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The Mythical Framing Effect: Media Coverage and Public Opinion Regarding the Iraq War

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Abstract

This study focused on the distinction between mythic and non-mythic framing of news stories pertaining to the Iraqi War. A content analysis was performed on 531 news articles appearing in The New York Times and Time Magazine from 2003 to 2007. Gallup polling data was used to construct measures of public opinion regarding the war (War Approval) and the Presidents handling of the war (Presidential Approval). In both news sources, non-mythical news coverage was more predominant than mythical coverage. Most importantly, the amount of mythical news coverage influenced popular opinion. Importantly, however, this mythical framing effect was moderated by media source and the nature of the popular opinion rating. Specifically, mythical news coverage in the New York Times significantly increased Presidential approval ratings. This mythical framing effect failed to emerge, however, when examining the effect of news coverage in Time Magazine and when predicting more general and impersonal ratings of War Approval. Results are discussed in the context of a psychological model of framing effects that incorporates the moderating role of media source and target of rating.

Keywords: Media; War; Iraq war; Terror frame; Framing; Public opinion

Introduction

The effect of the media on public opinion is of particular importance when a country is at war [1]. This study examines how media framing influenced social perceptions of reality during the Iraq War. In addition, this study links specific types of media frames to changes in public opinion regarding the Iraq War. Specifically, this study examines the prevalence of "mythic" and "non-mythical" frames in media depictions of the Iraq War, and considers their effect on public opinion.

Media coverage is determined by many social forces. These include rhetoric advanced by the administration, congress, military sources, interest groups, and policy analysts [2,3]. Once a news story is presented, it can potentially influence public opinion. News story frames emphasize, prime, or highlight certain aspects of a political event, while de-emphasizing or ignoring others [4,5]. In doing so, news story frames increase the perceived importance of certain aspects of a news event, and decrease the perceived importance of other aspects of a news event [6-10]. A news story frame also provides a central theme or story line that organizes and adds coherence to specific information pertaining to a news event [3,7,11]. This central theme or story line promotes a certain interpretation or construal of the news event (e.g. referring to the Iraq War as an "occupation" versus "liberation") [12,13]. Communications elicit a "framing effect" when they cause an individual to focus on a selected set of considerations, thereby shaping the individual's cognitive construal of the news event.

For decades, American coverage of international news was dominated by the Cold War frame [5,9]. This frame condemned communist aggression and idealized the "free world" [5]. More recently, a variety of media frames have emerged, although arguably, a prominent frame involves terrorism, safety, and victimization. Media frames can be influential even when they are misleading [1]. For example, the Bush administration framed (9/11) as a terrorist act that was connected to Saddam Hussein. Within weeks of doing so, 60% of Americans regarded Saddam Hussein as an "imminent threat to the US" [14]. Six months following the attack, almost half of the population believed Saddam Hussein was involved in the (9/11) attacks and that the hijackers included Iraqis. Support for the war was correlated with these beliefs [14]. Since (9/11), a "terror frame" has been frequently employed by the media [15]. This "terror frame" possesses some features that are compatible with the "mythic war frame".

Mythic and Non-mythic war frames

The present study examines the prevalence of "mythic" and "non-mythic" frames in media depictions of the Iraq War [16,17]. "Mythic" framing engenders a *specific form* of "top-down" psychological processing when individuals derive their impression of a war event. It elicits impressions of war events that are based upon a previously established story line or script that depicts war in mythic terms. This mythical war script underlies popular depictions of warfare and conflict that appear in fairy tales, Hollywood movies, and television shows (e.g., "Westerns"). It provides crystal clear designations of good and evil by employing a narrative of victimization, heroism, and villainy [18]. There is little room for ambiguity or complexity. Individuals are either "good guys" or "bad guys." In mythic framing, the distinction between in-group and out-group is emphasized, potentially activating an ethnocentric construal of war events [19].

In contrast, "non-mythic" framing engenders an impression of war that is grounded in factual or sensory reality [17]. That is, impressions of events are primarily based upon the actual "data" or evidence. They are not based upon a mythical pre-conceptualization of human conflict involving a simple distinction between "good guys" and "bad guys." On the contrary, complexities of the world are acknowledged in a more open-minded and non-dualistic fashion. The non-mythic frame

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recognizes that a variety of perspectives exist when considering social conflict, and elicits a view of social conflict that is less likely to activate an "us versus them" mentality.

