The Affect and Effect of Images of War on Individual Opinion and Emotions

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ABSTRACT
We explore the conditions under which individuals are attentive to positive and negative battlefield information when forming beliefs about a conflict’s success or failure. We use three experiments to explore the impact of visual and textual battlefield cues on individuals’ emotional states and attitudes toward the war in Afghanistan. We find that both visual and textual information convey information about failure that influences public attitudes and emotions toward war. In keeping with rational expectations theory, but contrary to widespread beliefs within the journalistic and policymaking communities, textual cues and images of battlefield failure have similar effects on emotions and attitudes. The consistency of multiple war cues, however, greatly affects peoples’ reactions. Simply put, in war the content of information matters, not its delivery style.

KEYWORDS
Conflict; foreign policy; public opinion

The growing literature on “rational expectations theory” claims that individuals update their attitudes and beliefs about military conflict in response to battlefield information, including information about casualties and the likelihood that the mission will succeed (Eichenberg 2005; Fordham 2013; Gartner 2008a, 2011; Gartner and Segura Forthcoming; Gelpi 2010; Gelpi, Feaver, and Reifler 2005/2006, 2009; Horowitz and Levendusky 2011; Koch 2011; Larson 2000; Valentino, Huth, Croco 2010). We identify the conditions under which individuals are attentive to positive and negative battlefield information when forming beliefs about a conflict’s success. We find that visual and textual cues have similar substantive effects on individuals’ beliefs about a war’s failure, as well as their emotional response to a war, and that these reactions are mitigated by the cues’ consistency.

The results are important for a number of reasons. First, while much of the “rational expectations” literature focuses on the impact of textual cues and information on attitudes toward war (Gartner 2008a; Gelpi 2010), we build upon Gartner’s (2011) analysis to compare the impact of visual and textual cues on individuals’ ability to update their wartime beliefs. This
approach allows us to address a puzzle regarding wartime evaluations of performance. Individuals generally retain limited factual knowledge about military conflicts (Boettcher and Cobb 2009). So what explains the relationships observed between wartime variation and opinion? A reliance on simple visual cues from news stories explains how individuals update war attitudes in a reasoned fashion without retaining extensive knowledge.

Second, rational expectations arguments anticipate, but rarely empirically examine, how the (1) surprise and (2) consistency of war information influence reactions (Gelpi 2010). We examine these expectations directly and find support for both.

Third, our results cast doubt on claims that news imagery has a greater impact than textual information (Graber 1987, 1990; Pfau, Haigh, Fifrick, Holl, Tedesco, Cope, Nunnally, Schiess, Preston, Roszkowski, and Martin 2006) and on the widely held belief that images of warfare have a larger and more emotional impact on public attitudes than the textual reporting of facts and figures. We find that both kinds of wartime information have similar effects on attitudes and emotional states.

While more research is needed to integrate these findings into our understanding of public perceptions of war costs and benefits, this study helps to delineate better the processes whereby wartime information influences individuals’ attitudes and emotions. We make three contributions to the literature. First, we extend studies of wartime images (Gartner 2011) to see if they influence assessments of success and failure. Second, we expand on work regarding information and success and failure (Gelpi, Feaver, and Reifler 2005/2006, 2009) to include negative emotional reactions. Third, we build on work regarding the consistency of wartime signals (Gelpi 2010) in two ways. First, we examine if visual images and text that tell the same or contradictory stories have varied influence. Second, we examine if messages that are consistent or contradictory to receivers’ beliefs have different impact.

**Theoretical approach**

Images influence public responses to war (Graber 1987; 1990), affecting views of defeat (Dauber 2001), victory (Aday, Cluverius, and Livingston 2005), and the costs of fighting (Pfau et al. 2006). Much of this evidence focuses on iconic and widely recognized images (Perlmutter 2004): the smoking World Trade Center, the toppling of the statue of Saddam Hussein, or the abused bodies of American soldiers dragged through Mogadishu. Such images may be influential, but it is difficult to identify *ex ante* which images will become iconic. Moreover, these rare iconic images cannot explain the routine use of information to update attitudes during an ongoing war (Althaus and Kim 2006). Gartner (2011) began to fill this void by showing that conventional pictures of losses (for example, flag-draped coffins) negatively influence
support for war. We build upon this result both by comparing the impact of routine visual and textual cues and by examining the mechanisms by which individuals use these cues to update their beliefs about a war’s success or failure.

