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Powell, T.E.; Hameleers, M.; van der Meer, T.G.L.A.

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Thomas E. Powell¹ , Michael Hameleers²,
and Toni G. L. A. van der Meer²

Abstract

The psychological bases of the selection and attitudinal response to news media have received ample attention in political communication research. However, the *interplay* between three crucial factors in today's online, high-choice news media settings remains understudied: (1) textual versus multimodal (text-plus-visual) communication; (2) attitude congruent versus attitude incongruent versus balanced content; and (3) political versus nonpolitical genres. Relying on an experimental study of refugee and gun control news in the United States ($N = 1,159$), this paper investigates how people select and avoid, and also the extent to which they agree with, congenial, uncongenial, and balanced political news in a realistic multimodal selective-exposure setting in which political news is presented alongside sports and entertainment news. Although the findings partially depend on the issue, we find that the presence of multimodal (compared to textual) entertainment and sport items can increase avoidance of political news. Multimodal (compared to textual) political news augments attitude congruent selective exposure instead of encouraging cross-cutting selective exposure. Once selected, multimodal political news articles evoke stronger emotions and lead to higher issue agreement than textual news, regardless of an article's attitude congruence. By linking research on text-alone to multimodal selective exposure, this study shows that visuals in high-choice media environments

¹Netherlands Organization for Applied Scientific Research (TNO), The Hague, the Netherlands

²University of Amsterdam, Amsterdam, the Netherlands

Corresponding Author:

Thomas E. Powell, Netherlands Organization for Applied Scientific Research (TNO), Oude
Waalsdorperweg 63, The Hague 2597 AK, the Netherlands.

Email: t.e.powell@hotmail.com

can contribute to the selective avoidance of political news generally and cross-cutting political news more specifically.

Keywords

confirmation bias, multimodal communication, selective exposure, selective avoidance, visual communication

Today's high-choice and fragmented online media environment may pose vexing problems for democratic decision-making (Van Aelst et al. 2017). This may especially be the case for online media settings, where many cues compete for selection and attention. With the abundance of online media choices and content, audiences have the option to opt out of political news altogether (Prior 2007). If people do select political news, their selection behavior may be driven by confirmation biases and attitudinal congruence (e.g., Knobloch-Westerwick et al. 2017; Taber and Lodge 2006), especially for polarized issues such as immigration and gun control news. Further complexity is added to selection choices by the inherent visual quality of cue-rich digital media environments: Vivid images linked to nonpolitical items such as sport or entertainment news may be attention-grabbing and compete with textual information on politics, potentially motivating avoidance of less salient political news items which are inherently complex and difficult to visualize. Moreover, visual cues might also reinforce avoidance of news items cutting across one's preexisting views of an issue. Such selection behavior would compound concerns about increasingly uninformed voters on the level of political issues and policies.

In any media setting, but especially in information-rich environments such as online or social media, people are limited in the number of messages they can process in the amount of time devoted to their media consumption. Media exposure is thus the consequence of making choices. Although much research has focused on selective exposure to political news, the *context* of selective exposure environments is too often neglected, especially in experimental research (Feldman et al. 2013). People's actual online newsfeed does not exclusively consist of political news, but rather reflects a diversified stream of content where, for example, entertainment and sports news items also compete for attention.

Making the news selection process richer still is that news environments are frequently *multimodal*—presenting textual stories alongside the combination of images and texts, and often videos, offering news in visually attractive and stimulating ways (Dan 2017; Geise and Baden 2015). Thus, in the overload of information online, these selection patterns might increasingly be driven by easy-to-process cues like eye-catching visuals.

Previous research on selective exposure in high-choice media settings has not integrated the *interplay* of three crucial factors driving news choices in online, high-choice media settings: Selective exposure to (1) textual versus multimodal communication; (2) political versus nonpolitical genres, and (3) attitude-congruent versus attitude-incongruent

versus balanced political news based on confirmation biases. Hence, most research has either focused solely on the selection of political news presented alongside entertainment options (Feldman et al. 2013), visual versus textual selection (Powell et al. 2019), or confirmation-biased selection of political news (e.g., Knobloch-Westerwick et al. 2017). As a contribution, we link the literatures on the selective exposure with multimodal framing research (e.g., Geise and Baden 2015; Powell et al. 2015). This integration will help us to better understand how cue-rich information settings—in which a plethora of (multimodal) news items on various topics compete for the audience's attention—influence news selection.

Another contribution of this study is that we examine attitudinal effects that follow selection. As argued by Stroud (2008), the selection of reassuring content and avoidance of cross-cutting exposure might bolster partisan identities and polarize attitudes. Yet, findings on motivated reasoning and attitude-congruent issue agreement are typically situated in a textual information setting, neglecting the role of visuals. As visuals can be attention-grabbing and psychologically activating (e.g., Barry 1997), they may help to motivate people into selective exposure to cross-cutting political news and, in turn, activate an emotional response that might reduce polarization along partisan lines. Using a carefully controlled experiment drawing on refugee and gun control news in the United States, this article contributes novel insights about the selection and avoidance of political news, and subsequent persuasive effects, in information-rich multimodal media settings.

Selective Exposure to Political News in Multimodal Information Settings

Selective exposure can be understood as the guiding influence of people's prior attitudes on how they approach new information (e.g., Stroud 2008). Not only does today's high-choice media setting allow citizens to avoid political media altogether, but those who do attend to political communication demonstrate a tendency to confirm their issue attitudes by selecting news that reassures their priors. At the same time, conflicting or cross-cutting exposure is selectively avoided (Iyengar and Hahn 2009; Knobloch-Westerwick et al. 2017; Stroud 2008).

The process behind confirmation-biased selective exposure can be understood as the need to reduce the sense of discomfort (cognitive dissonance) that individuals experience when being confronted with challenging views (Festinger 1957; Knobloch-Westerwick et al. 2017). To avoid cognitive dissonance, information that reassures standing attitudes or identities is preferred over information that attacks or challenges existing beliefs (Taber and Lodge 2006). Although much research has studied confirmation-biased selective exposure in the context of textual political news, the interaction of three factors in real-life news ecologies is overlooked: (1) the role of textual versus multimodal information; (2) the influence of the surrounding selection context in which political news is embedded; and (3) confirmation biases that motivate the approach or avoidance of political news. In this paper, we therefore study the interplay of these factors in cue-rich online information settings that offer a favorable opportunity structure for selective exposure.

In a cue-rich digital information setting, individuals' selection behavior should not only be regarded as driven by textual cues. We thus draw on visual communication research, specifically focusing on visual perception (basic mental processing of visual elements in one's environment) and decoding (relation between the perceived elements and one's own semantic knowledge) to examine the ability of news images to influence selective exposure (Barry 1997; Geise and Baden 2015). Studies of visual perception have found that the presence of news images can stimulate higher levels of psychological arousal, stronger discrete emotional responses (Brader 2005; Iyer et al. 2014; Lang et al. 1996), and improved memory for news stories (Nelson et al. 1976; Newhagen and Reeves 1992). Due to their vividness and resemblance to real-life sensory experience, images can cause stronger physiological reactions than words, which by comparison are abstract symbols that bear no physical resemblance to their referents (Grabe and Bucy 2009). Moreover, since visuals are a direct depiction of physical objects and events in the nonmediated environment, they can trigger an intuitive assignment of meaning, albeit depending on the prior attitudes of the viewer (e.g., Krause and Bucy 2018). We leverage these psychological principles of visual communication to test the effects of pictures on news selection.