In sum, the "non-mythic" frame represents a factually grounded form of discourse, whereas the "mythic" frame represents a kind of departure from reality. Taken to the extreme, the mythically framed world is seen through the lens of a fairytale, with clear angels and villains [16]. Le Shan [17] has proposed that these two realities engender significant differences in public opinion. The present study attempted to test whether this assertion holds up to scientific analysis.

Mythic framing and public opinion regarding the Iraq war

The theoretical perspective advanced in the present study is derived on the basis of the Metaphorical Framing Model [11]. According to this conceptualization, the mythic (versus non-mythic) frame activates a war script in the mind of the message recipient. This war script functions as a cognitive schema that can influence the message recipient's impression of the Iraq War in a relatively direct or indirect manner. A direct effect emerges when the message recipient relies on the war script to infer what happened ("filling in missing data"). In this case, the mythic frame conveys new information about war events that the citizen has not previously considered [10]). A more indirect effect emerges when the mythical war script elicits selective cognitive processing that highlights information congruent with the script and overlooks information that contradicts the script. This increases the perceived importance of the highlighted information and decreases the perceived importance of the ignored information [6,10]. Indirect effects may also emerge when the mythical war script guides interpretation of ambiguous war events.

These psychological processes provide the basis of the core hypothesis investigated in the present study. Namely, it was predicted that mythic (versus non-mythic) framing would positively influence public opinion regarding the Iraq War. Importantly, this mythic framing effect can be distinguished from effects elicited by the simple evaluative tone of media coverage [20]. That is, the mythic framing effect is presumably mediated by a pattern of psychological construal or construction that goes beyond the "presented" information. As such, the mythic framing effect should emerge even when controlling for the evaluative tone of the presented media message (e.g., amount of pro versus anti-war content).

The present study examines the mythic framing effect using news articles appearing in the New York Times and Time Magazine. The New York Times is one of the most elite U.S. newspapers [4,5,21]. Time Magazine is regarded as one of the most elite U.S. news magazines and is often used in studies that involve content analysis of print media [22]. These news sources were selected to maximize the perceived credibility of the news source [20,23]. Research confirms that the New York Times elicits an inter-media agenda setting effect. Namely, the morning edition of the New York Times sets the agenda for televised news coverage of international events appearing on the NBC, ABC, and CBS evening news [23,24]. Thus, the New York Times should elicit an especially strong framing effect.

The present study examines media framing effects on two measures of popular opinion. The first involves the percentage of U.S. citizens that indicated the Iraq War "was not a mistake" versus "was a mistake." The second involves the percentage of U.S. citizens that indicated "I approve" versus "I disapprove" of "the President's handling of the present war." Whereas the former reflects a general measure of war approval, the later reflects a more focused and personal measure of the *president's* war-related performance [25]. Mythic portrayals of war often employ a form of metonymy that allows the individual ruler to stand for the entire state. For example, the Iraq War might be framed as a fight between George W. Bush and Saddam Hussein [16]. Thus, the mythic framing effect might be especially evident when predicting the personal measure of the president's war-related performance.

Method

A content analysis was conducted on print media during the first four years of the Iraq War (2003-2007). March 20, 2003 is generally regarded as the beginning of Operation Iraqi Freedom [12]. On this date, the President of the United States announced that he had ordered an "attack of opportunity" against targets in Iraq. Data collection began a month before this date with an endpoint of February 1, 2007 in an effort to cover a four year span. This Iraq War data was collected as part of a larger study that included data regarding the Viet Nam War.

Sample

531 news articles pertaining to the Iraq War were sampled. These articles were taken from *The New York Times* (N=294) and *Time* (N=237) magazine. A stratified sample was collected from both sources over the course of the four year time span. Editorials were not included. Each news article constituted a "case" when performing the statistical analyses.

Derivation of news story characteristic scores

Each news story (article) was composed of multiple "units." Each story "unit" was, more often than not, a single paragraph. The number of story units within each article varied based on article length. For example, while the first article within the sample contained 13 story units, the second article contained 24 story units. On average, *Time Magazine* articles contained a greater number of story units than the *New York Times* articles. Thus, it is inappropriate to use raw totals of each story characteristic (e.g., total number of "mythic units" in the story) when computing story (article) characteristic scores. Thus, for each news story (article), the *proportion* of units was calculated for each story characteristic. For example, an article's "mythic story characteristic" score was computed by taking the number of mythic units and dividing by the total number of units within the article.

