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A Quantitative Content Analysis

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by

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Abstract

This study investigated differences in the newspaper coverage of Gulf War I (1991) and the recent U.S. Iraq War II (2003) using content analysis of The New York Times and The Wall Street Journal. Results indicate that there were significant differences in the coverage of the two wars. The data show that The New York Times published significantly more war news stories and carried more photographs and visual elements than The Wall Street Journal. Other findings reveal significant differences in the timeliness of reporting a war story, location of the story in the newspaper, dateline of the story, author of the story, nationality of the sources, and the occupation of the sources quoted.
Press performance in the recent U.S. - Iraq War (2003) became a major history as the Pentagon allowed reporters to go along side military units and gain immediate coverage of any war to date (Taylor, 2003). The media’s role in a democratic society in general is to provide the public with an informed basis upon which they can exercise their democratic rights to lobby and express their views on matters of national importance. This role does not change during wartime, as coverage decisions can be critical. All democracies incorporate the freedom of press as a fundamental right and consequently the media plays the role of a watchdog of the government.

Television serves as an effective weapon for war coverage. The moving images on television create an impact on the viewers’ minds and influence their beliefs, attitudes and perceptions. Vietnam is often said to be the first television war, although in fact television cameras covered the Korean War of 1950-1953 (Knightley, 1975). Today, as we witness technologically advanced war, we may also witness changes in war reporting. Technological advances since the Gulf War of 1991 dramatically changed how international media covered the Gulf War 2003 and these changes affected the way in which audiences viewed the political context and military operations of the war. The proliferation of news stations and the Internet has enabled the audience to view news from differing perspectives. A sense of immediacy in reporting war news ‘first’ has emerged. As summarized by Prof. Taylor, for the media, war is now about reporting war news promptly to the innumerable broadcast media who are constantly absorbing information without authentication (Taylor, 2003). Advances in information technology have made it possible for reporters to report war events instantaneously from remote
locations. Newspapers, owing to their use of still images and photographs, are dispossessed of visual dominance. War news is more often than not front-page news for most newspapers. According to Casey Ripley Jr., “What we consider news or ‘newsworthy’ has not totally changed: wars, disasters, and political indiscretions have always been ‘front page’ material” (as cited in Squires, 1994, p. 107).

It is mainly during the outbreak of a war that the role of a war correspondent comes under the public eye. The Vietnam War produced what Henry Kamm of the New York Times called proto-journalists who had no professional experience in writing or reporting until the war broke out (Knightley, 1975). The Persian Gulf War saw the emergence of a press pool system. According to Capt. Jon Mordan, “A press pool is comprised of one wire-service photographer and correspondent, one network television correspondent and two technicians, one radio correspondent, one national news magazine correspondent and photographer, and three newspaper reporters. The purpose of the media pool is to enable independent, breaking news coverage of U.S. troops deployed worldwide and in remote areas with no American press”

http://www.airpower.maxwell.af.mil/airchronicles/cc/mordan.html (retrieved on 01/30/04). The US-Iraq crisis (2003) saw the emergence of new age journalism. The news coverage of the recent crisis was characterized by embedded journalism. War correspondents embedded in the Gulf were entrusted with the task of reporting war as they witnessed it.

According to Matthews, “News of the wars became a must for the newspapers, regardless of how far removed from the conflict they and their readers might be. …there
are numerous illustrations of enormous increases in circulation that clearly resulted from war coverage (1957, p. 4). Image and text seem to have developed a symbiotic relationship in which they were construed as reinforcing the objective "truth" of each other. Images combined with text offer a certain visual expansion to the truthfulness of news. The presence of photographs in sensationalizing war news is therefore central to this study.

As newsgathering technologies evolved, war reporting also changed. The Civil War is believed to be one of the greatest historic events in American history. The war created an opportunity for war correspondents for quality reporting. The war created the need for news and the proprietors sent more correspondents for extensive war coverage. With the invention of the telegraph in 1838, the newspapers increased the news stories on war from an occasional column to two or three pages. The Civil War thus created the need for immediacy of news, as war correspondence became an important aspect of journalism not present in any previous wars (Knightley, 1975). The Civil War made it possible for the public to witness a change in the coverage of wars.

The level of objectivity, the extent to which reporters convey the truth and newsgathering have become key issues in observing changes in journalistic coverage of wars. According to Susan L. Caruthers, "Iraq’s invasion of Kuwait in August 1990 prompted a huge international military and journalistic mobilization" (2000, p. 131). The Persian Gulf War thus provided a natural setting for the media to transmit different kinds of war information. Newspapers covered hard-hitting stories using modern equipment such as lightweight camcorders and portable editing facilities. The military therefore
became concerned about transmission of war news and censorship of information (Carruthers, p. 132).

**Rationale and Research Questions**

Newspaper coverage of wars held at two different time frames at the same location has several social implications. Wars that take place at a distant or foreign country need to be reported by the press to keep the public informed about their soldiers and the possible consequences that the war might bring. According to James D. Squires, "In such a system, it is the reporting of unfettered truth about how things are and ideas of how they might be made better that motivates a citizenry to act and educates it to courses of action. People cannot govern what they cannot see" (1994, p. 10). Thus, in the social context, an increase in the number of pages on war news and the number of war stories on front pages acting as key instruments to accentuate readership are important to this study. This study aims to investigate the importance attached to war news by studying the location of war-related articles in the two national newspapers across time in two different periods. By examining whether war news is reported on the front page or any other page of the newspaper the study can inspect differences, if any, in the significance related to the Persian Gulf War and the U.S.- Iraq War (2003).

According to Howard Kurtz, at the *Chicago Tribune*, the space allotted for foreign news increased by more than a quarter during the Persian Gulf War. The foreign staff of the newspaper also increased from 10 to 15 reporters. However, foreign coverage withered with time. According to the Tyndall Report, at the end of six months of the
Persian Gulf War, Iraq faded from daily coverage. The report also found that when the war had just started there were 1,177 minutes of network reporting on Iraq in January 1991. This number dropped down to 48 minutes in August 1991. The objective of this study is to investigate if there was a decline in the coverage of war news in the recent US-Iraq war as seen in the Persian Gulf War (cited in Kurtz, 2003).

According to Dugger (2003), the Washington Post crusaded in favor of the criminal war against Iraq. The Wall Street Journal posted a list of the traitors who opposed the war. Dugger indicated that the major television networks focused on whether Iraq has weapons of mass destruction, which was not the real question of the war.