In the context of news media, previous research has demonstrated the salience of images in driving news selection (Casas and Williams 2017; Garcia and Stark 1991; Knobloch et al. 2003; Wolf and Grotta 1985; Zillmann et al. 2001). Especially on social media, images might be accessed and processed differently since such platforms provide more user control and interactivity (Valentino et al. 2009). Hence, compared with offline information settings, online news users can access news asynchronously by pausing and delaying news exposure, or by clicking on entertainment news on the same page or next screen. Social media may also encourage low-attention and low-effort processing (Powell et al. 2018), where news exposure follows more peripheral cues (e.g., headlines that confirm prior beliefs). Although social media delivers news from weak- and strong-tie network members and thus has the potential to enable more cross-cutting exposure to multimodal news containing heterogeneous views (Messing and Westwood 2014), the affordances of social media may foster confirmation-biased selection and distraction from political news. A key question in this study, then, is how would a cue-rich digital information setting characterized by an abundance of choice, control, and cross-cutting views stimulate the selection of multimodal news?

Looking at the role of headlines and images separately, Powell et al. (2019) indicated that headlines play a more prominent role in guiding news story selection behavior—which may be explained by the stronger narrative information carrying capacity of text than visuals (Geise and Baden 2015). However, when visuals and headlines are combined, the qualities of text and images should together motivate selection (Knobloch et al. 2003). Against this backdrop, we formulate the following hypothesis:

Hypothesis 1 (H1): Multimodal political news items containing an image will be selected more often than news items without an image.

Political News in Context: How Visual Cues Can Distract

As argued by Feldman et al. (2013), selective exposure to political news should not be understood as operating in a vacuum. News selection is about making choices out of a number of alternative exposure options: If sports or entertainment news is selected, then citizens' time for political news exposure is reduced. Nonpolitical news can therefore act as a distracter in news exposure settings by drawing one's limited attention away from political news. Hence, research that conceptualizes selective exposure as the avoidance or selection of political news items without looking at the surrounding information environment neglects the reality of news selection as a tradeoff between a number of exposure options. Importantly for this study, the addition of visuals to nonpolitical news in this surrounding exposure environment may function as eye-catching distracters and reduce the selection of political news items (e.g., Garcia and Stark 1991; Lavie 2005).

The ability of visuals to distract citizens from political news has not yet been tested in the context of news media selection, but the same psychological mechanisms of visual perception should be at play. Visual cues may be particularly attention-grabbing for nonpolitical news items. Entertainment news may, for example, include images of attractive celebrities and tasty food that are placed alongside hard political news items that struggle to compete for attention. Moreover, images may be more meaningful when they present entertainment and sports news compared with political issues: The often complex meaning of political issues is less easily illustrated by visual depictions compared with the familiar plotlines of sports or entertainment. Against this backdrop, we propose the following hypothesis:

Hypothesis 2 (H2): Political news is less likely to be selected when the nonpolitical exposure context (entertainment and sport news items) contains multimodal information compared with when the context relies on text alone.

Motivated Reasoning in a Multimodal Information Setting

We argue that principles of partisan selective exposure should be extended beyond textual cues alone and tested in a multimodal media context. Visual framing effects literature can be used to inform predictions on the role of visuals on motivated reasoning (Geise and Baden 2015; Messaris and Abraham 2001). To inform people's selection decisions, one would need to perceive the central meaning of an image (e.g., suffering refugees), which is related to their own semantic knowledge and point of view of the issue at hand during decoding (Geise and Baden 2015). Since images can trigger an intuitive assignment of meaning, confirmation biases may be more pronounced for multimodal compared with textual information.

To our knowledge, only one published study has addressed the influence of images in partisan selective exposure. In an experiment, Powell et al. (2019) presented images and headlines conveying different issue frames in matching or mis-matching image-headline pairs. This was designed to compare the relative "power" of images and text over decisions to select pro-, balanced, and counter-attitudinal political news. In line with previous visual framing studies, their findings indicate that textual information corresponded to stronger confirmation biases than visuals. However, the Powell et al.

(2019) study offered a limited selection environment, with participants only able to choose from political news items, and with *all* news items containing a visual that either matched or mis-matched the linked headline.

Since visual information in news reports needs to be actively decoded by receivers—who have to compare perceived meanings to their own frames of reference (Geise and Baden 2015), it may be expected that attitudinal congruence is a stronger predictor of confirmation-biased selection for visual compared with textual information. Alternatively, as visuals are less explicit in conveying a specific semantic meaning than text but are also attention-grabbing and effective in stimulating a physiological response (e.g., Lang et al. 1996), visuals may stimulate more cross-cutting exposure compared with written information. In other words, as (political) meanings and attitudes are less fixed in visual cues, and open to interpretation in line with receivers' frames of reference (Krause and Bucy 2018), they may stimulate more cross-cutting news selection. Based on these alternative mechanisms, we pose the following research question:

Research Question 1 (RQ1): Can visuals significantly increase selection of cross-cutting political news stories?

From Selection to Effects: How Visuals Affect Issue Agreement

Moving beyond selection as a dependent variable, the second part of this study investigates the effects of multimodal framed political news articles once they are selected. Extant research on visual communication has demonstrated that visuals can have stronger effects on opinions and emotions than an equivalent text, and the addition of an image to a text is stronger than text alone (e.g., Powell et al. 2015). Against this backdrop, we expect that images not only affect selection but also influence issue agreement and emotional responses to political news articles.

Empirical research has indicated that visuals have an impact on basic psychological processes (e.g., Barry 1997; Brader 2005; Iyer et al. 2014; Lang et al. 1996). When images are included in political communication, the salience of issues can be increased, which in turn can make these topics more accessible in the minds of readers (Scheufele and Tewksbury 2007). The psychologically activating effects of visual communication should also extend to effects on issue agreement (e.g., Arpan et al. 2006). In light of this research we hypothesize the following:

Hypothesis 3 (H3): Once selected, political communication featuring images will have stronger effects on issue agreement than exposure to text alone.

Motivated Reasoning and the Persuasiveness of Visual Communication

Beyond the argument that multimodal political news may be more persuasive than text alone, motivated reasoning literature suggests that information in line with people's existing attitudes is more persuasive than dissonant information (Taber and Lodge

2006). Although research on the role of attitudinal congruence in multimodal settings is scarce, Domke et al. (2002) demonstrate that the effect of visual news images can be understood by taking individuals' predispositions into account. More recent research has shown that citizen interpretations of images are influenced by their prior issue attitudes (Krause and Bucy 2018). Thus, from this perspective, we expect prior attitudes to moderate the effect of multimodal news on issue agreement and predict the following

Hypothesis 4 (H4): The effects of multimodal political news exposure on issue agreement are strongest when the political item is congruent with preexisting issue attitudes.