Each news story (article) constituted a "case" when performing the statistical analyses. Coders coded each story unit in terms of frame type (non-mythic, mythic, neither), valence (positive, negative, neutral), war stance (pro, anti-war, no war stance), and (9/11) references. For each news story (article), these codes were used to create a proportion score that reflected the predominance of that characteristic in the news story (article). Supplementary analyses confirmed that the coding scheme was highly reliable. Specifically, using two coders to code a sample of the news stories, the average correlation between these proportion scores was .91.

Frame Type: Each story unit was coded as "non-mythic," "mythic," or "neither" (unable to categorize). Story units were coded as "non-mythic" when they provided a factual or realistic description of war events. These included descriptions that: (a) contained factual details of a war event, (b) assumed actors on both sides of the conflict possess universal aspects of the human condition (e.g., there is good and bad in everyone), (c) realistically acknowledged "shades of grey" instead of promoting a simplistic "black" versus "white" conceptualization of a news event, (d) conveyed minority or opposing viewpoints that were

grounded in fact or logic, or (e) acknowledged realistic alternatives to war as a means of resolving the conflict (e.g., negotiation).

Story units were coded as "mythic" when they promoted an unrealistic, oversimplified, or close-minded view of war events. These included descriptions that: (a) glossed over factual details in favor of theatrical rhetoric, (b) dehumanized the enemy, (c) neglected "shades of grey" in favor of a viewpoint that made an absolute distinction between "good guys" and "bad guys," (d) presumed the moral superiority of the in-group over the out-group, or (e) rejected a realistic characterization of a news event simply because it was divergent from in-group popular opinion.

For each news story, the proportion of units that was coded as non-mythical constituted the story "non-mythical frame" score (NM) and the proportion of units that was coded as mythic constituted the story "mythic frame" score (M). In addition, the proportion of non-mythic units was subtracted from the proportion of mythic units to produce a "mythic framing index" for each news story (hereafter, also labeled the "Mythic-D" score, or "M-NM").

Story Valence: Each story unit was also coded as possessing a positive, negative, or neutral "valence." If a story unit contained both positive and negative content, the coder was instructed to either break the story unit into smaller units (when possible), or decide whether the story unit was predominantly negative or positive. Story units that were not clearly positive or negative were coded as neutral. Story units were coded as positive if the content was slanted in a positive direction or if the story unit evoked positive aspects of a war event. Story units were coded as negative if the content was slanted in a negative direction or if the story unit evoked negative aspects of a war event. For each news story, the proportion of units that was coded as positive constituted the story "positive valence" score, and the proportion of units that was coded as negative constituted the story "negative valence" score. Importantly, when examining the effects of non-mythic and mythic framing on popular opinion, effects of positive and negative valence were included as control variables.

Story war stance

Each story unit was also coded for "war stance." The coder was provided with three options; "pro," "anti," or "no war stance." "Pro-war" story units promoted or advocated the war effort (e.g., "If we had not acted, Saddam Hussein and his sons would still be in power,"). "Anti-war" story units denounced the war effort. For each news story, the proportion of units that was coded as pro-war constituted the story "pro-war" score, and the proportion of units that was coded as anti-war constituted the story "anti-war" score.

Importantly, when examining the effects of mythic and non-mythic framing on popular opinion, effects of anti-war and pro-war story content were included as control variables. It should be noted that "war stance" and "valence" are not identical. A story unit might contain negative information (e.g. high casualty rates) without taking an anti-war stance. This might be because negative events (e.g., casualties) are considered to be an unavoidable aspect of a necessary and justified military action.

For each story unit, specific references to (9/11) (World Trade Center or Pentagon related) were tallied for frequency. Because (9/11) rhetoric has been characterized as being distinctly mythic, it was important to examine whether (9/11) rhetoric was more prevalent in those articles that are predominantly mythically framed. A news story (9/11) reference score was computed by simply computing the average frequency of (9/11) references among the units composing the news story.