Photojournalism and visual reportage play a crucial role in depicting war and mediating readers’ knowledge about military conflicts. According to Evans, Kenneth Jarecke’s Gulf War image of a charred skeletal head of an Iraqi soldier in a rocketed vehicle was not published in any of the American newspapers. However, the London Observer, which published the image, was followed by several protests. He is of the opinion that readers do not want to know the risk a war correspondent undertakes in reporting the reality of war (p. A 10). A few other journalists are of the view that the images of the Iraqi civilian casualties were handled very cautiously. According to Juan Vasquez many Latin American newspapers released pictures of dead and wounded Iraqis, while the American newspapers released pictures of U.S. soldiers moving forward, U.S. soldiers being shot at, tanks and the machinery of war (cited in Evans, 2003). Alan G. Artner, Chicago Tribune art critic, is of the view that some of the gruesome war photographs of the U.S.-Iraq war (2003) have been in black and white, which
communicate slowly, while the optimistic images of the war have been in color. The color images appeal to the viewer quickly by passing the intellect. This study, thus, seeks to quantitatively determine if press censorship stalled shocking images of war from being released in the US-Iraq war, as was the case in the Gulf War.

Scholarly research suggests that freedom of press acts as an important tool while reporting war news. The press is considered as a truth-seeker. It becomes crucial for the press to question the policies, activities and decisions before the government declares war. However, the press has to exercise restraint on matters related to military secrecy. According to Margaret A. Blanchard, “The Persian Gulf War brought great cries of concern - at least in some circles - about restrictions placed on journalists trying to cover the conflict. For the first time in American history, reporters were essentially barred from accompanying the nation’s troops into combat” (1992, p. 5-6). The Persian Gulf War was characterized by the pool system of reporting as opposed to embedded reporting in the US-Iraq war (2003). Most previous research focuses on press censorship. However, with the emergence of embedded journalism in the U.S.-Iraq war, recent research has made a quantifiable entry in investigating changes in war reportage. This study seeks to contribute to the body of scholarship on war reporting by quantitatively studying the changes, if any, between the two different styles of reporting during the two Gulf wars fought at two different periods.

Misreporting and twisting news is a serious concern surrounding public opinion. Twisting and manipulation of information can result in erroneous and misleading public opinion. According to Margaret A. Blanchard, “This reprehensible practice generally is
dated to the news management techniques of the John F. Kennedy administration, especially during the Cuban Missile Crisis. ...the major argument against such government practices is, of course, that Americans need truthful information in order to make wise decisions” (1992, p. 9). The citizens of a warring nation need to be conversant with accurate information to take appropriate political stands. The first casualty at the outbreak of war is truth (Johnson, H. 1917, as cited in Knightley, 1975). The press, which is a public-spirited institution, therefore needs to uphold values of truth and trustworthiness in the public. Thus, at the time of war, the newspapers play the role of a watchdog of the government. By determining the timeliness in reporting the war story/event, this study aims to explore whether the newspapers created an atmosphere of war to inform the public even before the actual war broke out or merely played the role of a watchdog of the government. An examination of the increase or decrease in the number of war photographs, content of photographs, the number of sources and the type of source first quoted as reported before and after the two wars will enable this study to contribute to the body of knowledge on war news coverage.

With increasing importance attached to content of news stories and its effect on the society, this study aims to quantitatively examine war reporting.

Censorship of information, credibility, news story tone, framing and gate keeping became key issues in the US-Iraq War (2003). In the wake of this second Gulf war, which was fought at the same location - Iraq - at a different time frame, this paper seeks to answer the question “What differences, if any, have been there in the newspaper coverage of the U.S. - Iraq war as opposed to the Persian Gulf War?”
In the present study, war can be defined as an act of aggression by one nation upon another foreign nation accompanied by machinery of war. The term coverage in this study implies reporting of war-related news by measuring variables such as name of the publication, date of publication, dateline of the story, location of the story, author of the story, timeliness in reporting, nationality of first source quoted, occupation of sources, number of sources, presence of photographs, number of photographs, content of photographs and presence of visual elements. To examine the complex background of this coverage, the study drew a series of 16 hypotheses to answer the research question.

Hypothesis 1- The *New York Times* will publish more war stories per day in the second war.

Hypothesis 2- The *Wall Street Journal* will publish more war stories per day in the second war.

Hypothesis 3- The *New York Times* will publish more war stories per day than the *Wall Street Journal* in the first war.

Hypothesis 4- The *New York Times* will publish more war stories per day than the *Wall Street Journal* in Gulf War II.

Hypothesis 5- War stories are more likely to be reported from Washington, D.C.

Hypothesis 6- Authors of war news stories will more likely be staff-writers.

Hypothesis 7- War news stories will more likely be reported a day after the event occurred.

Hypothesis 8- The nationality of the sources quoted in both the wars will more likely be U.S.
Hypothesis 9- The occupation of first sources quoted in Gulf War I and II will more likely be U.S. military officials.

Hypothesis 10- There will be more number of sources quoted in the New York Times in Gulf War II.

Hypothesis 11- There will be more number of sources quoted in the New York Times than the Wall Street Journal in the two wars.

Hypothesis 12- The presence of photographs accompanying a story will be more in the New York Times in the second war.

Hypothesis 13- There will be no significant difference in the presence of photographs accompanying a story in the Wall Street Journal.

Hypothesis 14- There will be more number of photographs accompanying a story in the New York Times in the second war.

Hypothesis 15- The content of photographs will more likely be military action photographs.

Hypothesis 16- The presence of visual elements is more likely to be maps.

Literature Review

Literature on newspaper coverage of war is limited. Malinkina and McLeod (2000) examined the influence of political change on news coverage. Their study investigated the coverage of two international conflicts (one from the Cold War era and one from its aftermath) by the New York Times and the Russian newspaper Izvestia and observed the changes in news coverage. The results of the study showed that Izvestia
largely covered issues of lack of communication from the Russian government, access to
information and co-ordination of the various government measures and military branches.
The Russian newspaper reported stories of the plight of injured soldiers left behind in
Chechnya and an unwillingness to fight by both officers and soldiers. This was new age
news coverage by the Russian press. By making a comparison of the coverage at two
different time frames, the study examined how changes in the Russian media and world
political arena affected news coverage. However, there were no major differences in the
*New York Times* coverage of the two conflicts. The *New York Times* opposed the Soviet
intrusion in Afghanistan and the Russian interference in Chechnya. The study also found
that the absence of differences in the *New York Times* coverage of the two conflicts was
due to the fact that there were fewer organizational changes in the features that shape its
news production than there was in Russia. The end of the Cold War and the modifications
in US foreign policy interests did not seem to influence the coverage of the *New York
Times*. Thus, the results revealed that changes in political, economic and ideological
control confined the functioning of the Russian newspaper. Results reflected that with
alterations in the control structure *Izvestia* also underwent dramatic changes. *Izvestia*
presented graphically dramatic descriptions of the combat and tragic accounts of the
Chechen conflicts. The study thus found significant differences in the coverage of war at
two different time periods.