The Role of Emotions in Processing Images

Emotions can exert a powerful influence over political behavior (e.g., de los Santos and Nabi 2019; Nabi 2003). However, despite the importance of visuals in evoking emotions (Iyer et al. 2014), emotional responses to visual media in direct comparison to text remains relatively underexplored (but see, amongst others, Dan 2017; Powell et al. 2018; Powell et al. 2015). Existing research on this topic, building on the appraisal theory of emotion (e.g., Lazarus 1991; Nabi 2003), has investigated the mediating role of emotions in visual framing effects (e.g., Iyer et al. 2014). These studies indicate that media effects of visual or multimodal communication can be perceived as a process—emotional responses are triggered by exposure to images, and these emotional states can affect behavioral or attitudinal outcomes (Frijda 1988).

Against this backdrop, we assess the mediating effect of discrete emotions on issue agreement after exposure to multimodal political communication. In our study, we consider multimodal frames of refugees and gun laws. In response to frames of suffering refugees, we expect emotional responses of sympathy and distress toward the victims (Powell et al. 2018). In response to images of hostile and violent refugees, we expect responses of fear to a perceived threat (Brader 2005), anger from a need to right perceived injustices, and disgust as an avoidance response (Kühne 2014). When viewing multimodal news about victims of gun crime, we expect an emotional response of sympathy and distress when confronted with needless loss of life, and surprise and disgust in the face of gun-related atrocities in the United States (Nabi 2003). We expect images opposing stricter gun control laws to trigger emotions of anger at a perceived unjust loss of civil liberty (Kühne 2014) and fear at a perceived loss of self-protection (Powell et al. 2019). These discrete emotional responses to the multimodal stimuli are expected to lead to issue agreement in line with the perceived frame (i.e., mediation). Thus, we predict the following:

Hypothesis 5 (H5): Multimodal political communication elicits issue-congruent discrete emotional responses, which in turn affects issue agreement congruent with the multimodal stimulus.

We test our hypotheses and RQ for two different political issues: gun control and refugees. Two topics were used in this study to ensure the robustness of the findings, since the choice of news topic could affect selective exposure and issue agreement. Although both issues are surrounded by partisan disagreement, they differ on a number of factors. Prior to the COVID-19 crisis, most U.S. citizens perceived immigration as the most important national issue, considerably more important than gun control (Gallup 2020). However, partisan disagreement on how the issue is interpreted is fierce: 57 percent of Republicans report that opening up the borders will harm American identity, whereas the vast majority of Democrats (86 percent) say open borders are central to U.S. identity (Pew Research Center 2019a).

Gun control is also surrounded by partisan disagreement, although the majority (60 percent) of citizens feel that gun control should be stricter (86 percent Democrats, 31 percent Republicans; Pew Research Center 2019b). In addition, the issue of gun control may be perceived as more personally relevant and closer than the issue of refugees: 44 percent of Americans know someone who has been shot (Pew Research Center 2019b), and there have been many examples of recent school shootings in which U.S. citizens were targeted. In this setting, we ask to what extent participants' multimodal news selection and effects are similar or different for these two issues.

Method

Design

A mixed between- and within-subjects experimental design was used. This included three between-subjects factors in a 2 (political news item: image present versus absent) \times 2 (nonpolitical news items: images present versus absent) \times 3 (attitude congruence of political news item: pro-attitudinal versus counter-attitudinal versus balanced) factorial design. These three factors resulted in 12 different conditions, which are shown in the Supplementary Information file in a flowchart (Table D1) and in a table (Table D1), which details each condition and the number of participants in each cell of the design. The topic of the news item was a within-subjects factor: all participants were exposed to two realistic online newsfeeds (one for each topic of refugees and gun control, with the order counterbalanced), each containing *three* different news items—one about politics and the other two about sports and entertainment.

To assess whether selection could be influenced by the presence of visuals, we identified issues that would resonate with people's existing attitudes and issue understanding. Therefore, the experiment was situated in the context of two highly salient and polarizing issues in the United States: gun control and refugee resettlement. The attitudinal stance (editorial slant) of the political news items on these issues was first manipulated into pro-issue (pro-refugee, pro-gun control), anti-issue (anti-refugee, anti-gun control), and balanced (offering both pro- and anti-sides) presentations. Selected images were then paired with these issue stances so they would be congruent with the articulated issue position.

The experiment proceeded in two dependent steps: selection and then (optional) exposure to a self-selected political news item. In the first step, participants saw three headlines for the different news items listed in a newsfeed—accompanied by an image in the multimodal conditions—of which only one headline was about politics and the other two about sport and entertainment (positions varied randomly). They were instructed to imagine they came across these news items in a newsfeed in everyday life (Facebook or a news website), then to select one of the three items they would most likely choose to read. Similar to a real newsfeed, participants could click on these previews, indicating they would like to read the full article.

Exposure to these self-selected articles took place in the second phase of the experimental design. How did self-selection to political news in a cue-rich newsfeed affect subsequent emotions and issue agreement? When respondents selected a political news item in the newsfeed, they were forwarded to the full article. When they selected the sport or entertainment item, and thus did not select the politics option, they were not forwarded to read an article. Here, it should be noted that the sports and entertainment options only concerned news item selection and not subsequent exposure to the complete articles. This part of the design produces results are to some extent endogenous to selection: We only moved on to the effects part of the experiment with people who decided to select political news—the results are thus dependent on participants' selection behavior (see Table D1 in the Supplementary Information file for the number who selected into political news items). That said, exposure to pro-, balanced-, or counter-attitudinal content and multimodal or textual communication was still randomly allocated in the first part of the design.

Sample

Participants were recruited by an international research sampling company, Survey Sampling International. In total, a varied sample of 1,159 U.S. citizens completed this study. Calculating a post hoc power test, using the sample size of our experiment and parameters for small effect sizes, we arrive at the statistical power above the acceptable level of .80. Quotas on age ($M = 39.96$), gender (56.3 percent female), ideology, and education were used to ensure variety in political leanings and demographics.

To construct the attitudinal congruence independent variable, at the start of the experiment participants answered two 7-point attitude items about whether they (1) support or oppose refugees coming to the United States, and (2) support or oppose stricter gun laws. Those who responded neither support or oppose (score of 4) were removed from the study and thanked for their interest. A quota ensured that there was a sufficient number of participants in the sample with prior attitudes both in opposition to (score of 1 to 3) and support of (score of 5 to 7) refugees resettlement (support $n = 658$, oppose $n = 501$) and stricter gun laws (support $n = 711$, oppose $n = 448$).

Independent Variables and Stimuli

The political news items, surrounded by a sport and entertainment item in the two newsfeeds participants saw, addressed gun control and refugees entering the United States. The independent variable of attitude congruence was manipulated by varying the attitudinal stance of the political headlines for the two topics: for the example of gun control, pro-issue framing entailed the position that policy on gun control should be more restrictive. The balanced option, by contrast, described that opinions on gun control were still divided. Headlines for the counter-issue framed condition claimed that restrictive gun laws do not work. The selected headlines were based on actual headlines from online news articles around the time of the experiment (see Table A1 in the Supplementary Information file for an overview of all headlines used in all conditions). Despite these headlines differing in terms of whether they contain, for example, empirical or normative claims, an extensive pilot test ensured that the headlines were perceived similarly in terms of their issue stance, perceived arousal, salience, and complexity (see below). The attitudinal stance of the headline was then compared with the prior attitude of each participant on the topics of refugees and gun control to achieve the attitude congruence variable (congruent, incongruent, balanced).