Casualty rate

Casualty rates influence public approval of military action [26]). Thus, soldier casualty rates occurring at the time each news article was published were recorded (iCasualties.com daily casualty counts). This variable was computed by averaging the daily casualty rates during those days that spanned the "pre" (assessed before the news article) and "post" measures of popular opinion (assessed after the news article). This measure of casualty rate was entered as a control variable when predicting popular opinion.

Popular opinion measures

U.S. public opinion data was collected via an archival search of Gallup. When possible, this data was matched by date to news articles contained in the sample. Responses to two survey questions were examined in the present study. These two questions were targeted because they have been asked most consistently during times of war involving the USA. The first question asked respondents whether or not they perceived the present war as having been a mistake. The percentage of respondents who replied "mistake" was subtracted from the percentage of respondents who replied "not a mistake" to arrive at an overall "War Approval" score. The second question asked respondents whether or not they approved of the President's handling of the present war. Responses were divided between the percentage of the respondents who checked "yes, I approve" versus those who responded, "no, I disapprove". The percentage of respondents who replied "I disapprove" was subtracted from the percentage of respondents who replied "I approve" to arrive at an overall "Presidential Approval" score. In both cases, higher scores indicate of greater support or approval. The popular opinion scores served as dependent measures in a number of analyses.

In the present study, news story characteristics appearing in a given news article were used to predict popular opinion polling data collected by Gallup four weeks following the news article, while controlling for popular opinion assessed by Gallup two weeks prior to the news article. Because Gallup polls are not performed on a daily basis, only a subset of the news articles could be linked to popular opinion data collected two weeks before and four weeks following the news article. Thus, only a subset of the sampled news articles was included in the analyses that predicted popular opinion.

Results

Table 1 depicts mean story characteristic scores as a function of news source (New York Times, Time Magazine). The first two rows reveal that mythic framing was much less prevalent than non-mythic framing. A 2 X 2 ANOVA was performed using "source" (New York Times versus Time) as a between subjects factor and "frame type" (mythic versus non-mythic) as the within subject factor to predict news story characteristic scores. This analysis yielded a strongly significant main effect for frame type, F (1, 530)=49655.50, p<.001. The effect of frame type effect was also moderated by source. Stories in The New York Times were more likely to be non-mythical (and less likely to be mythical) than were news stories in Time magazine, yielding a significant two-way interaction between frame type (non-mythic versus mythic) and source (New York Times versus Time), F (1, 530)=9.148, p<.01. Table 1 reveals that the mean proportions for valence and war stance were small. Clearly, stories were most likely to be neutral with regard to valence and war stance [4]. Mean values for (9/11) references were also small.

Intercorrelations between news story characteristics

New York Times: The top half of Table 2 summarizes the inter-correlations between the news story characteristics in the New York Times. Not surprisingly, the first three columns of this table reveal that prevalence of mythic and non-mythic framing were highly correlated (r=-.91, p<.001). This, of course, yields extremely high correlations between each of these news story characteristics and Mythic-D (r=.97, p<.001; r=-.98, p<.001). Because the mythic and non-mythic categories are in direct competition when coding each story unit, these two scores are strongly negatively correlated. The three middle columns of Table 2 reveal that the mythic, non-mythic, and mythic index (Mythic-D) scores failed to correlate with the prevalence of negative, positive, or anti-war content (p>.10 in all cases). The last two columns of Table 2, however, reveal that the mythic, non-mythic, and mythic index (Mythic-D) scores were correlated with the prevalence of pro-war content (r=.30, r=.29 r=.30; p<.001 in all cases) and mention of (9/11) (r=.42, r=-.38, r=.41, p<.001 in all cases). Whereas mythic framing was positively associated with pro-war content and mention of (9/11), non-mythic content was negatively associated with these story characteristics. Inter-correlations between negative, positive, anti-war, pro-war, and (9/11) mentions tended to be small or non-significant, with one exception. Prevalence of pro-war content was positively associated with (9/11) mention (r=.24, p<.001).

N=531	*NY Times (N=294)*	*Time (N=237)*
Mythic (M)	.13 (.19)	.17 (.18)
Non-Mythic (NM)	.84 (.21)	.78 (.21)
Mythic D (M-NM)	-.71 (.39)	-.61 (.38)
Negative	.04 (.07)	.07 (.13)
Positive	.00 (.02)	.01 (.02)
Anti-War	.03 (.09)	.03 (.10)
Pro-War	.01 (.03)	.00 (.02)
9/11 References	.03 (.09)	.03 (.07)

Table 1: Mean News Story Characteristic Scores (Standard Deviation in Parentheses).