Ryan Barber and Tom Weir conducted a content analysis of newspaper coverage
of U.S. military conflicts in Vietnam, Grenada and the Persian Gulf War to examine
changes in the topics and types of sources used. The study examined selected news
stories in the *New York Times*, the *Washington Post* and the *Los Angeles Times*. Results of the study show that in the 1,624 articles examined, the two topics that occurred most frequently were “Peace Talks” and “U.S. War Protests.” The results thus supported their first hypothesis that stories written in the recent conflicts would focus more on military strategy, support of U.S. policy and less on enemy attacks than in earlier wars in which the media had to develop their own sources. Results reflected that the most frequently used source was “Official Military” followed by “U.S. Government Non-Military.” Results also revealed that as the use of “official” sources increased the use of “U.S. Civilian” sources also increased.

The concept of *gate keeping* is one the oldest and frequently researched areas in the field of mass communication. Researchers have found that *gatekeepers* play an important role in the presentation of war news. According to Shoemaker (1991), “the process of gate keeping involves selecting from among a large number of messages those few that will be transmitted to one or more receivers.” In coverage of war news, newspaper editors and military officials become gatekeepers. The editors play a key role in reporting and printing news. The form in which war news is presented is shaped by these gatekeepers and ultimately affects the public’s view of reality.

Shoemaker and associates investigated that items have “forces” which either aid or hamper their passage through the gate keeping process. Chang and Lee conducted a national survey of newspaper editors to examine factors that affect gatekeepers’ selection of foreign news. A national sample of 540 daily newspapers proportionate to their circulation was randomly selected. The top editor of each newspaper received a six-page
questionnaire. They report that newspaper editors considered the threat of the event to the United States very important in their selection of foreign news. Five in 10 editors regarded timeliness and United States involvement as very important. However, findings suggested that few editors would consider human interest and cultural relevance as important in foreign news selection. Furthermore, results showed that no editors thought military strength of a country to be a significant factor in foreign news decision-making. The study thus found that American security and national interest were major factors that influenced the selection of international news in American daily newspapers.

Sasser and Russell’s study of news judgments in a newspaper, two television stations and two radio stations showed little agreement on story selection, length and position except for the most prominent stories (1991, p. 49).

The news media fulfill a vital role in democratic society by presenting a balanced view of current events and informing citizens who collectively influence their own government. The focus of news reports may set the agenda for public discourse. According to McCombs and Shaw’s (1972) theory of agenda setting, the press succeeds in directing the public’s attention (what is agenda setting?). The mass media may select and give importance to certain issues, which may be perceived as important by the public (cited in Severin & Tankard, 1979).

Pfau and associates studied whether embedded journalist coverage of the first days of the 2003 U.S. invasion of Iraq produced print news coverage that was either more decontextualized in form or more favorable in tone. The researchers content analyzed four newspapers- *New York Times, Washington Post, Los Angeles Times* and *Chicago*
Tribune. Results indicated that embedded journalists produced news reports that manifest more episodic frames than nonembedded or unknown reporters. Embedded journalists produced more positive news reports about the military than nonembedded or unknown reporters, both in their overall tone and in their depictions of individual troops. However, results also showed that the overall tone of coverage in “Iraqi Freedom” was not more positive than “Desert Storm” and “Enduring Freedom.” The findings of the study indicate that embedding alters the nature and tone of coverage.

Iyengar and Simon (1993) indicated that coverage during wartime also increases reliance on official sources, further deepening a reliance on an existing source of frames.

Few other studies have focused on evaluation of fairness and balance in newspaper coverage of significant social and political issues. Fico and associates (1994) conducted a study to devise and apply a tool to evaluate fairness and balance of newspaper coverage by examining newspaper coverage in Michigan during the Gulf War. The research content analyzed how nine daily newspapers considered the most prestigious in the nation and nine daily newspapers in Michigan treated pro- and anti-war advocacy during the peak of the Persian Gulf War. Results indicated that more than two-thirds of the 134 stories on the Persian Gulf War during February and early March 1991 were one-sided, thus supporting the hypothesis on overall fairness of individual stories. Findings also showed that stories gave more access to the views of anti-war advocates, supporting the research question on even-handedness of treatment of the sides. Stories run on front pages were more evenly balanced over time than stories run inside the
newspapers. The results of the research suggest that there was a significant imbalance favoring anti-war advocates while the front-page stories were more balanced.

Funkhouser explored the trends of media coverage of the issues of the 1960s. Funkhouser conducted a content analysis by counting the number of articles dealing with selected national issues for each year from 1960 until 1970, appearing in three weekly news magazines—Time, Newsweek and U.S. News and World Report. The issues that were content analyzed include civil rights, black militancy, ecology, smoking, drugs, women’s rights, crime, inflation, poverty and the war in Vietnam. Results showed that the number of articles on the Vietnam War rose from virtually none in 1962 to a peak of 206 in 1966, student unrest received a peak number of articles in 1969, and urban riots, which were acknowledged to have begun in 1965, received peak coverage in 1967. Coverage of crime reached two peak levels of 35 articles, one in 1965 and one in 1968. However, results also indicated mismatch between the volume of coverage and the covered situation. The climax of the American involvement in the Vietnam War occurred in 1968, larger numbers of civil disturbances were recorded in 1968, 1969 and 1970 than in 1967, although a large number of articles appeared in 1967. The crime rate steadily increased in 1964; however, this trend was not clearly reflected by the profile of coverage. The results of the study thus indicate that issues prominent in the news during the 1960s did not necessarily deserve the attention at the times they received it.

Rosentiel et al conducted a content analysis to study how the media covered the war on terrorism. The study examined 2,496 stories contained on television, magazines and newspapers in three key periods in mid-September (2001), mid-November (2001)
and mid-December (2001). The findings suggested that in the early days, 25% of the coverage was analysis, opinion and speculation. By December, the number rose to 36% reportage. Furthermore, the number of sources cited as evidence in stories declined over time. The study also found that the initial positive public reaction to the press coverage declined from 56% in September to 30% in November. The study found that during the periods examined the press heavily favored pro-Administration and official U.S. viewpoints - as high as 71%.