In the online newsfeed, the presence of visuals (multimodality) was manipulated by adding images to the headlines. Depending on the condition, both the entertainment and sport headline came with a visual, or both did not, and the political item was also varied in terms of whether a visual was added. All images (political, sports, entertainment), were obtained from actual news stories. The political images were taken from stories on the topic of refugees or gun control that conveyed a clear pro- or anti-issue perspective.

Since news images can visually frame a topic in a certain way (Krause and Bucy 2018; Messaris and Abraham 2001), we ensured that the images included to achieve the multimodality condition always matched the manipulated attitudinal stance of the political news headline. In this way, the multimodality condition conveyed the same central meaning as the text-only news items but included extra visual cues that may draw the attention of readers and influence selection. To give one example, the headline “Refugees not welcome here, governors of 16 states say” was accompanied by an image of a refugee about to throw a stone toward a border fence—illustrating potential negative consequences of hostile refugees. See Figures B1 to B4 in the Supplementary Information file for more stimuli examples.

Multiple headline and image exemplars were used for the issue stances. Although including story repetitions enhances external validity, this choice can introduce potential confounds beyond the manipulation of the independent variable. To control for confounds and conduct a check of the issue-stance manipulations, both the headlines and the images in these political news items were subject to a pilot test using Amazon’s Mechanical Turk platform ($n = 228$). In the pilot test, we asked participants to rate a large array of political headlines and images for the gun control and refugee issues. The images and headlines selected for the final study were perceived as (1) congruent with the desired issue position (pro-issue versus anti-issue, $p < .05$ for both refugees and gun control), and (2) equally arousing, (3) salient, and (4) complex (pro-issue versus anti-issue versus balanced, all $p > .05$ for both refugees and gun control).

The nonpolitical news items focused on sport and entertainment, which are commonly used in studies of selective exposure (Prior 2007). Care was taken to ensure that people were portrayed in the images. This way, we matched the political news items that also portrayed people. The authors also critically assessed each image to avoid choosing sports and entertainment items that were overly sensational or attention-grabbing. This was to ensure that the observed selection of news items was based on their intended genre, and not accidentally seen as political, particularly attention-grabbing, or sensational. This decision was also motivated by previous studies showing that the presence of entertainment or sport items can pull substantial numbers from selecting political news (Feldman et al. 2013; Prior 2007). The political news items were selected 68.5 percent of the time (68 percent for refugees, 69 percent for gun control) compared with entertainment and sports items, which were chosen just 31.5 percent of the time. The layout of the news items followed the design of Facebook, including buttons for likes, shares, and comments (see Figures B1 to B4 in the Supplementary Information file for stimuli examples).

Each participant saw one newsfeed for each topic (refugees and gun control), whose composition depended on assignment to one of the 12 experimental conditions. All newsfeeds contained three news items—one political, one sports, and one entertainment oriented. We created multiple different sets of the newsfeeds to ensure results were not influenced by particularities of specific image-headline pairings, thereby maximizing internal validity (see Appendix E in the Supplementary Information file for a detailed explanation).

If participants chose a political news item in their assigned newsfeed for each topic, they were then asked to read the corresponding political article(s). We created a news article for each possible combination of headline and image pairing. Each article contained the headline and image (if present) from the selected political news item and a main text outlining pro-, anti-, and balanced issue arguments. (See Figures C1 to C6 in the Supplementary Information file for examples of articles about the refugee and gun control issues.) The articles were also subject to manipulation checks, which showed the attitudinal stance or editorial slant of the article was manipulated successfully. Participants rated pro-, balanced, and anti-issue articles as significantly different in their level of perceived support of (refugees: $p < .001$; gun control: $p < .001$) and opposition to (refugees: $p < .001$; gun control: $p < .001$) the issue at hand.

Procedure

All participants entered the online survey environment via an e-mail invitation sent by the sampling company. After completing the informed consent procedure, participants answered a short battery of items measuring demographics, political perceptions, and prior attitudes toward refugees and gun control (screen-out questions).

Following these questions, participants who qualified for the study were forwarded to the experimental section and randomly assigned to one of the experimental conditions (newsfeeds) for the first topic. The experimental portion of the study consisted of two parts. First, all participants were shown a realistic social media environment

where there were three items they could select (politics, sports, or entertainment), with images added to the items depending on the condition. Two screens were shown one after another for the two political issues (refugees and gun control), and assignment to conditions was randomized and counterbalanced.

The second step of the experiment was conditional on selective exposure: only when people actually decided to select a post with political content did they proceed to the next part of the study, which included an article on the topic followed by measures on the dependent variables: issue agreement and discrete emotions, which were measured separately for each article. If no political post was selected (i.e., only sports or entertainment items), then no articles were shown. After this phase, participants were thanked and debriefed.

Dependent Variables

First, selective exposure to political news was directly measured by participants' selection behavior. For both refugee and gun control issues, respondents were asked to select one of the three items they would most likely choose to read. The dependent variable selection thus had two levels: not selected or selected (0 or 1). Refugee topic, $M = .68$, $SD = .47$. Gun control topic, $M = .69$, $SD = .46$.

Second, when participants selected a political news item and subsequently viewed an article, issue agreement was measured using the following item on a 7-point scale: "To what extent did you agree with the arguments presented by the article you just read?" (Refugee agreement: $M = 4.41$, $SD = 1.82$. Gun control agreement: $M = 5.46$, $SD = 1.94$).

Measuring Discrete Emotions

After exposure to the news articles, participants were asked to indicate the extent to which they experienced six discrete emotions (again using a 7-point scale where 1 = "not at all" and 7 = "extremely"). These emotions were tapped with eleven items that were combined to form the following scales: *fear* (afraid, frightened; refugees: $M = 2.59$, $SD = 1.62$; guns: $M = 2.80$, $SD = 1.68$), *anger* (angry, furious; refugees: $M = 3.28$, $SD = 1.79$; guns: $M = 3.30$, $SD = 1.80$), *sympathy* (sympathetic, compassionate; refugees: $M = 4.13$, $SD = 1.84$; guns: $M = 3.16$, $SD = 1.67$), *disgust* (disgusted, appalled; refugees: $M = 3.49$, $SD = 1.88$; guns: $M = 3.24$, $SD = 1.84$), *distress* (distressed, upset; refugees: $M = 3.29$, $SD = 1.69$; guns: $M = 3.26$, $SD = 1.68$), and *surprise* (single item; refugees: $M = 2.47$, $SD = 1.65$; guns: $M = 2.47$, $SD = 1.66$).

Analysis Strategy

Binary logistic regressions were performed for the analyses focused on the selection of multimodal news (H1, H2, and RQ1). Analysis of variance was used to analyze the effects of the independent variables on the ordinal issue agreement variable (H3 and H4). Mediation analysis was used to assess whether the discrete emotions mediated the

effect of political images on issue agreement (H5). This was performed using Hayes' PROCESS macro in SPSS (Hayes 2017; Model 4) with 95 percent bias-corrected bootstrap confidence intervals based on 5,000 bootstrap samples.