Rational expectations theory argues that individuals form their attitudes toward war based on an evaluation of the expected costs and benefits of the operation (Fordham 2013; Gartner 2008a; Gelpi, Feaver, and Reifler 2005/2006; Larson 2000). Expected costs are primarily a function of the casualties in the military operation (Gartner, Segura, and Wilkening 1997), while the benefits are largely a function of success in achieving war aims (Eichenberg 2005; Gelpi, Feaver, and Reifler 2009). Because the focus is on the information content, rational expectations theory predicts cues that provide similar information about a war should have similar impact regardless of their delivery style (textual or visual). We anticipate that the content of information has primary, and the medium through which people receive that information has secondary, effects on peoples’ wartime attitudes.

H1: Visual and textual cues that convey similar substantive battlefield information will have a similar impact on subjects’ attitudes toward military conflict.

Visual cues may also influence attitudes through their emotional impact on viewers (Aday, Livingston, and Herbert 2005; Graber 1987, 1990; Perlmutter 2004; Pfau et al. 2006). Earlier work often viewed emotional reactions to visual cues as “irrational,” but recent research suggests these responses may be adaptively rational for individuals in a low-information environment (De Oliviera-Souza, Moll, and Grafman 2011; Kaufman 1999; Muramatsu and Hanoch 2005). We examine two emotions closely related to responses to wartime information: feeling upset and unsafe.

Wartime deaths are terrible, and incurring casualties in a losing effort represents an especially unsettling tragedy. We anticipate that information about losing a costly conflict may make people feel upset. Similarly, while the physical threat to individuals resulting from American setbacks in Iraq or Afghanistan may be limited, leaders have justified these conflicts and the War on Terrorism on the grounds that victory will keep Americans safe. Thus we expect that information about failure will make Americans feel less safe. Rational expectations theory also expects war information to have similar emotional effects regardless of the medium through which it is delivered (textual versus visual).

H2: Visual and textual cues that convey similar substantive battlefield information will have similar effect on subjects’ wartime emotional states.
The literature on images in war (for example, Aday, Cluverius, and Livingston 2005; Graber 1987, 1990; Perlmutter 2004; Pfau et al. 2006) commonly offers two views that conflict with our expectations. First, news images have a more profound impact than story text. Rainey’s (2005) conclusion that “a headline that 1,500 Americans have died doesn’t give you nearly the impact of showing one serviceman who is dead,” is a widely held belief across the academic and journalistic communities. Second, imagery has a greater impact on attitudes than text because of its stronger emotional impact. For example, Doris Graber (1996:90) concludes that, “Visual stimuli excel in creating a sense of drama. Drama enhances learning because it attracts and holds attention by engaging the viewer’s emotions and producing identification between the viewer and the story subjects.” We thus posit two alternative hypotheses:

H3: Visual cues of battlefield information will have a larger impact on subjects’ attitudes toward military conflict than textual cues.

H4: Visual cues of battlefield information will have a larger impact on subjects’ emotional states than textual cues.

Experimental analysis

Experiments represent an effective method for identifying the influence of specific signals in the information-noisy wartime environment (Gartner 2011) because they can isolate the independent effect of treatments (McDermott 2013). Information, however, might have different effects in war’s cacophonous environment than it does in the laboratory. To try to control for that concern, we employ three studies (that include a variety of other topics to add noise), multiple methods (posttests and pre- and posttests), and extensive control variables (including those that capture individuals’ attentiveness to news).

Nevertheless, external validity always represents a concern when conducting laboratory experiments. For example, our experiments assign subjects to informational treatments rather than allowing them to select their exposure to news information. Similarly, partisan elites compete outside the laboratory to place battlefield events in narrative frames that may blunt or accentuate the impact of battlefield news information. Thus changes in news coverage such as those reflected in our experimental manipulations may vary in their effects outside the laboratory depending on the political environment and prior beliefs of those attentive to the news.
We note, however, that our purpose here is not to establish a macrorelationship but rather to identify better the microfoundations undergirding well-documented historical, observational studies of war opinion (Eichenberg 2005; Gartner, Segura, and Wilkening 1997; Gelpi, Feaver, and Reifler 2009; Horowitz and Levendusky 2011). Moreover, existing experimental studies have already investigated partisan framing (Gelpi 2010) and selective exposure to the news (Garret 2009). Our focus here is on variations in the delivery medium for battlefield information and their effects on the updating of attitudes and emotions regarding war.