Photojournalism is also an important aspect of war reporting. The number of photographs printed in the newspapers signifies the visual impact of war images. Most newspapers use pictures of the dead, injured soldiers, and destroyed civilian areas to create a visual imagery of war events. Patterson (1984) conducted a study on the coverage of the Vietnam War in the news magazines. One of the research questions that the study investigated was “Did the American magazine reporters tend to concentrate on American troops in battle believing that they needed pictures thus leading to an emphasis being placed on pictorial accounts of the battle or the dead and wounded by the major news magazines?” The study was conducted on weekly news magazines published between August 5, 1968 and August 15, 1973. The sample included 55 issues of *Newsweek*, 55 issues of *Time* and 50 issues of *Life*. Results showed that *Time* presented 32.4% of its Vietnam related news that involved reports of combat without photographs. *Newsweek* printed 22.8% of its Vietnam related stories without photographs. *Life*, the picture magazine, printed 4.9% of the war news but without pictures. Thus, the data revealed that magazine coverage was not visually dominant.
However, another study on images of the Vietnam War had dissimilar results from the previous one. Sherer (1989) conducted a study to examine: did the image of the Vietnam War, as published in three leading news magazines, change at the time that a shift in public support for the war was being revealed in national public opinion polls. News photographs of the war published in *Time, Life* and *Newsweek* were being content analyzed. Results revealed that magazines carried a majority of non-combat images while public support for the war was high. However, during the transition period when the public support for the war was split in half, they carried a far greater percentage of combat and combat-related photographs. In the days of high support for the conflict, readers saw scenes of relative safety with little emphasis on combat fatigue situation. However, when support for the war declined, there was greater visual emphasis on life-threatening situations. Thus, the study revealed that as the public opinion on war shifted, images of the war also changed.

Griffin and Lee (1995) conducted a systematic analysis of the visual depiction of the Gulf War. They analyzed 1,104 Gulf War related pictures published in three newsmagazines - *Time, Newsweek* and *U.S. News and World Report* from 21 January 1991 through 18 March 1991. Griffin and Lee analyzed the visual style, pictorial genre and event context. Their research focused on whether the photojournalistic coverage in U.S. newsmagazines was characterized by candid, on-the-scene, visual reporting of events, or by pre-existing, staged, or symbolic representations of nations, political actors and military power. Results showed that pictures that made up more than half of all the pictures published in the magazines were pictures of military hardware, noncombat
scenes of troops and photos of political leaders. However, the pictures that depicted scenes of battle and wartime destruction, and pictures of the human costs of war were relatively low. Only 27 of 1,104 pictures showed signs of wounded or killed American soldiers. The analysis thus indicates that military weaponry and technology dominated the pictorial coverage.

Researchers have also focused considerable attention on television coverage of war news. Newhagen (1994) conducted a content analysis of 424 television news stories during the Persian Gulf War for the presence or absence of censorship disclaimers, censoring source and the producing network. Results showed that while 58.8% of news covered by Iraqi media carried censorship disclaimers, only 18.5% of war news from U.S. sources carried censorship disclaimers. Results also showed that stories were less critical when they were based on U.S. sources than with Iraqi based sources regardless of the presence or absence of censorship disclaimers.

Most previous research has focused on the qualitative study of news stories as presented in the newspapers. There is very limited research on quantitative content analysis. The current study aims at contributing to the relatively limited empirical research by quantitatively content analyzing newspapers, which covered war against the same country at two different periods.

**Method**

The study conducted a census of the newspaper coverage. The study conducted a census (census define in footnote) of the two national newspapers. The newspapers were
coded across two different time frames from the date war was declared by the President of United States up to the date when the war was declared as concluded. Three hundred thirteen war stories from *The New York Times* and 163 war stories from *The Wall Street Journal* were coded from January 16, 1991 up to March 28, 1991 for Gulf War I. Similarly, 663 war stories from *The New York Times* and 245 war stories from *The Wall Street Journal* were coded from March 19, 2003 up to May 2, 2003.

The study operationalized the term *coverage* to quantitatively content analyze the hypotheses. A T-test and a non-parametric test (Wilcoxon Signed Ranks Test) were conducted to compare the differences between the two wars. The frequencies for each unit of analysis were also found to reveal differences in coverage during the two wars. Two coders were trained to conduct the test. Coders coded the units of analysis on a coding sheet that was compiled into a Microsoft Excel sheet.

Reliability tests were also conducted between the results of the two coders to ensure that the results derived were reliable and valid.

**Results**

The study’s findings show significant differences in the coverage of the Gulf Wars in the two periodicals. To answer Hypothesis 1, the *New York Times* will publish more war stories per day in the second war, a T-test was conducted. The T-test resulted in significant differences in the number of wars stories published: Significantly (t= -6.77, df=33, p=.000) more stories were published in Gulf War II.

A T-test was also conducted to answer Hypothesis 2, the *Wall Street Journal* will publish more war stories per day in the second war. Statistically significant (t= -4.12, df=
32, p=.000) differences were found between the number of stories published per day between the two wars with Gulf War II carrying more number of stories.

To answer Hypothesis 3, the New York Times will publish more war stories per day than the Wall Street Journal in the first war, a T-test was conducted. The study found a significant (t= 7.63, df=33, p=.000) difference between the number of stories published by the New York Times and the Wall Street Journal. In Gulf War I, the New York Times published more war stories per day than the Wall Street Journal where the New York Times averaged 9.53 stories per day while the Wall Street Journal averaged 4.24 stories per day.

A T-test was conducted to answer Hypothesis 4, the New York Times will publish more war stories per day than the Wall Street Journal in Gulf War II. Results indicate that in Gulf War II, the New York Times averaged significantly more stories per day than the Wall Street Journal (t= 14.23, df= 32, p=.000). The New York Times averaged 17.26 stories per day while the Wall Street Journal averaged 7.45 stories.