Results

Selecting Political News in a Cue-Rich Information Environment

When collapsing across the nonpolitical news items conditions, we expected that political news items containing an image would be selected more often than items without an image (H1). For political news items on refugees, the presence or absence of images on the political post did not affect the likelihood of selection, $b = .13$, $\text{Exp}(B) = 1.15$, $SE = .154$, $p = \text{n.s.}$ The same results were found for the topic of gun control, $b = -.08$, $\text{Exp}(B) = .93$, $SE = .16$, $p = \text{n.s.}$ Irrespective of the topic, adding an image to the political news item did not increase the likelihood of selection into political news. These results do not offer support for H1.

However, and in line with H2, our findings indicated that the nonpolitical news context does matter for selection into political news. More specifically, for news items on refugees, and collapsing across the political news item conditions, political posts are significantly *less* likely to be selected when images are present in the sports and entertainment posts compared with when images are not present in them, $b = -.31$, $\text{Exp}(B) = .73$, $SE = .16$, $p = .045$. This result was not present for the gun control issue, $b = -.09$, $\text{Exp}(B) = .92$, $SE = .16$, $p = \text{n.s.}$ This provides partial support for H2 on the distracter role of images in adjacent nonpolitical stories (see Table 1).

Confirmation Biases in Selective Exposure to Multimodal Political News

In the next steps, we test whether presence of an image influences selective exposure into attitudinal congruent or cross-cutting political news (RQ1). Our findings indicate that, for news on both refugees, $b = .83$, $\text{Exp}(B) = 2.30$, $SE = .20$, $p < .001$, and gun control, $b = .44$, $\text{Exp}(B) = 1.56$, $SE = .19$, $p = .021$, there is a significant main effect of attitudinal congruence on selection. News that confirms prior attitudes is most likely to be selected (see Figure 1 and Table 2).

Beyond this confirmation bias, there is an image-by-congruence interaction for both issues, refugees, $b = .84$, $\text{Exp}(B) = 2.32$, $SE = .39$, $p = .033$, and gun control, $b = .73$, $\text{Exp}(B) = 2.07$, $SE = .38$, $p = .059$. Compared with no image, the presence of an image *strengthens* selective exposure based on confirmation bias—avoidance of incongruent news items and selection of congruent news items (see Figure 1 and Table 2). Specifically, when an image was not present in the political news item, congruent news items were selected 68 percent (gun control) and 72 percent (refugees) of the time, compared with 66 percent (gun control) and 62 percent (refugees) for incongruent items. When an image was present, congruent news was selected 75 percent (gun control) and 81 percent (refugees) of the time compared with 58 percent (gun control) and 55 percent (refugees) for incongruent items. To answer RQ1, then, the presence of

Table 1. Mean Likelihood of Selection of the Political News Item for the Refugee and Gun Issues.

	Refugee issue			Gun issue		
	Political image			Political image		
	Present	Absent	Total	Present	Absent	Total
Nonpolitical images						
Present	.66 (.48) 196	.63 (.48) 193	.64* (.48) 389	.66 (.47) 192	.70 (.46) 193	.68 (.47) 385
Absent	.72 (.45) 192	.70 (.46) 191	.71* (.45) 383	.71 (.46) 194	.69 (.46) 191	.70 (.46) 385
Total	.69 (.46) 388	.66 (.47) 384	.68 (.47) 772	.68 (.47) 386	.70 (.46) 384	.69 (.46) 770

Note. Scale ranges from 0 to 1. Logistic regression model fit: Nagelkerke $R^2 = .01$. Each cell includes mean, (SD), and n . Comparing the presence/absence of a political image and the presence/absence of nonpolitical images. A main effect of nonpolitical images for the refugee issue is shown. Significant differences between cells shown by * ($p < .05$, two-tailed).

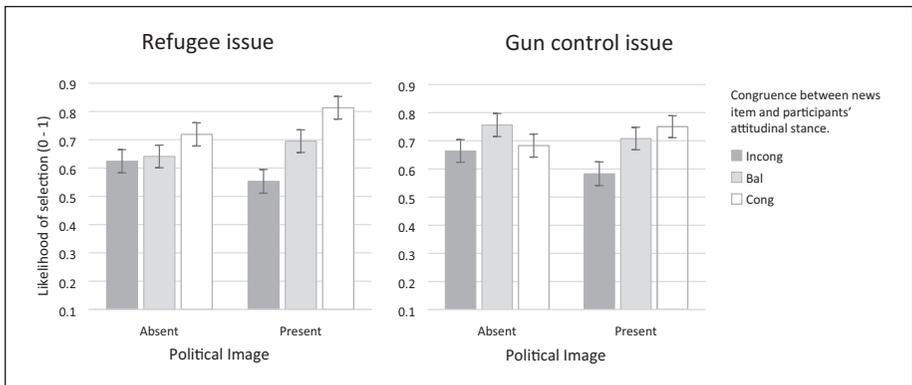


Figure 1. Mean likelihood of selection of the political news item, with standard error bars. Note. Comparing the presence/absence of a political image (x axis) and congruence between news item and participants' attitudinal stance. A main effect of congruence, and an image-by-congruence interaction is shown for both the refugee and gun control topics. The interaction indicates that the effect of attitude congruence is increased when an image is added to the political post.

an image in the political selective exposure setting stimulates attitude-congruent rather than cross-cutting selective exposure.

In addition, for the gun control issue, a significant three-way interaction between the presence of an image, nonpolitical images, and congruence was observed, $b = 1.68$, $\text{Exp}(B) = 5.39$, $SE = .78$, $p = .031$. Inspection of the between-group differences shows

Table 2. Mean Likelihood of Selection of the Political News Item for the Refugee and Gun Issues.

Political item attitude-congruence		Refugee issue			Gun issue						
		Political image			Political image						
		Y	N	Total	Y	N	Total				
Congruent	Nonpolitical images	Y	.81 (.39) 69	.68 (.43) 62	.75 (.44) 131	Nonpolitical images	Y	.75 (.44) 76	.66 (.48) 73	.70 (.46) 149	
		N	.82 (.39) 65	.76 (.43) 66	.79 (.41) 131		N	.75 (.44) 60	.72 (.45) 53	.73 (.44) 113	
		Total	.81 (.39) 134	.72 (.45) 128	.77 (.42) 262		Total	.75 (.43) 136	.68 (.47) 126	.72 (.45) 262	
	Balanced	Nonpolitical images	Y	.60 (.49) 66	.59 (.50) 66	.60 (.49) 132	Nonpolitical images	Y	.69 (.47) 65	.71 (.46) 63	.70 (.46) 128
			N	.78 (.41) 65	.69 (.47) 65	.74 (.44) 130		N	.72 (.45) 65	.80 (.41) 64	.76 (.43) 129
			Total	.69 (.446) 131	.64 (.48) 131	.67 (.47) 262		Total	.71 (.46) 130	.76 (.43) 127	.73 (.44) 257
Incongruent		Nonpolitical images	Y	.54 (.50) 61	(.49) (.49) 65	.58 (.50) 126	Nonpolitical images	Y	.49 (.50) 51	.75 (.43) 57	.63 (.49) 108
			N	.56 (.50) 62	.63 (.49) 60	.60 (.49) 122		N	.65 (.48) 69	.59 (.49) 74	.62 (.49) 143
			Total	.55 (.50) 123	.62 (.49) 125	.59 (.49) 248		Total	.58 (.50) 120	.66 (.47) 131	.63 (.48) 251

Note. Accounting for attitude congruence of the political news item (congruent, balanced, incongruent) and presence (Y) and absence (N) of images in the political and non-political news items.

that when there are nonpolitical distracter images (compared with no distracter images), the presence of an image on the political post leads to more *avoidance* of incongruent news (see Table 2). Thus, when placed in a busy and multimodal information environment, images are especially useful cues for selectively avoiding uncongential news content.

