The Facts of the Matter: How the Public Recognizes and Responds to Reality

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Abstract

Political debate is about a mix of facts and values. We put forward the claim that where facts are involved the side with the better factual claim tends to win the debate—that there is a convergence on truth, at least in the aggregate. We examine six controversies where convergence on truth can be observed and, for balance, two cases where false beliefs persist.

> "Let her and Falsehood grapple; who ever knew Truth put to the worse, in a free and open encounter?" - John Milton

At a time when commentators are impressed by the power of "fake news" and scholars increasingly focus on false beliefs in the mass public, we assert an old, underappreciated, truth, that facts matter. More specifically we assert that much of political debate is about factual matters, and that when facts are available in the public sphere, that debate tends to converge on truth. We have nothing to say of debate over values. And our thesis will require some qualification and limitation. But our thesis is that arguments which have a factual basis tend to win out over counter arguments that do not.

Indeed the often invoked theory of party issue ownership (Petrocik, 1996) can be seen as a special case of our thesis. Parties come to "own" issue stances precisely because they have a strong factual claim to have pursued distinctive positions on them over the years. It is factually true, for example, that Democrats have done much more to create and sustain programs like Social Security and Medicare than have Republicans. And equally it is factually true that Republicans most of the time are the party of tax cuts. Electorates come to learn that while both parties often state the same goals in these regards, one has a history of action more than the other.

We make no argument that Americans are informed or attentive when it comes to politics. Undoubtedly, they are not (Delli Carpini & Keeter, 1996). But these shortcomings should not be necessarily detrimental to the democratic process (Lupia & McCubbins, 1998). Voters do not need exhaustive amounts of information to receive and interpret clear signals. Learning is active and goal driven; citizens will learn only as much as they need to in order to come to reasonable decisions. So while we certainly do not suggest that the typical American knows all of the facts, we hope to demonstrate that facts have more leverage on opinion than is typically assumed.

Our assertion that the truth carries weight in politics is grounded in the notion that when individual opinions are aggregated, random errors cancel out, demonstrating a stable and responsive public (Page & Shapiro, 1992). We join others in advocating the existence of an American electorate capable of rationally updating, where collective opinion responds to changing conditions and information in intelligible ways. However, as Kuklinski and Quirk

(2000) observe, proponents of collective rationality confront two major obstacles to the theory. First, when confronted with information, errors in individual citizen's political judgments are not always entirely random, but may be motivated. For example, strong partisans engage in selective learning, effectively avoiding processing factual information that portrays their party negatively (Jerit & Barabas, 2012). However, as we will address later, these motivations face constraints and are highly contextual.

Secondly, the collective opinion school has assumed that the media environment provides voters with reliable and truthful information. This largely neglects the self-interested and manipulative rhetoric of political elites, media pundits and interest groups that often appears to saturate political discourse. Although deception by sources is always a possibility, penalties for lying and threats of verification *should* discourage elites from making false statements, at least ad infinitum (Lupia & McCubbins, 1998). While a political environment teeming with falsehoods is far from ideal, Page and Shapiro (1992) suggest that incorrect and misleading information should have little effect on public opinion in the aggregate. Stimson (2004) echoes this sentiment by positing that "opinion is not infinitely malleable. When people are feeling prosperous, you can't convince them that they should be depressed. When depressed, messages of good cheer fall flat. Facts matter" (p. 108).

These competing perspectives raise the question that in a country where false claims such as the notion that Barack Obama was not born in the U.S., that climate change is a hoax, and that there would be bureaucratic "death panels" if the Affordable Care Act (ACA) were to pass have all risen to such prominence, can we really suggest that the truth matters to the American public? The purpose of this paper is to demonstrate—despite what one might gather from contemporary media rhetoric—facts in the long run do matter to collective public opinion. Specifically, this study seeks to demonstrate that over the course of highly prominent debates, when the quality of evidence is high, public belief will move in the direction of the facts. We proceed by highlighting the shortcomings of the existing literature and citing the conditions under which people are most likely to begin rationally updating. We then provide several examples to make our case. In short, we argue that politics may be *highly* subjective, but not *hopelessly* subjective.

1 When Do Facts Matter?

One of the most frequently cited explanations for why facts do *not* matter to members of the public is motivated reasoning, which consistently demonstrates to be a powerful force at the individual level. Taber and Lodge (2006) illustrate the theory by suggesting that all reasoning is motivated, typically by two main drivers: a desire for accuracy and a desire for belief perseverance. When individuals engage in directional motivated reasoning, they tend to readily accept evidence that confirms their predispositions, actively argue against incongruent evidence and seek out information that supports their worldview. Therefore certain partisans, particularly those most passionate and knowledgeable about certain issues, are effectively unable to escape the pull of their own priors (Taber & Lodge, 2006). Partisan motivated reasoning has become a common explanation for various phenomena, including selective media exposure and resistance to corrective information. However, one must be reminded that (directional) motivated reasoning, while seemingly ubiquitous, does not always occur. Certainly, it can shape issue opinions for those sophisticated enough to engage in it effectivley. Motivated reasoning, however, disappears among *ambivalent* individuals (Lavine et al., 2012). And such weakly opinionated, ambivalent individuals constitute a substantial portion of the American electorate. Therefore, we believe it is fair to argue that many social scientists have overstated the prevalence of directional reasoning, and in turn have understated both voters' preference and capacity for accuracy.