To answer Hypothesis 5, war news stories are more likely to be reported from Washington, D.C., frequency was found out. Findings show that in the first war in the New York Times, 211 stories were reported from locations categorized as “other,” 73 were reported from Washington, D.C. and seven stories were reported from Baghdad. The locations of 33 stories were not mentioned. The Wall Street Journal carried 77 news stories which were reported from Washington, D.C., and 30 stories from locations categorized as “other.” The location of 24 stories could not be identified. No stories were reported from Baghdad. In the second war, the New York Times reported 312 stories from
locations categorized as “other.” One hundred sixteen stories were reported from Washington, D.C., followed by 77 stories from Baghdad. The location of 53 news stories could not be determined. The Wall Street Journal reported 116 stories from locations categorized as “other.” The newspaper carried 77 stories which were reported from Washington, D.C., and 26 stories from Baghdad. The location of 57 stories could not be identified. (see Table 1)

Frequency was also found to answer Hypothesis 6, the authors of the war stories will more likely be staff-writers. Results indicate that in the first war in the New York Times, 268 staff writers reported war news, 32 authors were categorized as “other,” 12 were wired service and 12 authors were not identifiable. In the Wall Street Journal, 151 staff writers reported war news, eight stories were reported from wired service and eight authors were categorized as “other.” In the second war, in the New York Times, 554 staff writers reported war news and three were not identifiable. There was no wired service and no authors who were categorized as “other.” In the Wall Street Journal, 213 staff writers reported war news and 15 were authors categorized as “other.” Seven stories were reported from wired service and two authors were indeterminable. (See Table 2)

To answer Hypothesis 7, war news stories will more likely be reported a day after the event occurred, frequency was found. This hypothesis has been supported by results that show that in the first war, the New York Times carried 156 news stories where the timeliness in reporting the story could not be determined. There were 126 stories which were reported on the day the event occurred, 33 stories were reported a day after the event occurred and five stories were reported two days after the event occurred. The Wall
Street Journal published 135 stories where the timeliness could not be identified. Seventeen stories were reported a day after the event occurred and six stories were reported on the day the event occurred. Only one story was reported two days after the event occurred.

Frequency was also found for Hypothesis 8, the nationality of the first source quoted in both the wars will more likely be U.S. This hypothesis is supported by results that indicate that in the first war there were 200 U.S. sources quoted in the New York Times, 95 sources were quoted from countries categorized as “other,” followed by 30 Iraqi sources. There were 10 sources whose nationalities could not be identified. In the Wall Street Journal, 121 U.S. sources were quoted, followed by 30 sources that were categorized as “other,” and seven Iraqi sources. The nationality of 18 sources could not be determined. In the second war, the New York Times quoted 393 U.S. sources, followed by 93 Iraqi sources. There was just one foreign source quoted. The nationality of 54 sources could not be identified. In the Wall Street Journal, 195 U.S. sources were quoted, followed by 63 sources from “other” countries and 53 Iraqi sources. The nationality of nine sources was indeterminable. (See Table 3)

To answer Hypothesis 9, the occupation of first sources quoted in Gulf War I and II will more likely be U.S. military officials, frequency was found. Results show that in the New York Times 121 U.S. military officials were quoted, followed by 118 sources categorized as “other,” which mainly comprised of civilians and families of soldiers. The newspaper quoted 105 government officials and 24 non-U.S. military officials. There were 46 news stories in which no source was quoted. However, the Wall Street Journal,
quoted 70 sources categorized as "other," and 53 U.S. military officials. The *Wall Street Journal* quoted 73 government officials and five non-U.S. military officials. There were 10 news stories with no sources quoted.

Findings also indicate that in the second war, the *New York Times* quoted 265 sources categorized as "other" and 250 U.S. military officials. The newspaper quoted 235 government officials and 23 non-U.S. military. There were 26 news stories with no sources quoted. The *Wall Street Journal* quoted 122 sources categorized as "other" in the second war, followed by 103 U.S. military officials. The newspaper quoted 98 government officials and 21 non-U.S. military. There were 16 news stories with no sources quoted. (See Table 4)

To find results for Hypothesis 10, there will be more number of sources quoted in the *New York Times* in Gulf War II, a non-parametric test (Wilcoxon Signed Ranks Test) was conducted. The test resulted in a statistically (t= -3.12, p= .002) significant difference in the number of sources quoted in the *New York Times* with the Gulf War II quoting more. However, there was no significant (t= -1.03, p= .302) difference in the number of sources quoted in the *Wall Street Journal*.

Hypothesis 11, there will be more number of sources quoted in the *New York Times* than the *Wall Street Journal* in the two wars was supported with findings from the Wilcoxon Signed Ranks Test. Results showed significant (t= -.40, p= .687) difference in the number of sources quoted in the first war where the *New York Times* averaged 117.69 while the *Wall Street Journal* averaged 56.52 sources. Significant (t= -1.66, p=.096) difference was also found in the number of sources quoted in the second war where the
New York Times averaged 126.60 sources while the Wall Street Journal averaged 54.71 sources.

To answer Hypothesis 12, there will be significantly more photographs accompanying a story in the New York Times in Gulf War II, a T-test was conducted. The T-test resulted in significant differences in the presence of photographs per day in the New York Times. Significant (t= -6.164, d= 32, p=.000) differences were found with the New York Times publishing more stories with photographs in Gulf War II.

A T-test was also conducted to find results for Hypothesis 13, there will be not much difference in the presence of photographs accompanying a story in the Wall Street Journal in the two wars. This hypothesis was supported with results which show that there was no significant (t= .500, df= 2, p=.667) difference in the presence of photographs during the two wars in the Wall Street Journal.

To answer Hypothesis 14, there will be more number of photographs accompanying a story in the New York Times, the Wilcoxon Signed Ranks Test was conducted. There was a noteworthy difference between the numbers of photographs accompanying a story in the New York Times and the Wall Street Journal. A statistically (t= -4.64, p= .000) significant difference was found in the number of photographs accompanying a story in the New York Times with Gulf War II carrying more. However, there was no significant (t= -1.34, p=.18) difference in the number of photographs accompanying the story in the Wall Street Journal during the two wars. There was no significant (t= -1.41, p= .157) difference in the number of photographs accompanying the story in the New York Times and the Wall Street Journal in the first war. There was a
significant ($t= -3.73, p= .000$) difference in the number of photographs accompanying the story with the *New York Times* carrying more number of photographs than the *Wall Street Journal* in the second war.