Table 3. Agreement with the Issue Position Presented by the Political News Article.

	Refugee issue			Gun issue		
	Article image			Article image		
	Present	Absent	Total	Present	Absent	Total
Attitude congruence of news item						
Congruent	5.08 ^a (1.49) 103	5.48 ^a (1.66) 89	5.27 ^a (1.58) 192	6.90 ^a (1.29) 96	6.71 ^a (1.27) 84	6.81 ^a (1.28) 180
Balanced	4.33 ^b (1.28) 91	4.58 ^b (1.52) 79	4.45 ^b (1.40) 170	5.55 ^b (1.59) 91	5.04 ^b (1.66) 90	5.30 ^b (1.64) 181
Incongruent	3.22 ^c (1.85) 65	3.16 ^c (1.95) 75	3.19 ^c (1.90) 140	4.25 ^c (1.88) 65	3.88 ^c (1.82) 84	4.04 ^c (1.85) 149
Total	4.35 (1.69) 259	4.47 (1.96) 243	4.41 (1.82) 502	5.73 (1.88) 252	5.21 (1.97) 258	5.46 (1.94) 510

Note. Scale ranges from 1 to 7. Each cell includes mean, (SD), and n. Significant differences between rows shown by letters in superscript ($p < .05$, two-tailed). Significant differences between columns shown by bold text ($p < .05$, two-tailed).

Effects of Visual Political News on Issue Agreement

For participants who selected political news, and in turn viewed an article on gun control or refugees, we assessed the effects of image presence on issue agreement (H3). On the issue of gun control, exposure to an image plus text ($M = 5.73$, $SE = 1.88$) results in higher levels of agreement with the statements in the narrative compared with exposure to text alone, $M = 5.21$, $SE = 1.97$; $F(1, 504) = 6.15$, $p = .013$, $\eta_p^2 = .01$. For political news on refugees, however, the presence of an image by itself did not have an effect on issue agreement, $F(1, 496) = 1.89$, $p = \text{n.s.}$, also see Table 3. These findings provide partial support for H3: exposure to multimodal communication can make political news more persuasive, but this is not the case for news on refugees. But are the effects of visual communication in multimodal environments contingent upon motivated reasoning (H4)?

For political news on gun control, $F(2, 504) = 122.63$, $p < .001$, $\eta_p^2 = .33$, and refugees, $F(2, 496) = 67.47$, $p < .001$, $\eta_p^2 = .21$, we see a significant, direct effect of attitudinal congruence (see Table 3). Participants agreed more with political news that matched their prior attitudes. However, the two-way interaction for image presence and attitudinal congruence on issue agreement was not significant, neither for political news on refugees, $F(2, 496) = 2.16$, $p = \text{n.s.}$, nor gun control, $F(2, 504) = .472$, $p = \text{n.s.}$ In contrast to the expectation formalized under H4, the persuasiveness of attitude-congruent news does not appear to be influenced by multimodal communication.

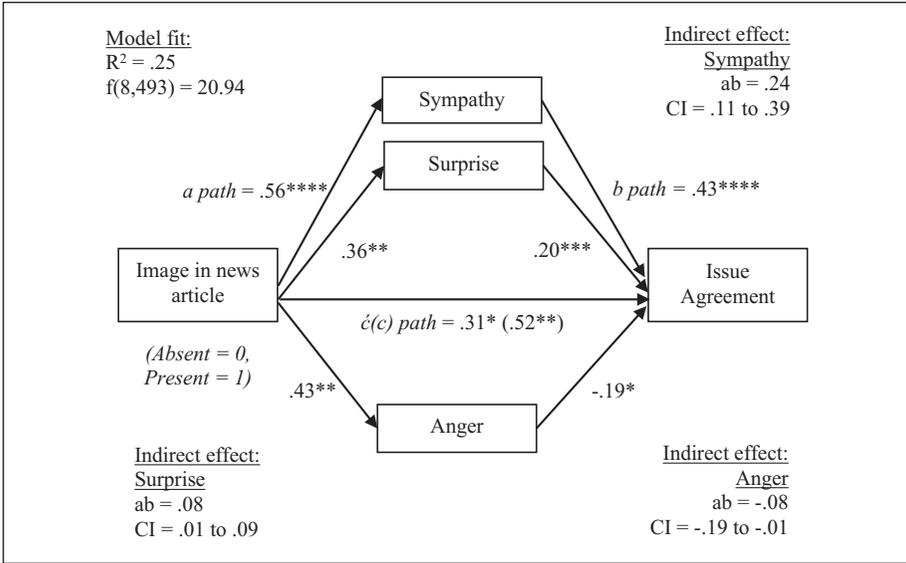


Figure 2. Mediation model for the gun control articles.
 Note. Showing the indirect effects of image presence on issue agreement via different emotions. No indirect effects found for fear, disgust, and distress and these emotions are not shown. CI = confidence interval.
 $*p < .05$. $**p < .01$. $***p < .001$. $****p < .0001$.

The Mediating Role of Discrete Emotions

Finally, we investigated whether the effects of multimodal political communication are mediated by emotional responses (H5). The mediation model depicted in Figure 2 indicates that visual communication in the articles viewed by participants did indeed elicit emotions that predict further responses to political communication. More specifically, for political news on gun control, we see that images evoke sympathy and surprise, which in turn leads to more agreement with the article. In addition, participants who read a gun control article with an image also experienced anger, which in turn decreased agreement with the article. However, for political news on refugees, mediation effects were not found. These findings provide partial support for H5: multimodal communication may evoke discrete emotional responses, which, in turn, predict emotionally congruent issue agreement.

Discussion

This study aimed to improve our understanding of the news selection process in high-choice multimodal online media environments, focusing on (1) selective exposure of political news in a multimodal setting, and (2) the effects of selected multimodal political news on issue agreement and emotions. Our results indicate that the context of the online media environment matters for selective exposure to political news. Contrary to

our expectations, we did not find evidence that using visuals to multimodally frame political news increases the likelihood of selection. However, we show that adding images to the surrounding exposure environment, for example, to sports or entertainment news, draws attention away from politics and makes it more likely that political news is avoided.

Another major finding is that the presence of images in political news items, at least for the refugee resettlement and gun control issues, reinforces confirmation biases (Stroud 2008; Taber and Lodge 2006). Our results indicate that multimodal (compared with textual) political communication increases the likelihood of selective exposure to political news congruent with people's preexisting attitudes. These findings complicate existing research showing that images play a secondary role to text in partisan selective exposure (Powell et al. 2019), something we attribute to this study's comparatively more diverse exposure environment, which contained both political and nonpolitical news items, and news items both with and without images. Therefore, in a rich selective exposure environment, images can have a significant influence over people's interpretation and selection of political news in line with their prior attitudes (Krause and Bucy 2018). This finding may have ramifications for deliberative democracy: At least for the polarizing issues studied here, multimodal communication can reinforce existing divides in the selection behavior of issue publics.