But what drives accuracy goals? Chong and Druckman (2010) suggest that when individuals are confronted with competing information over long stretches of time, motivated reasoning in opinion formation should diminish. Indeed, the information people in actuality confront across time is a central (and often neglected) part of the puzzle here. Experimental research suggests that people will begin to rationally update their beliefs under the right conditions. For example, Redlawsk et al., (2010) find that in the face of repeated disconfirming information, there is an "affective tipping point", at which voters finally "stop reinforcing their preferences, abandon motivated reasoning, and begin rational updating" (p. 564). We expect this pattern of behavior to carry well outside of experimental settings. Voters are exposed to copious amounts of competing signals. However, certain signals, namely

highly visible truths, are reinforced through repetition over time to the point where remaining noise should drown out.

Prior work suggests that if we take into account the broader information environment, when realistic conditions are being signaled clearly, the public does respond reasonably. For example, while partisanship can shape individuals' perceptions of national economic conditions, Parker-Stephen (2013) demonstrates that when macroeconomic conditions are unambiguously positive or negative, partisan disagreement on the state of the economy declines. This implies that when the quality of evidence is high, the public is more likely to come to a consensus, rewarding the side of the facts. Therefore, while motivated reasoning certainly occurs, it is highly contextual, where individuals should choose to engage in it only if they have sufficient evidence to properly substantiate their priors. Thus, realistic conditions, particularly those that are highly visible and unmistakable, should not be irrelevant to public opinion.

However, for facts to matter to the public, they must be readily available. Given that collective opinion is bound to depend upon the information and ideas that are conveyed to it, it is important to measure the information environment which individuals encounter. Economic indicators—unemployment, inflation, and so on— offer objective and clear information for the public to judge economic conditions appropriately. Other types of information are not as straightforward. One of the largest information providers to the public remains to be the mass media, which provides an endless stream of competing information. Although the rise of partisan outlets in recent years has brought with it the unbalanced presentation of facts, these outlets may not be accurately representative of the larger information environment (Levendusky, 2013). News providers that reach a large audience and have a reputation for setting the agenda of the entire news community, such as *The New York Times*, are more inclined to present information in a fact-based manner (Graves, 2016) . Indeed, Graves (2016) suggest as political elites have become more polarized, print and broadcast journalists have actually grown more analytical, assertive and critical. So while incentives certainly do exist for some journalists to report news in a way that satisfies consumer demand, this phenomenon may be overstated. Competitive information environments should effectivley increase the quality of reporting, particularly among those outlets whose reputation depends on it.

Of course, the media are not the only way in which citizens receive relevant political information. Interpersonal discussion provides another avenue for citizens to learn about the political world. Page and Shapiro (1992) remind us that "collective public opinion does not arise solely through the action of external stimuli upon atomistic, isolated individuals" (p. 362), but information and interpretations are disseminated through social processes. And indeed, social expectations, by encouraging deeper thinking and increasing accountability, can promote accuracy (Klar, 2014). While observing such processes is beyond this scope of the study, there is reason to suggest that over time such processes are more likely to facilitate than inhibit the motivation to be accurate among members of the public.

In sum, much of the existing literature often neglects several factors that are of essential importance if we are to understand the role of facts in national political discourse and public opinion. First, scholars seldom consider the role of the broader information environment, primarily the mass media, on opinion. Individuals can only process the information that is available to them in their natural environment, and therefore studying what voters in actuality confront proves important. Second, attitudes toward issues are not static; they can evolve and be shaped by the content of information—as well as the sequence and timing—that people encounter over time. In order to determine if facts have significant leverage in political debates, it is important to examine how the public responds across time as those facts become more apparent. Lastly, since political debates have outcomes in the aggregate, examining how collective public opinion responds to changing realities proves important. This study aims to take into account these factors.

2 What are "Facts"?

This paper seeks to expand on the work of others by demonstrating that in political debates about facts, over the course of a debate public belief will move in direction of the facts. But first, what defines a fact? Certainly there are instances where what was once considered as truth centuries, and even decades ago, has been entirely debunked. Despite this we believe it is reasonable to suggest that facts are assertions which "have strong empirical support, as determined by nearly unanimous agreement among experts who

have relatively little ideological or partisan motivation" (Hochschild & Einstein, 2015, p. 36) . In this respect, we classify statements such as "smoking is strongly linked to lung cancer" and "climate change is a consequence of human activity" as facts because they have been continually supported by mountains of empirical evidence.

