

Article

Analogical Framing: How Policy Comparisons Alter Political Support for Health Care Reform

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Abstract

Analogies have captivated philosophers for millennia, yet their effects on modern public opinion preferences remain largely unexplored. Nevertheless, the lack of evidence as to whether analogies aid in political persuasion has not stopped politicians from using these rhetorical devices in public debates. To examine such strategic attempts to garner political support, we conducted survey experiments in the United States that featured the analogical arguments being used by Democrats and Republicans as well as some of the policy rationales that accompanied their appeals. The results revealed that analogies—especially those that also provided the underlying policy logic—increased support for individual health coverage mandates, the Affordable Care Act (ACA), and even single payer national health proposals. However, we demonstrated that rebutting flawed analogies was also possible. Thus, within the health care arena, framing proposals with analogies can alter policy preferences significantly, providing a way to deliver policy rationales persuasively.

Keywords

policy, public opinion, analogies, experiments, health care

Leaders often craft arguments to support their side of an issue. This can take many forms, such as touting the benefits of a policy or predicting what will happen in the future if a policy is enacted (e.g., Bolsen et al., 2014; Jacobs & Matthews, 2012). Politicians also use particular words to define problems, again with implications for public opinion or knowledge (e.g., Clifford & Jerit, 2013; Jerit & Barabas, 2006; Utych, 2018). In addition, elites might suggest—accurately or not—that members of the public support or agree with their views to bolster mass political support (Cook et al., 2002; Paden & Page, 2003).

All of these, broadly speaking, are instances in which different considerations can be brought to bear on a policy issue, framing it in an attempt to sway the public (e.g., Brewer & Gross, 2005; Chong & Druckman, 2007b). Framing effects have been found in many contexts, such as tolerance (Nelson et al., 1997), climate change (Nisbet, 2009), and international conflict (Entman, 1991). Frames are especially effective when they build upon existing mental structures or schema (Fiske & Linville, 1980) by providing cues about which evaluative criteria citizens should prioritize when they utilize informational shortcuts, or heuristics, to approximate well-reasoned choices (e.g., Amira et al., 2018; Cosmides & Tooby, 1994; Gigerenzer, 2008; Jensen & Petersen, 2017; Lupia, 1994; Lupia et al., 1998). Of course, attempts to frame issues are not without limits. Political opponents may try to counterargue with frames of their own (Chong & Druckman, 2007c; Sniderman & Theriault, 2004).

However, the underlying commonality is that leaders on various sides of an issue assemble arguments strategically in their efforts to sway public opinion.

Framing relates to the broader literature on persuasion, which has been the focus of countless social science works for decades (e.g., Hovland et al., 1949; Mutz et al., 1996; Petty & Cacioppo, 1986). Indeed, persuasion is a key element of policy debates in modern democracies. As Goodin et al. (2011) write,

To make policy in a way that makes it stick, policy-makers cannot merely issue edicts. They need to persuade the people who must follow their edicts if those are to become general public practice. In part, that involves persuasion of the public at large . . . (p. 897).

Among the persuasive techniques that leaders use, analogies have long fascinated political philosophers.¹ For instance, Zashin and Chapman (1974) point out how Plato, in *The Republic*, used a specific type of analogy—the metaphor—to

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make his arguments. Yet, although these theorists and other public policy experts note the importance of analogies (e.g., Stone, 2001), few studies explore the effects that analogies have on policy views (but see Barry et al., 2009; Lau & Schlesinger, 2005; Schlesinger & Lau, 2000).

All of this begs the question, does highlighting similarities between different policies alter political support? If so, are there limits to analogical policy comparisons? We explore these questions in national survey experiments on several health care policies early in the 21st century. In particular, we focus on three analogies being deployed in American politics: (a) linkages between the health insurance coverage mandate of the Affordable Care Act (the ACA, also known as "ObamaCare") and car insurance coverage mandates, (b) the idea of selling health insurance across state lines as major auto insurance companies do, and (c) attempts to frame national health care plans as "Medicare for All" versus "socialized medicine." Our experiments demonstrate that the analogies alter public support, but not in an unlimited way; they can be refuted and even undone minutes later. One important lesson is that political analogies must often be accompanied by policy rationales to influence preferences in a significant manner. In this way, analogies can "weaponize" political arguments, delivering key substantive points that might be lost if presented in isolation.

Analogical Framing: Definitions, Mechanisms, and Political Consequences

The terms *analogy*, *simile*, and *metaphor* are often used interchangeably, but each of these has a distinct meaning. Simply put, analogies describe a relationship between two things through a comparison, whereas similes and metaphors are types of speech that articulate such comparisons. The *Merriam-Webster Dictionary* defines an analogy as, "a comparison of two otherwise unlike things based on resemblance of a particular aspect," or as an "inference that if two or more things agree with one another in some respects they will probably agree in others." Thus, an analogy highlights some shared feature while implying other shared features.

Two vehicles, or "rhetorical devices," for expressing the inferences of analogies are similes and metaphors. Again, the dictionary describes a simile as, "a figure of speech comparing two unlike things that is often introduced by 'like' or 'as' (e.g., *cheeks like roses*)." In contrast, metaphors are "a figure of speech in which a word or phrase literally denoting one kind of object or idea is used in place of another to suggest a likeness or analogy between them (as in 'drowning in money')." In the broadest sense, then, analogies may be thought of as the general term for comparisons, whereas similes and metaphors are types of analogies.²

Metaphors and analogies are pervasive in politics and in policymaking (see Stone, 2001). For instance, President

Trump often refers to efforts to impeach him as a "witch hunt," presumably to imply unjust persecution as with the Salem trials of the late-1600s. On the other side of the political spectrum, some liberal lawmakers have rebranded their environmental and economic proposals in the early 21st century as a "Green New Deal," invoking former President Franklin D. Roosevelt's popular New Deal programs from the past century. On occasion, political leaders make use of analogies and metaphors at the same time, such as when 2020 presidential candidate Senator Bernie Sanders appeared at a campaign event in front of placards proclaiming "Medicare for All" (an analogy linking single payer universal health care to Medicare) while the same placard had the motto, "Health Care is a Right" (a metaphor) immediately below (see the supplemental appendix for a photo of the sign; Greenberg, 2019). Collectively, these are attempts to frame issues, specifically by using reasoning shortcuts that substitute lengthier arguments with supportive details, facts, or interpretations. As we elaborate upon in the next subsections, leaders use analogies to mentally group concepts (e.g., impeachment \approx a witch hunt) with the hope that citizens come to evaluate an issue in the leader's preferred manner.

