# A Framework for the Study of Persuasion

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**DRAFT**

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# Abstract

Persuasion is a vital part of politics – who wins elections and policy disputes often depends on which side can persuade more people. Given this centrality, the study of persuasion has a long history with an enormous number of theories and empirical inquiries. But it is fragmented, with few generalizable findings. Druckman unifies previously disparate dimensions of this topic by presenting a framework focusing on actors (speakers and receivers), treatments (topics, content, media), outcomes (attitudes, behaviors, emotions, identity), and settings (competition, space, time, process, culture). This "Generalizing Persuasion (GP) Framework" organizes distinct findings and offers researchers a structure in which to situate their work. He concludes with a discussion of the normative implications of persuasion.

**INTRODUCTION**

The study of persuasion has a long and storied history, dating back to Aristotle and the Greeks (Barnes 1984). In the 20th century, social scientists joined modern philosophers and rhetoricians (Foucault 1980, Habermas 1984, Booth 2004) in the pursuit of better understanding persuasion. Like the ancients, modern social scientists focus on how speakers' characteristics, what they say, and how recipients think determine whether a given persuasive attempt is successful. The framework – characterized long ago by Lasswell's (1948) "who says what, to whom, in which channel" – captures how much of the social sciences treat persuasion (e.g., O'Keefe 2016, Lau 2020).

But what, exactly, do we know about persuasion? On the one hand, an enormous knowledge base provides insight into when persuasion may or may not work, and there is clearly no "silver bullet" that always works. On the other hand, the vast literature remains disconnected, sometimes contradictory, and without a structure to facilitate connecting one study with another. This essay aims to remedy the situation by offering a framework for the study of persuasion: the Generalizing Persuasion (GP) Framework. While I focus primarily on political persuasion, the approach can be applied across domains.

**POLITICAL PERSUASION**

Persuasion is "a successful intentional effort at influencing another's mental state through communication in a circumstance in which the persuadee has some measure of freedom" (O'Keefe 2016: 4). The focal approach entails exploring how characteristics of the 1) speaker/source, 2) message, 3) receiver/audience, and 4) channel/medium determine persuasive outcomes (McGuire 1969). Theories have integrated these dimensions by identifying psychological variations that explain the relative influence of each factor. Most notable are the

dual process Elaboration Likelihood Model (ELM) (Petty and Cacioppo 1986, Carpenter 2015) and Heuristic-Systematic Model (Chen and Chaiken 1999). These posit that motivated and able individuals evaluate details of messages while others rely on cues (e.g., source credibility).

Political persuasion scholarship has had a circuitous evolution thanks partially to two books published in 1960. First, *The American Voter* (Campbell et al. 1960) put forth an influential approach (i.e., the funnel of causality) that excludes "non-personal" factors such as communications. Second, Klapper's (1960) review of the early scientific literature concluded that mass communication effects are minimal, undermining researchers' incentives to explore them (Tesler and Zaller 2017: 69).

Slowly but surely theoretical orientations evolved, and evidence accrued such that by the mid-1990s, scholars studied the influence of mass communications and inter-personal exchanges. In 1996, Mutz and her colleagues published an edited volume, making the case that political persuasion should be a *sui generis* topic of study. The subsequent quarter-century has seen substantial advances, culminating in multiple handbooks (e.g., Kenski and Jamieson 2017, Suhay et al. 2020), and meta-analyses (e.g., Lau et al. 2007, Amsalem and Nir 2019, Amsalem and Zoizner 2020, Walter et al. 2020). Further, the politicization of various areas of social life led scholars to expand the study of political persuasion to consumer choices (e.g., Gil de Zúñiga et al. 2014) and science (e.g., Lupia 2013, Bolsen and Druckman 2015).

Despite these developments, the field lacks a coherent theoretical structure. The guiding theory continues to focus on the speaker-message-receiver-channel framework (Holbrook 2011: 150, Sydnor 2019: 9, Lau 2020, Suhay et al. 2020: 3). Despite occasional calls for attention to context, systematic study of competitive scenarios with

strategic persuaders is rare. This is the case even though these settings define much of politics (Druckman and Lupia 2006). We also know little about how political persuaders construct their messages in the first place despite "opinion leader" being one of the first concepts in the field (Lazarsfeld et al. 1944).

The lack of an overarching framework contributes to ostensibly contradictory conclusions. Consider the following statements.

- Politicians are "relatively unconstrained by public opinion and able to shape it merely by announcing their positions" (Broockman and Butler 2017: 208).

- "Our results indicate that participants are more likely to stick with their initial decisions than to change them no matter which reasons are considered" (Stanley et al. 2020: 891).

- "The results from this analysis show quite clearly that campaigns are persuasive" (Flores 2019: 189).

- "Sizable persuasive effects from campaign activities seem very unlikely to be observed…" (Nickerson and Rogers 2020: 1181).

- Evidence "points to the fairly short duration (or rapid decay) of most persuasion effects" (Tesler and Zaller 2017: 79).

- "Media can have durable effects on public opinion that subsequently may influence policy" (Markovich et al. 2020: 25).

Thus, persuasion is unconstrained or extremely limited by prior opinions, campaigns are persuasive or they are not, and persuasive effects taper or endure. To be clear, the above quotes accurately portray conclusions of exemplary studies, and the authors do not over-generalize themselves. Nonetheless, taken together, the statements provide a portrait of a fragmented field – one without an organizing framework that identifies the reasons why studies arrive at distinct conclusions.

**THE GENERALIZING PERSUASION FRAMEWORK**

Even foundational process theories such as the ELM ignore crucial components of persuasion including competition and speaker intent. These approaches make sense for a single study, but as O'Keefe (2016: 184) states, "the task of creating dependable generalizations from such research can be more challenging than might appear at first look."

I propose the *Generalizing Persuasion (GP) Framework* based on what we know about external validity – that is, confidence that a relationship holds over variation in actors, treatments, outcomes, and settings (Shadish et al. 2002: 38, Druckman 2021). This is not meant as a competitor with other theories (such as the ELM), but rather as a framework that fills two gaps. First, it allows one to consider how individual persuasion studies connect to one to another and why one may arrive at contradictory conclusions across studies. Second, it highlights the sources of variations that should be studied. I present the framework in Table 1. Progress will come if studies of persuasion place themselves in the context of the GP framework. This can be done by stating the elements under study and the aspects being held constant. In what follows, I review each element independently: the collective power of the framework will become clear upon revising the aforementioned ostensibly contradictory conclusions.

**[Insert Table 1 About Here]**

**ACTORS**

**Speakers**

Speakers come in a host of guises including elites who devote themselves to politics, media, opinion leaders, and friends and family. Most studies treat the speaker's message as exogenous, focusing on the audience's reactions. This ignores whether the actual speaker (e.g., an elite) has an impact (see Minozzi et al. 2015) and sidesteps the motivations behind the speaker's messaging. The latter reflects the difficulty of studying communicators' decisions.

Consider Druckman and Jacobs' (2015) study of presidential rhetoric; they obtained the private polls from three presidents (Johnson, Nixon, and Reagan) and explored how polling results informed the presidents' public statements. They find that presidents choose their rhetoric to prime the salience of issues on which they are favored and to cater to issue publics (e.g., taking positions on family value issues that align with religious voters) (also see Rottinghaus 2010, Hager and Hilbig 2020). Yet, elite polls are private for a reason and do not always become publicly available for analyses.

Others look at the decisions of media outlets, exploring the influence of market pressures (Bovitz et al. 2002, Hamilton 2004) and ideology (Groeling 2013). It is notoriously difficult, however, to pinpoint the drivers of media decisions (Druckman and Parkin 2005; however, see Lelkes 2020). In their study looking at readers, owners, reporters, and local politicians, Gentzkow and Shapiro (2010) find scant evidence of supply-side incentives shaping the slant of U.S. newspapers. Yet, there are exceptional cases. For example, newspapers with ownership interest in 1996 television deregulation covered the issue in a skewed fashion, suggesting that under some conditions, ownership preferences can shape news coverage (Gilens and Hertzman 2000; also see Bailard 2016, Martin and McCrain 2019).

This work evolved with the media ecosystem to study social media. A robust literature studies the impact of social media on opinions (Settle 2018, Allcott et al. 2020) and how users engage with one another (Bail 2021). Again, what is missing is work on *why* a speaker produces a particular message. This lacuna goes back to work on opinion leaders who are "to whom… the rank-and-file voters typically 'delegate' the main burden of political discussion…" (Berelson et al. 1954: 109). Scholars explore how to identify opinion leaders based on self-reports of

engagement (e.g., Weimann et al. 2007, Ahn et al. 2014). The work also studies opinion leaders on social media or "prosumers" (e.g., Weeks et al. 2017, Mangold and Bachl 2018).

Whether people actual choose the prototypical opinion leader when it comes to information gathering seems unclear, at best. Minozzi et al. (2020) use panel network data to show that people tend to incidentally discuss politics with others who share their demographic characteristics (e.g., gender, race/ethnicity, religion) rather than with purported opinion leaders who are politically interested and knowledgeable. This, in turn, could affect what people learn; for instance, Carlson (2019) shows that people learn less from non-ideal informants relative to "ideal informants" who resemble knowledgeable and trustworthy opinion leaders.

Regardless of these choices, as with other types of speakers, little is known about how opinion leaders or incidental discussion partners formulate their messages. A starting point is to recognize that individuals make statements with particular goals such as objectively informing, persuasion/advocacy, self-expression, self-presentation, or mutual understanding (Greene 1997, Cionea et al. 2017, Carlson 2019). Some recent work identifies the correlates of advocacy (e.g., Akhtar and Wheeler 2016, Cheatham and Tormala 2017). For example, the likelihood of advocacy increases with confidence in one's opinions (Cheatham and Tormala 2015), and a belief that the receiver is open-minded (Teeny and Petty 2021). A next step would be to further unravel what generates self-expression and self-presentation (e.g., Hillman 2010). Along these lines, Kraft et al. (2020) show that the tone of stories differs across media such that new media stories are more negative than shared stories, particularly those shared on e-mail, but also via Twitter and Facebook. The authors explain this media distinction stems from speakers being motivated by self-presentation (and a desire to look positive) (also see Marwick and boyd 2011).

How these distinct speaker motivations influence the success of persuasive efforts remains unclear. It may be that those motivated by advocacy are less successful, as people often have an aversion to those who actively pursue change (Bashir et al. 2013). Ultimately, the hope is to move the study of persuasion from a perspective of a unilateral process of speaker to receiver to one of an exchange between the actors – the reality in many modern political contexts. Moreover, speakers may be more persuasive when they engage in interactions with receivers, as such interactions enhance receivers' feelings of self-efficacy (Levine 2021).