Not all facts are created equal. In their study of the various types of political knowledge, Barabas et al., (2014) observe that facts have both temporal and topical dimensions. We make no argument that the public at large is informed about static facts that one would learn in a civics class. Rather, we expect that over the course of a political debate about some known fact, "surveillance" knowledge among the public should increase. Therefore, the issues used in this study should meet three conditions. They should be 1) highly visible and prominent 2) substantiated by factual evidence and 3) have been present in public discourse for a considerable amount of time.

3 Testing the Thesis

This paper builds on the work of others by examining how the distribution of relevant facts will affect public agreement across different issue domains. Our theory therefore rests on two central elements—the information that the public is exposed to and the public's response. We ultimately expected that as objective conditions change, the public will collectively recognize and respond appropriately to the environment it encounters. When the signal is strong, there should be a growing consensus among the public, converging towards the truth.

The Information Environment While the true state of the reality is always changing in some cases (e.g. the economy), the factual reality for other debates can remain fixed. What does change significantly is the national attention paid to a debate and the volume, prominence, and balance of facts concerning an issue that is provided to the public. Therefore, when a debate first emerges with a clear factual winner, the balance of competing information may be somewhat comparable. However, over time we expect this noise to cancel out and a clear signal (provided by the facts) remaining.

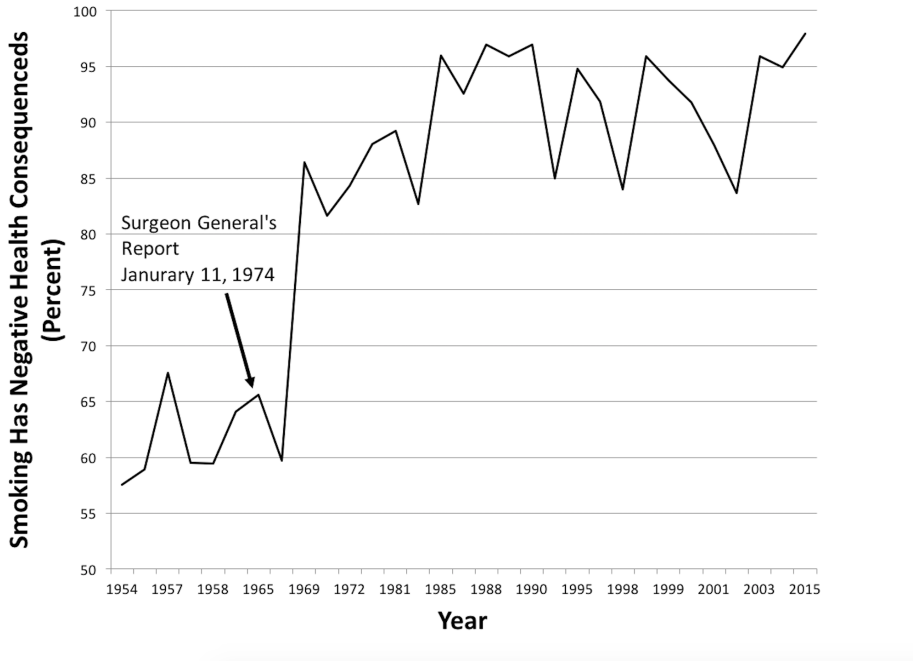
The information provided to the public at times can be overwhelmingly misleading or downright false, but such rhetoric in a democratic polity cannot endure uncontested.

The Style of the Argument This project will look quite different from most research in political science in that we do not present a single way in which to test our predictions. Rather, to determine if facts matter to the public, we opt to examine several different cases, most of which support our expectations. We also present a couple of examples that do not support our theory, and aim to provide some potential rationales as to why.

3.1 Smoking

The case of the causal link between smoking tobacco and cancer provides a clear example of how highly visible facts are recognized by the public, *absent* partisan motivated reasoning. Without such motivations to cloud judgment, the public is particularly capable of nearly unanimously recognizing reality. Figure 1 illustrates how since the decades since the 1950s, Americans have come to conclude—quite strikingly—that smoking has negative health consequences. In 1964, the Surgeon General's report officially recognized the serious health risks of tobacco, and in the subsequent years we observe the highest rate of opinion change since survey records on the subject were introduced.

Figure 1: Agreement among Americans that smoking tobacco is causally related to cancer