Perspectives on Analogies

Analogies likely operate through mental categorizations, though their precise mechanisms are still being explored. In particular, speakers use analogies to emphasize dimensions of similarity. Charting linkages created by analogies and their limits has consumed linguists studying mental categories such as George Lakoff (1990), whose work on Australian aboriginal tribes unearthed a common noun used for "women," "fire," and "dangerous things." However, there have also been important steps forward in the study of analogies taken by scholars in psychology, communications, and political science.

Some of the earliest empirical work on analogies in social psychology comes from Dedre Gentner and her colleagues. Gentner's (1983) review article in *Cognitive Science* provides a theoretical framework for analogies. In particular, Gentner's structure-mapping theory charts relations between objects and develops the notions of base and target, drawing upon the work of Amos Tversky (1977) and others in her field. Accordingly, analogies may facilitate understanding and memory by linking concepts (Halpern et al., 1990). More recent works delve into similarities and differences in comparisons (Gentner & Markman, 1994; Sagi et al., 2012) as well as how similarities are shaped by long-term memory processes (e.g., Gentner et al., 1993, 2009) or how metaphors shape information acquisition and cognition (Thibodeau & Boroditsky, 2011).

The psychological understanding of analogies set the stage for research in related fields. For instance, communication scholars discuss analogies as part of "political impression management" (Landtsheer et al., 2008). There is also a

related literature on exemplars in which speakers point to particular manifestations of concepts, sometimes in a biased fashion (Arpan, 2009; Brosius & Bathelt, 1994). Another line of research, conducted by political scientists, tends to focus on leaders. In these studies, analogies and metaphors are of particular interest in studies of elite decision-making, especially in foreign affairs (e.g., Dyson & Preston, 2006; Hemmer, 1999; Shimko, 1994).

Within foreign policy and elite decision-making, analogies are particularly common in linking armed conflicts (Khong, 1992; Lakoff & Johnson, 2003). For instance, Berinsky and Kinder's (2006) framing study explores, ". . . whether an analogy can be drawn between Milosevic's ethnic cleansing [in Kosovo during the 1990s] and Hitler's Holocaust" in World War II (WWII; p. 650). Likewise, Stapel and Spears (1996) explored whether associative analogies (X is like Y) and dissociative analogies (X is not like Y) have political effects. For instance, consider linking (or delinking) the Gulf War to the Vietnam War or WWII, with one analogy clearly being favorable (WWII) as opposed to the other (Vietnam). Much like Berinsky and Kinder, who validated the existence of mental categories using cluster analysis, Stapel and Spears found that 90% of participants recalled the content of analogies, suggesting that they resonated.

Analogies and Reasoning Heuristics

Analogical frames are especially powerful in political arguments because citizens have limited time and cognitive abilities with which to engage the modern political world (Downs, 1957; Fiske & Taylor, 1991; Lau & Sears, 1986; Simon, 1957, 1985). As citizens face an abundance of political information, they often turn to cognitive shortcuts that allow them to approximate a calculated choice in an efficient manner (e.g., Amira et al., 2018; Cosmides & Tooby, 1994; Gigerenzer, 2008; Jensen & Petersen, 2017; Lupia et al., 1998). In general, decision-making heuristics help people choose between alternatives in information-rich environments by allowing them to focus on some evaluative criteria and ignore other information (e.g., Gigerenzer & Goldstein, 1999). For instance, a classic review of nearly two dozen studies on decision-making finds that people predominantly rely on heuristics that utilize informational cues to select evaluative criteria to help them choose between alternatives in a variety of choice environments (Keeney & Raiffa, 1993).3 Thus, in a world of abundant information, people often use informational cues to decide which criteria to emphasize and which to ignore when making choices in the world.

Political scientists have identified many informational cues that citizens commonly prioritize when making sense of politics. Especially significant are cues related to the source of political information (Carmines & Kuklinski, 1990; Mondak, 1993; Mondak et al., 2004) as well as a candidate's political party affiliation (Campbell et al., 1960; Lodge &

Hamill, 1986; Rahn, 1993) or ideology (Conover & Feldman, 1986, 1989; Hamill et al., 1985; Sniderman et al., 1986). In the domain of policy alternatives, we believe analogical frames can be used as rhetorical tools that provide additional cues about the dimensions upon which a policy should be evaluated. For instance—and to foreshadow real-world political arguments we will examine later—stating that health insurance is like car insurance signals to citizens that they should focus on the ways that these two policies are similar and ignore their differences when considering health care reform alternatives. Similarly, relabeling national health care as "Medicare for All" is an attempt to associate a new proposal with an existing policy that is widely admired (Oberlander, 2003, 2019).

Pioneering work on psychological categories built around analogical reasoning (through the metaphor) comes from Schlesinger and Lau (2000; also see Barry et al., 2009, for applications to obesity-related policies). In interviews with elite actors and citizens, they showed how citizens can arrive at coherent beliefs even while displaying widespread ignorance (i.e., lacking knowledge of institutions, actors, and events) and ideology. Schlesinger and Lau showed, through a sorting exercise, that elites and citizens can reason by policy metaphor. For instance, health care may be cast as a civil right or a market commodity. These metaphors, in turn, lead to allocations of who is responsible for the problem as well as who should take responsibility for treating the problem. Thinking of health care as a societal right, even though it is not enshrined in the Constitution, tends to encourage moral reasoning.

In subsequent work, Lau and Schlesinger (2005) show that citizens using these metaphors tend to have distinct policy preferences. For instance, people who identify with health care being a right are more supportive of hospital care, long-term care, and treatment of substance abuse. Importantly, metaphors were found to operate above and beyond other factors, such as values, partisanship, self-interest, and emotions. In short, and as argued earlier, metaphors are "cognitive frames" (Lau & Schlesinger 2005, p. 101) that rely upon heuristics (Bougher, 2012, p. 146; Schlesinger & Lau, 2000, p. 614) to shape how people navigate the political world.