To support Hypothesis 15, the content of photographs will predominantly be military action photographs, frequency was found. In the first war, the *New York Times* carried 58 photographs, which were categorized as “other,” 54 military action photographs, and 23 photographs of damage. The newspaper carried 10 photographs of prisoners of war, six protest images and eight photographs of the dead. There were five victory images and five photographs of the wounded. There were three images of humanitarian aid and two home front images. The *Wall Street Journal* carried four photographs that were categorized as “other,” and two protest images. The newspaper also carried one photograph of the prisoners of war. In the second war, the *New York Times* carried 178 photographs that were categorized as “other,” 104 military action photographs and 39 photographs of soldiers/pilots/marines. The newspaper carried 30 photographs of damage and 12 images of the wounded. There were eight protest images, eight photographs of the dead and seven photographs of prisoners of war. The newspaper carried six images of humanitarian aid and one victory image. The *Wall Street Journal* carried 17 military action photographs and four photographs of humanitarian aid. There were seven photographs that were categorized as “other.” The newspaper carried two protest images and one photograph of prisoners of war. (See Table 5)

To support Hypothesis 16, the presence of visual elements is more likely to be maps, frequency was found. The hypothesis was supported by results, which point that in
the first war, in the *New York Times*, there were 250 stories with no visual elements. The newspaper carried 52 maps, seven drawings, two pie-charts and two graphs. The *Wall Street Journal* carried 120 stories with no visual elements. There were 19 maps, 13 cartoons/caricatures and three graphs. In the second war, in the *New York Times*, there were 432 stories with no visual elements. There were 57 maps, 16 drawings, three graphs and two cartoons/caricatures. The *Wall Street Journal* carried 182 stories with no visual elements. The newspapers carried 47 maps, six graphs, four cartoons/caricatures, three pie-charts and one drawing.

**Discussion**

The results of the study showed significant differences in the coverage of the Gulf Wars: *New York Times* v. *Wall Street Journal*. A particularly noticeable observation was in the number of war stories published by the *New York Times* during the second war. While the *New York Times* averaged 17.26 stories per day in the second war, the first war averaged 9.53 stories per day. The *Wall Street Journal* averaged 7.45 stories per day in the second war and 4.44 stories per day in the first war. This interpretation supports the prevalence of embedded journalism in the second war that gave unprecedented access to the embedded journalists due to a partnership between the military and the media. Findings also indicate that the *New York Times* published more war stories in both the wars than the *Wall Street Journal*. These results can be attributed to the fact that the *New York Times* features more political and international news than the *Wall Street Journal*, which is mainly a business periodical.
The present study contradicted the hypothesis that war news stories will more likely be reported from Washington, D.C. The study hypothesized more stories to be reported from Washington, D.C., the capital of the nation and site of a large number of government offices; military offices where strategies are devised for any military action exist there. Results indicate that in the first war, 211 stories in the *New York Times* were mainly reported from other foreign locations such as Riyadh, Egypt, South Africa and Damam; 73 from Washington, D.C. and seven from Baghdad. However, the *Wall Street Journal* reported 77 war stories from Washington, D.C. and only 30 stories from other foreign locations. In the second war, the *New York Times* reported 312 stories from other locations such as Germany, London, Japan and Jordan, followed by 116 stories from Washington, D.C. However, in the second war, the *Wall Street Journal* reported 116 stories from other foreign locations and only 77 from Washington, D.C., which is a reversal from the first war.

The findings of the study also indicate that the timeliness in reporting a story was largely indeterminable. This contradicts the hypothesis that war news stories will more likely be reported a day after the event. The prevalence of the press pool system in the first Gulf War and embedded journalism in the second Gulf War let the study hypothesize that a sense of urgency and immediacy in reporting war news would be predominantly present in the coverage during the two wars. The media pool was created to enable independent, breaking news coverage of U.S. troops worldwide and in remote areas.

Embedded journalism was a step further in the press pool system where the journalists were embedded with military units to report war news round the clock. The concept of embedded journalism also enabled the Pentagon to control war reports and report only news which the Pentagon had an interest in. “Their highly choreographed, round-the-clock reporting gave the Pentagon extraordinary control of war reports back home and also allowed the military to quietly contain those journalists who wanted to report war independently…” [Link](http://www.camerairaq.com/embedded_journalism/) (retrieved on 11/05/05). This factor could be attributed to the contradiction in the hypothesis of timely reporting.

Evidence also supports the hypothesis that the nationality of first source quoted will more likely be U.S. Results indicate that in both the wars, the two periodicals quoted a significantly high number of U.S. sources. The results can be supported with the argument that the current study covered differences in coverage between two U.S. national newspapers and therefore a predominantly large number of U.S. sources will be quoted.

The study also hypothesized that the occupation of sources quoted will more likely be U.S. military officials and results supported the hypothesis. The hypothesis was based on the propaganda model of Herman and Chomsky, which focuses on the inequality of distribution of wealth and power and its effects on mass media coverage. The model applies to the Gulf War in three dimensions: size, ownership and profit (Severin and Tankard, 1979). The study focuses on the second dimension that the Gulf wars relied on elite sources. The news media is reliant upon a steady flow of information
where the prime supplier of news is the elite. The findings in the *New York Times* in the first war confirm that the use of the “pool” system forced a total reliance upon military sources of news where the military could adopt the role of the primary definer, controlling the form and content of war coverage.

Findings also indicate there was a significantly higher presence of photographs in the *New York Times* in the second war. The results are strengthened by the fact that the usage of advanced digital equipment on the front lines of the conflict in Iraq promotes photojournalists to play a key role in shaping the public’s understanding of the war. The results also support the hypothesis that there will be no significant differences in the “presence” of photographs accompanying a story. Contrary to common belief, that the *Wall Street Journal* does not carry photographs, the study found a certain albeit insignificant “presence” of photographs.

Evidence also supports that in the second war, the *New York Times* had more numbers of photographs accompanying a story thereby signifying the visual importance attached to every story. Advances in visual reportage now play a crucial role in mediating readers’ knowledge about military conflicts.

Contrary to hypothesis, the content of photographs was predominantly the photographs categorized as “other” as opposed to military action photographs. Acts of torture and repression, which remain hidden from readers, are now given importance through pictures of fleeing refugees and crowded refugee camps. The study hypothesized that due to the prevalence of embedded journalism, the embedded journalists would focus more on the military action photographs while advancing with the military unit. This
hypothesis was proved false by the findings, which suggest that there were a significant number of photographs categorized as “other” which could not be identified. However, the two periodicals covered a reasonable number of military action photographs thus giving importance to photographs with soldiers fighting with machinery of war, soldiers non-fighting and machinery of war that were active and non-active.