Moving from selection to effects, our results also suggest that images can make a difference when it comes to agreement with political news. In particular, political news on gun control was more persuasive when supported by visuals compared with text alone—those exposed to multimodal communication were more likely to agree with the article and support stricter gun laws than participants exposed to the written narration alone. This finding ties in with the visual framing literature that points to an “amplifying” effect of visuals (Geise and Baden 2015). Images are more attention-grabbing than text and can make meaning and associations more easily accessible in the minds of viewers, which can in turn increase issue agreement (Powell et al. 2015).

In the final step of this experiment, we focused on the affective processing of multimodal political communication. Confirming the theoretical expectation that images evoke more emotional responses than text (e.g., Iyer et al. 2014), we found that political news on gun control elicits discrete emotions of sympathy, surprise, and anger. Sympathy and surprise, in turn, produces more agreement with and support for stricter gun laws. Anger, in contrast, reduces support for stricter gun laws. These findings support the notion that visuals not only evoke emotional responses but may also shape attitudinal responses congruent with the evoked emotional state.

The fact that our findings partially depend on the issues under consideration is worthy of further discussion. We assert that these differences can be explained in terms of the issue-specific differences discussed in the theoretical framework and by interpreting findings across our multiple hypotheses and research question. The distraction effect we found for nonpolitical images for the refugee issue, but not the gun control issue, fits well with the finding of significant effects of images on emotions and issue agreement for the gun control articles, but not for the refugee articles. The inclusion of images with the gun control articles was more emotionally arousing (specifically for anger, surprise

and sympathy) than exposure to articles without images (de los Santos and Nabi 2019). No emotion effects were found for the addition of images to the refugee articles.

It follows, then, that when viewing gun control political news items in a newsfeed, audiences respond with stronger emotions and therefore are likely to select gun control items more often and be less distracted by nonpolitical selection options. In contrast, refugee news items evoked less emotion and participants were significantly more easily distracted. Together with the high personal relevance of gun control to U.S. citizens (Pew Research Center 2019b) and the fact that citizens are more regularly exposed to refugee news (e.g., Gallup 2020), this finding helps explain why participants are more distracted by nonpolitical images when viewing refugee news and respond more powerfully to gun control articles with images. That said, we did not vary the emotional (or nonverbal) intensity of the refugee images themselves, so the demonstration of image influence for this issue awaits more controlled visual presentation.

As with all empirical analyses, this experimental study has some limitations. First, although we aimed to simulate a more realistic media environment compared with studies that only include political options (also see Feldman et al. 2013), our online media environment was limited to one platform (Facebook) and only three messages (sport, politics, and entertainment). One could argue that real-life online media settings contain many more choices, both within and between platforms. However, we aimed to isolate one moment of choice in an everyday newsfeed, incorporating as much variety in genres as could be carefully controlled.

Next, within experimental contexts it can be challenging to manipulate news items in such a way that they perfectly mirror actual news headlines. Accordingly, the headlines presented in the experiment, despite being inspired by actual news stories, might not always present newsworthy events for every participant at the time of viewing, as it can be tricky to rely on current affairs that are still developing, re-use old news items that respondents might have already come across in real life, or create fictional news events with the risk that they are seen as too unrealistic. Such limitations seem inevitable since the main purpose was to manipulate the content of the headlines to represent different issue stances and not vary other elements like subtopics or current affairs that are being addressed.

Moreover, when studying visuals in selective-exposure research, images might not only act as attention-grabbing devices but also present additional context. Although we pilot-tested the visuals used in the study, used multiple stimuli exemplars, counter-balanced our design, and ensured our headlines matched the visuals in terms of issue stance as well as other potential confounding factors, the question of whether the differential effects we found are due to the presence of a visual and not the specific type of image still remains and this should be explored in further research. In addition, the fact that we find important differences across different topics warrants further investigation. Finally, although the effects we observed were significant, the effect sizes were small and therefore require replication to reinforce our conclusions.

Despite these limitations, this study provides important insights into the political consequences of selective exposure in a cue-rich, multimodal online media setting. The key findings indicate that today's multimodal media environment can be a distraction from

selecting political news. Moreover, with the issues studied here, multimodality does not seem to stimulate cross-cutting news exposure; rather, a cue-rich multimodal setting can strengthen citizens' selection into attitudinal-congruent content. Yet, we observed that, regardless of a news article's attitude congruence, multimodal political news leads to stronger reported emotions and higher issue agreement than textual news. Therefore, on a more positive note, those who select political news are more persuaded by emotionally evocative visuals even if the linked story runs counter to prior attitudes. Future research should build on these insights to further explore the factors at play for news selection and effects in multimodal high-choice media settings.

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ORCID iD

Thomas E. Powell  <https://orcid.org/0000-0001-7917-5644>

Supplemental Material

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References

- Arpan, Laura M., Kaysee Baker, Lee Youngwon, Taejin Jung, Lori Lorusso, and Jason Smith. 2006. "News Coverage of Social Protests and the Effects of Photographs on Prior Attitudes." *Mass Communication & Society* 9 (1): 1–20. doi:10.1207/s15327825mcs0901_1.
- Barry, Anne M. 1997. *Visual Intelligence: Perception, Image, and Manipulation in Visual Communication*. Albany: State University of New York Press.
- Brader, Ted. 2005. "Striking a Responsive Chord: How Political Ads Motivate and Persuade Voters by Appealing to Emotions." *American Journal of Political Science* 49 (2): 388–405.
- Casas, Andreu, and Nora W. Williams. 2017. "Images that Matter: Online Protests and the Mobilizing Role of Pictures." *Political Research Quarterly* 72: 360–75.
- Dan, Viorela. 2017. *Integrative Framing Analysis: Framing Health Through Words and Visuals*. New York: Routledge.
- de los Santos, Theresa M., and Robin L. Nabi. 2019. "Emotionally Charged: Exploring the Role of Emotion in Online News Information Seeking and Processing." *Journal of Broadcasting & Electronic Media* 63 (1): 39–58.

