Entman, R.M. 1993. "Framing: Towards Clarification of a Fractured Paradigm." *Journal of Communication* 43(4):51–85.

Fiske, S.T., and P.W. Linville. 1980. "What Does the Schema Concept Buy Us?" *Personality and Social Psychology Bulletin* 6:543–57.

Fiske, S.T., and S.E. Taylor. 1991. *Social Cognition*. 2nd Edition. New York: McGraw-Hill.

Galtung, J., and M. Holmboe Ruge. 1965. "The Structure of Foreign News: The Presentation of the Congo, Cuba and Cyprus in Four Norwegian Newspapers." *Journal of Peace Research* 2(1):65–91.

Gamson, W.A., and A. Modigliani. 1987. "The Changing Culture of Affirmative Action." In *Frontiers in Social Movement Theory*, ed. R. G. Braungart and M. Braungart. New Haven, CT: Yale University Press.

Goffman, E. 1974. *Frame Analysis: An Essay on the Organization of Experience*. Boston: Northeastern University Press.

Graber, D. 1988. *Processing the News: How People Tame the Information Tide*. Lanham, MD: University Press of America.

Grundmann, R., D. Smith, and S. Wright. 2000. "National Elites and Transnational Discourses in the Balkan War." *European Journal of Communication* 15(3):299–320.

Gurevitch, M., M.R. Levy, and I. Roeh. 1991. "The Global Newsroom: Convergences and Diversities in the Globalization of Television News." In *Communication and Citizenship: Journalism and the Public Sphere*, ed. P. Dahlgren and C. Sparks. London: Routledge.

Hallin, D.C. 1986. *The Uncensored War: The Media and Vietnam*. Los Angeles: University of California Press.

Hjarvard, S. 2001. "News Media and the Globalization of the Public Sphere." In *News in a Globalized Society*, ed. S. Hjarvard. Goteborg: Nordicom.

Iyengar, S. 1991. *Is Anyone Responsible? How Television Frames Political Issues*. Chicago: University of Chicago Press.

Kaid, L.L., B. Harville, J. Ballotti, and M. Wawrzyniak. 1993. "Telling the Gulf War Story: Coverage in Five Papers." In *Desert Storm and the Mass Media*, ed. B.S. Greenberg and W. Gantz. Cresskill, NJ: Hampton.

Karim, K.H. 2002. "Making Sense of the 'Islamic Peril': Journalism as Cultural Practice." In *Journalism after September 11*, ed. B. Zelizer and S. Allan. London: Routledge.

Lee, C.C., J.M. Chan, Z. Pan, and C.Y.K. So. 2002. *Global Media Spectacle: News War over Hong Kong*. New York: State University of New York Press.

Lippmann, W. 1922. *Public Opinion*. New York: Free Press.

McCombs, M.E., and G. Estrada. 1997. "The News Media and the Pictures in Our Heads." In *Do the Media Govern?*, 237–47.

McCombs, M., and S. Ghanem. 2001. "The Convergence of Agenda Setting and Framing." In *Framing Public Life*, ed. S.D. Reese, O.H. Gandy, and A.E. Grant. Mahwah, NJ: Lawrence Erlbaum.

McCombs, M.E., and D.L. Shaw. 1972. "The Agenda-Setting Function of the Mass Media." *Public Opinion Quarterly* 36:176–87.

McLuhan, M. 1960. *Understanding Media: The Extension of Man*. New York: McGraw-Hill.

Minsky, M.A. 1975. "Framework for Representing Knowledge." In *The Psychology of Computer Vision*, ed. P.H. Winston. New York: McGraw-Hill.

Nacos, B.L., and O. Torres-Reyna. 2003. "Framing Muslim-Americans before and after 9/11." In *Framing Terrorism: Understanding Terrorist Threats and Mass Media*, ed. P. Norris, M. Just, and M. Kern. New York: Routledge.

Nelson, T.E., R.A. Clawson, and Z.M. Oxley. 1997. "Media Framing of a Civil Liberties Conflict and Its Effect on Tolerance." *American Political Science Review* 91:567–83.

Neuman, W.R., M.R. Just, and A.N. Crigler. 1992. *Common Knowledge*. Chicago: University of Chicago Press.

Norris, P. 1995. "The Restless Search: Network News Framing of the Post-Cold-War World." *Political Communication* 12:357–70.

Norris, P., M. Just, and M. Kern. 2003. *Framing Terrorism: Understanding Terrorist Threats and Mass Media*. New York: Routledge.

O'Heffernan, P. 1991. *Mass Media and American Foreign Policy: Insider Perspectives on Global Journalism and the Foreign Policy Process*. Nordwood, NJ: Ablex.

O'Heffernan, P. 1994. "A Mutual Exploitation Model of Media Influence." In *U.S. Foreign Policy. Taken By Storm: The Media, Public Opinion, and U.S. Foreign Policy in the Gulf Crisis*, ed. W.L. Bennett and D.L. Paletz. Chicago: University of Chicago Press.

Patterson, Th.E. 1993. *Out of Order*. New York: Knopf.