In sum, the New York Times data indicates that the mythic and non-mythic scores were extremely negatively correlated. As such, it seems appropriate to regard these two scores as two measures of the same construct (Mythic-D). The mythic, non-mythic, and Mythic-D scores were sometimes correlated with other story characteristics (i.e., pro-war, (9/11) mention). However, none of these correlations accounted for more than 18% of the variance. Clearly, the mythic, non-mythic, and Mythic-D scores capture a form of media framing that can be distinguished from the other story characteristics.

Time Magazine: The bottom half of Table 2 provides the correlations obtained in the Time Magazine data. Three aspects of this table converge with the results obtained for the New York Times. (1) The first three columns reveal that mythic and non-mythic scores were highly correlated (r=-.86, p<.001), and that these scores was strongly associated with the Mythic-D score (r=.96, p<.001; r=-.97, p<.001). (2) The far right column reveals that mythic, non-mythic, and Mythic-D scores were correlated with (9/11) mentions (r=.29, p<.001; r=-.23, p<.001; r=.27, p<.001). (3) Inter-correlations between negative, positive, anti-war, pro-war, and (9/11) mentions tended to be small or non-significant. The Time Magazine data, however, is unique in two respects. First, negative and positive content are *both* positively associated with the non-mythic score and negatively associated with the mythic and Mythic-D scores. Second, prevalence of pro-war content failed to significantly correlate with mythic, non-mythic, or Mythic-D measures of framing.

In sum, the Time Magazine and New York Times data revealed that mythic and non-mythic scores were strongly negatively correlated. As such, it seems appropriate to regard these two scores as two measures of the same construct (Mythic-D). The mythic, non-mythic,

New York Times (N=294)								
	Mythic M	**Non-Mythic NM**	**Mythic M-NM**	**Negative**	**Positive**	**Anti-war**	**Pro-War**	**9/11**
Mythic M	1	-.91**	.97**	-.10	-.03	.05	.30**	.42**
Non-Mythic NM		1	-.98**	.02	.03	-.07	-.29**	-.38**
Mythic-D M-NM			1	-.06	-.03	.06	.30**	.41**
Negative				1	.03	-.08	-.08	-.10
Positive					1	-.04	.16**	.03
Anti-war						1	.15*	.12*
Pro-War							1	.24**
9/11								1
Time Magazine (N=237)								
	Mythic M	**Non-Mythic NM**	**Mythic M-NM**	**Negative**	**Positive**	**Anti-war**	**Pro-War**	**9/11**
Mythic M	1	-.86**	.96**	-.19**	-.14*	.00	.10	.29**
Non-Mythic NM		1	-.97**	.21**	.16*	-.01	-.08	-.23**
Mythic-D M-NM			1	-.21**	-.15*	.01	.09	.27**
Negative				1	.08	-.08	.08	-.12
Positive					1	-.06	.02	-.07
Anti-war						1	.06	.02
Pro-War							1	.16*
9/11								1

Table 2: Correlations between News Story Characteristics.

and Mythic-D scores were sometimes correlated with other news story characteristics. However, none of these correlations accounted for more than 18% of the variance. Thus, the mythic, non-mythic, and Mythic-D scores capture a form of media framing that can be distinguished from the other story characteristics.

Predicting Popular Opinion-Correlations

New York Times: To examine the effect of New York Times media coverage on popular opinion, we initially performed correlational analyses. Specifically, the New York Times news story characteristics were used to predict War Approval and Presidential Approval ratings four weeks following the news story. These correlations are shown in the first two columns labeled "**r**" in Table 3. Rows 1-3 of Table 3 pertain to two "control" variables. These are (a) the approval score collected two weeks prior to publication of the article, and (b) casualty rates for U.S. soldiers during the time period that elapsed between the "pre" and "post" measures of approval. These control variables correlated with public opinion in the expected direction. Public opinion during the two weeks that preceded the news story was strongly positively correlated with public opinion that followed the news story. For instance, the correlation between War Approval two weeks before the news story and War Approval four weeks following the news story was r=.85, $p<.001$. Thus, consistent with previous research, popular opinion was quite stable across this time span [20]). In addition, casualties were negatively correlated with public opinion four weeks later.