Using Experiments to Study Analogies From Real Policy Debates

Although social scientists have made important strides in our understanding of analogies and metaphors, there are some gaps in the scholarly literature. One issue relates to the nature of the evidence. The methods used in previous investigations tend to be observational, thus leaving room for alternate interpretations and possible confounding patterns (e.g., Aronow & Samii, 2016; Samii, 2016). For instance, Schlesinger and Lau's (2000) study relied upon observational methods,⁴ but they concede, "There also is

considerable potential in experiments . . ." when studying metaphors in policy debates (p. 623). Of particular importance is sorting out causality.

It could be that analogies cause people to feel a certain way about a policy or, alternatively, in observational data it is also possible that that feelings lead to the endorsement of the analogy. Adding still more methodological complexity, political leaders might supply analogies that they know already resonate in the public, attempting to activate feelings that are already held. Given the many possibilities, some scholars suggest that observational studies convey the "illusion of learning" (Gerber et al., 2014), perhaps in part because of publication pressures to find "statistically significant" results (Gerber & Malhotra, 2008). In other words, although the patterns are suggestive, they lack the sort of causal leverage that comes with experimental investigations, which have been called "... the gold standard of social science research" (Montgomery et al., 2018, p. 760). This is not to say that experiments are without shortcomings (see Gerring, 2011), but comparisons between events in the real world and survey experiments have been encouraging, pointing to externally valid findings on focal outcomes of interest (Barabas & Jerit, 2010) or consistency across different types of experiments (Jerit et al., 2013; Krupnikov & Levine, 2014; Mullinix et al., 2015).

Moreover, past studies have tended to isolate analogies and/or metaphors, obscuring how they are situated in policy debates. However, elites often use analogies amid broader arguments to marshal political support. More to the point, analogies are often adorned with supporting rationales and may be challenged or publicly debated by journalists who deliberate the merits of policy on behalf of the masses (Page, 1996). To measure the effects of analogical frames in this context, we need to isolate the effects of analogies and then systematically (through random assignment) add to them (i.e., altering what accompanies analogies). Yet, it is uncommon to field an experiment with even a handful of messages from elites in policy debates (cf. Jerit, 2006). We also need a way to look at the effects upon groups of citizens who are otherwise equal to be sure that some survey participants do not selfselect into media outlets featuring particular types of analogies. In other words, it is helpful to induce analogical reasoning experimentally, and then look for evidence of whether they work alone or in combination with other arguments.⁵

Expectations

All of this leads to a series of expectations and questions guiding our inquiry. All else equal—and especially given their time-honored pedigree among political philosophers (e.g., Plato)—analogies should have significant effects on policy preferences. The views of those who are exposed to analogies should change, presumably in the direction that the speaker intends to argue, relative to those who are unexposed. However, isolated analogies may not be enough.

Rationales accompanying the analogy should provide additional persuasive power in support of the analogical goal, whereas rationales undercutting the analogy ought to have the opposite effect, much the same way as people might be persuaded by campaign ads that first get attention *and then* deliver key frames or arguments (e.g., Franz & Ridout, 2007; Huber & Arceneaux, 2007).

However, political arguments are not typically presented in a vacuum, and the back-and-forth nature of dueling arguments is something that scholars studying "two-sided framing" have explored (Brewer & Gross, 2005; Chong & Druckman, 2007c) or, for example, when members of Congress object to presidential actions on policy-based or constitutional grounds (Christenson & Kriner, 2017). As Bougher (2012) writes, ". . . citizens are not passive recipients who simply accept the metaphors presented to them by politicians and the media" (p. 149). Furthermore, countering analogies may be done rhetorically, or it may take the form of a formal fact-checking exercise in which journalists attempt to call out false narratives (Gottfried et al., 2013; Wintersieck, 2017). As such, rationales and rebuttals accompanying analogies are tested with the expectation that they will have the potential to enhance or push against analogies, respectively.

To extend the scope of our study, we also consider whether analogies work in a proximate fashion (i.e., the specific policy that the analogy covers) or whether the effects go beyond the target to the broader policy arena. Proximate versus distal analyses provide helpful leverage on the extent and nature of the effects (e.g., Barabas & Jerit, 2010). The distal (or "spillover") potential of metaphors was also something that Lau and Schlesinger (2005) examined although they moved beyond health care to the realms of government provision of education and public housing. Other questions guiding our study-explored through interactions with background "control" variables or intentional subtle variations across experimental conditions—are whether analogies have persuasive effects on co-partisans or people with personal exposure to the policy arena through feedback mechanisms for those with personal experience with the programs (e.g., Barabas, 2009; Gusmano et al., 2002; Soss, 1999; Soss & Schram, 2007). Collectively, then, we seek to understand the degree to which analogies alter public opinion, especially in ways that mimic real-world policy debates, with leaders making competing analogical claims.6

Policy Issues, Experimental Designs, and Method

The issue of health care policy in the United States is both contentious and consequential. Scholars have explored the politics leading up to the passage of the ACA (e.g., Grande et al., 2011; Jacobs, 2014; Jacobs & Mettler, 2011) and the acrimony generated after its passage (Jacobs & Mettler, 2016; Oberlander, 2013). Our first set of experimental

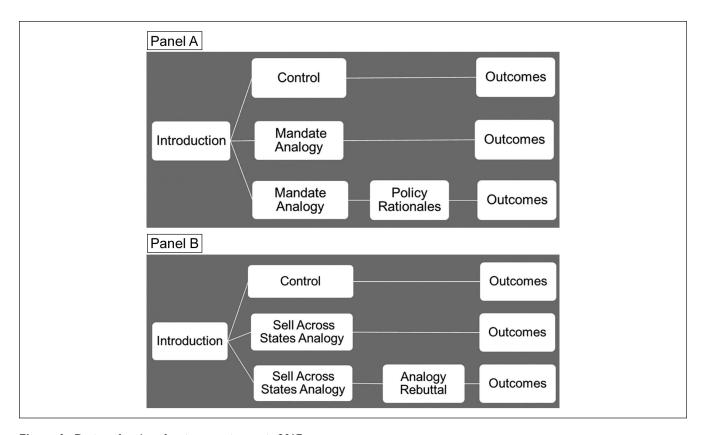


Figure 1. Design of analogy framing experiments in 2017.