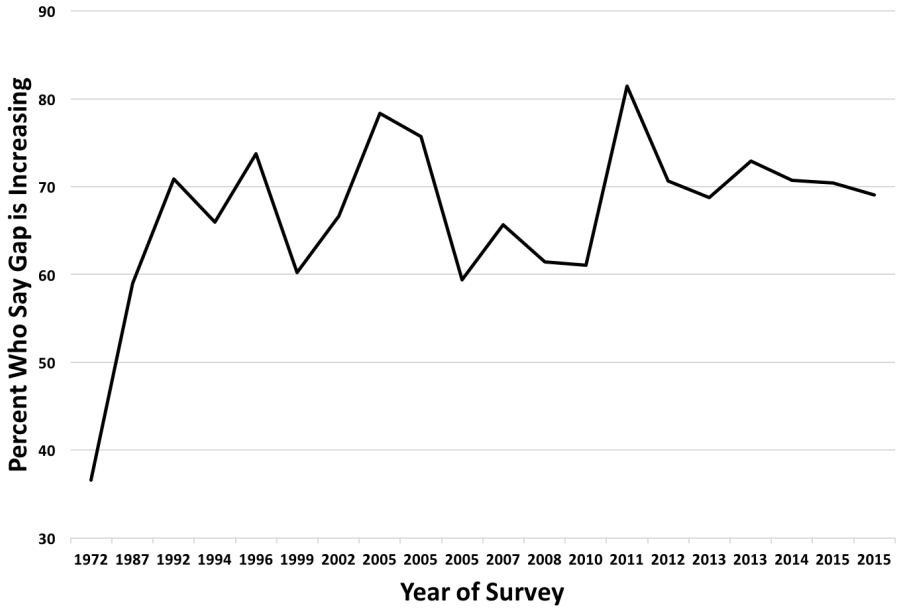
Source: Various surveys in iPoll. "Don't knows" are dropped from analysis.

As of 2015, 97 percent of Americans believe that using tobacco has negative consequences for one's health. Perhaps this fact is all too obvious. However, it is easy to forget that misleading rhetoric about smoking promoted by the tobacco industry permeated the information environment for decades, lionizing tobacco as a cash crop promising great economic rewards. Media coverage relating to health concerns of tobacco did not arise substantially until the mid-1950s, but escalated thereafter, leading to an overall hostile media environment for the tobacco industry ever since (Baumgartner & Jones, 2010). We assume it is safe to argue that both government institutions and the media communicated quite strongly the reality that smoking carries health risks, and the signal was received by the public, which amended its beliefs accordingly.

3.2 Economic Inequality

It has been well established that many citizens misperceive the realities of economic inequality in the U.S. (Norton & Ariely, 2011). Scholars suggest that not only do typical Americans underestimate how large the gap between the rich and poor is, but have a certain "tolerance for inequality" in that they do not feel particularly distressed about it either. Perhaps this phenomenon can be attributed to the level of abstract thinking the concept of inequality requires, as well as the fact that the normative implications and potential remedies can be ambiguous. But the question remains, given the rapidly growing gap between the rich and poor, has the public been capable of recognizing this trend over time? Figure 2 illustrates that from 1972-2016, a plurality of Americans has come to accept that the gap has been growing.

Figure 2: Agreement among Americans that Gap between the Rich and Poor is Widening



Source: Various surveys in iPoll. "Don't knows" are dropped from analysis.

Clearly this figure can illustrate that to some extent, facts matter. More Americans on average acknowledge that there is rising inequality today than decades ago. However, some may argue that recognizing inequality means little if people cannot update their political beliefs reasonably. For example, Bartels (2005) notes that although some may be able to recognize rises in inequality, many of the same people still support policies that contribute to inequality, such as tax cuts for the wealthy. He argues that the typical American is unable to connect inequality with the appropriate causes, consequences, and remedies.

Even more daunting, Kelly & Enns (2010) show that from 1952 to 2006, as income inequality rises, there is a conservative shift in opinion about remedies among both the poor and rich in the U.S. But our question is more limited, does the public get the facts right. The answer is yes.

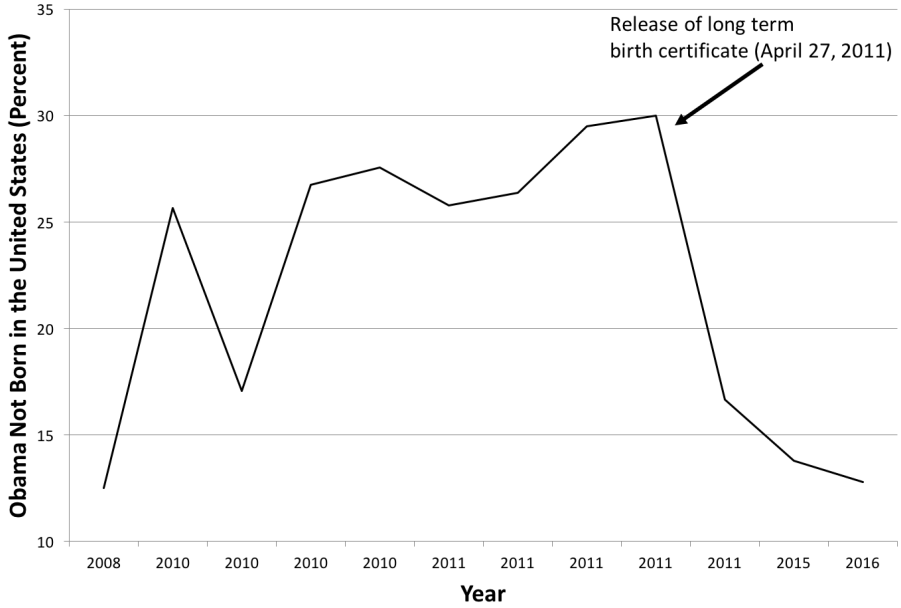
Other research may encourage more optimism. In a comparison of nearly forty countries, Gimpleson (2015) finds that citizens' perceived level of inequality is positively correlated with demand for redistribution. Put more broadly, this suggests that the public's perceptions matters of inequality matter. Although Americans underestimate inequality, they know that relatively it is greater now. And increasing concern about inequality is positively related to support for greater government action (McCall, 2013). Clearly the literature is in conflict on how and to what extent rising inequality shapes preferences. A conclusive answer to this question is beyond the scope of this study.