Pennebaker, J.W., M.E. Francis, and R.J. Booth. 2001. *Linguistic Inquiry and Word Count*. Mahwah, NJ: Lawrence Erlbaum.

Persson, V. 2004. "Framing Mediated Terrorism Before and After 9/11: A Comparative Study of 'Framing' Kenya and Tanzania in 1998 and Madrid 2004 in the Swedish Broadsheet of Dagens Nyheter" Master's thesis, Stockholm University.

Price, V., and D. Tewksbury. 1997. "News Values and Public Opinion: A Theoretical Account of Media Priming and Framing." In *Progress in Communication Sciences*, ed. G. Barnett and F.J. Foster. Norwood, NJ: Ablex.

Price, V., D. Tewksbury, and E. Power. 1997. "Switching Trains of Thought: The Impact of News Frames on Readers' Cognitive Responses." *Communication Research* 24:481–506.

Quattrone, G.A., and A. Tversky. 1988. "Contrasting Rational and Psychological Analyses of Political Choice." *American Political Science Review* 82:719–36.

Reynolds, A., and B. Barnett. 2003. "?'America Under Attack': CNN's Verbal and Visual Framing of September 11." In *Media Representations of September 11*, ed. S. Chermak, F.Y. Bailey, and M. Brown. New York: Praeger.

Rhee, J.W. 1997. "Strategy and Issue Frames in Election Campaign Coverage: A Social Cognitive Account of Framing Effects." *Journal of Communication* 47:26–48.

Richardson, J.E. 2001. "British Muslims in the Broadsheet Press: A Challenge to Cultural Hegemony?" *Journalism Studies* 2(2):221–42.

Ritzer, G. 2004. *The Globalization of Nothing*. Thousand Oaks, CA: Sage.

Robertson, R. 1995. "Glocalization: Time-space and homogeneity-heterogeneity." In *Global Modernities*, ed. M. Featherstone, S. Lash, and R. Roberton. London: Sage.

Ryan, M. 2004. "Framing the War Against Terrorism: U.S. Newspaper Editorials and Military Action in Afghanistan." *Gazette* 66(5):363-82.

Said, E.W. 1981. *Covering Islam: How the Media and the Experts Determine How We See the Rest of the World*. 1st Edition. New York: Pantheon.

Schaefer, T.M. 2003. "Framing the US Embassy Bombings and September 11 Attacks in African and US Newspapers." In *Framing Terrorism: Understanding Terrorist Threats and Mass Media*, ed. P. Norris, M. Just, and M. Kern. New York: Routledge.

Scheufele, D.A. 1999. Framing as a Theory of Media Effects. *Journal of Communication* 29:103–23.

Semetko, Holly A., and Peter M. Valkenburg. 2000. "Framing European Politics: A Content Analysis of Press and Television News." *Journal of Communication* 50(2):93–109.

Shaheen, J. 1981. "Images of Saudis and Palestinians: A Review of Major Documentaries." In *Television Coverage of the Middle East*, ed. W.C. Adams. Norwood, NJ: Ablex.

Shannon, C., and W. Weaver. 1948. *A Mathematical Theory of Communication*. Champaign: University of Illinois Press.

Simmons, B.K., and D.N. Lowry. 1990. "Terrorists in the News, as Reflected in Three News Magazines, 1980–1988." *Journalism Quarterly* 67:692–96.

Snow, D.A., and R.D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1:197–217.

Snow, D.A., E.B. Rochford, S.K. Worden, and R.D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51:464–81.

Tuchman, G. 1978. *Making News: A Study in the Construction of Reality*. New York: Free Press.

Tversky, A., and D. Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *Science* 211:453–58.

Valkenburg, P.M., H.A. Semetko, and C. H. de Vreese. 1999. "The Effects of News Frames on Readers' Thoughts and Recall." *Communication Research* 26(5):550–69.

Van Atteveldt, W., N. Ruigrok, and J. Kleinnijenhuis. 2006. "Associative Framing: A Unified Method for Measuring Media Frames and the Media Agenda." In *Accepted for presentation at the International Communication Association (ICA)*. Dresden.

Van Belle, D.A. 2000. "New York Times and Network TV News Coverage of Foreign Disasters: The Significance of the Insignificant Variables." *Journalism & Mass Communication Quarterly* 77:50–70.

Volkmer, I. 2002. "Journalism and Political Crises." In *Journalism after September 11*, ed. A.Z. Stuart and B. London. New York: Routledge.

Weimann, G., and C. Winn. 1994. *The Theater of Terror: Mass Media and International Terrorism*. White Plains, NY: Longman.

Wolfsfeld, G. 1997. *Media and Political Conflict: News from the Middle East*. Cambridge, UK: Cambridge University Press.

Zaller, J.R. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

Zaller, J.R. 1994. "Elite Leadership of Mass Opinion: New Evidence from the Gulf War." In *Taken by Storm: The Media, Public Opinion and U.S. Foreign Policy in the Gulf War*, ed. W.L. Bennett and D.L. Paletz. Chicago: University of Chicago Press.

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