Note. Panel A: Health insurance coverage mandate. Panel B: Health insurance sales across states.

studies takes place in the midst of this historic moment by fielding a large national survey (n = 4,008) in the time just before the Republican-controlled Congress repealed the individual mandate.⁷ The individual mandate was controversial from the start.8 Virtually every health care reform bill that Republicans introduced after the passage of the ACA included the elimination of the individual mandate, and many considered this tantamount to repealing ObamaCare.⁹ The irony is that even though Republicans came to dislike the mandate after it became a key part of Obama's health policy law, the reliance on mandated private market insurance originated in conservative think tanks (Butler, 1989), 10 and the individual mandate was a key feature of (then Governor) Mitt Romney's health program in Massachusetts before he ran for president in 2012 (Doonan & Tull, 2010; Taranto, 2011; but see Butler, 2012 who later disputed the mandate's conservative origins).

What was remarkable about the appearance of analogies in the health care policy debate was that both Democrats and Republicans attempted to link car insurance to health insurance policy, albeit for different goals. First, consider the car insurance analogy used to bolster support for the individual mandate underlying the ACA. In a speech to Congress on Health Insurance Reform during September of 2009, President Obama stated, "Under my plan, individuals will be required to carry basic health insurance—just as

most states require you to carry auto insurance." Yet, car insurance analogies have been deployed by opponents of the ACA as well. Years later, while making the case about what the United States should do as it repealed "ObamaCare," Vice President Mike Pence stated that "under President Trump's leadership, we're actually also going to finally allow Americans to purchase health insurance across state lines—the way you buy life insurance, the way you buy car insurance." The first two experiments feature both of these analogies in an unadorned way (e.g., without elite source cues or supporting rationales) as well as with embellishments drawn from the policy debate.

To illustrate, the basic experimental designs (collectively dubbed "Study 1") are shown schematically in Figure 1. The top Panel (Figure 1, Panel A) shows the (untreated) control group as well as two branches of analogy treatments. All subjects saw a common introduction via the internet before being randomized into one of the arms. The goal of the experimental treatments was to probe the effects of the pro-mandate analogy Obama made as well as rationales in favor of the analogy, against it, or both. The mandate analogy was:

Some proponents of the individual coverage mandate for health care say that it is just like car insurance. In nearly all states, individuals are required to purchase car insurance, so being required to purchase health insurance should be no different.

Subjects randomized into the middle arm of Figure 1, Panel A were presented only the mandate analogy. A separate group of subjects encountered the mandate analogy plus rationales. The positive rationale added an economic argument for the mandate: "Coverage mandates help make insurance less costly for everyone and lead to more people being insured because risks are spread out across a larger pool of people." The negative rationale starts with the main mandate analogy but then adds a critique drawn from the policy debate: "However, auto insurance is only required if an individual drives a car. If somebody does not want to purchase auto insurance, then he or she can choose to not drive a car." A two-sided condition featured the analogy along with the positive and negative rationales. To economize and as they operate in a similar fashion, we collapse the rationale conditions in our presentation (see the supplemental appendix for detailed results by condition).11

After being assigned to the control or a treatment condition, all subjects answered a policy preference question on the target policy—the mandate itself—as well as policy support for the ACA more generally. The appendix contains the wordings of the common introduction, the experimental treatments, and the outcome questions, but the essence is that all subjects read a brief and balanced introduction to the issue while those randomly selected for exposure to the treatments were shown the car insurance mandate analogy or the analogy plus rationales. ¹²

Panel B in the lower half of Figure 1 presents the design schematic for the experiment on the car insurance analogy made in support of selling health insurance across state lines. All subjects received a common introduction. ¹³ In addition to a control group that received nothing other than the introduction, there were three basic types of treatment conditions. The first treatment group featured the analogy linking auto insurance sales to health insurance sales across the states without anything else. Specifically, it read,

Some proponents of health care reform say that buying health insurance should be like buying car insurance. Individuals are currently allowed to purchase auto insurance from firms that sell policies across state lines, so purchasing health insurance should be no different.

This is an unattributed rendition of an analogy that Vice President Mike Pence was making during March of 2017 in support of a Trump Administration proposal to allow health insurance sales across state lines.

To devise rationales, or "rebuttals" to be more precise, we draw from the policy debate as portrayed in the media. The analogy linking cross-state sales of auto insurance to health insurance was the subject of a fact-check by PolitiFact, a group of journalists who check the veracity of statements by political leaders. In their critique, PolitiFact noted the "deeply flawed" analogy being made by Pence, the essence of which focused on the state-specific regulatory nature of

auto insurance as opposed to the federal health insurance system. Once again, and with the same goal of streamlining the presentation, we collapse the analogy rebuttal conditions, in part because they operate in a similar fashion.¹⁴

The key tests are mean comparisons for treatment conditions (relative to the control group) for both the target policies (the individual mandate or selling insurance across state lines) as well as for the ACA more generally. Consistent with our research goals and to ease the presentation, we present simple mean comparisons in a series of figures, first for all types of analogy conditions relative to the control before splitting out the main variants (e.g., analogies vs. analogies with rationales or rebuttals). The supplemental appendix presents output for the separate treatments.

Survey Experiment Results From Study I

The results of the first analogy experiment exploring the connections between car and health insurance mandates appear graphically in Figure 2, Panel A. The left-most set of results shows the control versus treatment levels as well as the difference (i.e., the treatment "effect") in the area above the bars (95% confidence intervals [CIs] are in the brackets). The first set of entries reveals that analogies work. As expected, there is a positive and significant effect of being given any car insurance mandate analogy (i.e., any rendition of the analogies in the first experiment, collapsed) on support for the individual mandate (effect = 7 points, 95% CI = [3, 11 points]). The next two sets of entries in Figure 2, Panel A separate these results into the analogy alone or the analogy plus rationales. The analogy alone is marginally significant (5 points, p < .10), but the conditions with the analogy plus rationales of any type lead to an 8 percentage point increase relative to the untreated control group (p < .01; CI = [3, 12] points]). Thus, the main story in Figure 2, Panel A is the power of analogies with rationales. The analogy plus any type of rationale—positive, negative, or both—uniformly increases support for the individual mandate (see the appendix for separate condition results). This same type of pattern appears in the broader outcome, shown in Panel B of Figure 2. Support for the ACA (the distal or "spillover" policy arena) more generally rises with all analogy conditions combined, but it is particularly concentrated among analogies with rationales; the effect is 5 percentage points (CI = [1, 10]points], p < .05). 16