Finally, findings were also contrary to the hypothesis that there would be more likely maps as visual elements. Maps are of strategic importance, and provide a visual depiction of areas of enemy presence and combat zones. However, results contradicted the hypothesis. In the first war in the *New York Times*, there were 250 stories with no visual elements, followed by just 52 maps. The *Wall Street Journal* carried 120 stories with no visual elements followed by 19 maps. In the second war, the *New York Times* carried 432 stories with no visual elements, followed by 57 maps. The *Wall Street Journal* carried 182 stories with no visual elements, followed by 47 maps. The absence of visual elements in the *New York Times* can be explained with the huge “presence” of photographs during the two wars.

**Limitations and Conclusion**

The primary focus of the current study was to investigate differences in the coverage of the two Gulf Wars as reported in the *New York Times* and the *Wall Street Journal*. The study identified a few limitations given the nature of quantitative content analysis. Searching through newspapers and finding results, which involved going back and forth on numbers of photographs, sources quoted and stories, brings in the chances of
coding the value assigned to each unit of analysis repetitively. Unavailability of printed versions of newspapers and reliance on microfilms was one of the major pitfalls of the study. A third limitation is that one cannot draw generalizations from the results since similar measures of analysis are not used. However, since most previous research has focused on qualitative content analysis of war reporting, the quantitative nature of this study brings a new dimension to research in this topic. The study facilitated an understanding of how an increase in the number of war stories, timely reporting, location of the story and other factors have augmented the speedy coverage of war news. Future research can focus on aspects of gender in war correspondence. Research on gender studies can investigate gender bias in support or opposition of war while reporting war stories. Future studies can also focus on visual reporting of war on the Internet v. newspapers. This can allow us to determine the degree of censorship in presenting pictures of the dead, wounded, damages and other war-related images.

The current study found significant differences in the coverage of the two Gulf Wars. The presence and usage of lightweight camcorders and other electronic devices used in war reporting have brought about sweeping changes in journalistic coverage of wars. The proliferation of news stations and the Internet has enabled the audience to view news from differing perspectives. The technological advance from pool system to embedded journalism has allowed reporters to provide direct, real-time reporting from the front lines. Embedded journalism gave a sense of immediacy in reporting war news “first.” Technological changes thus affected the course of the war and the political and social contexts surrounding it.
References

Artner, A. G. (2003). The war in color; Do the bright images out of Iraq obscure the true nature of the photos, or of the conflict? Chicago Tribune North Final Edition Chicago pg.1


Dugger, R. (2003 Summer). Permitting a war of aggression Free Inquiry 23 (3) pg.14


Taylor, P. (2003 April). Science in war. Source:


retrieved on 11/07/05

Appendix A

CODING BOOKLET

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Rochester Institute of Technology
Directions: The coder should read the coding booklet prior to coding the two newspapers – *New York Times* and the *Wall Street Journal*. Each variable to be coded in the coding sheet has been explained below. Coders should follow the directions precisely.

The coding procedure will identify and record the following variables:

- The names of the national edition of the two newspapers- the *New York Times*, the *Wall Street Journal*
- The date of publication indicates the date, month, and year in which the news was published
- The location of the story indicates the location from where the story was reported
- Author of the story indicates if the story was written by a staff writer (of the newspaper), wired service where the news was released by an institution and not a person or by an unidentified source
- Timeliness implies the time lag between the occurrence of an event and the actual reporting of the story which could be 1, 2, 3 or more or any other indeterminable time after the occurrence of the event
- Nationality of the first source quoted, indicates the nationality of the person releasing the news
- Occupation of source quoted indicates the profession of the prime source in reporting a story or event which could military official, government official, non-U.S. military, any other source who cannot be categorized or there could be no source quoted.
• The number of sources mainly indicates the number of sources in a particular war news story reporting a story or event which could be 0, 1, 2, 3

• The “presence” of photographs accompanying the story implies the presence of absence of photographs

• The “number” of photographs accompanying a story could be 0, 1, 2, 3 or more

• The content of photographs is a broad category which will code the following elements of coverage

Military action photographs include
  - soldiers fighting with guns and other machinery of war
  - soldiers non-fighting with machinery or without machinery of war
  - machinery of war (with no soldiers) which are active and non-active

Fighting can be described as an act of aggression on part of soldiers with arms, artillery, ammunition, bombers, fighters, battle tanks and the machinery of war.

Protest images include
  - anti-war protests in U.S. and Iraq
  - pro-war rallies in U.S. and Iraq

Humanitarian images include medical aid
  - food, water supplies
  - hospitals

Prisoners of war images include
  - prisoners on the warfront
  - prisoners off the warfront
Victory images
   - of the U.S.
   - of Iraq

Damage images include
   - property
   - environment
   - explosions/smoke

Images of soldiers/marines/pilots include
   - Afghani soldiers wearing mountaintop with guns
   - Uniformed U.S. soldiers/marines/pilots

Images with portraits and headshots of leaders of U.S. and Iraq will be excluded.

Images of the dead include
   - soldiers which include U.S., Iraq
   - civilians
   - indeterminate

Pictures of the wounded include
   - civilians
   - soldiers either from U.S. or Iraq
   - indeterminate

Home front images will include images that show U.S. soldiers coming back to the home country after the war.

‘Other’ images will include pictures that cannot be categorized
Presence of visual elements accompanying the story indicates graphs, maps, charts, cartoons/caricatures, drawings, pie-charts and also absence of visual elements.
**Content Codebook**

Name of publication

1 = *New York Times*

2 = *Wall Street Journal*

Date of publication

Enter the date, month and year of publication

Which war

1 = Gulf War I

2 = Gulf War II

Number of war news stories per publication

0 = 0

1 = 1

2 = 2

3 = 3 or greater

Location of the story

0 = not mentioned

1 = Washington, D.C.

