



No Need to Watch: How the Effects of Partisan Media can Spread via Inter-Personal Discussions

James Druckman

Payson S. Wild Professor of Political Science
Associate Director and Faculty Fellow, Institute for Policy Research
Northwestern University

Matthew Levendusky

Associate Professor of Political Science
University of Pennsylvania

Audrey McLain

Graduate Student, Department of Political Science
Yale University

Version: September 15, 2015

The authors thank Kevin Arceneaux, Ethan Busby, Alex Coppock, Don Green, Marc Hetherington, Shanto Iyengar, Marc Meredith, Dan O’Keefe, Markus Prior, and participants who attended Princeton’s conference on polarization for extremely insightful advice. They also thank Taylor Alvaro, Alexandra Fredendall, Claire Grabinski, Adam Howat, Kevin Levay, Heather Madonia, Natalie Peelish, and Allison Rubenstein for excellent research assistance, Penn’s PORES program for generous financial support, and the many participants who made this study possible.

DRAFT

Please do not quote or distribute without permission.

Abstract

Over the last quarter-century, the political news landscape has transformed. One notable change has been the rise of partisan media sources. How do partisan media sources influence public opinion? The researchers address this question by exploring not only how partisan media directly influence individuals' attitudes, but also how interpersonal discussions shape the impact of partisan media. They present experimental results showing that, depending on the nature of the discussion group, conversations can nullify or amplify partisan media effects. Perhaps more importantly, they also find that those who are not directly exposed to partisan media are still susceptible to its effects. This occurs via a two-stage process such that exposed individuals influence those who have not been previously exposed. The researchers conclude with a discussion of what these results imply about the study of media effects and partisan polarization.

How do partisan media sources affect public opinion? The answer to this question is far from clear—scholars and pundits differ on whether partisan media has no effect, a modest effect, or a large effect (cf., Sunstein 2007; Arceneaux and Johnson 2013; Levendusky 2013). Such variance in perspectives is not surprising given the many challenges to isolating partisan media effects (among them, identifying who watches partisan media; Stroud 2011; Prior 2013). In this paper, we do not aim to provide a definitive account of partisan media effects; such an account is likely not possible given the range of available media choices. Instead, we explore an important but previously overlooked dynamic: how do interpersonal discussions interact with partisan media effects? Can interpersonal discussions amplify or nullify partisan media effects? Can they serve as conduit through which partisan media effects spread (e.g., those who watch pass on partisan messages to those who do not watch)?¹

Prior research leaves little doubt that both media messages and interpersonal communications not only independently shape opinions but also interact with one another (e.g., Dalton et al. 1998; Druckman and Nelson 2003; Druckman 2004; Klar 2014; Ahn, Huckfeldt, and Ryan 2014; Mutz 2006; Sinclair 2012). Yet, the impact of discussions on partisan media effects has received scant attention. Understanding the role of interpersonal discussions is important for two reasons. First, direct partisan media effects may be amplified by subsequent interpersonal discussions among like-minded partisans or nullified when discussions involve out-partisans that introduce distinct perspectives. Second, by all accounts, the partisan media audience is small (e.g., at most 10-15% of the

¹ In essence, we are answering Stroud’s (2011: 173) call: “[q]uestions about the relative influence of interpersonal networks and media and the ways that they may interact... provide an important avenue for additional research... Does the composition of one’s interpersonal network moderate the influence of partisan media use and vice versa?”

voting age population; Prior 2013: 113), but the impact of partisan media effects may transcend its audience size if those effects spread via discussion in social networks. This latter possibility coheres with the theory of two-step communication flows, whereby the effects of mass media messages spread through interpersonal discussion (Lazarsfeld, Berelson, and Guadet 1948; Katz and Lazarsfeld 1955).

We begin by describing a framework for understanding the interaction between partisan media and interpersonal discussions. We then present an experiment that shows how different forms of discussion can polarize or moderate those who were affected by earlier exposure to partisan media. Perhaps more importantly, we also find that partisan media effects can indeed influence individuals who never even watched that media—via a two-stage communication flow. The experimental (controlled) nature of our study precludes us from making broad, definitive statements about the overall influence of partisan media. However, the results suggest that future studies may misestimate partisan media effects if interpersonal discussions following media exposure are ignored. Our findings have implications for studying media effects, opinion formation, and mass political polarization.