3.3 Barack Obama's Place of Birth

What about other controversies over facts that that are more divisive on partisan lines and relatively time specific? An example of a fact that clearly divided Democrats and Republicans is the question of President Barack Obama's religion and place of birth. The false rumors on this subject gained mainstream attention. By November 2008, nine out of ten Americans reported either hearing or reading about Obama being a Muslim and six out of ten had heard or read that Obama did not qualify as a U.S. "natural-born" citizen (Garrett, 2011). The rumor fueled by partisan divisions and also,

among whites, negative attitudes towards blacks and ethnocentrism (Pasek et al., 2014) .

Figure 3: Agreement among Americans that Barack Obama was not born in the U.S.



Source: Various surveys in iPoll. "Don't knows" are dropped from analysis.

The percent of Americans reporting that they believe Obama was born somewhere outside of the U.S. is shown in Figure 3. The graph paints an interesting picture in that through the height of the debate—specifically, throughout most of Obama's tenure in office—20 to 30 percent of Americans reported that Barack Obama was born outside of the U.S. However, following the release of his long form birth certificate in April 2011 that number dropped to less than 15 percent, the same levels we see before he took office.

What can account for this shift? We expect that when the quality of evidence is high (i.e. a publicly released birth certificate), partisans who may have normally jumped at the opportunity to endorse the rumor as a chance to "partisan cheerlead", lose the motivation to do so. In other words, when the evidence is undeniable people should reach a tipping point, where accuracy motivations overcome partisan motivations.

3.4 Tracking Opinion on Global Warming

Bullock (2009) posits that the way in which partisans react to new information is surprisingly consistent with the ideal of Bayesian rationality. Specifically, he predicts that partisans are likely to update their beliefs accordingly when they "receive political messages so numerous and so credible that their prior beliefs are overwhelmed" (p. 1112). To examine how the information environment contributes to debates over facts in a broader scale, we had several trained research assistants read and hand code articles from the Associated Press[1] that were about climate change. The debate concerning climate change gained widespread attention after the signing of the Kyoto treaty in 1997, and in the following years the two major parties sorted in their support and opposition of policies that recognized the reality of climate change. The issue meets the conditions that we have outlined in that it is highly prominent, has been in public discourse for decades and is substantiated by strong factual evidence, clearly rewarding one side.

Over four hundred articles were randomly drawn from a twenty year period (1997-2017) using the LexisNexus database. Coders assessed how favorable or critical each article was toward the existence of climate change, in addition to several other measures.[2] Interestingly, we discovered little variation over time in how the media broadly covered climate change—overall, the facts were loud and clear. Our content analysis suggest the media have been relatively consistent in their reporting of the realities of climate change and have steadily communicated what scientists have agreed upon as consensus.[3] Perhaps using a wider variety of sources from different ideological perspectives would have lead to more variable results. We also chose to designate articles as the unit of analysis, as opposed to analyzing smaller units (such as paragraphs or sentences), which may have illustrated more dissenting opinion. Lastly, our analysis did not look at specific frames used to tell stories about climate change, which likely have varied over time.

From our preliminary content analysis we cannot say that the balance of

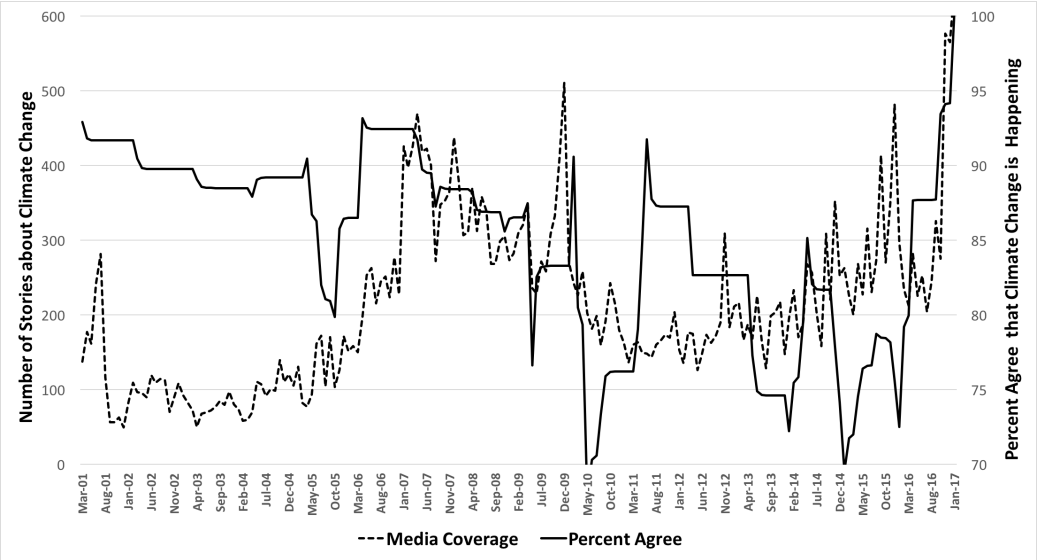
[1] The AP has been used in the past as a reliable proxy for the overall media environment (Jerit & Barabas, 2006).