**Receivers**

A common starting point is characterizing the target of a persuasive attempt, classically the receiver's attitude about (i.e., evaluation of) an object. A useful approach, coined the summative or expectancy value model (e.g., Chong and Druckman 2007b, Fishbein and Ajzen 2010), holds that an individual's attitude toward an object is the weighted sum of a series of evaluative beliefs about that object. Specifically, $Attitude = \sum v_i * w_i$, where $v_i$ is the evaluation of the object on attribute $i$ and $w_i$ is the salience weight ($\sum w_i = 1$) associated with that attribute. For example, one's overall attitude, $A$, toward a new housing development might consist of a combination of negative and positive evaluations, $v_i$, of the project on different dimensions $i$. An individual may believe that the project will favor the economy ($i=1$) but harm the environment ($i=2$). Assuming this individual holds a positive value on both the economy and the environment, then $v_1$ is positive and $v_2$ is negative, and his or her attitude toward the project will depend on the relative magnitudes of $v_1$ and $v_2$ discounted by the relative weights ($w_1$ and $w_2$) assigned respectively to each attribute (Nelson and Oxley 1999). This conceptualization applies to any object of evaluation (e.g., issues, candidates, institutions, products) as well as behaviors (e.g., voting, donating, purchasing).

Whether a persuasive attempt succeeds depends on how the receivers assess the message. I highlight three main factors: effort, motivation, and prior attitudes. First, receivers put forth a certain amount of effort in assessing a communication. Dual process models identify effort as a key determinate of whether a receiver scrutinizes the content of message (high effort) or relies on a cognitively simple cue such as the perceived credibility of the speaker (low effort) (Chaiken and Trope 1999). Effort depends on opportunity, ability, and the salience of the topic. For example, Arceneaux and Vander Wielen (2017: 98-105) exposed individuals to mixes of party cues and arguments about whether the federal or local government should control environmental policy. They find that those who put forth greater thought are swayed by the arguments whereas those who exert less effort rely on the party cues. On the more salient issue of government health care, low effort individuals relied on the arguments rather than the cues (also see Boudreau and MacKenzie 2014, De Angelis et al. 2020). Even though politics remains distant for many people, they still assess message content on salient topics.

Second, receivers have motivations or goals: "a cognitive representation of a desired endpoint that impacts evaluations, emotions and behaviors" (Fishbach and Ferguson, 2007: 491). Directional goals involve confirming a specific desired conclusion (e.g., that climate change is a natural process over which humans have little control, or that it is not occurring at all). Non-directional goals, in contrast, are independent from specific conclusions, involving broader objectives like forming an accurate opinion (see Lodge and Taber 2013, Leeper and Slothuus 2014). Many scholars point to directional goals as a reason why persuasion efforts fail (Cotter et al. 2020a,b).

Consider Stanley et al.'s (2020) study that first measured people's opinions on five low salience policy issues (fracking, animal testing, drone strikes, the gold standard, and standardized

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testing). They then (randomly) asked participants to assess affirming, conflicting, or a mix of arguments, after which they again queried their opinions. They conclude "no matter which set of reasons was evaluated, participants were more likely to stick with their initial decisions than to change them" (901). They argue this reflects individuals are motivated to protect their initial opinions, leading them to evaluate contrary (affirming) reasons negatively (positively).

**[Insert Table 2 About Here]**

Directional reasoning takes a variety of forms, as displayed in Table 2. For instance, the Stanley et al. paper posits a belief consistency-seeking goal. One might ask though what respondents would do if the contrary messages had come from their party. Would they stick to their prior beliefs or follow their party (social identity) (Mullinix 2016)? In other situations, individuals seek to confirm their values. For example, Feinberg and Willer (2013) show that messages which frame environmental issues in terms of conservative values of purity and sanctity lead conservatives who typically oppose environmental legislation to become more supportive (see also Wolsko et al. 2016). Other motivations include seeking to agree with those in one's social circle or following descriptive norms in society (e.g., Sinclair 2012).

Extant work rarely theorizes motivations *a priori* or directly documents the presence of a given motivation. Druckman and McGrath (2019) refer to an observational equivalence problem such that scholars infer a directional motivation when a persuasive message fails even though it could be that the message simply was not compelling. For instance, consider the prevailing wisdom that persuasion during high salience (e.g., presidential) campaigns rarely occurs (e.g., Kalla and Broockman 2018). One could conclude that it stems from partisan motivated reasoning where voters seek to only agree with their party (i.e., social group) (Nickerson and Rogers 2020: 1181). Alternatively, it could be that voters aim for accuracy but hold strong prior beliefs, with

an increasing share being "likely to agree with their party on any issues on which they have opinions in the first place" (Kalla and Broockman 2018: 150; c.f., Hillygus and Shields 2008).

Which process occurs matters since in the former case successful persuasion requires altering voters' motivations whereas in the latter it entails convincing voters that candidates share their perspectives (c.f., Little 2021). Isolating the motivation requires manipulating it or directly measuring it (Tappin et al. 2020). For instance, Bayes et al. (2020) distinguish between accuracy motivation, social identity protection, and a value affirmation goal by experimentally inducing each before providing participants with climate change messaging designed to appeal to one of the motivations. They find that Republican participants believed more in climate change when they received a message that facilitated the pursuit of the specific induced motivation (e.g., those with an accuracy motivation were more persuaded by scientific information, those with a value goal were more persuaded by a moral value message).

The final key construct influencing receivers is their standing attitudes: stronger attitudes (e.g., those held with more certainty, confidence, importance, extremity) are more difficult to change (Boudreau and MacKenzie 2014, Howe and Krosnick 2017). This can occur because accuracy motivated individuals have less uncertainty around their beliefs and thus hold a higher threshold to change them (Druckman and McGrath 2019). For example, Druckman and Nelson (2003) find that individuals who hold stronger prior attitudes about campaign finance reform are significantly less likely to be swayed by messages that frame reform as a free speech or minimizing special interest issue. However, just how much of an impact prior attitudes have remains unclear; for instance, Guess and Coppock (2020) offer consistent evidence of persuasion on gun control, minimum wage, and the death penalty regardless of attitude importance or extremity.

Beyond prior attitude strength, scholars might consider the salience of directionally relevant constructs such as social identities, values, and normative expectations. For instance, Girvan et al. (2010) show that information about a normative social consensus (e.g., opinions of friends, family, celebrities) has a particularly strong influence on the vote decisions of high self-monitors – that is, those more likely to make decisions based on social cues (i.e., they value normative expectations). That said, Coppock (2020) finds that political persuasion often occurs "in parallel," meaning that "everyone responds to persuasive information by updating their [prior] views in the same direction [as the information] and by about the same amount" (2). He finds this to be the case among variations in partisanship, age, education, race, gender, etc. (also see Coppock et al. 2020).

In sum, the result of any political persuasion effort hinges on the receiver's effort, the motivation, and prior attitude strength.[1] Existing work rarely considers all three. Some even rely on stereotypical portraits of the public as exerting little effort (Lau 2020), being directionally motivated (Lodge and Taber 2013), and holding weak standing attitudes on most issues (Kinder and Kalmoe 2017). Yet, as the above examples demonstrate, there exists substantial variance in effort, motivation, and attitude strength. Scholars need to avoid being caricatures themselves of low effort, directional motivation, and weak prior expectations, and theorize about how these variables influence persuasion.

**TREATMENTS**

**Topic**

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[1] Some readers may note the exclusion of sophistication from the discussion. While this surely is a causal factor in shaping attitude change, it typically operates through more proximate variables including elaboration (e.g., via ability), motivation (c.f., Taber and Lodge 2006, Tappin et al. n.d.), and attitude strength (Holbrook et al. 2005).

The classical framework considers "what is said" (message content) and on "what channel" (medium). But it ignores something perhaps even more central: the topic. There exist at least four political topical areas. First are persons or groups such as candidates, elected officials, media figures, parties, racial/ethnic groups, etc. Second are public policy issues. A third topical area includes institutions – i.e., norms/rules or organizations – including the government, science, the military, etc. Finally, the rise of political consumerism or private politics has politicized businesses such as when activists try to sway consumers to boycott a business due to poor environmental practices (e.g., Abito et al. 2019).

People process distinct topics differently. For instance, attitudes about individuals are more enduring and less vulnerable to persuasion than attitudes about policies (e.g., Druckman and Lupia 2000). In this vein, McGraw and Dolan (2007) show that when a message personifies the state (e.g., focusing on its leader), people form stronger attitudes than when the message characterizes the state in terms of institutions (e.g., the parliament). Hence topical framing affects attitude strength.

There also exists a substantial variation within "topics." Consider work on the persuasive impact of party cues. Studies suggest that when a party endorses a policy, partisans move their opinions from 3% to 43% of the policy opinion scale (Bullock 2011, 2020). Variation in the policy issues studied partially drives these inconsistent results: there is no sampling from a population of policy issues (e.g., Druckman and Leeper 2012a, Slothuus and Bisgaard 2020). Tappin (2020) studies the impact of party cues across 34 distinct policy questions and finds the impact ranges from 15% (on whether Congress should audit the Federal Reserve) to 1% (on whether police should be required to wear body cameras). This may not explain all the variation, but it clearly plays a role (also see Clifford et al. 2019). Relatedly, variation across topics

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depends on the strength of prior opinions (Bartels 1993), self-interest (Slothuus and Bisgaard 2021), and, as I discuss below, on timing – that is, the extent to which people have already been exposed to arguments on the topic (Druckman and Leeper 2012b).

**Message Content**

Scholarship on the content of persuasive messages is expansive and exasperating. One of the more prominent concepts is "argument quality." As mentioned, when people are able to put forth effort, they scrutinize the argument and it persuades when the argument is considered "high quality" (e.g., Chaiken 1980, Petty and Cacioppo 1986). Identifying what constitutes high quality entails an empirical exercise of asking individuals whether they perceive the argument as strong and cogent rather than weak and specious (Eagly and Chaiken 1993: 311). While this approach helps to document when content receives attention or which message wins out in competition (Chong and Druckman 2007a), it provides scant theoretical insight. In fact, it seems to be an inadequate tautology. It is a tautology since it involves identifying persuasive messages to be persuasive, and it is inadequate because it turns out that "asking respondents about perceived or expected persuasiveness [is] no more informative about relative actual persuasiveness than flipping a coin" (O'Keefe 2018: 133).

Where does that leave the study of message content? I suggest three steps as a way forward. First, tie the study of persuasive messages to the aforementioned model of attitude structure that includes evaluative dimensions, evaluations on those dimensions, and weights applied to each dimension. Different messaging strategies target each of those elements. For instance, framing (or priming/agenda setting) captures altering the dimensions under consideration or the relevant weights, as in the earlier example of

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assessing a housing development on economic and/or environmental grounds. Social scientists have long recognized altering the frame or scope of conflict as a crucial part of politics (e.g., Berelson et al. 1954, Schattschneider 1960, Riker 1986, Baumgartner and Jones 1993). Alternatively, messages can focus on evaluations such as how the housing development will affect the environment.