Rows 4-8 of Table 3 predict approval ratings using valence, war stance, and (9/11) mentions. Prevalence of negative content is associated with a decrease in war approval (r=-.31, $p<.001$) and presidential approval (r=-.21, $p<.001$). Prevalence of pro-war, anti-war, and (9/11) mentions are *all* positively correlated with presidential approval (r=.19, $p<.001$; r=.24, $p<.001$; r=.21, $p<.001$). The effect of the mythic framing index (Mythic-D) on popular opinion is shown toward the bottom of Table 3. Although the mythic framing index failed to predict War Approval ratings (r=.06, $p>.15$), it was positively associated with Presidential Approval ratings (r=.25, $p<.001$).

Time Magazine: In Table 3, the second two columns marked "r" contain the correlations between the predictors and approval ratings when analyzing the Time Magazine data. Again, the approval scores two weeks prior to the news article strongly predicted War and Presidential Approval 4 weeks following the news article (r=.65, $p<.001$; R=.67, $p<.001$). Casualties also continued to influence approval ratings in the predicted manner, although this effect was significant solely when predicting Presidential Approval ratings (r=.32, $p<.001$). In clear contrast to what was found for The New York Times, however, no significant correlations emerged between Time Magazine news story characteristics and measures of popular opinion.

The top half of Table 4 presents the correlations between the mythic framing index (Mythic-D) and public opinion as a function of news Source (New York Times versus Time Magazine) and Rating Target (War Approval versus Presidential Approval). This table suggests that the mythic framing effect is moderated by both Source and Rating Type. That is, the mythic framing effect is only apparent when the source is the New York Times and the popular opinion rating is a personalized rating of the President's performance in handling the war.

Predicting popular opinion–multiple regression

To eliminate concerns about multicollinearity and direction of causality, we performed longitudinal regression analyses to predict popular opinion. These analyses predicted popular opinion four weeks following the news story after controlling for popular opinion during the two weeks that preceded the news story. The casualty rate occurring between the "pre" and "post" measure of public opinion served as an additional control variable. All news story characteristics were included in the predictive model. Thus, the effect of mythic framing on popular opinion was tested after controlling for the proportion of positive, negative, pro-war, anti-war, and (9/11) references. Sample sizes for the regression analyses were not nearly as large as the previous sample sizes used to compute the bivariate correlations. Because the Gallup public opinion polls could not be temporally matched with all of the sampled news stories, analyses using the public opinion data could only be performed on a subset of the sampled.

When performing these regression analyses using the New York

	New York Times				Time Magazine			
	War Approval		Presidential Approval		War Approval		Presidential Approval	
	r	***B***	***r***	***B***	***r***	***B***	***r***	***B***
War Approval -2 weeks	.62** (75)	.62**	.70** (57)	____	.65** (60)	.65**	.67** (57)	____
President Approval -2 weeks	.85** (64)	____	.80** (51)	.81**	.75** (43)	____	.75* (37)	.88**
Casualties (2-4)	-.25** (139)	.04	-.18* (123)	.02	-.17 (113)	.14	-.32** (102)	.15
Positive	-.07 (139)	-.05	-.00 (123)	.08	.01 (113)	-.13	-.19 (102)	.03
Negative	-.31** (139)	-.31**	-.21* (123)	.06	-.08 (113)	.11	-.14 (102)	-.09
Pro-war	-.05 (139)	-.12	.19* (123)	-.02	-.08 (113)	-.07	-.11 (102)	.06
Anti-war	.05 (139)	.09	.24** (123)	-.05	-.11 (113)	.00	-.05 (102)	-.08
9/11 Reference	.01 (139)	-.11	.21* (123)	-.18	.08 (113)	-.09	-.07 (102)	-.30˙
Mythic-D (M-NM)	.06 (139)	-.15	.32** (123)	.25¨	.15 (113)	.07	.04 (102)	-.18
R-Squared	--	.53	--	.71	--	.46	--	.69
N	--	75	--	51	--	60	--	37

Note. Sample Size in parentheses for "***r***" (correlation). Entries for "***B"*** are standardized regression coefficients (i.e., beta weights). **p<.001, *p<.05.

Table 3: Predicting Popular Opinion with News Story Characteristics (Controlling for Prior Popular Opinion and Casualties).