We conduct three IRB-approved experimental studies on undergraduate students at a large public university in the western United States.¹ Our reliance on undergraduate student convenience samples raises questions regarding the generalizability of our results. However, our focus is primarily on contrasting treatment effects of visual and textual cues (and not the average response), which minimizes sample concerns. Moreover, the characteristics of our sample would generally tend to dampen estimated treatment effects. That is, compared to most Americans, our subjects are better informed, more opposed to the war in Afghanistan, and thus are more likely to have well-formed attitudes that are difficult to influence. Nonetheless, we hope that future studies can evaluate the robustness of these treatment effects in representative national samples.

Visual cues in all three studies convey losing information with images of unhappy American soldiers with downcast faces and slumped shoulders and/or happy insurgents with uplifted faces and confident body posture. Conversely, winning information was conveyed visually with images of confident US soldiers and downcast insurgents.²

**Study I**

We first determine whether our visual cues alone could evoke a treatment effect regarding subjects’ attitudes toward Afghanistan. Study I randomly assigns subjects to view for 3 seconds one image (chosen from a two-photo set) suggesting Losing (30%), Winning (37%), or no photo (Control, 37%). All subjects were then asked, “What would you rate as the probability of success for the US in Afghanistan?” Those who believed the chance of success was less than 50% were coded 1 on the variable Fail (56%), 0 otherwise.

Subjects were: Republican (14%), Democrat (63%), Independent (17%), Other (7%), Female (64%), Politically Informed (11%, watch network news five or more days a week), and 11% know a recent war fatality

¹Study I Winter 2010, Study II Winter 2011, and Study III Winter 2012. Participation was voluntary and incentivized through extra credit.
²Visual and textual treatments are available from the authors.
The results of a Probit analysis of *Fail* are shown in Table 1, Model 1.\(^3\) *Losing Information, Female, Democrat, Independent, Highly Informed,* and *Knows Died in War* all increased the chances of having a low estimate of the likelihood of US victory in Afghanistan. Model fit is strong, predicting the correct response 65% of the time, which is 21% better than achieved by *Fail’s* modal value. Estimated predicted probabilities (not shown), indicate that viewing a losing image increased the likelihood of believing US efforts in Afghanistan will fail by 17%—which is greater than the influence exerted by gender or party.

Exposure to a winning image did not have a significant impact on expectations of success in Afghanistan. The difficulty of increasing perceptions of success may have been connected to the skewed political affiliation of our convenience sample, but as we discuss later, we think it was more likely due to the implausibility of an Afghanistan success narrative at the time of the study. Nonetheless, the results of Study I demonstrate that visual cues communicate losing information regarding Afghanistan even when presented entirely out of narrative context (that is, with no textual cues) similar to that found regarding costly information (Gartner 2011).

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\(^3\)Analyses conducted in Stata© 13.
Study II

Study II compares the impact of visual and textual information on success. We randomly assign subjects to: Losing Information, Winning Information, and No Information/Control. Winning and losing images were taken from Study I. Losing text posits a narrative that highlights both an increasing trend of US casualties (Gartner 2008a) and a general’s negative assessment about the outcome (Baum and Groeling 2010; Gelpi 2010). The winning text emphasized how the success in Kabul has spread throughout the country, military and civilian casualties are decreasing, and a general’s positive assessment.

Within each treatment subjects are randomly assigned to: (1) images and text, (2) text, or (3) images. This procedure yields seven groups. Each visual treatment presents two similar (losing or winning) photos (randomly ordered). We first pool treatments into: Losing Information (44%), Winning Information (41%), and Control (15%). Following the treatment subjects were asked: (1) “How likely or unlikely would you say it is that the U.S. mission will succeed in Afghanistan and Pakistan?” (Afghanistan Failure: from 1 [very likely] to 10 [very unlikely], mean 6.9, standard deviation of 2.3); (2) “How upset did this news item make you feel?” (Upset: from 1 [not at all upset] to 10 [very upset], mean 5.4, standard deviation of 2.5); (3) “How safe or unsafe did this news item make you feel?” (Unsafe: from 1 [very safe] to 10 [very unsafe], mean 5.6, standard deviation 1.8). Subjects in this study were: Democrat (72%), Independent (9%), Republican (19%), Highly Informed (15%, state political interest at the maximum), Connected to Casualties (14% knew a recent war fatality), and evenly divided on gender (Female 50%).