Second, consider the audience's motivations to isolate whether the message will be effective. Recall the Bayes et al. (2020) study that shows climate change arguments succeed when they align with the audiences' motivation – for example, value framing (e.g., protect the sanctity of the environment) works when receivers seek value affirmation while a science fact message persuades with accuracy motivated receivers (also see van der Linden et al. 2015). This dynamic explains the appeal of targeted messaging crafted to match the recipient's characteristics (e.g., Hillygus and Shields 2008). For example, Matz et al. (2017) show that messages that comport with the audience's level of extraversion or openness to experience enjoy more success in affecting product purchasing behaviors, than mismatched messages (although see Eckles et al. 2018). Targeting in politics, though, may not be an ideal strategy. Hersh and Schaffner (2013) show that targeting specific groups (e.g., Born Again Christians, union members, Latinx respondents) with specialized messages tends not to persuade the group, and backfires among the broader public (also see Ostfeld 2019). Instead of focusing on social groups, more success could come from connecting messages to the audience's goals (e.g., do they care about their values, what others are doing, particular policies, etc.).

Third, another messaging strategy involves altering the audience's motivation (e.g., Mullinix 2016). Consider narrative persuasion: a message format that describes events in chronological order with information about characters acting. Gooch (2018) uses two experiments to show that a personalized narrative from a partisan elite (Joe Biden) can increase support for the discussed issue (social security) among in-partisans and increase the elite's favorability among all partisans (also see Gustafson et al. 2020, Lejano and Nero 2020). Kalla and Broockman (2020a) present evidence from three field experiments on the impact of the "non-judgmentally" exchanging of narratives where the speaker offers portrayals of unauthorized immigrants or transgender people (also see Broockman and Kalla 2016, Kalla and Broockman 2020b). They find, relative to a control placebo (and in one case, arguments alone), the inclusion of the narrative durably reduces exclusionary attitudes towards these groups. Kubin et al. (2021) similarly show that relative to facts, relaying personal experiences, particularly those relevant to the issue at hand and that involve harm/suffering, generates respect across group lines and perceptions of rationality (also see Hagmann et al. 2021).

Personal narratives "transport" the receiver into the story such that they become focused on the world it depicts (e.g., Green and Brock 2000, Busselle and Bilandzic 2009). Hamby et al. (2017) suggest transportation works via retrospective reflection, the recall of self or other relevant memories to validate and extend the story. It consequently can shift the audience away from directional motivations to a focus on connecting with the narrative (e.g., Carpenter 2019: 15). This is not the same as an accuracy motivation but, in essence, it shifts motivations by reducing the need to be protective and allows for persuasion on ego-threatening topics.

**Medium**

Much has changed since Lasswell's (1948) mention of "channel" as one of the key persuasive variables. The political communication environment evolved from newspapers and radio to television to the internet to social media. Researchers have leveraged social media data in remarkably innovative ways to study political communication patterns (e.g., Habel and Theocharis 2020, Persily and Tucker 2020). Here I make two points that have received less attention.

First, the medium by which one receives a message can alter frames, processing goals, and/or effort. For example, in his experiment using the famous first Nixon-Kennedy debate, Druckman (2003) shows that, compared to those who listen to the debate, those who watch it on television rely more on personality assessments in evaluating the candidates (e.g., perceived integrity) and less on issues position assessments. And, this altered overall evaluations (in Kennedy's favor). Here the medium acts as a framing mechanism shifting the criteria of assessment. Althaus and Tewksbury (2002) show that reading *The New York Times* on-line, instead of in printed format, facilitates directional goals because it "draw[s] readers immediately to those stories most likely to fit their information preferences" (182-183). Print readers view international stories on the front-page section (and then see them as more salient) while directionally motivated on-line readers skip over such stories by following links. In this case, the medium prompts distinct goals.

Another such example comes from Druckman et al. (2018), with regard to communication via media segments versus in-person conversations (which I construe as variations in media although one could argue it is about context). They show that exposure to an out-partisan media segment (e.g., Democrats watch a Fox News for drilling for oil) appears to stimulate directionally motivated reasoning such that the audience counter-argues the story and

moves in the opposite direction (e.g., they become more opposed to drilling). In contrast, when individuals watch partisan media and talk with a group that includes out-partisans about the topic (e.g., Democrats talk to Republicans about drilling for oil), they seem to move away from directionally motivated reasoning and become relatively persuaded (e.g., they become less opposed to drilling). The give-and-take of the in-person format stimulates more reflecting thinking that the media format (Wojcieszak 2011: 599).[2]

When it comes to motivation and social media, the results are surprising. Many conclude misinformation on social media stems from directional motivations where partisans believe anything that supports their group (e.g., Flynn et al. 2017: 128, Kahan 2017). Pennycook et al. (2021) show that this is not always the case and, instead, it reflects a lack of effort when it comes to processing social media (c.f., Osmundsen et al. n.d.). When people put in more effort in assessing social media informatiGon, they are less likely to believe false messages and to share them (Bago et al. 2020, Pennycook and Rand 2020). The implication is that simple effort nudges can make a difference: Pennycook et al. (2020) show that asking people to rate the accuracy of a single headline subsequently increases the likelihood of sharing true rather than false posts.

My second point is about the interaction between medium and other variables. For example, considerable debate concerns how persuasive argumentation works on social media (e.g., Guess et al. 2021). Bail et al. (2018) find that exposing Republicans to liberal messages via Twitter leads them to move in a more conservative direction (a backlash effect) while Democrats exposed to conservative Twitter messages move in a liberal direction, but not statistically significantly so. In contrast, Levy (2021) finds no effects on political opinions among partisans

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[2] That said, Kalla and Broockman (2020a) find similar persuasive effects of narratives regardless of whether they are delivered in person, on video, or via a phone.

exposed to counter-attitudinal messages via Facebook.[3] Even though both papers focus on the impact of social media out-party exposure, the differences could stem from variation in other dimensions that affect persuasion. These include treatment medium (respectively, Twitter versus Facebook), sources (retweets from more than 4,000 political accounts versus news outlets), receiver motivation (being paid to follow a Twitter bot/account versus being nudged to subscribe to an outlet that could reveal new perspectives), and settings (receiving 24 messages each day versus choosing whether to comply and view the outlets). Of those variations, the most salient may have been the relative onslaught of oppositional message in Bail et al. (2018), triggering negative reactions (Bail 2021). This differs from the careful engagement likely stimulated in the Levy (2021) study. This comparison provides a microcosm of why one may find conflicting results: when studying messages in a particular medium, it is crucial to consider differences across other variables.

**OUTCOMES**

**Attitudes**

The modal target of persuasion is the receiver's attitude, which has been my implicit focus thus far. Given that, here I make a tangential point. The increasing availability of behavior data due to the internet and social media (e.g., "big data") has led some to minimize the importance of studying attitudes (for discussion, see Matz and Netzer 2017, Miller 2017). This is foolhardy. For one, a tenet of representative democracy is the responsiveness of elected officials to the preferences of the populace (Dahl 1971). Thus, political preferences – regardless of actions based on those preferences – matter. This need not entail Gallup and Rae's (1940) idyllic vision of *The Pulse of Democracy* where polls reveal genuine thoughts to the nation's leaders.

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[3] These contrasting findings reflect a larger set of conflicting results about potential backlash effects (c.f., Porter and Wood 2019, Ma et al. 2019).

Regardless of one's normative stance on what makes for the "best" democracy, politicians attend to opinion surveys and so, practically, they are important (Druckman and Jacobs 2015).[4] Further, as I discuss in the next section, scholars have taken low correlations between attitudes and behaviors as evidence that attitude measures may be insufficient. Yet, in the age of social media data, one must also consider whether the behaviors studied are the "right" behaviors. Put another way, attitude surveys are constrained by sampling issues and non-response (Miller 2017) but those using behavioral data often ignore the "sample" and use whatever social media expressions are available. These may be meaningful but are far from the population of possible behaviors. In short, if attitudes and behaviors do not match, it could be that the wrong behavior is being studied rather than that attitudes do not matter (see Groves 2011: 870).

**Behaviors**

Early studies presumed attitudes straightforwardly explain behaviors (e.g., a voter likes a candidate and so he or she votes for or donates to the candidate). But, as mentioned, "we should not expect that a change in general attitudes… will have much of an impact on any particular behavior…" (Fishbein and Ajzen 2010: 278). To see the implications for persuasion, consider Levine and Kline's (2017) experiment on climate change. They provided recipients with a generic message about taking action to address climate change, a public health message about taking climate change action, or a food risk message about taking climate change action (e.g., prevent food shortages). They find that – in line with the idea that loss frames persuade – the health and food risk message cause people to express more support for clean energy policies and believe climate change should be a policy priority. Yet in an analogous experiment, these types of loss frames depressed climate-relevant behaviors such as joining a climate advocacy group.

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[4] Further, the public themselves look at attitudes of others as pieces of information on which they act (e.g., Moy and Rinke 2012).

The logic is that, relative to a gains frame, the loss frame leads people to support preventing the loss (their attitude) but it also makes salient their own resource constraints leading them to not act (also see Levine and Kline 2019).

This work makes clear that one needs to be careful in identifying the target outcome. There are at least two possible routes when it comes to exploring behavioral outcomes (or judgmental choices). One possibility is to downplay or evade a focus on the attitude-behavior connection if one's goal is to understand behaviors. For example, Groenendyk (2019) shows that a crucial lynchpin for stimulating voting turnout and intentions lies not with resolving attitudinal ambivalence but rather with activating positive "gut feelings." It may be that altering behaviors depends less on attitudes than on motivations and emotions (also see Groenendyk 2016).

Another possibility is to identify the conditions under which attitudes shape behaviors (Fishbein and Ajzen 2010: 278). For example, Druckman and Bolsen (2011) exposed people to pro (e.g., lower energy costs) or con (health risks) arguments about the use of carbon nanotubes (CNTs), an alternative energy source to coal, oil, or natural gas. They also randomly varied whether the arguments included facts, operationalized as a reference to a scientific study (e.g., showing mice who are injected with CNTs react as if they were injected with asbestos, or showing CNTs double the efficiency of solar cells). They find the, regardless of the facts, the frames move attitudes in the predicted direction (e.g., a pro frame leads to more support for the use of CNT). However, the frames only influence behavioral intentions (e.g., likelihood of personally using CNTs) when accompanied by the supporting fact. The accompanying facts increase the certainty with which individuals hold their attitude and that leads people to act on their attitudes.