With respect to the second experiment, as shown in Figure 3, any type of analogy about selling insurance across state lines to the control condition does not influence support for selling insurance across state lines. However, as shown in Panel A of Figure 3, exposure to the selling-across-state-lines analogy with a negative rebuttal tends to *decrease* support for the Pence proposal by about 7 percentage points (CI = [-2, -12], p < .05). This may have been due to the high level of support for the proposal overall, as nearly 75% of the control group favored the policy. Also,

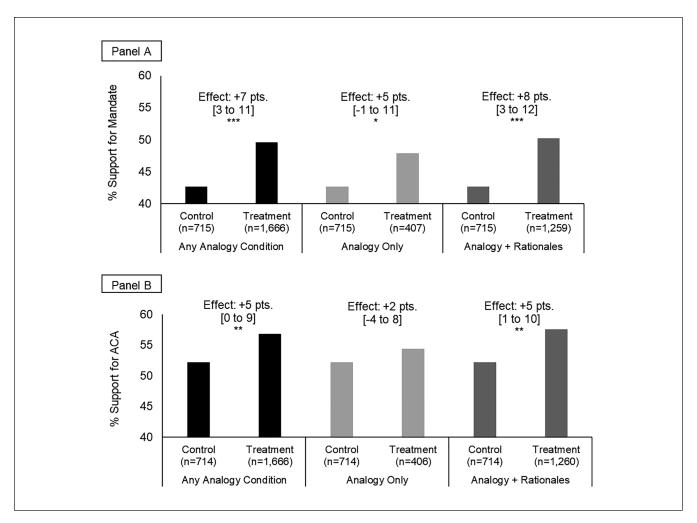


Figure 2. Insurance coverage mandate analogy experiment.

Source. Survey Sampling International (SSI) in December 2017, National U.S.

Note. Panel A: Mandate analogy treatment, support for mandate outcome. Panel B: Mandate analogy treatment, support for Affordable Care Act (ACA) outcome. 95% confidence intervals are in brackets.

*p < .10. **p < .05. ***p < .01. (two-tailed).

Panel B of Figure 3 reveals that subjects who were treated with the state lines analogy tended to *increase* support for the ACA overall relative to subjects who did not receive a treatment, which is likely not what supporters of that policy would likely want to see (7 percentage point increase, p < .10, two-tailed). Backfire effects of this sort—with weak frames undermining support instead of increasing it as intended—have been documented elsewhere (Chong & Druckman, 2007a).¹⁷

Therefore, analogies are politically persuasive, although not uniformly. Importantly, especially given that leaders are making the arguments and the focus on elite analogies in the literature (e.g., for a critique, see Bougher, 2012), elite cues do not seem to elevate an otherwise lackluster analogy in the case of selling across state lines (see appendix), even for Republicans; Grand Old Party (GOP) partisans are not especially moved by the elite cue to support

selling across state lines (but support was high in general) and they are still moved against the state lines proposal if it is rebutted (the effect among Republicans is -11 points, while it is -9 points for Democrats, both p < .05 and not statistically different from each other); Republicans were also the group that became more favorable toward the ACA upon hearing the state lines analogy (+9 points, p < .06; ns for Democrats).

However, our most dramatic conditional effect among the demographic subgroups occurred in the insurance coverage mandate experiment. The effect we found for analogies with rationales for the target policy of supporting the mandate was concentrated almost exclusively among Republicans. Their support was low to begin with, only 20 percentage point support for the mandate in the control group (near the lower bound or "floor" of possible support). However, Republicans who were treated with the analogy as well as the rationales

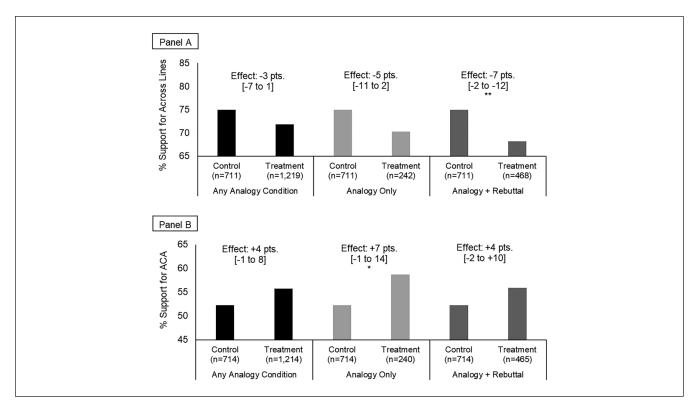


Figure 3. Selling across state lines analogy experiment.

Source. Survey Sampling International (SSI) in December 2017, National U.S.

Note. Panel A: Across state lines treatment, support for selling across state lines outcome. Panel B: Across state lines treatment, support for Affordable Care Act (ACA). 95% confidence intervals are in brackets.

*p < .10. **p < .05. ***p < .01. (two-tailed).

increased their support by 11 percentage points, which was highly significant (p < .01). In contrast, Democrats tended to favor the ACA mandate (63% support in the control condition), and treatment with analogies did not move their support appreciably (to 65%, ns). This same receptivity to the car mandate analogy plus rationales extended to the ACA more generally, with Republicans increasing their support for the ACA by 8 points (from 23 to 31 percentage points, p < .05), whereas Democrats were largely unmoved (75% in the control vs. 76% in the treatment condition of analogies plus rationales). Is In summary, then, audience characteristics related to partisanship tended to be more important than message characteristics (written vs. video; elite cue or not), but the lack of variation across subgroups is perhaps the more common finding.

Survey Experiment Results From Study 2

One limitation of the previous study is that we have conditions for analogies alone as well as analogies with rationales (or rebuttals), but nothing that illustrates what happens with rationales without analogies. Thus, we cannot be sure that the effects we see from analogies with rationales are not from the rationales rather than the analogies—that is, we do not have conditions that present analogies *or* policy

rationales separately. In a follow-up study conducted in November 2019 with a high-quality national survey, we explored political support for national health insurance proposals in the United States with analogies that advocates use (Medicare for All) as well as those from opponents ("socialized medicine"). ¹⁹

Figure 4 displays the experimental design. There are four conditions. Respondents randomized to the control group received only a common introductory statement which was, "There have been discussions in the United States about changes to the health care system. One proposal is to change to national health plan in which the federal government provides health care to everyone and pays directly." Three other groups receive either analogies, rationales, or analogies with the rationales that we drew from the policy debate surrounding the proposal.²⁰ This design allows us to discern the effects of analogies to be sure that it is not just rationales that are persuasive.