- Domke, David, David Perlmutter, and Meg Spratt. 2002. "The Primes of Our Times? An Examination of the "Power" of Visual Images." *Journalism* 3:131–59. doi:10.1177/146488490200300211.
- Feldman, Lauren, Natalie J. Stroud, Bruce Bimber, and Magdalena Wojcieszak. 2013. "Assessing Selective Exposure in Experiments: The Implications of Different Methodological Choices." *Communication Methods and Measures* 7:172–94. doi:10.1080/19312458.2013.813923.
- Festinger, Leon. 1957. *A Theory of Cognitive Dissonance*. Stanford: Stanford University Press.
- Frijda, Nico H. 1988. "The Laws of Emotion." *American Psychologist* 43:349–58.
- Gallup. 2020. "Most Important Problem." <https://news.gallup.com/poll/1675/most-important-problem.aspx> (accessed May 4, 2020).
- Garcia, Mario R., and Margaret M. Stark. 1991. *Eyes on the News*. St. Petersburg: Poynter Institute for Media Studies.
- Geise, Stephanie, and Christian Baden. 2015. "Putting the Image Back into the Frame: Modeling the Linkage between Visual Communication and Frame-Processing Theory." *Communication Theory* 25:46–69. doi:10.1111/comt.12048.
- Grabe, Maria Elizabeth, and Erik P. Bucy. 2009. *Image Bite Politics: News and the Visual Framing of Elections*. Oxford, UK: Oxford University Press.
- Hayes, Andrew F. 2017. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.
- Iyengar, Shanto, and Kyu S. Hahn. 2009. "Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use." *Journal of Communication* 59:19–39. doi:10.1111/j.1460-2466.2008.01402.x.
- Iyer, Aarti, Joanna Webster, Matthew J. Hornsey, and Eric J. Vanman. 2014. "Understanding the Power of the Picture: The Effect of Image Content on Emotional and Political Responses to Terrorism." *Journal of Applied Social Psychology* 44:511–21. doi:10.1111/jasp.12243.
- Knobloch, Silvia, Matthias Hastall, Dolf Zillmann, and Coy Callison. 2003. "Imagery Effects on the Selective Reading of Internet Newsmagazines." *Communication Research* 30:3–29. doi:10.1177/0093650202239023.
- Knobloch-Westerwick, Silvia, Cornelia Mothes, and Nick Polavin. 2017. "Confirmation Bias, Ingroup Bias, and Negativity Bias in Selective Exposure to Political Information." *Communication Research* 47 (1): 104–24.
- Krause, Amber, and Erik P. Bucy. 2018. "Interpreting Images of Fracking: How Visual Frames and Standing Attitudes Shape Perceptions of Environmental Risk and Economic Benefit." *Environmental Communication* 12 (3): 322–43.
- Kühne, Rinaldo. May 2014. "Political News, Emotions, and Opinion Formation: Toward a Model of Emotional Framing Effects." Annual Conference of the International Communication Association (ICA), Phoenix, AZ.
- Lang, Annie, John Newhagen, and Byron Reeves. 1996. "Negative Video as Structure: Emotion, Attention, Capacity, and Memory." *Journal of Broadcasting & Electronic Media* 40 (4): 460–77.
- Lavie, Nilli. 2005. "Distracted and Confused? Selective Attention under Load." *Trends in Cognitive Sciences* 9 (2): 75–82. doi:10.1016/j.tics.2004.12.004.
- Lazarus, Richard S. 1991. *Emotion and Adaptation*. Oxford: Oxford University Press.
- Messariss, Paul, and Linus Abraham. 2001. "The Role of Images in Framing News Stories." In *Framing Public Life*, ed. S. D. Reese, O.H. Gandy and A. E. Grant, 215–26. Mahwah: Erlbaum.

- Messing, Solomon, and Sean J. Westwood. 2014. "Selective Exposure in the Age of Social Media: Endorsements Trump Partisan Source Affiliation When Selecting News Online." *Communication Research* 41 (8): 1042–63.
- Nabi, Robin L. 2003. "Exploring the Framing Effects of Emotion: Do Discrete Emotions Differentially Influence Information Accessibility, Information Seeking, and Policy Preference?" *Communication Research* 30 (2): 224–47.
- Nelson, Douglas L., Valerie S. Reed, and John R. Walling. 1976. "Pictorial Superiority Effect." *Journal of Experimental Psychology: Human Learning and Memory* 2 (5): 523–28.
- Newhagen, John E., and Byron Reeves. 1992. "The Evening's Bad News: Effects of Compelling Negative Television News Images on Memory." *Journal of Communication* 42 (2): 25–41.
- Pew Research Center. 2019a. "Around the World, More Say Immigrants Are a Strength than a Burden." <https://www.pewresearch.org/global/2019/03/14/around-the-world-more-say-immigrants-are-a-strength-than-a-burden/> (accessed May 5, 2020).
- Pew Research Center. 2019b. "Share of Americans Who Favor Stricter Gun Laws Has Increased since 2017." <https://www.pewresearch.org/fact-tank/2019/10/16/share-of-americans-who-favor-stricter-gun-laws-has-increased-since-2017> (accessed May 5, 2020).
- Powell, Thomas E., Hajo G. Boomgaarden, Knut De Swert, and Claes H. de Vreese. 2018. "Framing Fast and Slow: A Dual Processing Account of Multimodal Framing Effects." *Media Psychology* 22 (4): 572–600.
- Powell, Thomas E., Hajo G. Boomgaarden, Knut de Swert, and Claes de Vreese. 2015. "A Clearer Picture: The Contribution of Visuals and Text to Framing Effects." *Journal of Communication* 65 (6): 997–1017.
- Powell, Thomas E., Toni G. L. A. van der Meer, and Carlos B. Peralta. 2019. "Picture Power? The Contribution of Visuals and Text to Partisan Selective Exposure." *Media and Communication* 7 (3): 12–31.
- Prior, Markus. 2007. *Post-broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. Cambridge: Cambridge University Press.
- Scheufele, Dietram A., and David Tewksbury. 2007. "Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models." *Journal of Communication* 57:9–20. doi:10.1111/j.1460-2466.2006.00326_5.x.
- Stroud, Natalie J. 2008. "Media Use and Political Predispositions: Revisiting the Concept of Selective Exposure." *Political Behavior* 30:341–66.
- Taber, Charles S., and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50:755–69. doi:10.1111/j.1540-5907.2006.00214.x.
- Valentino, Nicholas A., Antoine J. Banks, Vincent L. Hutchings, and Anne K. Davis. 2009. "Selective Exposure in the Internet Age: The Interaction between Anxiety and Information Utility." *Political Psychology* 30 (4): 591–613.
- Van Aelst, Peter, Jesper Strömbäck, Toril Aelberg, Frank Esser, Claes de Vreese, Jörg Matthes, David Hopmann, Susana Salgado, Nicolas Hubé, Agnieszka Stepińska, Stylianos Papathanassopoulos, Rosa Berganza, Guido Legnante, Carsten Reinemann, Tamir Sheafe, and James Stanyer. 2017. "Political Communication in a High-Choice Media Environment: A Challenge for Democracy?" *Annals of the International Communication Association* 41:3–27. doi:10.1080/23808985.2017.1288551.
- Wolf, Rita, and Gerald L. Grotta. 1985. "Images: A Question of Readership." *Newspaper Research Journal* 6 (2): 30–36.
- Zillmann, Dolf, Silvia Knobloch, and Hong-Sik Yu. 2001. "Effects of Photographs on the Selective Reading of News Reports." *Media Psychology* 3:301–24. doi:10.1207/S1532785XMEP0304_01.

Author Biographies

Thomas E. Powell is a scientist at the Netherlands Organization for Applied Scientific Research (TNO). His research interests include visual communication, media psychology, news framing, dis- and misinformation, selective exposure, and intelligence analysis.

Michael Hameleers is an assistant professor in Political Communication at the Amsterdam School of Communication Research (ASCoR), University of Amsterdam, the Netherlands. His research interests include populism, framing, disinformation, (affective) polarization, and the role of social identity in media effects.

Toni G. L. A. van der Meer is an assistant professor in Corporate Communication at the Amsterdam School of Communication Research (ASCoR), University of Amsterdam, the Netherlands. His research focuses on crisis communication, news framing, processes of media-tization, misinformation, and (negativity) bias in the supply and demand side of news.