This study reveals the importance of attitude strength as a driver of behavior (Visser et al. 2006, Howe and Krosnick 2017). More generally, behavior or the intention to engage in a behavior (O'Keefe n.d.) depends on: 1) attitudes/attitude strength, 2) injunctive norms (i.e., if the behavior is desired by important others), 3) descriptive norms (i.e., if other people perform the behavior), 4) perceived behavioral control (i.e., perception of the ease or difficulty of the behavior, including resources constraints), and 5) emotions (Fishbein and Ajzen 2010).[5] Persuaders who hope to influence behaviors need to consider: which of these components matter in a given situation to the receiver(s), which component seems more moveable, and the status of the receiver(s) current intention.

**Emotion**

Emotions – instinctive states emanating from one's situation or mood – are not an explicit part of the attitudinal construct presented above. Yet emotions inform the considerations that drive attitudes or behaviors, and sometimes override conscious considerations driving behaviors (see Marcus 2002: 10-11, O'Keefe 2016: 118-119). Either path makes emotions an important target of persuasion (Albertson et al. 2020).

For example, Clifford and Jerit (2018) provide study participants with messages about an infectious disease that varied the absence or presence of text prompting disgust (e.g., symptoms include bloody diarrhea, boils) and/or anxiety (e.g., high likelihood of spread). They find anxiety messages prompted individuals to request more information about the disease while disgust messages lowered such requests. Brady et al. (2017) show that messages about gun control, same-sex marriage, and climate change that include moral-emotional words (e.g., hate) lead individuals to pass them along in social media (i.e., moral contagion). Other work demonstrates

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[5] These factors come from reasoned action theory. Habit is another predictor as is clear from work on habitual voting (e.g., Malhotra et al. 2011).

the role of negative emotions such as anger in stimulating political action (e.g., Valentino et al. 2011), and how individuals who regulate negative emotions reduce their likelihood of political action (e.g., protesting, donating, volunteering online posting) (Ford et al. 2019).[6] This latter finding suggests that those interested in stimulating action may want to reframe upsetting political events to accentuate personally relevant negative emotions (that can vitiate regulation), although this can also lead to deleterious behaviors (e.g., violence, moral condemnation).

**Identity**

People often base political decisions on their partisan or social identities (Achen and Bartels 2016). Indeed, the implications for one's identity group often serve as a crucial consideration when one forms an attitude. It is thus not surprising speakers often seek to activate or pander to particular identities.[7]

For instance, Levendusky (2018) shows that priming a common national identity can lead opposing partisans to move away from animus and hold more positive feelings towards one another. Klar (2013) looks at issue attitudes; she shows that when receiving a message that makes their partisan identity salient, Democratic parents become more supportive of social service spending regardless of the national deficit (that falls to future generations), less supportive of anti-terrorism spending, and more supportive of releasing sex offenders early to start rehabilitation. In contrast, when the message instead accentuates their parental identity, their policy opinions move in the opposite directions. Klar further shows that the key to activating an identity is threat (i.e., current policies pose a threat to one's partisanship or parental status) (also see Wojcieszak and Garrett 2018, Valenzuela and Reny 2021).

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[6] Positive emotions also can stimulate action; Brader (2006) shows how campaign advertisements that prompt enthusiasm stimulate campaign participation.

[7] Speakers also often target values such as in the moral framing examples above. See Howat (2019) on the relationship between identity and values.

**SETTINGS**

**Competition**

Classical persuasion experiments involve a single speaker sending a message to receivers; there is scant attention to context. Yet, many contexts involve multiple speakers trying to persuade the audience. To see why this matters, consider a typical framing effect such as when people hear that a hate group rally should be thought of as a public safety concern and not be allowed (e.g., Nelson et al. 1997). Invariably, the involved group or another group will argue the rally constitutes a free speech issue and should be allowed. When two arguments clash, they could cancel out (Sniderman and Theirault 2004). Chong and Druckman (2007a), however, argue that competing rhetoric prompts elaboration, leading people to opt for the argument they perceive as stronger. The authors show that if the public safety argument comes from a credible source and the free speech arguments come from a non-credible source, then the public safety perspective sways individuals (although see above discussion on argument strength). Yet, as a general matter, studies of competitive persuasion remain limited in the social sciences (e.g., Della Vigna and Gentzkow 2010: 665).

The number of receivers also matters. The presence of others when someone hears an argument could stimulate normative pressures. Levitan and Verhulst (2016) show that having others nearby shapes how people form their attitudes on issues such as abortion, affirmative action, gay rights, and immigration. Receivers look to see how others react and follow suit (also see Sinclair 2012). Alternatively, if someone observes a persuasive argument targeting someone else, they may learn about its applicability to them. Lupia and McCubbins (1998: 61) suggest the persuasive observer effect such as when a Democrat observer hears a Republican endorse a policy to his/her constituents and subsequently takes the opposite stance. This type of dynamic

partially explains the aforementioned backlash of targeted messages among those not targeted (e.g., Hersh and Schaffner 2013).

**Space**

Many political and social interactions occur in a specific space, and so what happens in one context may not affect attitudes and behaviors in another. This aligns with the prior discussion of outcome variables but concerns the application of a particular outcome in distinct contexts. Consider Mousa's (2020) study of inter-group contact where attitudes can change due to inter-personal exchanges, even if not involving explicit argumentation. Mousa recruited Christian amateur soccer teams in northern Iraq to randomly received three additional Christian players or three additional (displaced) Muslim players. She finds Christian players on teams that added Muslims become more tolerant when it comes to direct interactions with Muslim players – such as training with Muslims or playing on a mixed team in the future. However, they do not become more tolerant of interactions with Muslims not on the teams such as attending neighborhood social events or patronizing Muslim businesses.

Wiest et al. (2015) find a related dynamic in a study of climate change messaging – they find that frames focusing on local (state) conditions alter perceptions of the severity of climate change and support for sub-national policies. However, the frames do not carry over to influence support for policy efforts at the national or global level. These types of findings connect to construal theory where people construe psychologically proximal targets in more concrete terms (e.g., Liberman and Trope 1998). The bottom line is that attitudinal and/or behavioral change in one setting does not generalize to other spatial contexts.

**Time**

Timing matters in a variety of ways – in their review of attitude change, Albarracin and Shavitt (2018) discuss time in terms of a receiver's development, lifespan, and generation. Here I focus on timing in terms of settings – i.e., political arguments occur over-time. Understanding the outcome of persuasion thus requires recognition of what came before. For example, Druckman and Leeper (2012b) show that, among engaged individuals, arguments for a public-funded casino – either pro-arguments focusing on economic benefits or con-arguments focusing on social costs (e.g., addiction) – failed. They failed because these individuals previously had been exposed to the economic argument and had formed strong opinions in favor of the casino. Hearing the economic argument again did not matter and they had already formed strong opinions and rejected the con argument. Such pre-treatment effects make clear that one often must attend to communication over-time to grasp the effects (Gaines et al. 2007, Slothuus 2016).

Druckman et al. (2012) show how early arguments can set opinions in place, leading individuals to seek out confirmatory information, making them more resistant to later arguments. For instance, those exposed to an initial argument for universal healthcare to minimize inequality, subsequently chose to read articles with that framing, and then when exposed later to opposing arguments concerning economic costs, they rejected them. In other circumstances, more recent arguments may win out, particularly among individuals who are averse to elaboration (e.g., Chong and Druckman 2010).

The flip side of "what happened before" is how long a given persuasive effect lasts: a topic considered since Hovland and Weiss's (1951) sleeper effect hypothesis but far from settled (e.g., Albarracin et al. 2017). Related to this is the amount of elapsed time between exposure to the persuasive message and measurement of outcome – sometimes it is immediate while other times it is after a delay. Not that all studies of persuasion need to account for prior and

subsequent dynamics, but they need to situate themselves in time and recognize that timing can alter what persuades.

**Process**

Different settings can trigger distinct decision-making processes. For instance, situations with personal threats alter how individuals receive persuasive messages. Druckman et al. (2021) show that those who felt more threatened by COVID-19 (e.g., more cases in their surroundings) focused on substantive information instead of following messages from their parties.

Groenendyk and Krupnikov (2021) explain the "how it was decided" in politics often assumes an environment rife with conflict and individualism. Yet, another depiction of politics posits a public endeavor of deliberation for a common good (also see Karpowitz and Mendelberg 2014). In this latter situation, individuals move away from directional goals and engage in even-minded assessments (which is not synonymous with accuracy). The authors show settings that privilege open-mindedness (e.g., links it to life success) lead individuals to evaluate arguments counter to their standing beliefs (on gun control) in an open-minded fashion. Individuals also arrive at moderate opinions in response to a mix of arguments. In political settings, by comparison, individuals think of conflict and engage in directional processing. This is particularly the case in the presence of extreme partisan differences (Druckman et al. 2013). An intriguing question, given these results, concerns the impact of various social media and entertainment contexts on processing (e.g., Kim 2019, Baym and Holbert 2020) – when do they prompt directional as opposed to open-minded reasoning in response to arguments?

**Culture**

In recent years, persuasion scholars have come to recognize culture shapes how arguments are made and processed (e.g., Albarracin and Shavitt 2018). For instance, Song et al.

(2020) conducted a survey to assess what individuals viewed as an environmental issue. They find that minorities and low-income respondents perceive several human-oriented issues as environmental. For instance, relative to White people, Black and Hispanic individuals are significantly more likely to identify poverty, unemployment, diabetes, and racism as environmental issues. Those with lower household income are significantly more likely to identify unequal access to education and racism as environmental issues. Presumably, social experiences become embedded in a cultural understanding of what constitutes an environmental issue. This, in turn, matters for persuasion since it shapes the nature of conversations and surely affects what makes for a persuasive argument on these issues.

Stark et al. (2020) show that priming evenhandedness alters attitudes – for instance, reminding labor activists of the possibility of labor campaign contributions leads them to be more supportive of business contributions (i.e., they offer more evenhanded evaluations). Yet, this effect is not nearly as strong in countries that have collectivist cultures (e.g., Asian countries) because evenhandedness considerations are chronically accessible. Here culture generates what could be thought of as a pre-treatment effect.

Soroka et al. (2019) study the impact of negative news content in 17 countries across 6 continents. They find evidence of higher attentiveness and arousal during exposure to negative stories. They also report individual-level variations in reactions; however, these differences do not connect to country-level contextual factors. In this case, there is less evidence of a cultural impact which itself is intriguing given prior research had been concentrated in Anglo-Saxon countries. Clearly, understanding persuasion requires attending the intersection of multiple variables.