After answering the outcome question of support for national health care (the wording was, "Do you favor or oppose having a national health plan in which all Americans would get their insurance from a single government plan?"),²¹ all respondents went on to answer five other questions unrelated to health care that were part of an unrelated methodological study.²² Then, all respondents were re-randomized

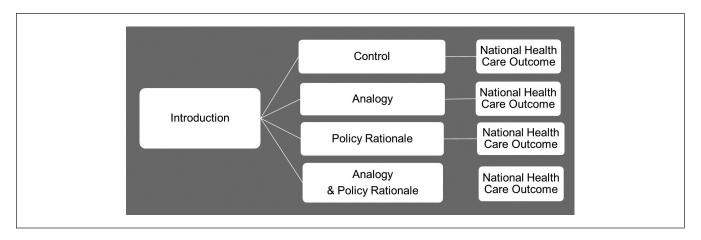


Figure 4. Design of analogy framing experiments on "Medicare for all" and "socialized medicine" in 2019.

Note. The same design was used to explore both the "Medicare for All" and "Socialized Medicine" analogies. In the first experiment, survey respondents were randomized into one of four conditions with treatment conditions related to the Medicare for All analogy, policy rationale, or both. After five unrelated questions on different topics, respondents were re-randomized into the four conditions shown above, but this time they were supplied with one of the conditions related to socialized medicine and then asked the same outcome question. See text for details.

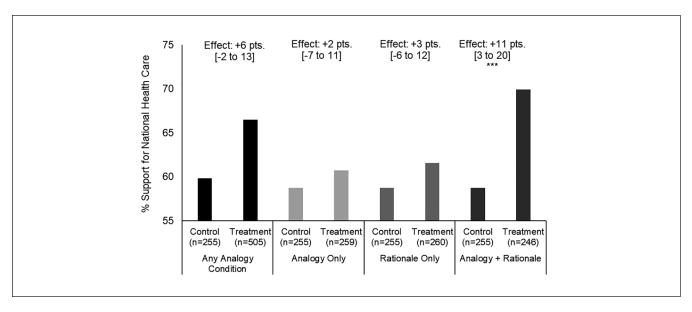


Figure 5. Medicare for all analogy framing experiment. Source. National Opinion Research Center (NORC), AmeriSpeak Omnibus Panel in November 2019, National Probability Sample of the U.S. Note. 95% confidence intervals are in brackets. *p < .10. **p < .05. ***p < .01. (two-tailed).

into one of four conditions akin to the schematic in Figure 4 that showcased an analogy used by opponents of national health care, that is, calling it "socialized medicine." This design gives us a chance to examine the results in both a cross-sectional ("between-subjects") experimental comparison as well as looking at what happens to support for those who were first exposed to the Medicare for All analogical treatments a few minutes earlier (i.e., within-subjects comparisons to see whether effects can possibly cancel out).

The results of the Medicare for All framing experiment are shown in Figure 5. The first set of results on the left

shows the effects of any analogy (i.e., the analogy, with or without a rationale). Support for national health care for the control group was nearly 60%.²³ Individuals shown any sort of analogy increased 6 percentage points (95% CI = [-2, 13]), which was not a significant change. However, when we separate the conditions into analogies, rationales, or both, a pattern emerged. Analogies or rationales alone barely move policy preferences toward national health care; the effects are 2 and 3 points, respectively, but they are both insignificant. In contrast, and what Figure 5 reveals clearly, is that the last condition featuring both analogies and rationales moved

support for national health care significantly, up 11 points (from just under 60% to 70%; p < .05, two-tailed). This pattern suggests that analogies, along with rationales, can combine to form a persuasive effect that either alone did not have. The analogies could be the proverbial Trojan horse (or "designer drugs" to use another metaphor) that allow persuasion to take place, although we acknowledge the post hoc nature of these interpretations that deserves more scholarly investigation.

These results are dramatic, but other features of Study 2 reveal important limits. In particular, and in contrast to the Medicare for All analogical frame, a different way of describing single payer health care for opponents is "socialized medicine."24 As such, we wanted to see what happened when we conducted an experiment similar to the one reported above with analogies, rationales, and both—but this time with an analogy designed to reduce support for the same policy. Respondents who finished the Medicare for All vignettes and outcome question then went on to answer five unrelated questions that served as a distraction (i.e., a palatecleansing buffer). Then they were re-randomized into receiving socialized medicine treatments (or the control).²⁵ This subsequent experiment did not move preferences on the national health care plan outcome question; analogies, with rationales or without, did not alter support relative to the control group in a significant manner (results not shown).²⁶

However, because the same people answered the question about their preferences for national health care at two points in time after each set of frames (Medicare for All and socialized medicine), we can look at individual changes.²⁷ Here some surprises emerge. Even when controlling for their initial attitudes or not (i.e., including their initial policy preferences after the first experiment but before the socialized medicine experiment), the rationale accompanying socialized medicine pushes support for national health care down relative to initial attitudes (i.e., the change was to reduce support, p < .01). The same pattern was observed for those in the condition that featured *both* the socialized medicine analogy and the rationale (weighted regression coeff. = -.06, SE = .026, p < .05). What this means is that even though the first experiment increased support for a subset of the respondents who saw the Medicare for All analogy with the rationale, individuals who were later exposed to the rationale with or without the socialized medicine analogy became less supportive. This final set of results shows the limits of analogical framing, how effects can be undone in some cases (for those who were initially moved upward) as well as how competing frames might erode support across time (e.g., Chong & Druckman, 2007c).