Figure 1 compares expectations of failure in Afghanistan between those who received winning and losing information (textual, visual, or both). The mean for the winning information group is greater than that of the losing (p < .01). More than 20% of those who received losing information rated the likelihood of failure 10 out of 10, more than double the proportion of winning information subjects, suggesting the possibility of a ceiling effect regarding the impact of losing information. Like Study I, winning information did not increase optimism about success relative to the control group.

Because random assignment can result in unbalanced treatment groups (Gartner 2008a), we also perform a multivariate ordered probit analysis that controls for potentially confounding effects (see Table 1). Exposure to losing information, being a woman, and being a Democrat all increase estimates of the likelihood of failure. Results are robust to

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Footnote: For all figures, red represents the percent of subjects receiving losing and blue winning information treatment conditions.
the exclusion of all control variables (Model 2A vs. 2B) and excluding the control group (2C). Estimating the change in the probability of Afghanistan Failure (not shown) suggests that Losing Information has the second-highest impact with an average change in predicted probability of .022, just below Democrat’s .028.

Figures 2 and 3 demonstrate that Losing Information (pooling together visual and textual treatments) made subjects feel significantly more Upset (Figure 2) and Unsafe (Figure 3). A multivariate analysis (not shown) showed that exposure to Losing Information has a statistically and substantively significant effect on individuals’ feelings. Losing Information has an average change in the predicted probability of Unsafe of .08 (twice that of the next strongest effect) and .07 for Upset.

Because exposure to any wartime information may create negative emotions (Gartner 2011), we exclude the control group and focus on comparisons between positive and negative wartime information through visual and textual media. Any Losing Information identifies all subjects who received a losing cue. We include interaction terms to capture the potentially differing effects of visual, or visual and textual, cues. The coefficient for Any Losing Information captures the average treatment effect for subjects who received a textual cue only. The Losing Image Only coefficient is an interaction effect that captures the difference between the treatment effects of the visual-only and text-only cues. The coefficient for Losing Image and Text
captures the difference in the treatment effects that we observe when we add battlefield images to the textual cues.

Table 2 presents our core statistical results. As posited by Hypothesis 1 (and contrary to Hypothesis 3), we find no evidence that visual cues differ from
textual cues in their impact on expectations of success. The coefficient for *Any Losing Information* is positive and significant, indicating that a losing textual cue increases expectations of failure. However, the interaction effects for visual-only and the combined visual and textual cue are small and insignificant, suggesting these treatments do not differ from the text-only cue.

Visual and textual cues similarly affect emotions—supporting Hypothesis 2. The coefficients for *Any Losing Information* are positive and statistically significant in both our analysis of feeling *Upset* and feeling *Unsafe*. With regard to feeling *Unsafe*, we find that both the interaction terms for visual-only and combined textual and visual cues are again small and insignificant. Once again, this pattern of coefficients indicates that visual and combined visual/textual cues do not differ from textual cues in terms of making subjects feel unsafe. With regard to feeling *Upset*, we do find that visual-only cues differ from textual cues. However, in this case the coefficient is negative, indicating that subjects were less upset by the visual-only cues. Nonetheless, subjects who received the *Losing Visual Only* cue were more upset than those who received a winning cue, and the combined visual/textual cue did not differ from text-only in its effects.

Study II indicates that individuals update their attitudes and emotions in similar ways to the information in visual and textual cues. However, while rational expectations theory argues that individuals update attitudes in response to new information, Study II cannot determine whether these effects were a consequence of updating or were based on a priming response that made previously held information more salient to the respondents. Moreover, while previous studies suggest that the internal consistency of cues affects their influence (Gelpi 2010), they have not investigated the extent to which such congruence is important when one cue is textual and the other visual.
Study III

Study III uses a pre/post design to assess the contingency of treatment effects on prior beliefs. To the extent that treatment effects reflect updating on new information, we should expect larger treatment effects for subjects whose prior beliefs are inconsistent with the cue that they receive. Pretreatment attitudes were measured as part of a battery of questions prior to subjects participating in several unrelated studies. Approximately 10 minutes elapsed between the measurement of the pretreatment attitudes and the application of the treatment. For each question, we divided subjects into those with optimistic and pessimistic prior beliefs. Those whose expectations of failure and opposition to fighting were below the median value (6 and 7 respectively) were coded as having optimistic priors. All others were coded as pessimistic.\(^5\)

We examine internal treatment consistency by focusing on negative textual treatments and varied visual cues. The losing visual treatment included two photos—one of US soldiers and one of Taliban fighters. The first treatment group (133 subjects) received the same losing information treatment that was used in Study II. The second treatment group (167 subjects) received the same textual information and image of a despondent American soldier; however, we replaced the confident image of the Taliban fighters with the image from the “winning” visual treatment showing a downcast group of Taliban fighters. A control group (168 subjects) received no information.