**REVISITING CONTRADICTORY CLAIMS**

To see the usefulness of the GP Framework, consider the contradictory statements from earlier in the paper. Broockman and Butler (2017) conclude politicians can shape opinions with ease while Stanley et al. (2020) suggest individuals do not move from their initial opinions regardless of the reasons presented. The studies differ in terms of actors (sources) and settings (timing). The former had statements from legislators and measured change from initial opinions after a substantial amount of time (at least a week). The latter provided arguments without sources and assessed opinions very close in time to the initial reporting of opinions. Flores (2019) states that ballot initiative campaigns are persuasive in his study of television advertisement effects on opinions about the legality of same-sex marriage. Nickerson and Rogers state campaigns have little to no effect; however, their treatment (topic) focuses on candidate elections (as opposed to initiative campaigns) and their outcome of interest is voting behavior (as opposed to an issue attitude). Finally, Tesler and Zaller (2017) base their conclusion about short-lived persuasive effects on evidence from election studies focused on candidate television advertisements altering voting behavior (Gerber et al. 2011, Hill et al. 2013). In contrast, Markovich et al. (2020) suggest effects endure; yet, compared to Tesler and Zaller, they study a distinct outcome (opinions), treatment (legalization of marijuana), medium (on-line news), and actor/speaker (partisan networks).

The claims thus stem from work that differs on multiple dimensions – with all four from the GP Framework being relevant. In fact, in each case, the works differ along at least two of the dimensions, making clear that comparing why studies with the same ostensible focus arrive at contradictory conclusions requires attention to multiple possible differences. The purpose of the GP Framework is to offer scholars a way to proceed when

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they study persuasion, identifying which variables may matter and how their work connects to other research. The goal is to structure the literature in a way that better ensures collective progress. It can be applied by having authors be explicit about which elements they are studying and which they are not (e.g., in a table), thereby allowing others to easily situate the work.

## FINAL THOUGHTS: NORMATIVE CONSIDERATIONS

There is much to say about normative implications and theorists have considered how to treat persuasion from a host of angles (e.g., Garsten 2006, Disch 2011). Here I make two points. First, there exists a long-standing tension between idyllic conceptions of citizenship – as engaged and holding consistent preferences – and the existence of persuasion by political elites. That elites can persuade means the very individuals who supposed respond to "authentic" opinions have an incentive to engage in disinformation and manipulation. This contributes to confusion about salubrious persuasion (learning) versus detrimental manipulation (Druckman 2014). Adding to the complexity is that vaunted engaged citizens are more likely to have directional motivations that makes them averse to open-minded deliberation (e.g., Druckman 2012). If one continues down this line of reasoning, an infinite regress of tradeoffs emerges, making it clear that normative criteria for "good citizenry" and the role of persuasion in that process is inherently subjective, often arbitrary, and empirically challenging (e.g., how to intuit speakers' motivations).

Second, an alternative would be to focus on processes – such as articulating an ideal of accuracy motivated citizens with access to competitive information. This problem here is that accuracy may be a lot to ask for and even if not, accuracy-motivation need not lead to accurate conclusions (Kunda 2001: 238). Moreover, specifying the availability of competitive information

may be doable at the extremes, but ultimately can become arbitrary in terms of what the full range of information includes, particularly given institutional constraints on representation.

Many sidestep normative debates for fear that imposing their own values on to citizens could be elitist (Lupia 2006). Alas, knowingly or not, this is what much scholarship has done. Narratives lead to less exclusionary attitudes even though they can be far from fact-based (van Bavel et al. 2021), moral framing generates support for climate change policy despite including no scientific information, and identity priming can de-polarize without any mention of the need for compromise in politics. In all of these cases, scholars have no ethical issue in studying particular persuasive approaches that could alter opinions because they lead to, respectively, more tolerant, evidence-based, and politically functional outcomes. These each invariably constitute valued democratic collective goods to which governments contribute and thus scholars need not back away from endorsing them and exploring persuasion as a means to these ends.

**DISCLOSURE STATEMENT**

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## LITERATURE CITED

Abito JM, Besanko D, Diermeier D. 2019. *Corporate Reputation and Social Activism*. New York: Oxford Univ. Press.

Achen CH, Bartels LM. 2016. *Democracy for Realists: Why Election Do Not Produce Responsive Government.* Princeton: Princeton Univ. Press.

Ahn TK, Huckfeldt R, Ryan JB. 2014. *Experts, Activists, and Democratic Politics: Are Electorates Self-Educating?* New York: Cambridge Univ. Press.

Akhtar O., Wheeler SC. 2016. Belief in the immutability of attitudes both increases and decreases advocacy. *J. Pers. Soc. Psychol.* 111(4):475-92.

Albarracin DG, Kumkale T, Poyner-Del Vento P. 2017. How people can become persuaded by weak messages presented by credible communicators: not all sleeper effects are created equal. *J. Exp. Psychol.* 68:171-80.

Albarracin D, Shavitt S. 2018. Attitudes and attitude change. *Annu. Rev. Psychol.* 69: 299-327.

Albertson B, Dun, L, Gadarian SK. 2020. The emotional aspects of political persuasion. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Allcott H, Braghieri L, Eichmeyer S, Gentzkow M. 2020. The welfare effects of social media. *Am. Econ. Rev.* 110(3):629-76.

Althaus SL, Tewksbury D. 2002. Agenda setting and the 'new' news: patterns of issue importance among readers of the paper and online versions of the New York Times. *Commun. Res.* 29(2):180–207.

Amsalem E, Nir L. 2019. Does interpersonal discussion increase political knowledge?: a meta-analysis. *Commun. Res.* 009365021986635.

Amsalem E, Zoizner A. 2020. Real, but limited: a meta-analytic assessment of framing effects in the political domain. *Brit. J. Polit. Sci.*, https://doi.org/10.1017/S0007123420000253.

Arceneaux K, Vander Wielen RJ. 2017. *Taming Intuition: How Reflection Minimizes Partisan Reasoning and Promotes Democratic Accountability*. Cambridge: Cambridge Univ. Press.

Bago B, Rand DG, Pennycook G. 2020. Fake news, fast and slow: deliberation reduces belief in false (but not true) news headlines. *J. Exp. Psychol. Gen.* 149(8):1608–13.

Bail C. 2021. *Breaking the Social Media Prism: How to Make our Platforms Less Polarizing.* Princeton: Princeton Univ. Press.

Bail CA, Argyle LP, Brown TW, Bumpus JP, Chen H, Hunzaker MBF, Lee J, Mann M, Merhout F, Volfovsky A. 2018. Exposure to opposing views on social media can increase political polarization. *P. Natl. Acad. Sci. USA* 115(37):9216-21.

Bailard CS. 2016. Corporate ownership and news bias revisited: newspaper coverage of the Supreme Court's *Citizens United* ruling. *Polit. Commun.* 33(4):583-604.

Barnes J, ed. 1984. *The Complete Works of Aristotle: The Revised Oxford Translation*. Princeton: Princeton Univ. Press.

Bartels LM. 1993. Messages received: the political impact of media exposure. *Am. Political Sci. Rev.* 87(2):267-285.

Bashir NY, Lockwood P, Chasteen AL, Nadolny D, Noyes I. 2013. The ironic impact of activists: negative stereotypes reduce social change influence. *Eur. J. Soc. Psychol.* 43(7):614-626.

Baumgartner, FR, Jones, BD. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Bayes R, Druckman JN, Goods A, Molden DC. 2020. When and how different motives can drive motivated political reasoning. *Polit. Psychol.* 41(5):1031-52.

Baym G, Holbert RL. 2020. Beyond infotainment: political-entertainment media and electoral persuasion. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Berelson BR, Lazarsfeld PF, McPhee WN. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: Univ. of Chicago Press.

Bolsen T, Druckman JN. 2015. Counteracting the politicization of science. *J. Commun.* 65(5):745-69.

Booth, W. 2004. *The Rhetoric of Rhetoric: The Quest for Effective Communication*. Oxford: Blackwell.

Boudreau C, MacKenzie SA. 2014. Informing the electorate?: how party cues and policy information affect public opinion about initiatives. *Am. J. Political Sci.* 58(1):48–62.

Bovitz GL, Druckman JN, Lupia A. 2002. When can a news organization lead public opinion?: ideology versus market forces in decisions to make news. *Public Choice* 113:127-55.

Brader T. 2006. *Campaigning for Hearts and Minds: How Emotional Appeals in Political Ads Work*. Chicago: Univ. of Chicago Press.

Brady WJ, Wills JA, Jost JT, Tucker JA, Van Bavel JJ. 2017. Emotion shapes the diffusion of moralized content in social networks. *P. Natl. Acad. Sci. USA* 114(28):7313-18.

Broockman DE, Butler, DM. 2017. The causal effects of elite position-taking on voter attitudes: field experiments with elite communication. *Am. J. Political Sci.* 61(1):208-21.

Broockman DE, Kalla JL. 2016. Durably reducing transphobia: a field experiment on door-to-door canvassing. *Science* 352(6282):220-24.

Bullock JG. 2011. Elite influence on public opinion in an informed electorate. *Am. Political Sci. Rev.* 105(3):496-515.

Bullock JG. 2020. Party cues. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Busselle R, Bilandzic H. 2009. Measuring narrative engagement. *Media Psychol.* 12(4):321-47.

Campbell A, Converse PE, Miller WE, Stokes, DE. 1960. *The American Voter*. Chicago: The Univ. of Chicago Press.

Carlson, TN. 2019. Through the grapevine: informational consequences of interpersonal political communication. *Am. Political Sci. Rev.* 113(2):325-39.

Carpenter CJ. 2015. A meta-analysis of the ELM's argument quality × type predictions. *Hum. Commun. Res.* 41(4):501-34.

Carpenter CJ. 2019. Cognitive dissonance, ego-involvement, and motivated reasoning. *Ann. of the In. Commun. Assoc.* 43(1):1–23.

Chaiken S. 1980. Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *J. Pers. Soc. Psychol.* 39(5):752-66.

Chaiken S, Trope Y, eds. 1999. *Dual-Process Theories in Social Psychology*. New York: The Guilford Press.

Cheatham L, Tormala ZL. 2015. Attitude certainty and attitudinal advocacy: the unique roles of clarity and correctness. *Pers. Soc. Psychol. B.* 41(11):1537-50.

Cheatham LB, Tormala ZL. 2017. The curvilinear relationship between attitude certainty and attitudinal advocacy. *Pers. Soc. Psychol. B.* 43(1):3-16.

Chen S, Chaiken S. 1999. The heuristic-systematic model in its broader context. In Chaiken S, Trope Y, eds., *Dual-Process Theories in Social Psychology*. New York: The Guilford Press.

Chong D, Druckman JN. 2007a. Framing public opinion in competitive democracies. *Am. Political Sci. Rev.* 101(4):637-55.

Chong D, Druckman JN. 2007b. Framing theory. *Annu. Rev. Polit. Sci.* 10:103-26.