[2] We employ a somewhat similar coding scheme to that used by Baumgartner & Jones (2010).

[3] Results of this content analysis are available upon request.

facts in the media environment has evolved considerably in the last twenty years. However, the *volume* of media coverage provided also acts as a signal to voters. Given that media reporting generally supports the claim of climate change, an increase in volume should amplify that message.

Figure 4: Agreement that Climate Change is Happening and Volume of Media Coverage



Source: Public opinion data provided by various surveys in iPoll. Responses to survey items were are all recoded as either "Agree that climate change is happening" or "Do not agree that climate change is happening". Don't knows are dropped from analysis.

Figure 4 illustrates these two trends from 2000 to 2016. The dotted line tracks total number of stories about climate change (or global warming) in five prominent American newspapers (Washington Post, Wall Street Journal, New York Times, USA Today, and Los Angeles Times).[4] The solid line tracks change in opinion over time, which we construct by applying Stimson's (1998) dyad algorithm to polling on climate change. Our focus is exclusively on measuring either agreement or disagreement among respondents with the fact that climate change is occurring.

A cursory glance at the graph indicates a potential relationship between

[4]Media data used provided by Luedecke et al., (2017).

the two variables. To determine the existence and direction of causality, we use a Granger causality test, a standard time series method for evaluating such relationships. Our theory leads us to expect that as media coverage of climate change increases, the strength of the signal will increase and voters will respond appropriately (i.e be more likely to agree that climate change is occurring).

Table 1: The Media and Public Opinion on Climate Change: Granger Test Results

	Endogenous Variables	
Exogenous Variables	Media Coverage	Percent Agree
Media Coverage	–	.004**
Percent Agree	.052	–

Note: Each cell represents a different equation. Cell entries are p-values. Each equation includes 3 lags of endogenous variables.

Table 1 presents the results of two Granger causality tests. Each cell represents a separate equation, and the cell entries are the p-values from the test. In the table we see that greater agreement that climate change is occurring does not result in greater media coverage on climate change ($p > .05$). However, the results do indicate that greater media coverage of climate changes leads to significantly greater agreement that climate change is real ($p < .01$). These findings support our expectations that temporal ordering flows from coverage to opinion. When the signal is strong, the public follows appropriately. The findings corroborate prior research that demonstrates that specific knowledge among the public for various issues is shaped by the volume of coverage those issues receive (Barabas et al., 2014) .

From these data we can only tentatively conclude that spikes in media coverage of global warming will result in greater consensus among the public on its reality. We have yet to address the more fine grained details of climate change—specifically its causes and seriousness—which are perhaps just as important to the debate. Although, since prior research indicates increased media coverage leads to greater public concern about climate change (Brulle et al., 2012), we expect that the two trends are quite dependent.

3.5 The Ideology of Presidential Candidates

There is a factual basis to left-right ideology. Reasonable people can agree that proposals to expand the government role are generally liberal and proposals to contract it are conservative. But there is much also that is not factual. Much of ideology is the manipulation of symbols. And that resists factual description and measurement. Thus much of the perception of candidate ideology is in the eye of the beholder. With some factual basis, but much that is symbolic, ideology is a particularly challenging case for our thesis.

We know at the outset that ideology is difficult for the mass electorate. Large numbers of respondents are unable to place themselves on the ideological scale using the standard language of American politics. And we know that many who succeed in answering the self placement question misclassify themselves as judged by their expressed policy preferences (Ellis & Stimson, 2012). Thus getting the candidate placements right faces stark limits.

As in many other cases we expect motivated reasoning to play a role. Presidential candidates regularly claim to be more mainstream than their "radical" opponents of the other party. Thus we expect their supporters—the party identifiers in the electorate—to misperceive in the direction of claiming that their candidate is more moderate than others see him or her.

Citizens get some help from media reporting. This is particularly the case when there are serious primary contests, in which case the various contestants will often be described as representing the left, right, or centrist wings of their party.

We measure ideological perceptions of presidential candidates from the American National Election Study series for 1972 through 2012. Respondents are first asked to place themselves on a scale running from "Extremely liberal" on the left to "Extremely Conservative" on the right. They are then asked to place the presidential candidates by name on the same seven point scale.