2 = Baghdad

3 = Other

Author of the story

0 = indeterminable

1 = wired
2 = staff writer
3 = other

Timeliness in reporting the story
0 = indeterminable
1 = 1 day after the event occurred
2 = 2 days after the event occurred
3 = 3 or more days after the event occurred
4 = the day the event occurred

Nationality of first source quoted
0 = indeterminable
1 = U.S.
2 = Iraq
3 = Other

Occupation of first source quoted
0 = no source quoted
1 = U.S. Military Official
2 = Government Official
3 = Non-U.S. Military Official
4 = Other

Number of sources quoted
0 = 0
1 = 1
2=2
3=3
4=4 or greater

Presence of photographs accompanying the story

0= no photograph
1= photograph (s)

Number of photographs accompanying the story

0=0
1=1
2=2
3=3
4=4 or greater

Content of photograph (s)

1= Military action
2= Protest images
3= Humanitarian
4= Prisoners of war
5= Victory images
6= Damage
7= Soldiers/marines/pilots
8= Death
9= Wounded
10= Home front images
11= Other

Presence of visual elements accompanying the news story
0= no visual
1= graphs
2= maps
3= charts
4= cartoons/caricatures
5= drawings
6= pie-chart
Table 1

Location of story (by per cent)

<table>
<thead>
<tr>
<th>Location</th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>Washington</td>
<td>22.53</td>
<td>20.78</td>
</tr>
<tr>
<td>Baghdad</td>
<td>2.16</td>
<td>13.79</td>
</tr>
<tr>
<td>Other</td>
<td>65.12</td>
<td>55.94</td>
</tr>
<tr>
<td>Indeterminable</td>
<td>10.19</td>
<td>9.49</td>
</tr>
<tr>
<td>Total Number (n)</td>
<td>324</td>
<td>558</td>
</tr>
</tbody>
</table>

Table 2

Author of the story (by per cent)

<table>
<thead>
<tr>
<th>Author</th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>Wire service</td>
<td>3.75</td>
<td>0</td>
</tr>
<tr>
<td>Staff- writer</td>
<td>82.75</td>
<td>99.46</td>
</tr>
<tr>
<td>Other</td>
<td>9.87</td>
<td>0</td>
</tr>
<tr>
<td>Indeterminable</td>
<td>3.63</td>
<td>0.54</td>
</tr>
<tr>
<td>Total Number (N)</td>
<td>324</td>
<td>557</td>
</tr>
</tbody>
</table>
Table 3

Timeliness in reporting a story (by per cent)

<table>
<thead>
<tr>
<th></th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>The day the event occurred</td>
<td>39.37</td>
<td>38.55</td>
</tr>
<tr>
<td>1 day after the event occurred</td>
<td>10.31</td>
<td>5.27</td>
</tr>
<tr>
<td>2 days after the event occurred</td>
<td>1.57</td>
<td>9.06</td>
</tr>
<tr>
<td>3 or more days</td>
<td>0</td>
<td>0.16</td>
</tr>
<tr>
<td>Indeterminable</td>
<td>48.75</td>
<td>46.96</td>
</tr>
<tr>
<td>Total Number (n)</td>
<td>320</td>
<td>607</td>
</tr>
</tbody>
</table>

Table 4

Nationality of the first source quoted (by per cent)

<table>
<thead>
<tr>
<th></th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>U.S.</td>
<td>59.72</td>
<td>72.64</td>
</tr>
<tr>
<td>Iraq</td>
<td>8.95</td>
<td>17.19</td>
</tr>
<tr>
<td>Other</td>
<td>28.35</td>
<td>0.19</td>
</tr>
<tr>
<td>Indeterminable</td>
<td>2.98</td>
<td>9.98</td>
</tr>
<tr>
<td>Total Number (n)</td>
<td>335</td>
<td>541</td>
</tr>
</tbody>
</table>
Table 5
Occupation of the first source quoted (by per cent)

<table>
<thead>
<tr>
<th></th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>U.S. Military Officials</td>
<td>29.22</td>
<td>31.28</td>
</tr>
<tr>
<td>Government Officials</td>
<td>25.36</td>
<td>29.41</td>
</tr>
<tr>
<td>Non-U.S. Military</td>
<td>5.79</td>
<td>2.87</td>
</tr>
<tr>
<td>Other Sources</td>
<td>28.5</td>
<td>33.18</td>
</tr>
<tr>
<td>No sources</td>
<td>11.13</td>
<td>3.26</td>
</tr>
<tr>
<td>Total Number (n)</td>
<td>414</td>
<td>799</td>
</tr>
</tbody>
</table>
Table 6

Content of photographs (by per cent)

<table>
<thead>
<tr>
<th>Category</th>
<th>New York Times</th>
<th>Wall Street Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>Military Action</td>
<td>31.04</td>
<td>26.46</td>
</tr>
<tr>
<td>Protest Images</td>
<td>3.44</td>
<td>2.04</td>
</tr>
<tr>
<td>Humanitarian</td>
<td>1.73</td>
<td>1.52</td>
</tr>
<tr>
<td>Prisoners of War</td>
<td>5.75</td>
<td>1.78</td>
</tr>
<tr>
<td>Victory Images</td>
<td>2.87</td>
<td>0.25</td>
</tr>
<tr>
<td>Damage</td>
<td>13.22</td>
<td>7.63</td>
</tr>
<tr>
<td>Soldiers/marines/pilots</td>
<td>0</td>
<td>9.93</td>
</tr>
<tr>
<td>Death</td>
<td>4.59</td>
<td>2.04</td>
</tr>
<tr>
<td>Wounded</td>
<td>2.87</td>
<td>3.05</td>
</tr>
<tr>
<td>Home front Images</td>
<td>1.14</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>33.35</td>
<td>45.29</td>
</tr>
</tbody>
</table>

Total Number (n) 174 393 60 123
### Table 7

Presence of visual elements (by per cent)

<table>
<thead>
<tr>
<th></th>
<th>New York Times</th>
<th></th>
<th>Wall Street Journal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GW I</td>
<td>GW II</td>
<td>GW I</td>
<td>GW II</td>
</tr>
<tr>
<td>No visual</td>
<td>75.54</td>
<td>84.70</td>
<td>53.33</td>
<td>74.89</td>
</tr>
<tr>
<td>Graphs</td>
<td>0.60</td>
<td>0.59</td>
<td>1.34</td>
<td>2.47</td>
</tr>
<tr>
<td>Maps</td>
<td>15.70</td>
<td>11.18</td>
<td>8.44</td>
<td>19.34</td>
</tr>
<tr>
<td>Charts</td>
<td>5.43</td>
<td>0</td>
<td>31.12</td>
<td>0</td>
</tr>
<tr>
<td>Cartoons/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caricatures</td>
<td>0</td>
<td>0.39</td>
<td>5.77</td>
<td>1.64</td>
</tr>
<tr>
<td>Drawings</td>
<td>2.13</td>
<td>3.14</td>
<td>0</td>
<td>0.42</td>
</tr>
<tr>
<td>Pie-chart</td>
<td>0.60</td>
<td>0</td>
<td>0</td>
<td>1.24</td>
</tr>
<tr>
<td><strong>Total Number (n)</strong></td>
<td><strong>331</strong></td>
<td><strong>510</strong></td>
<td><strong>225</strong></td>
<td><strong>243</strong></td>
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</tbody>
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