Chong D, Druckman JN. 2010. Dynamic public opinion: communication effects over time. *Am. Political Sci. Rev.* 104(4):663-80.

Cionea IA, Hoelscher CS, Ileş IA. 2017. Arguing goals: an initial assessment of a new measurement instrument. *Commun. Rep.* 301(1):51-65.

Clifford S, Jerit J. 2018. Disgust, anxiety, and political learning in the face of threat: disgust and political learning. *Am. J. Political Sci.* 62(2):266-79.

Clifford S, Leeper TJ, Rainey C. 2019. Increasing the generalizability of survey experiments using randomized topics: an application to party cues. Paper presented at the annual meeting of the American Political Science Association, Washington, D.C.

Coppock A. 2020. *Persuasion in Parallel*. Unpublished Manuscript, Yale University.

Coppock A, Hill SJ, Vavreck L. 2020. The small effects of political advertising are small regardless of context, message, sender, or receiver: evidence from 59 real-time randomized experiments. *Science Adv.* 6(36).

Cotter RG, Lodge M, Vidigal R. 2020a. The boundary conditions of motivated reasoning. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Cotter RG, Lodge M, Vidigal R. 2020b. When, how, and why persuasion fails. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Dahl RA. 1971. *Polyarchy: Participation and Opposition*. New Haven: Yale Univ. Press.

De Angelis A, Colombo C, Morisi D. 2020. Taking cues from the government: heuristic versus systematic processing in a constitutional referendum. *West Eur. Polit.* 43(4):845-68.

Della Vigna S, Gentzkow M. 2010. Persuasion: empirical evidence. *Annu. Rev. Econ.* 2(1):643-69.

Disch L. 2011. Toward a mobilization conception of democratic representation. *Am. Political Sci. Rev.* 105(1):100-14.

Druckman JN. 2003. The power of television images: the first Kennedy-Nixon debate revisited. *J. Polit.* 65(2):559-71.

Druckman JN. 2012. The politics of motivation. *Crc. Rev.* 24(2):199-216.

Druckman JN. 2014. Pathologies of studying public opinion, political communication, and democratic responsiveness. *Polit. Commun.* 31(3):467-92.

Druckman JN. 2021. *Experimental Thinking: A Primer on Social Science Experiments*. New York: Cambridge Univ. Press.

Druckman JN, Bolsen T. 2011. Framing, motivated reasoning, and opinions about emergent technologies. *J. Commun.* 61(4):659-88.

Druckman JN, Fein J, Leeper TJ. 2012. A source of bias in public opinion stability. *Am. Political Sci. Rev.* 106(2):430-54.

Druckman JN, Jacobs LR. 2015. *Who Governs? Presidents, Public Opinion, and Manipulation*. Chicago: Univ. of Chicago Press.

Druckman JN, Klar S, Krupnikov Y, Levendusky M, Ryan JB. 2021. Affective polarization, local contexts, and public opinion in America. *Nature Human Behavior* 5:28-38.

Druckman JN, Leeper TJ. 2012a. Is public opinion stable?: resolving the micro/macro disconnect in studies of public opinion. *Daedalus* 141(4):50-68.

Druckman JN, Leeper, TJ. 2012b. Learning more from political communication experiments: pretreatment and its effects. *Am. J. Political Sci.* 56(4):875-96.

Druckman JN, Levendusky MS, McLain A. 2018. No need to watch: how the effects of partisan media can spread via inter-personal discussions. *Am. J. Political Sci.* 62(1):99-112

Druckman JN, Lupia A. 2000. Preference formation. *Annu. Rev. Polit. Sci.* 3:1-24.

Druckman JN, Lupia A. 2006. Mind, will, and choice: lessons from experiments in contextual variation. In Goodin RE, Tilly C, eds., *The Oxford Handbook of Contextual Polit. Anal.* Oxford: Oxford Univ. Press.

Druckman JN, McGrath MC. 2019. The evidence for motivated reasoning in climate change preference formation. *Nature Climate Change* 9:111-19.

Druckman JN, Nelson KR. 2003. Framing and deliberation: how citizens' conversations limit elite influence. *Am. J. Political Sci.* 47(4):729-45.

Druckman JN, Parkin M. 2005. The impact of media bias: how editorial slant affects voters. *J. Polit.* 67(4):1030-49.

Druckman JN, Peterson E, Slothuus R. 2013. How elite partisan polarization affects public opinion formation. *Am. Political Sci. Rev.* 170(1):57-79.

Eagly AH, Chaiken S. 1993. *The Psychology of Attitudes*. Fort Worth: Harcourt Brace College Publishers.

Eckles D, Gordon RB, Johnson GA. 2018. Field studies of psychologically targeted ads face threats to internal validity. *P. Natl. Acad. Sci. USA* 115(23):E5254–E5255.

Feinberg M, Willer R. 2013. The moral roots of environmental attitudes. *Psychol. Sci.* 24(1):56-62.

Feinberg M, Willer R. 2019. Moral reframing: a technique for effective and persuasive communication across political divides. *Soc. and Pers. Psychol. Compass* 13(12). https://doi.org/10.1111/spc3.12501.

Fishbach A, Ferguson MJ. 2007. The goal construct in social psychology. In Kruglanski AW, and Higgins ET, eds., *Social Psychology: Handbook of Basic Principles*. New York: The Guilford Press.

Fishbein M, Ajzen I. 2010. *Predicting and Changing Behavior: The Reasoned Action Approach*. New York:  Taylor and Francis Group, LLC.

Flores AR. 2019. Persuasion and ballot initiatives: how persuasive were the televised campaign ads on same-sex marriage? *Politics, Groups, and Identities* 7(1):177-93.

Flynn DJ, Nyhan B, Reifler J. 2017. The nature and origins of misperceptions: understanding false and unsupported beliefs about politics. *Adv. Polit. Psychol.* 38(S1):127-50.

Ford BQ, Feinberg M, Lam P, Mauss IB, John OP. 2019. Using reappraisal to regulate negative emotion after the 2016 U.S. presidential election: does emotion regulation trump political action? *J. Pers. Soc. Psychol.* 117(5):998-1015.

Foucault M.  1980.  *Power/Knowledge:  Selected Interviews and Other Writings, 1972-1977*, edited by Colin Gordon. Brighton, Sussex: Harvester Press.

Gaines BJ, Kuklinski JH, Quirk PJ. 2007. The logic of the survey experiment reexamined. *Polit. Anal.* 15(1):1–20.

Gallup G, Rae SF. 1940. *The Pulse of Democracy: The Public-Opinion Poll and How It Works*. New York: Simon & Schuster.

Garsten B. 2006. *Saving Persuasion: A Defense of Rhetoric and Judgment*. Cambridge, MA: Harvard Univ. Press.

Gentzkow M, Shapiro, JM. 2010. What drives media slant?: evidence from daily newspapers. *Econometrica* 78(1):35–71.

Gerber, AS, Gimpel JG, Green DP, Shaw DR. 2011. How large and long-lasting are the persuasive effects of televised campaign ads?: results from a randomized field experiment. *Am. Political Sci. Rev.* 105(1):135-50.

Gil de Zúñiga H, Copeland L, Bimber B. 2014. Political consumerism: civic engagement and the social media connection. *New Media & Soc.* 16(3):488–506.

Gilens M, Hertzman C. 2000. Corporate ownership and news bias: coverage of the 1996 telecommunications act. *J. Polit.* 62(2):369-86.

Girvan EJ, Weaver J, Snyder M. 2010. Elevating norm over substance: self-monitoring as a predictor of decision criteria and decision time among independent voters. *Anal. Soc. Iss. Pub. Pol.* 10(1):321-36.

Goldberg MH, van der Linden S, Maibach E, Leiserowitz A. 2019. Discussing global warming leads to greater acceptance of climate science. *P. Natl. Acad. Sci. USA* 116(30):14804-05.

Gooch A. 2018. Ripping yarn: experiments on storytelling by partisan elites. *Polit. Commun.* 35(2):220-38.

Green MC, Brock TC. 2000. The role of transportation in the persuasiveness of public narratives. *J. Pers. Soc. Psychol.* 79(5):701-21.

Greene JO, ed. 1997. *Message Production: Advances in Communication Theory*. New York: Routledge.

Groeling T. 2013. Media bias by the numbers: challenges and opportunities in the empirical study of partisan news. *Annu. Rev. Polit. Sci.* 16(1):129-51.

Groenendyk E. 2016. The anxious and ambivalent partisan: the effect of incidental anxiety on partisan motivated recall and ambivalence. *Public Opin. Quart.* 80(2):460-79.

Groenendyk E. 2019. Two minds, but one heart: a good "gut" feeling moderates the effect of ambivalence on attitude formation and turnout." *Am. J. Political Sci.* 63(2):368-84.

Groenendyk E, Krupnikov Y. 2021. What motivates reasoning?: a theory of goal-dependent political evaluation. *Am. J. Political Sci.* 65(1):180-96.

Groves RM. 2011. Three eras of survey research. *Public Opin. Quart.* 75(5):861-71.

Guess AM., Barberá P, Munzert S, Yang JH. 2021. The consequences of online partisan media. *P. Natl. Acad. Sci. USA* 118(14):e2013464118.

Guess A, Coppock A. 2020. Does counter-attitudinal information cause backlash?: results from three large survey experiments. *Brit. J. Polit. Sci.* 50(4):1497-515.

Gustafson A, Ballew MT, Goldberg MH, Cutler MJ, Rosenthal SA, Leiserowitz A. 2020. Personal stories can shift climate change beliefs and risk perceptions: the mediating role of emotion. *Commun. Reports* 33(3):121-35.

Habel P, Theocharis Y. 2020. Citizens, elites, and social media: methodological challenges and opportunities in the study of persuasion and mobilization. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Habermas J. 1984. *The Theory of Communicative Action*. Boston: Beacon Press.

Hager A, Hilbig H. 2020. Does public opinion affect political speech? *Am. J. Political Sci.* 64(4):921-37

Hagmann D, Minson JA, Tinsley CH. 2021. Personal narratives build trust across ideological divides. Working Paper, Harvard Kennedy School.

Hamby A, Brinberg D, Daniloski K. 2017. Reflecting on the journey: mechanisms in narrative persuasion. *J. Consum. Psychol.* 27(1):11-22.

Hamilton JT. 2004. *All the News That's Fit to Sell: How the Market Transforms Information into News.* Princeton: Princeton Univ. Press.

Hersh ED., Schaffner BF. 2013. Targeted campaign appeals and the value of ambiguity. *J. Polit.* 75(2):520-34.

Hill SJ, Lo J, Vavreck L, Zaller J. 2013. How quickly we forget: the duration of persuasion effects from mass communication. *Polit. Commun.* 30(4):521-47.