We analyze the effect of these treatments on two dependent variables: expectations that the mission in Afghanistan will fail and opposition to continuing to fight the war (both ranked on 1 to 10 scales with higher numbers reflecting greater pessimism or opposition). Then we subtracted subjects’ pretreatment expectations of success and opposition to continuing to fight from the posttreatment measures of these attitudes. In both cases our sample is almost evenly divided between those who do and do not change their attitudes during the experiment. On balance, the changes are evenly distributed in the positive and negative directions. The mean change in expectations of failure is 0.13, while the mean change in opposition to continuing the war is –0.2. Similar to Study II, our sample was: 50% female, 44% Democratic, 75% approved of President Obama, and 80% of subjects were between 19 and 22 years old. Our analyses control for all of these demographic factors; however, none of these characteristics has a significant impact, and dropping controls yielded nearly identical results (not shown).

Figure 4 displays the effects for the consistency and subjects’ prior beliefs (blue optimistic, red pessimistic priors, black bars 95% confidence intervals).

\(^5\)Our results are robust to various ways of coding prior beliefs. Splitting the sample at the middle of the scale (value 5) or interacting the treatments with the pretreatment attitudes yielded similar results.
Negative information only affects subjects with optimistic prior beliefs. Although pessimism about the war is high, this result cannot be attributed to floor effects, since only 7% of our subjects placed themselves at the top of the scale for expectations of failure in the pretreatment measure, and 13% did so with regard to opposition to the war. Thus about 90% of our pessimists had room to become gloomier about success in Afghanistan, and about 75% of them had room to become more strongly opposed to the war.

Optimists receiving internally consistent negative treatments became more pessimistic about the prospects for success and more opposed to continuing the war. As the far left-hand column in Figure 4 indicates, optimists who received the consistent negative treatment increased their expectations of failure in Afghanistan by an average of more than a full point on our scale. The same pattern holds regarding subjects’ opposition to continuing the war, but in this case the increase in opposition is a bit smaller. Optimists receiving the consistent negative treatment in this case increased their opposition to the war by an average of about two-thirds of a point. These results are in keeping with rational expectations theory’s contention that individuals update their beliefs in response to surprising new information (Gelpi 2010) and do not support arguments that individuals attend to cues that prime

Figure 4. Impact of consistent and inconsistent losing information depending on subjects’ prior beliefs.
or amplify their existing beliefs, or that individuals engage in biased or motivated processing of cues (Lord, Ross, and Lepper 1979; Taber and Lodge 2006).

Finally, with regard to the importance of internal consistency of the treatments, we find some support for previous results regarding cue consistency. With regard to opposition to continuing the war, we find strong support for the importance of consistency between visual and textual cues. The introduction of inconsistent visual information into the negative treatment completely eliminates the treatment effect among our optimistic subjects. Our optimists are no more affected by this inconsistent treatment than our pessimists were by our consistent negative treatment. We view these results as supportive of our expectation that individuals respond to new battlefield information by evaluating both its internal consistency as a cue and by evaluating its consistency with their prior beliefs. As expected with rational expectations theory, we find that internally consistent cues that are inconsistent with subjects’ prior beliefs (and therefore contain surprising new information) cause the greatest change in subjects’ attitudes toward the Afghan War.

**Conclusion**

Mounting evidence in support of the “rational expectations” model of public attitudes toward war suggests that individuals update their beliefs about a conflict in response to battlefield information (Gartner 2008a; Gartner and Segura Forthcoming; Gelpi 2010; Larson 2000). At the same time, studies have documented the public’s lack of knowledge regarding international affairs (for example, Boettcher and Cobb 2009). We sought to resolve this apparent disparity by exploring mechanisms through which individuals update their beliefs in an adaptively rational yet low-information manner. We find that both visual images and textual information convey battlefield information about failure that influences public attitudes and emotions toward war. As expected from rational expectations theory, but contrary to widespread beliefs within the journalistic and policymaking communities, textual cues and images of battlefield failure have similar effects on emotions and attitudes regarding the war in Afghanistan.6 Put simply, information matters—not presentation style.