Bivariate Correlations		
	Popular Opinion Measure	
	War Approval	Presidential Approval
New York Times	.06	.32**
Time Magazine	.15	.04
Beta Weight in Regression Analysis		
	Popular Opinion Measure	
	War Approval	Presidential Approval
New York Times	-.15	.25**
Time Magazine	.07	-.18

Table 4: Predicting Popular Opinion with News Story Mythic-D Score (M-NM).

Times data (Table 3, columns marked "*B*") reveals that public opinion during the two weeks preceding a news story strongly predicted public opinion four weeks following the news story. In addition, prevalence of negative news content negatively influenced War Approval ratings four weeks following the news story. Of primary interest was the predictive role of the mythical framing index (Mythic-D). Although the mythic framing index failed to predict impersonal ratings of War Approval, it significantly increased the favorability of the Presidential Approval (B=.25, $p<.001$).

Table 3 also provides the regression analysis results for the Time Magazine analyses. Again, public opinion during the two weeks preceding the news story strongly predicted public opinion four weeks following the news story. In this case, (9/11) mentions *negatively* influenced Presidential Approval. Most importantly, Table 3 reveals that the mythic framing index (Mythic-D) failed to predict both War Approval and Presidential Approval ratings.

The bottom half of Table 4 presents the standardized regression coefficients (beta weights) for Mythic-D when predicting popular opinion as a function of Source (New York Times versus Time Magazine) and Rating Type (War Approval versus Presidential Approval). The pattern matches the pattern obtained for the bivariate correlations. That is, the mythic framing effect was only apparent when the source was the New York Times and the popular opinion rating was a personalized rating of the President's performance in handling the war.

The moderating role of news source and rating type

An additional regression analysis was performed using both the New York Times and Time Magazine data. This analysis tested an expanded model that included the following set of additional predictors: (a) "Source" (New York Times versus Time), (b) "Target" of rating (War Approval versus Presidential Approval), (c) the two-way interaction between "source" and "rating type," (d) the two-way interactions between "Source" and each news story characteristic, (e) the two-way interactions between "Rating Type" and each news story characteristic, and (f) the three way interactions between "Source," "Rating Type," and each of the news story characteristics.

This analysis yielded a significant three-way interaction between source, rating type, and the mythical framing index (B=-.49, $p<.01$). Thus, the pattern of effects in Table 4 reflects a bona fide and statistically significant three-way interaction. The mythic framing effect only emerged when predicting *personalized* ratings of the President's war performance using news stories appearing in an elite *daily* newspaper (New York Times). Otherwise, the mythic framing effect failed to emerge.

Discussion

Non-mythic framing dominated news coverage in both the New York Times and Time Magazine. For both news sources, approximately 80% of the news coverage was framed in a "non-mythic" fashion, whereas approximately 15% of the news coverage was framed in a mythic manner. Moreover, less than 7% of the news coverage adopted an explicitly "anti" or "pro" war stance. Explicitly "pro-war" coverage failed to exceed 1% of the coverage in both the New York Times and Time Magazine. Media coverage that conveyed "negative" information was slightly more prevalent. 4% of New York Times coverage fell in this category whereas 7% of Time magazine coverage fell in this category. Media coverage conveyed positive information only rarely (less than 1% in the New York Times, 1% in Time Magazine). Interestingly, in both news sources, references to (9/11) appeared in only 3% of the news coverage.

The aforementioned news story characteristics were sometimes correlated. In the New York Times, pro-war news stories tended to convey more positive information and more mythically framed coverage. Interestingly, New York Times news stories that were relatively high in "pro-war" coverage were also relatively high in "anti-war" coverage. Perhaps this reflects a tendency to provide balanced news coverage. In both news sources, stories that mentioned (9/11) contained higher levels of "pro-war" coverage. Interestingly, although to a lesser extent, these news stories also contained higher levels of "anti-war" coverage in the New York Times. Again, this might reflect a tendency to provide balanced coverage.