Hillman AL. 2010. Expressive behavior in economics and politics. *Eur. J. of Polit. Econ.* 26(4):403-18.

Hillygus DS, Shields TG. 2008. *The Persuadable Voter: Wedge Issues in Presidential Campaigns*. Princeton: Princeton Univ. Press.

Holbrook AL. 2011. Attitude change experiments in political science. In Druckman JN, Green DG, Kuklinski JH, Lupia A, eds., *Cambridge Handbook of Experimental Political Science*. New York: Cambridge Univ. Press.

Holbrook AL, Berent MK, Krosnick JA, Visser PS, Boninger DS. 2005. Attitude importance and the accumulation of attitude-relevant knowledge in memory. *J. Pers. Soc. Psychol.* 88(5):749-69.

Hovland CI, Weiss W. 1951. The influence of source credibility on communication effectiveness. *Public Opin. Quart.* 15(4):635-50.

Howat AJ. 2019. The role of value perceptions in intergroup conflict and cooperation. *Politics, Groups, and Identities* 10.1080/21565503.2019.1629320

Howe LC., Krosnick JA. 2017. Attitude strength. *Annu. Rev. Psycho.* 68:327-51.

Jaeger CM, Schultz PW. 2017. Coupling social norms and commitments: testing the underdetected nature of social influence. *J. Environ. Psychol.* 51(3):199-208.

Kahan DM. 2015. Climate-science communication and the *measurement problem*. *Adv. Polit. Psychol.* 36(S1):1-43.

Kahan DM. 2017. Misconceptions, misinformation, and the logic of identity-protective cognition. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2973067.

Kalla JL, Broockman DE. 2018. The minimal persuasive effects of campaign contact in general elections: evidence from 49 field experiments. *Am. Political Sci. Rev.* 112(1):148-66.

Kalla JL, Broockman DE. 2020a. Reducing exclusionary attitudes through interpersonal conversation: evidence from three field experiments. *Am. Political Sci. Rev.* 114(2):410-25.

Kalla JL, Broockman DE. 2020b. Which narrative strategies durably reduce prejudice?: evidence from field and survey experiments supporting the efficacy of perspective-getting. Preprint. Open Science Framework. https://doi.org/10.31219/osf.io/z2awt.

Karpowitz C, Mendelberg T. 2014. *The Silent Sex: Gender, Deliberation, & Institutions*. Princeton: Princeton Univ. Press.

Kenski K, Jamieson KH, eds. 2017. *The Oxford Handbook of Political Communication*. New York: Oxford Univ. Press.

Kim E. 2019. Entertaining beliefs in economic mobility. Ph.D. Dissertation, University of Pennsylvania.

Kinder DR, Kalmoe NP. 2017. *Neither Liberal nor Conservative: Ideological Innocence in the American Public*. Chicago: Univ. of Chicago Press.

Klapper JT. 1960. *The Effects of Mass Communication*. Glencoe, IL: Free Press.

Klar S. 2013. The influence of competing identity primes on political preferences. *J. Polit.* 75(4):1108-24.

Kraft PW, Krupnikov Y, Milita K, Ryan JB, Soroka S. 2020. Social media and the changing information environment: sentiment differences in read versus recirculated news content. *Public Opin. Quart.* 84(S1):195–215.

Kubin E, Puryear C, Schein C, Gray K. 2021. Personal experiences bridge moral and political divides better than facts. *P. Natl. Acad. Sci. USA* 118(6):e2008389118.

Kunda Z. 2001. *Social Cognition: Making Sense of People*. (Fourth Printing.) Cambridge, MA: The MIT Press.

Lasswell HD. 1948. The structure and function of communication in society. In Bryson L, e.d., *The Communication of Ideas*. New York: Harper and Brothers.

Lau RR. 2020. Classic models of persuasion. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Lau RR., Sigelman L, Rovner IB. 2007. The effects of negative political campaigns: a meta-analytic reassessment. *J. Polit.* 69(4):1176–209.

Lazarsfeld PF, Berelson B, Gaudet H. 1944. *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*. New York: Duell, Sloan and Pearce.

Leeper TJ, Slothuus R. 2014. Political parties, motivated reasoning, and public opinion formation. *Adv. Polit. Psychol.* 35(S1):129-56.

Lejano RP, Nero SJ. 2020. *The Power of Narrative: Climate Skepticism and the Deconstruction of Science*. New York: Oxford Univ. Press.

Lelkes Y. 2020. National and cross-national perspectives on political media bias. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Levendusky M. 2018. Americans, not partisans: can priming American national identity reduce affective polarization? *J. Polit.* 80(1):59-70.

Levine AS. 2021. "Single conversations expand practitioners' use of research: evidence from a field experiment." *PS-Polit. Sci. Polit.* doi:10.1017/S1049096520002000.

Levine AS, Kline R. 2017. A new approach for evaluating climate change communication. *Climatic Change* 142(1-2):301-9.

Levine AS, Kline R. 2019. Loss-framed arguments can stifle political activism. *J. Exp. Polit. Sci.* 6(3):171-79.

Levitan LC, Verhulst B. 2016. Conformity in groups: the effects of others' views on expressed attitudes and attitude change. *Polit. Behav.* 38(2):277-315.

Levy R. 2021. Social media, news consumption, and polarization: evidence from a field experiment. *Am. Econ. Rev.* 111(3):831-70.

Liberman N, Trope Y. 1998. The role of feasibility and desirability considerations in near and distant future decisions: a test of temporal construal theory. *J. Pers. Soc. Psychol.* 75(1):5-18.

Little AT. 2021. Directional motives and different priors are observationally equivalent. Unpublished Paper, University of California, Berkeley.

Lodge M, Taber CS. 2013. *The Rationalizing Voter*. New York: Cambridge Univ. Press.

Lupia A. 2006. How elitism undermines the study of voter competence. *Crc. Rev.* 18(1-2):217-32.

Lupia A. 2013. Communicating science in politicized environments. *P. Natl. Acad. Sci. USA* 110 (Supplement 3):14048-54.

Lupia A, McCubbins MD. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* New York: Cambridge Univ. Press.

McGraw K, Dolan TM. 2007. Personifying the state: consequences for attitude formation. *Polit. Psychol.* 28(3):299-327.

McGuire W. 1969. The nature of attitudes and attitude change. In Lindzey G, Aronson E, eds., *The Handbook of Social Psychology*. Reading, MA: Addison-Wesley.

Ma Y, Dixon G, Hmielowski JD. 2019. Psychological reactance from reading basic facts on climate change: the role of prior views and political identification. *Envir. Commun.* 13(1):71–86.

Malhotra N, Michelson MR, Rogers T, Valenzuela AA. 2011. Text messages as mobilization tools: the conditional effect of habitual voting and election salience. *Am. Polit. Res.* 39(4):664-81.

Mangold F, Bachl M. 2018. New news media, new opinion leaders?: how political opinion leaders navigate the modern high-choice media environment. *J. Commun.* 68(5):896-919.

Marcus GE. 2002. *The Sentimental Citizen: Emotion in Democratic Politics*. Univ. Park, PA: The Pennsylvania State Univ. Press.

Markovich Z, Baum MA, Berinsky AJ, de Benedictis-Kessner J, Yamamoto T. 2020. Dynamic persuasion: decay and accumulation of partisan media persuasion. Paper presented at the annual meeting of the Southern Political Science Association.

Martin G, McCrain J. 2019. Local news and national politics. *Am. Political Sci. Rev.* 113(2):372-384.

Marwick AE, boyd d. 2011. I tweet honestly, I tweet passionately: twitter users, context collapse, and the imagined audience. *New Media Soc*. 3(1):114-33.

Matz, SC, Kosinski M, Nave G, Stillwell DJ. 2017. Psychological targeting as an effective approach to digital mass persuasion. *P. Natl. Acad. Sci. USA* 114(48):12714-19.

Matz, SC, Netzer O. 2017. Using big data as a window into consumers' psychology. *Curr. Opin. Behav. Sci.* 18(December):7-12.

Miller PV. 2017. Is there a future for surveys? *Public Opin. Quart.* 81(S1):205-12.

Minozzi W, Neblo MA, Esterling KM, Lazer DMJ. 2015. Field experiment evidence of substantive, attributional, and behavioral persuasion by members of congress in online town halls. *P. Natl. Acad. Sci. USA* 112(13):3937-42.

Minozzi W, Song H, Lazer DMJ, Neblo MA, Ognyanova K. 2020. The incidental pundit: who talks politics with whom, and why? *Am. J. Political Sci.* 64(1):135-51.

Mousa S. 2020. Building social cohesion between Christians and Muslims through soccer in post-ISIS Iraq. *Science* 369(6505):866-70.

Moy P, Rinke EM. 2012. Attitudinal and behavioral consequences of published opinion polls. In Holtz-Bacha C, Strömbäck J, eds., *Opinion Polls and the Media: Reflecting and Shaping Public Opinion*. London: Palgrave Macmillan UK.

Mullinix KJ. 2016. Partisanship and preference formation: competing motivations, elite polarization, and issue importance. *Polit. Behav.* 38(2):383-411.

Mutz DC, Sniderman PM, Brody RA. 1996. Political persuasion: the birth of a field of study. In Mutz DC, Sniderman PM, Brody RA, eds., *Political Persuasion and Attitude Change*. Ann Arbor, MI: The Univ. of Michigan Press.

Nelson TE, Clawson RA, Oxley ZA. 1997. Media framing of a civil liberties conflict and Its effect on tolerance. *Am. Political Sci. Rev.* 91(3):567-83.

Nelson TE., Oxley ZM. 1999. Issue framing effects on belief importance and opinion. *J. Polit.* 61(4):1040-67.

Nickerson DW, Rogers T. 2020. Campaigns influence election outcomes less than you think. *Science* 369(6508):1181-82.

O'Keefe DJ. 2016. *Persuasion: Theory and Practice*. 3rd Edition. Los Angeles: Sage Publications Inc.

O'Keefe DJ. 2018. Message pretesting using assessments of expected or perceived persuasiveness: evidence about diagnosticity of relative actual persuasiveness. *J. Commun.* 68(1):120-42.

O'Keefe, DJ. N.d. Persuasive message pretesting using non-behavioral outcomes: differences in attitudinal and intention effects as diagnostic of differences in behavioral effects. *J. Commun.* Forthcoming.

Osmundsen M, Bor A, Vahlstrup PB, Bechmann A, Bang Petersen M. N.d. Partisan polarization is the primary psychological motivation behind political fake news sharing on twitter. *Am. Political Sci. Rev.*, Forthcoming.

Ostfeld, MC. 2019. The new white flight?: the effects of political appeals to Latinos on white democrats. *Polit. Behav.* 41(3):561-82.