Our results suggest that informational cues influence individuals’ beliefs and emotional states in systematic ways. Losing information eroded expectations of success and made people feel upset and unsafe regardless of the means of transmission. While variation in delivery method had little

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6We do not address television footage, which may have greater effect on opinion than photos (Pfau, Haigh, Shannon, Tones, Mercurio, Williams, Binstock, Diaz, Dillard, Browne, Elder, Reed, Eggers, and Melendez 2008).
effect, the consistency of the images and text as well as the congruence of the news treatment with the individuals’ prior beliefs remained important. Individuals update their attitudes and emotional states in response to new information rather than simply being primed to respond to existing beliefs, contradicting those who expect the public to engage solely in motivated reasoning.

It is important to identify a number of caveats. First, we focus on convenience samples of undergraduate students. We encourage scholars to explore the generalizability of these treatment effects among the broader public; however, we also have reason to expect that the public may be more responsive to these cues than our subjects, because the subjects are less partisan and less interested in politics.

Second, our experiments are limited by their focus on the Afghanistan War. We chose to focus on this war because we wanted to capture something closer to “real-world” updating than we could obtain by asking respondents about hypothetical scenarios where subjects have no other information or prior beliefs. In general, we expect that our focus on a military mission where subjects have strong prior beliefs will dampen the impact of battlefield information on wartime attitudes relative to their impact when individuals have less-entrenched views (Baum and Groeling 2010). For example, exposure to winning information never had a significant effect in our study, contrasting with Gelpi’s (2010) study of Iraq, where both winning and losing battlefield information causes individuals to update their views. When Gelpi’s Iraq War study was fielded in spring 2008, both “good” and “bad” progress stories were plausible. But when our studies were conducted in 2010 and 2011, conditions in Afghanistan may not have been sufficiently elastic to make winning plausible.

But while our estimated effect of battlefield information may be reduced by our focus on the late stages of the Afghan War, we do not expect this focus to alter the relative impact of visual and textual cues. In fact, the scale of the human losses in Afghanistan (especially in the context of prior casualties in Iraq) would seem likely to intensify the emotional response to imagery of American failure in this longstanding war. Yet we find consistent treatment effects across delivery media even in this emotionally charged environment. Thus we would expect our central result to generalize to American interventions in other conflicts.

And lastly, we recognize that our results sidestep a longstanding debate regarding the relative impact of partisan cues and battlefield information. Our purpose is to work within the “rational expectations” paradigm to explore the mechanisms by which individuals may update in adaptively rational ways without retaining extensive factual information. Elites may be influenced by the same information that affects the mass public (Gartner and Segura Forthcoming), suggesting that the focus should be on wartime
information processes first and politics second. While partisanship has been shown to play a role in reactions to wartime information (Gartner 2008a; Gelpi, Feaver, and Reifler 2005/2006, 2009), part of this dynamic depends on the party seen as culpable for the conflict (Croco 2015). Our goal is to develop a general model about the dynamics of wartime information and assessments of victory and defeat.

We hope that future research will bring these mechanisms back into conversation with the ongoing debate regarding partisan versus battlefield cues.

We see a number of other future research avenues. First, we hope to move beyond the inelastic Afghanistan scenario and explore conditions under which individuals are attentive to positive versus negative battlefield information. Second, based on the results presented here, we anticipate that war information affects emotions, which in turn act as heuristics for influencing attitudes, but this claim requires further study. Third, more research is needed to incorporate these findings into our understanding of public perceptions of war costs and benefits. This study, however, helps advance conception of the process whereby people use information about winning and losing to update their beliefs and emotions regarding the war.

Following the June 2013 leak of classified information by Edward Snowden, there have been a number of studies of the role of information, openness, and democracy (for an assessment, see Aguilar, Daniel, Windahl Bøllingtoft, Elmquist-Clausen, Helvacı, Vognæs, and Genest 2014). Much of this debate centers on governments’ conduct of surveillance and data collection (Warman 2013). Our work suggests a different tack. We show that routine wartime information, such as newspaper images or text, provides people with sufficient information to affect assessments and emotional reactions. Thus, while governments restrict and manipulate information, only a minimal level of standard information is required to form assessments about the likelihood of victory in war. Our results suggest that it is thus probably unlikely in all but the most extreme circumstances (for example, North Korea) that governments can completely restrict wartime information sufficiently to eliminate people’s ability to form assessments of their country’s likelihood of wartime victory and defeat.

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