Partisan Media and Interpersonal Discussion

How partisan media messages and interpersonal discussions interact to shape opinion hinges on a host of factors, including source, message, receiver, and contextual variables. It is beyond our purview to produce a full theory that accounts for all possible scenarios. Instead, we focus on a situation that involves (a) partisan media outlets that offer messages with a partisan valence (which can either match or oppose a respondent's partisan identity), (b) a single issue on which parties often divide but on which people do

not hold particularly strong (e.g., value-based) opinions, (c) limited or no media choice, and (d) small group in-person discussions that immediately follow media exposure. In the supplemental appendix, we discuss the impact of these and other design choices; we constructed our design to *maximize* the probability of finding a direct effect of partisan media exposure in order to study how group discussion then conditions the effect of exposure.).²

With these parameters in mind, we offer expectations, first, about the influence of partisan media exposure, and second, about how interpersonal discussions affect those exposed and those not exposed to that partisan media. Our first question, then, is: how does exposure to a partisan media source shape opinions (see also Arceneaux and Johnson 2013; Levendusky 2013)? Generally, when a partisan receives a mass communication from a same-party source (that is, a source that shares his/her partisan valence), he/she moves his/her opinion in the direction advocated by the communication, relative to those not exposed to a mass communication (*hypothesis 1*).³

This likely occurs for two reasons. First, the audience member views the source as relatively credible since it shares the same ideological outlook and has perceived expertise (Lupia and McCubbins 1998; Baum and Groeling 2010: 130-131). Second, the message content is likely persuasive, given that common partisan outlooks resonate with audience members' underlying values (Nelson and Garst 2005).

² In other words, although perhaps not absolutely necessary, ensuring the presence of a first stage direct partisan media effect facilitates testing for any second-stage discussion effects on the initial media effect. (It is conceivable, albeit unlikely, that a discussion effect could occur sans an initial media effect if that discussion primed those exposed to reconsider and/or discuss the media content; we do not focus on this possibility here though. We thank Shanto Iyengar for pointing out this possibility to us.)

³ The main caveat to this prediction is there could be no opinion movement if the individual already holds very strong opinions on the matter that are difficult to dislodge (e.g., Druckman and Leeper 2012; Levendusky 2014).

When individuals receive a message from an out-party source, the outcome is less straightforward, as prior work has found no effect, a persuasive effect, and a boomerang effect (moving against the message) (Prior 2013: 109). That said, given our focus on a scenario where “partisan differences are made salient” due to partisan cable news and the choice of an issue that divides the parties, we expect people engage in “partisan motivated reasoning” (Leeper and Slothuus 2014: 6).⁴ This leads viewers to counter-argue the message and move their opinions in the opposite direction (i.e., toward their in-party). In short, if a partisan receives a mass communication from an opposite-party source, he/she moves his/her opinion in the opposite direction from the view advocated by the communication, relative to those not exposed to a mass communication (*hypothesis 2*).⁵

A final question about partisan media effects involves exposure: given that individuals can choose from an enormous array of outlets, how likely are they to opt for the same-party source? The aforementioned partisan motivated reasoning theory suggests that when offered the opportunity search/select information, individuals will opt for information from sources consistent with their partisan identity to a greater extent than information inconsistent with their partisan identity (*hypothesis 3*) (Taber and Lodge 2006; Hart et al. 2009; Stroud 2011; Druckman, Fein, and Leeper 2012).⁶ In line with our

⁴ It is worth noting that partisan motivated reasoning occurs more often when individuals possess strong prior opinions, and we are not focusing on such an issue. However, the accentuation of partisanship via our explicitly partisan outlets and discussion groups is likely sufficient to prompt motivated reasoning.

⁵ Other theories not rooted in partisan motivated reasoning make substantively similar predictions (e.g., Lupia and McCubbins 1998: 60-61).

⁶ Prior work suggests this to be a likely outcome given our focus on a single issue covered by distinct cable partisan outlets: “[s]tudies of selective exposure on television typically reach a... conclusion: Republicans and conservatives report more exposure to conservative outlets, whereas Democrats and liberals report greater exposure to liberal sources, so selective exposure in cable news viewing is common” (Prior 2013: 111; also see Iyengar and Hahn 2009; Stroud 2011: 34; Druckman, Fein, and Leeper 2012). An important exception to the selective exposure hypothesis, however, is Arceneaux and Johnson (2013: 197) who find

prior two hypotheses, unless individuals opt not to watch any political content, we predict they will move in a partisan consistent direction.