Conclusion

Analogies are not new. Plato invoked them more than 2,000 years ago as have other philosophers and leaders across the centuries. Yet, demonstrating that analogies work politically,

as well as their limitations, is a relatively recent endeavor. This is important because politicians use analogies regularly in many domains (e.g., witch hunts and Green New Deals). Only recently, however, have social scientists studied analogies and metaphors empirically (e.g., Lau & Schlesinger, 2005; Stapel & Spears, 1996). Our goal has been to demonstrate, experimentally, that analogies have persuasive effects among members of the public. Policy preferences differ significantly upon exposure to analogies—both for the policy provision targeted by the analogy and for the broader policy domain—although the effects are not always as expected as in the case of the state lines analogy. There are limits to what analogies can do politically and, importantly, they can be rebutted or even countered later with competing frames from opponents.

All of this sets the stage for future investigations of analogies. The policy domain we studied was health care, albeit from various sides of the political spectrum. This is a domain that is hotly contested in American politics and the policies have far-reaching economic and social consequences. Yet, future studies should extend into different policy arenas to ensure the generality of the findings. Likewise, we were also able to explore analogies for and against different policies within the same domain, which reminds us that analogies are techniques that politicians from many different political stripes use. Still, much work remains to be done when it comes to charting the prevalence of analogies, the underlying mechanisms, and dynamics in terms of when they are deployed strategically—much like other investigations of decisions to invoke some issues over others (Damore, 2004), to go negative (Lau et al., 2007), to focus on candidate traits (Fridkin & Kenney, 2011), or to use emotional appeals (Ridout & Searles, 2011). How long effects last is also of interest (e.g., Hill et al., 2013). For instance, with respect to the ACA, retention of information persists across multiple survey waves (Dowling et al., 2020) even if opinions drift back to baseline levels. Whether analogical arguments produce long-term attitudinal effects, in terms of weeks or months, seems worthy of investigation.

Perhaps most importantly, this article showcases analogies as a relatively understudied but important feature of the broader literature on framing, heuristics, and persuasion more generally. Analogies ought to be powerful in democracies because citizens often lack complete information about policy alternatives. Instead, they turn to reasoning heuristics to make sense of the political world (e.g., Amira et al., 2018; Jensen & Petersen, 2017). But as heuristic shortcuts, analogies may have shortcomings or fail to present the entire picture (Lau & Redlawsk, 2001). To return to an analogy mentioned earlier, relabeling national health care as "Medicare for All" is an attempt to associate a new proposal with an existing policy that is widely admired. However, the analogy only goes so far. Support for expanding Medicare tends to erode when citizens are given more information about what the proposal would entail, such as eliminating private insurance companies or increasing taxes (Kaiser Family Foundation, 2019). As we saw earlier, it is indeed possible to counter a supportive analogy with another presented later that undermines support. This mimics the environment in which competing actors vie for public support (Chong & Druckman, 2010, 2013), using various rhetorical techniques (e.g., Jerit, 2008; Riker & Mueller, 1996) or even word choices (e.g., Jerit & Barabas, 2006; Simon & Jerit, 2007).

Finally, analogical frames may help make citizens more accepting of arcane policy details. Policy minutia in health care—such as the economic concepts moral hazard and adverse selection in health insurance markets—can be difficult to explain, yet the policies themselves are designed with these points in mind (e.g., co-payments or waiting times to ration usage). In other words, wrapping policy details in an analogy may help move public policy preferences even if individuals might not be persuaded if given only the policy details. The general idea is akin to slippery slope arguments as others have studied them (Corner et al., 2011; Lode, 1999; Volokh, 2003), but here it has positive connotations (i.e., X is like Y and that is good because Y is acceptable) as opposed to the typical use of slippery slope arguments in a defensive fashion (e.g., doing X will lead to Y and Z, with Y and Z being bad, so we should not do X). Naturally, specific rhethorical effects may depend on communication patterns in particular organizations and cultures (Barabas, 1990). More research is needed on how analogies function amid other rhetorical strategies in different contexts.

Nevertheless, analogical framing has significant effects on policy reform preferences in the health policy arena, especially when they also deliver policy rationales. "Weaponizing" arguments in this manner can persuade members of the public to support policy proposals that might otherwise fail to gain adherents in the absence of such comparisons. Thus, political philosophers were onto something when they recommended these rhetorical strategies, but analogies alone may not be enough as we witnessed. Yet, we doubt this will be the last word on the subject. There are other variations of framing with analogies that deserve exploration. For instance, it may be that analogies are more persuasive to some types of audiences or if delivered in particular formats. We considered these possibilities (e.g., elite cues, video renditions) but only briefly. In the future, researchers should examine these and other possible manifestations of analogical frames as well as their prevalence and strategic usage in political debates.

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Supplemental Material

Supplemental material for this article is available online.

Notes

- Examples of other rhetorical devices include hyperbole, allusion, and epizeuxis (i.e., repeating words immediately for emphasis), although others exist too. See Aristole's *Rhetoric* from 350 BC.
- Analogies are often made in novel situations, whereas metaphors tend to be used for both novel and more long-term problems (see Schlesinger & Lau, 2000, for more on the subtle differences).
- Choice sets in these studies were varied and ranged from medical treatments and birth control methods to apartments and microwaves.
- 4. Schlesinger and Lau (2000) employed interviews with 119 members of the general public in the northeast (CT, NY, NJ, and PA) and 50 congressional staffers or executive branch members who dealt with health care. In a follow-up study, Lau and Schlesinger (2005) conducted 1,522 nationwide telephone interviews to chart association between cognitive frames and policy preferences.
- 5. Using arguments from real political debates runs the risk of "pretreatment" (Druckman & Leeper, 2012), when the arguments have already been absorbed by respondents before they take part in the survey experiment. In that sense, the effects we find are likely smaller than they otherwise would have been had the analogies been previously unused in the political environment.
- 6. In the supplemental appendix, we briefly consider how analogies are transmitted to the public as well as audience characteristics (i.e., experimental variations in message and audience characteristics). In particular, source attributions could be importance since metaphors and analogies are often employed by political actors (Bougher, 2012). As such, analogies with elite cues may be more persuasive to citizens (Mondak, 1993). It could also be that the medium of transmission, such as video versus written renditions, might play a role.
- 7. The survey was a diverse nationwide panel of online respondents maintained by Survey Sampling International (SSI). The survey was in the field from November 30, 2017, to December 22, 2017. See the appendix for evidence on the demographic representativeness of the sample relative to Census benchmarks.
- To take effect, the Affordable Care Act (ACA) had to be upheld in a Supreme Court decision in 2012, and the individual mandate was a central focus of the case. Interestingly,

and with relevance to the analogies on health care featured later, Justice Scalia used an analogy concerning broccoli consumption in his criticism of the mandate (i.e., "Everybody has to buy food sooner or later," Scalia said. "Therefore, you can make people buy broccoli."; see https://nyti.ms/2lLMxMe).