We learn from an initial crude analysis that what the whole electorate sees closely resembles the views of professional observers of politics. Republicans are always seen as right of center (average 5.03 where 4.0 is the center point),

Democrats always left (average 3.19). The average difference between them, 1.85 points, is large, given the possible range of 6.0. Particular years also comport well with professional views. George McGovern in 1972 as seen as the most liberal candidate. Ronald Reagan in 1980 is seen as most conservative. The smallest gap between the parties is found for 1976 when the moderate liberal Jimmy Carter met the moderate conservative Gerald Ford. We lack an absolute standard of perceptual accuracy, but these findings at very least do not surprise.

But these views of the whole electorate may mask the misperception that might exist in partisan subgroups, where motivated reasoning comes into play. We expect motivated reasoning to lead to perceptions that one's own party's candidate is more moderate than others see and the opponent is more extreme.

We look to multi-election averages to address the issue. When it comes to Democratic candidates the expected pattern of motivated reasoning emerges. Democrats in the electorate agree with (pure) independents on the positions of Democratic candidates (3.47 and 3.49 respectively, Table 2), but Republicans see Democratic candidates as further left by some measure (2.69, $p < .001$). But the effect is asymmetric. Democrats do not see Republican candidates as more conservative than Republican partisans do (5.04 and 5.12 respectively, the small difference opposite the expected one). Independents, from whom we do not expect motivated reasoning of this type, see Republicans as slightly more moderate (4.65), an effect arising principally from small N's.

Table 2: Average Left-Right Candidate Perceptions for the Presidential Elections of 1972 through 2012 of Democrats, Independents, and Republicans

Candidate	Respondent Party Identification		
Party	Democrats	Independents	Republicans
Democrats	3.47	3.49	2.69
Republicans	5.04	4.65	5.12

Source: Compiled from American National Election Studies for 1972 through 2012

What we see in sum is that candidate ideology, no matter how contentious,

no matter how symbolic, is roughly accurately perceived by the mass public. Surely this aggregate pattern covers up much micro-level misperception. But the whole electorate does a decent job of sorting out the essential facts about placing candidates in ideological space.

3.6 Who Will Win the Election?

Beneath the contest for votes in a presidential election is a second contest, for expectations. Both probable winners and probable losers have a motivation to shape voter expectations of the outcome. The probable winner needs to maintain emotional tension about the race, lest supporters take the outcome for granted and stop putting forth effort. The probable loser needs to maintain an image of viability to motivate his or her base. It is OK to be merely behind. But if voters conclude that a race is hopeless, that is a self fulfilling prophecy.

So there is always a partisan contest over voter expectations. And thus motivated reasoning comes into play. Both sides are expected to succumb to the message of their own side. But the daily news also bombards individual citizens with the facts of the matter, for example horse race polls. We are told with some frequency who is ahead and who is behind and by how much. We can choose not to believe, that polls are not reliable, that they are "skewed" for some nefarious purpose. But if candidate x leads candidate y day after day after day, before long it becomes very hard to resist the message, x is ahead. We expect citizens to resist messages they don't like, but when the facts are repeated over and over we expect resistance to fade.

We put the matter to a test in an analysis of the most recent presidential election, 2016. Looking at the *net* perceptions of the race by the whole electorate—Democrats, Independents, and Republicans—we seek to ask who wins in the contest between partisan spin and the facts of forecast information. We have data at sixteen points in time, from March to November, 2016, about voter perceptions of who would win the contest, Hillary Clinton or Donald Trump. And we have data about elite expectations as well, for which we utilize the Iowa Electronic Stock Market "Winner Take All" share prices, an instrument for examining how the politically active and involved

betting their own money on the outcome saw the race shaping up.

The facts voters are exposed to are the various objective forecasts, such as those by the *New York Times* and *FiveThirtyEight* and prediction or betting markets. Any of these would do, but we choose the Iowa Electronic Market "winner take all" market for its longer availability. We assume that voters who do not consult such sources will see their message reflected in public commentary on the election by those who do.

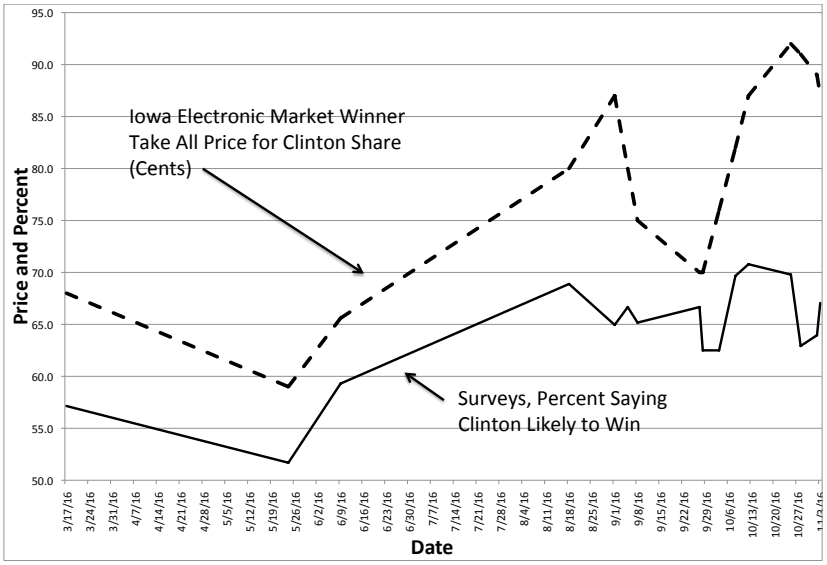
The question is: "Do voters follow the flow of factual information about the expected outcome or do they resist, for example to insist that their own favorite party or candidate in winning?" We measure citizen expectations with survey questions such as the CBS variant, *"Regardless of how you intend to vote for President in 2016, who do you expect to finally win the 2016 presidential election—Hillary Clinton or Donald Trump?"* We put the matter to a test in Table 3 where we predict the proportion saying that Clinton is the likely winner from the IEM "winner take all" share price for a Democrat to win.