Pennycook G, Epstein Z, Mosleh M, Arechar AA, Eckles D, Rand DG. 2021. Shifting attention to accuracy can reduce misinformation online. *Nature* https://doi.org/10.1038/s41586-021-03344-2.

Pennycook G, McPhetres J, Zhang Y, Lu JG, Rand DG. 2020. Fighting COVID-19 misinformation on social media: experimental evidence for a scalable accuracy-nudge intervention. *Psychol. Sci.* 31(7):770-80.

Pennycook G, Rand DG. 2020. The cognitive science of fake news. Unpublished Paper, Univ. of Regina.

Persily N, Tucker JA, eds. 2020. *Social Media and Democracy: The State of the Field, Prospects for Reform*. New York: Cambridge Univ. Press.

Petty R, Cacioppo J. 1986. The elaboration likelihood model of persuasion. *Adv. Exp. Soc. Psychol.* 19:123–205.

Porter E, Wood TJ. 2019. *False Alarm: The Truth about Political Mistruths in the Trump Era*. New York: Cambridge Univ. Press.

Riker WH. 1986. *The Art of Political Manipulation*. New Haven: Yale Univ. Press.

Rottinghaus B. 2010. *The Provisional Pulpit: Modern Presidential Leadership of Public Opinion*. College Station: Texas A&M Univ. Press.

Schattschneider EE. 1960. *The Semisovereign People: A Realist's View of Democracy in America*. New York: Holt, Rinehart, and Winston.

Settle JE. 2018. *Frenemies: How Social Media Polarizes America*. New York: Cambridge Univ. Press.

Shadish WR, Cook TD, Campbell DT. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inferences*. Boston: Houghton Mifflin.

Sinclair B. 2012. *The Social Citizen: Peer Networks and Political Behavior*. Chicago: The Univ. of Chicago Press.

Slothuus R. 2016. Assessing the influence of political parties on public opinion: the challenge from pretreatment effects. *Polit. Commun.* 33(2):302-27.

Slothuus R, Bisgaard M. 2020. How political parties shape public opinion in the real world. *Am. J. Political Sci.*, https://doi.org/10.1111/ajps.12550.

Slothuus R, Bisgaard M. 2021. Party over pocketbook?: how party cues influence opinion when citizens have a stake in policy. *Am. Political Sci. Rev.* doi:10.1017/S0003055421000332

Sniderman PM, Theriault SM. 2004. The Structure of political argument and the logic of issue framing. In Saris WE, Sniderman PM, eds., *Studies in Public Opinion*. Princeton, NJ: Princeton Univ. Press.

Song H, Lewis NA, Ballew MT, Bravo M, Davydova J, Gao HO, Garcia RJ, Hiltner S, Naiman SM, Pearson AR, Romero-Canyas R, Schuldt JP. 2020. What counts as an 'environmental' issue?: differences in issue conceptualization by race, ethnicity, and socioeconomic status. *J. of Env. Psychol.* 68 https://doi.org/10.1016/j.jenvp.2020.101404.

Soroka S, Fournier P, Nir L. 2019. Cross-national evidence of a negativity bias in psychophysiological reactions to News. *P. Natl. Acad. Sci. USA* 116(38):18888-92.

Stanley ML, Henne P, Yang BW, Brigard. 2020 F. Resistance to position change, motivated reasoning, and polarization. *Polit. Behav.* 42(3):891-913.

Stark TH, Silber H, Krosnick JA, Blom AG, Aoyagi M, Belchior A, Bosnjak M, Clement SL, John M, Jónsdóttir GA, Lawson K, Lynn P, Martinsson J, Petersen DS, Tvinnereim E, Yu R. 2020. Generalization of classic question order effects across cultures. *Sociol. Method. Res.* 49(3):567-602.

Suhay E, Grofman B, Trechsel AH, eds. 2020. *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Sydnor E. 2019. *Disrespectful Democracy: The Psychology of Political Incivility*. New York: Columbia Univ. Press.

Taber CS, Lodge M. 2006. Motivated skepticism in the evaluation of political beliefs. *Am. J. Political Sci.* 50(3):755-69.

Tappin BM. 2020. Estimating the between-issue variation in party elite cue effects. Working paper. Massachusetts Institute of Technology. https://doi.org/10.31234/osf.io/p48zb.

Tappin BM, Pennycook G, Rand DG. 2020. Bayesian or biased?: analytic thinking and political belief updating. *Cognition* 204:104375.

Tappin BM, Pennycook G, Rand DG. N.d. Rethinking the link between cognitive sophistication and politically motivated reasoning. *J. Exp. Psychol.: General*. https://doi.apa.org/doi/10.1037/xge0000974

Teeny JD, Petty RE. 2021. The perception of others' attitude bases and position as antecedents of inferred open-mindedness: consequences for attitudinal advocacy. Unpublished Paper, Northwestern University.

Tesler M, Zaller J. 2017. The power of political communication. In Suhay E, Grofman B, Trechsel AH, eds., *The Oxford Handbook of Electoral Persuasion*. New York: Oxford Univ. Press.

Valentino NA, Brader T, Groenendyk EW, Gregorowicz K, Hutchings VL. 2011. Election night's alright for fighting: the role of emotions in political participation. *J. Polit.* 73(1):156-70.

Valenzuela A, Reny T. 2021. Evolution of experiments on racial priming. In Druckman JN, Green DG, eds., *Advances in Experimental Political Science*. New York: Cambridge Univ. Press.

Van Bavel JJ, Reinero DA, Spring V, Harris EA, Duke A. 2021. Speaking my truth: why personal experiences can bridge divides but mislead. *P. Natl. Acad. Sci. USA* 118:e2100280118.

van der Linden S, Leiserowitz AA, Feinberg GD, Maibach EW. 2015. The scientific consensus on climate change as a gateway belief: experimental evidence. *PLoS ONE* 10 (2):e0118489.

Visser PS, Bizer GY, Krosnick JA. 2006. Exploring the latent structure of strength-related attitude attributes. *Adv. Exper. Soc. Psychol.* 38:1-67.

Walter N, Cohen J, Holbert RL, Morag Y. 2020. Fact-checking: a meta-analysis of what works and for whom. *Polit. Commun.* 37(3):350-75.

Weeks BE, Ardèvol-Abreu A, Gil de Zúñiga H. 2017. Online influence?: social media use, opinion leadership, and political persuasion. *Int. J. Public. Opin. R.* 29(2):214-39.

Weimann G, Tustin DH, van Vuuren D, Joubert JPR. 2007. Looking for opinion leaders: traditional vs. modern measures in traditional societies. *Int. J. Public. Opin. R.* 19(2):173-90.

Wiest SL, Raymond L, Clawson RA. 2015. Framing, partisan predispositions, and public opinion on climate change. *Glob. Envir. Chang.* 31:187-98.

Wojcieszak M. 2011. Deliberation and attitude polarization. *J. Commun.* 61(4):596-617.

Wojcieszak M, Garrett RK. 2018. Social identity, selective exposure, and affective polarization: how priming national identity shapes attitudes toward immigrants via news selection. *Human Commun. Res.* 44(3):247-73.

Wolsko C, Ariceaga H, Seiden J. 2016. Red, white, and blue enough to be green: effects of moral framing on climate change attitudes and conservation behaviors. *J. Exp. Soc. Psychol.* 65:7-19.

**Table 1: Generalizing Persuasion (GP) Framework**

| Dimension | Components |
|---|---|
| Actors | <ul><li>Speaker(s)<ul><li>Types (e.g., elites, media, opinion leaders, friends /family).</li><li>Motivations in crafting messages.</li></ul></li><li>Receiver(s)<ul><li>Assessments across weighted dimensions.</li><li>Effort, motivation, prior attitudes.</li></ul></li></ul> |
| Treatments | <ul><li>Topic<ul><li>Persons/groups, issues, institutions, products.</li><li>Variation within a topic (e.g., different policy issues).</li></ul></li><li>Message Content<ul><li>Argument strength (and its inadequacy).</li><li>Framing and evaluations.</li><li>Matching to receivers' goals.</li><li>Altering receivers' motivations (e.g., using narratives).</li></ul></li><li>Medium<ul><li>Alters frames, processing goals, and/or effort.</li><li>Interactions with other persuasion variables.</li></ul></li></ul> |
| Outcomes | <ul><li>Attitude<ul><li>General evaluation of an object (where the "object" is broadly construed).</li></ul></li><li>Behavior<ul><li>Does not always follow from an attitude.</li><li>Depends on attitude attributes, norms, behavioral control, and emotions.</li></ul></li><li>Emotion<ul><li>Can inform conscious evaluations or override them.</li></ul></li><li>Identity<ul><li>A dimension of evaluation.</li><li>Often activated when threatened.</li></ul></li></ul> |
| Settings | <ul><li>Competition<ul><li>Number of speakers.</li><li>Number of receivers.</li><li>Observers.</li></ul></li><li>Space<ul><li>Attitude or behavioral change in one setting may not carry over to other settings.</li></ul></li><li>Time<ul><li>Pre-treatment effects – what happened prior to the persuasive message.</li><li>Post-treatment duration. How long an effect lasts.</li></ul></li></ul> |

|  | o Time between exposure and outcome measurement. |
|  | ● Process |
|  | o Threatening settings. |
|  | o Political (conflictual) settings versus deliberative settings. |
|  | ● Culture |
|  | o Shapes understandings of topics. |
|  | o Alters salience of different values. |

**Table 2: Directional-Processing Goals\***

| Type | Goal | Example |
|------|------|---------|
| Belief Consistency Seeking | To maintain a prior standing belief. | Evaluates an argument based on whether it is consistent with what the individual already believes. An individual rejects a strong argument for a policy because he/she did not support the policy prior to learning of the argument (e.g., Lodge and Taber 2013, Ma et al. 2019). |
| Social Identity Protection | To maintain a feeling of identity or status within a social group. | Evaluates an argument with the goal of holding positions consistent with his/her party's elites or contrary to the other party's elites. An individual rejects a strong argument for a policy if endorsed by the opposing party (e.g., Leeper and Slothuus 2014, Kahan 2015). |
| Value Affirmation | To maintain a moral belief system. | Evaluates an argument based on whether it resonates with cherished values (e.g., sanctity, harm reduction). An individual rejects a strong argument for a policy if it invokes a value he/she does not hold in high regard (e.g., Feinberg and Willer 2013, 2019). |
| Social Consensus Seeking | To maintain consistency with descriptive norms (e.g., what others believe/are doing). | Evaluates an argument based on whether others find it compelling. An individual rejects a strong argument for a policy if many others (he/she knows or knows of) oppose it (e.g., Jaeger and Schultz 2017, Goldberg et al. 2019). |

*The types are non-exhaustive and non-exclusive. The examples take the form of rejecting a strong policy argument but could focus on acceptance and/or other targets (e.g., candidates, products, etc.)