- For the importance of the mandate repeal in Grand Old Party (GOP) legislation, see Park (2017; https://nyti.ms/2yiIVXI). As President Trump noted in late-December when the health care individual mandate was repealed, "we have essentially repealed ObamaCare" Sanger-Kartz (2017; https://nyti.ms/2Dmzgmr).
- In laying out the rationale for health insurance coverage mandates, Butler (1989) uses two car insurance analogies related to mandatory auto seatbelt laws and mandatory liability coverage.
- 11. We collapse conditions, in part, because we are unsure as to whether the rationales are of equivalent strength. Argument strength has been the focus of scholars who pit frames against each other in experiments (e.g., Chong & Druckman, 2010, 2013). However, in doing so, it is important to pretest frames to determine whether they are comparatively weak or strong (e.g., Chong & Druckman, 2007b; Chong & Mullinix, 2019; Clifford & Jerit, 2018).
- See the appendix for randomization checks and a schematic of the various conditions.
- 13. The common introduction for the state lines analogy was as follows:

The Patient Protection and Affordable Care Act (otherwise known as the "ACA") became U.S. law in 2010. A primary goal of the legislation was to help provide health care coverage for all Americans. However, some policymakers would like to reform the health care law and have offered a proposal to allow individual to purchase health insurance across state lines.

As with the introduction to the first experiment, all references to partisan actors have been omitted to focus on the issue alone.

- 14. There were also conditions that featured elite cues (i.e., including a mention of Vice President Pence) as well as written versus video renditions of the state lines analogy, but these variations are not the main focus and, as such, the results are presented in the appendix.
- 15. A balance check analysis with multinomial logit indicates successful randomization (i.e., p > .10, two-tailed).
- 16. That the analogy with the negative rationale also increased support for the coverage mandate was unexpected and returns us to the points made earlier about frame strength and pretesting (see Note 11). In an auxiliary finding with implications for the research on policy-feedback effects, respondents who drive a lot or who handle car insurance matters for their families were not more likely to exhibit large treatment effects.
- 17. We wish to acknowledge that calling this a backfire effect is potentially problematic. In particular, journal reviewers accurately noted that the introductory passage to this experiment that states "... proponents of health care reform ..." may lead some respondents to equate the selling across state lines proposal with the ACA—and thus pro-ACA movements would be consistent with that goal. However, the proponents here are actually partisans who want to end the ACA. There are also concerns about ceiling effects (i.e., the high level of support in the control condition for the state lines proposal

making upward movement harder). In addition, the rebuttals in the state lines experiment did not constitute rationales as with the first experiment—they were more about the analogy itself rather than supporting logic. The larger point we had hoped to make is that Vice President Pence probably would not have used the analogy if he thought it was going to increase ACA support, but this pattern could be an artifact of the experimental design.

- 18. The patterns were similar for the analogy alone without rationales. Republicans moved up 8 points (from 23% favoring the ACA in the control condition to 31% in the condition with only the auto insurance mandate without a rationale; p < .10). As a point of comparison, Democrats were again unmoved as they were already highly supportive ("pretreated" to some extent; Druckman & Leeper, 2012). These were the most dramatic conditional effects, dwarfing variations by health insurance status, self-rated health, issue importance, whether someone owns a car or knows auto insurance, race, gender, or political knowledge.
- 19. The study was part of the biweekly AmeriSpeak Omnibus surveys conducted by the National Opinion Research Center (NORC) at the University of Chicago. This is a probability sample of the American national public during November 22 to 24, 2019, with 1,020 adults. Most interviews were conducted by computer/smartphone over the internet, but a small portion was conducted using telephone; the answers do not change substantively when controlling for interview mode.
- 20. In addition to the common introduction, the analogies condition received the statement, "In particular, some leaders have proposed changing to a 'Medicare for All' national health plan that has the federal government provide health care to all Americans, not just those age 65 and older." The rationale condition saw the common introduction and then the statement, "People argue that providing coverage to everyone will make Americans healthier overall." The condition with both analogies and rationales received the introduction, the analogy, and the rationale statements.
- The question wording was adapted from Kaiser Family Foundation surveys on the topic during 2019.
- 22. The other study repeated a student loan vignette (from Mullinix et al., 2015) along with manipulation checks designed to measure attentiveness to experimental stimuli (Kane & Barabas, 2019). These questions were included to collect data for an unrelated methodological paper and to provide a buffer before returning to the issue of health care.
- 23. As it is a probability sample of the American public, NORC weights the data to account for potential biases in survey response with respect to census benchmarks (from the 2019 American Community Survey) on gender, age, education, race/ethnicity, and region. As such, the values reported in the text are from weighted nonlinear (i.e., probit) statistical models with condition indicators and pretreatment covariates that were asked in previous surveys (e.g., education, income, age, marital status, and home ownership). See the appendix for model output and robustness checks.
- 24. The term was used by Krugman (2019) in a New York Times editorial (https://nyti.ms/2TlQAPa). Health care polling professionals also use both terms. For example, a Kaiser Family Foundation (KFF) Health Tracking Poll conducted

- from April 11 to 16, 2019, found that 63% of the American public had a positive reaction to the term "Medicare-for-all," whereas only 46% felt positive about "socialized medicine."
- 25. There was a common introduction for all respondents: "There have been discussions in the United States about changes to the health care system. One proposal is to move to a national health plan in which the federal government provides health care to all citizens and pays directly." The analogy condition featured the introduction plus the statement, "In particular, some leaders think that adopting a national health care system would amount to 'socialized medicine." The rationale condition featured the introduction plus, "People argue that adopting a national health plan would increase the length of waiting times to get medical procedures." The condition with both had the introduction, the analogy, and then the rationale statements.
- 26. The outcome question was the same as before: "Do you favor or oppose having a national health plan in which all Americans would get their insurance from a single government plan?"
- 27. This is akin to a "within-subjects" experiment, whereas the others discussed thus far have been "between-subjects."

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