Table 3: Proportion Expecting Hillary Clinton to Win the 2016 Presidential Election Predicted by Iowa Electronic Markets "Democrat to Win" Share Value

Variable	Coefficient	Standard Error	t
Democrat Share Price	0.367	0.094	3.88
Intercept	0.356	0.075	4.77
N	16		
Adj. R^2	0.484		

The ups and downs of the 2016 contest can be seen in Figure 5 where we graph the same data used in Table 3. Note in the Figure that while citizens are not as confident of a Clinton win as market participants (by about 10 points), the mass sample's perception data does nicely track the betting market data as a signal of the likely election outcome ($r = 0.72$). Undoubtedly the aggregate data cover up some motivated reasoning going on among individual citizens. But the message of the facts comes through clearly.

Figure 5: Sixteen Surveys Tracking the Expected Winner of the 2016 Presidential Election Contest Against Same Day Values of the Iowa Electronic Markets Winner Take All Market for Democrats to Win



4 When Does Opinion Ultimately Not Follow the Facts?

So far we have presented several very different cases where we see collective opinion pick up on the facts surprisingly well. When the burden of evidence is high and unavoidable, opinion moves in the appropriate direction, on average converging toward the facts. There are, however, cases that do not fit our expectations cleanly.

One example is the issue over Social Security eventually going bankrupt. Jerit and Barabas (2006) demonstrate that the misleading rhetoric of politicians during the height of the reform debate (1998-1999) significantly influenced voters' knowledge of the subject. Four cross sectional surveys in this time

period show that roughly one-third of Americans incorrectly believed that Social Security would go bankrupt within the following twenty years if no changes were made. Moreover, the authors find little evidence of over time learning between 1998 and 1999. While towards the close of the twentieth century Social Security reform was heavily covered by the media, it has since lost prominence in our public discourse. As a result pollsters seldom ask about it. One of the most recent polls about the issue, conducted by Gallup in 2005, found that 64 percent of Americans believe it will go bankrupt eventually if no major changes are made. In this case clearly opinion has *not* moved in the direction of the facts. There are two explanations why. For one, understanding how Social Security works and is funded may require a higher level of thinking than the other issues examined here. Second, as mentioned previously, Social Security "reform" has not been a high priority on the national agenda for decades, and therefore information about the realities of it are not as tangible.

Another issue that has not appeared to have gained much leverage from facts is the conflict over voter identification laws. While being one of the most contentious issues in recent years among elites, such a partisan divide is hardly visible in the public, where voter ID laws enjoy broad support (Daprile, 2015). Although it is an established fact that the fraud such laws aim to deter occurs at a minuscule frequency,[5] and that the greater impact of imposing identification requirements has been voter suppression, voter ID laws remain popular. A 2016 poll by the Associated Press found that 60% of Americans thought that there was either "some" or a "great deal" of instances of voter fraud. In this regard, it appears facts do not have quite the pull we would expect. What can account for this? Conover and Miller (in press) argue that by presenting a strong frame that resonated with members of both parties (discouraging voter fraud), who often perceive it as a matter of moral conviction, Republicans ultimately and overwhelmingly won the "framing" war over voter ID laws. Democrats, on the other hand, pushed the relatively weaker voter suppression frame too late in the game, and it rarely stuck with voters. The failure of facts to sufficiently leverage the debate over voter ID laws is a reminder of the crucial role that competitive frames play in how people think about issues. While we make the claim that

[5]From 2000 to 2014, credible instances of voter impersonation in the U.S. occurred a total of 31 times (Levitt, 2014).

facts matter to the public over time, a critical component to the puzzle that we do not address is how facts and falsehoods are packaged and framed to the public.

5 Closing Thoughts

We present this paper with intention of encouraging a new perspective from which to view facts in American discourse. While it is clear that misperceptions can (and have) pervaded opinion on several issues in the U.S., sometimes with serious consequences, what is not clear is how long such misperceptions can persevere.

We have seen that a steady diet of information leads to convergence on the truth. And we have seen that a steady diet of misinformation leads to convergence on falsehood. What the two cases have in common is that they show a public which processes the facts it is exposed to.

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