Given the nature of the coding scheme, it is inevitable that the prevalence of "mythic" and "non-mythic" coverage was strongly inversely related. News stories that were predominantly "non-mythic" contained minimal amounts of "mythic" coverage, and vice versa. Therefore, it is appropriate to regard these scores as two measures of one and the same underlying construct. In both the New York Times and Time Magazine, mention of (9/11) tended to be associated with a reduction in non-mythic coverage and an increase in mythic coverage. Importantly, however, none of the correlations involving "mythic" or "non-mythic" news coverage accounted for more than 18% of the variance when predicting the other news story characteristics. Thus, it is clear that neither the "mythic" or "non-mythic" frame category is synonymous with war stance, valence of the news story, or the mention of (9/11).

When predicting popular opinion, bivariate correlational analyses yielded many significant effects. Prior approval ratings were strongly associated with public approval ratings four weeks following the news stories, suggesting substantial stability in public opinion. Casualty rates tended to be negatively associated with approval ratings. When examining correlations between news story characteristics and public opinion, a clear difference emerged when comparing the New York Times to Time Magazine. Whereas popular opinion was often associated with the characteristics of news stories appearing the New York Times, popular opinion was unrelated to characteristics of the news appearing in Time Magazine. For the New York Times, negative coverage was negatively associated with both War Approval and Presidential Approval. In addition, pro-war, anti-war, and increased (9/11)coverage in the New York Times were all positively correlated with Presidential Approval (but not War Approval). Most importantly, the predicted positive correlation between mythic framing and public opinion emerged for the New York Times when predicting Presidential Approval ratings. However, the mythic framing effect failed to emerge when predicting War Approval, and failed to emerge when examining the Time magazine data.

When predicting popular opinion, regression analyses were also performed to see if the mythical framing effect emerged when controlling for prior levels of public approval, casualties, and all the other news story characteristics (positive, negative, pro-war, anti-war, (9/11) reference). This was indeed the case. Once again, the mythical framing emerged for the New York Times when predicting Presidential Approval ratings. Once again, this effect disappeared when predicting more general ratings of War Approval, and when examining this effect in Time Magazine. Thus, the mythic framing effect is a conditional effect that emerges under some conditions but not others [27,28].

The New York Times may be more likely to elicit the mythic framing effect because it is more likely to serve as the source of an *inter-media framing effect*. Research confirms that the New York Times elicits an *inter-media agenda setting effect*. Specifically, the morning edition of the New York Times sets the agenda for televised news coverage of international events appearing on the NBC, ABC, and CBS evening news stations [23,24]. We speculate that an analogous *inter-media framing effect* exists, with the New York Times playing a central role in establishing the *frame* that is adopted by other U.S. sources of international news. If this is the case, framing of news articles in the New York Times may produce effects on large segments of the population, not merely those who specifically read the New York Times. Because Time magazine is not published on a daily basis, it may be less likely to establish a frame for international news that is adopted by other news media

The present findings indicate that the mythic framing effect is more potent when examining effects on Presidential Approval than when examining effects on War Approval. This may occur because mythic portrayals of warfare promote a personalized image of warfare, an image in which war is metaphorically conceptualized as a fight between two individuals (e.g., George W. Bush and Saddam Hussein). As a consequence, mythic framing may specifically promote emotional vilification of the out-group leader (e.g., Saddam Hussein) and idealization of the in-group leader (George W. Bush) [29,30] for the role of emotion in framing]. Viewed in this manner, it is not surprising that the mythic framing effect primarily emerges when predicting more personalized ratings of Presidential Approval, the in-group leader for the U.S. public.

Conclusion

"Non-mythic" framing of a news story is primarily grounded in factual information. It accurately conveys the complexity of news events in an open-minded manner. In contrast, "mythic" framing of a news story adopts a melodramatic tone and employs emotionality to create an unambiguous distinction between good and evil. Mythically framed news stories possess clear designations of victimization, heroism, and villainy. The present research confirms that mythic news coverage influenced public opinion regarding the Iraqi War. However, this mythic framing effect was moderated by media source and the nature of the public opinion rating. Specifically, mythic news coverage appearing in the New York Times elicited more favorable evaluations of the President's handling of the Iraq War; even when controlling for prior evaluations of the President, casualty rates, valence of the news coverage, pro- versus ant-war stance of the news coverage, and references to (9/11). This mythic framing effect failed to emerge, however, when examining news coverage appearing in Time Magazine or when predicting more general and impersonal ratings of War Approval. Future research may build on this by analyzing the extent to which these framing effect emerge on newer media platforms, such as social media [31,32].

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