Our focus here, however, extends beyond the direct effects of partisan media exposure—we want to explore how group discussion shapes its effects as well. Specifically, we are interested in how discussions affect those who were just exposed to partisan media. Additionally, we are interested in how discussions may serve as conduit through which partisan media even influences those who have not been directly exposed to the partisan media content itself. As Levendusky (2013: 153) explains, “partisan media can impact its audience, and then the audience in turn can shape the opinions [of] individuals [who] themselves never watch partisan cable TV news.”

Past work leads us to expect that group composition influences how discussions shape attitudes; (partisan) homogeneous groups—groups made up of only Democrats or only Republicans—have very different effects from heterogeneous ones with a mix of individuals from both parties (Druckman and Nelson 2003; Sinclair 2012; Klar 2014).⁷ While homogeneous groups are more common in the real world, heterogeneous groups certainly occur, especially given that many groups form for apolitical reasons (Sinclair 2012). Moreover, even if less frequent than homogenous groups, heterogeneous group effects offer an interesting counterfactual that could be of growing importance given the changing nature of how groups form (e.g., via social media). Below, we outline predictions both for those who are exposed to partisan media and those who are not

that choice substantially blunts, but does not entirely eliminate, partisan media effects. We discuss below and in our supplemental appendix how a number of significant design choices (e.g., the instructions, incentive to watch full media segments, etc.) may explain differences (i.e., we find larger partisan media effects in choice conditions) between their expectations/results and ours.

⁷ Our focus is on partisan disagreement in groups (Huckfeldt, Johnson, and Sprague 2004) rather than more general disagreement (Mutz 2006). We made this choice given our theory’s focus on partisan media, and leave for future work the effects of other types of disagreement (Klofstad, Sokhey, and McClurg 2013).

exposed to partisan media, and we also explain how these predictions differ based on the composition of the group (i.e., heterogeneous vs. homogeneous groups).

Group Effects on Those Exposed to Partisan Media Content

Given our construction of partisan media exposure, individuals just exposed enter the discussion with numerous accessible arguments at the ready. Consequently, they likely will repeat these perspectives to the group. In homogenous groups, these views typically will go unchallenged since they cohere with all group members' partisan identifications and underlying values. Repetition and public expression, without counter-arguments, tend to polarize the opinions of those speaking (Brehm and Cohen 1962; Cacioppo and Petty 1989; Downing, Judd, and Brauer 1992). Consequently, if a partisan exposed to a mass communication (from any source) engages in a discussion with a partisan homogenous group, he/she moves his/her opinion even further in the direction consistent with his/her party, relative to those who were exposed but did not engage in discussions (*hypothesis 4*) (Isenberg 1986; Druckman and Nelson 2003; Druckman 2004; Klar 2014; Neiheisel and Niebler 2015).⁸

We expect heterogeneous discussions to have a different effect. In these groups, those exposed to messages may repeat the arguments just heard, but those from the other party may challenge these arguments with information from their own outlets. Thus, in a heterogeneous group, individuals will be exposed to information from both sides of the issue, and attitudes will therefore likely moderate.

⁸ Homogeneous groups also encourage extremity due to increased partisan motivated reasoning (Sunstein 2009; Klar 2014) and social conformity (Sinclair 2012). Individuals are encouraged to express the majority viewpoint, which reinforces the underlying belief and facilitates polarization (Visser and Mirable 2004; Isenberg 1986).

On its face, this may seem contrary to our hypothesis 2 that out-party media generates partisan motivated reasoning (and thus polarizes rather than moderates). However, the interactive nature of discussions differ from the unilateral receipt of partisan media; Wojcieszak (2011: 599) explains that “there are differences between exposure to arguments and the interpersonal give-and-take of political talk, which may also stimulate reflective thinking (McLeod et al. 1999) and increase empathy by allowing people to vicariously experience various perspectives (Gamson 1992).”⁹ Thus, if a partisan receives a mass communication (from any source) and then engages in a discussion with a partisan heterogeneous group, he/she moves his/her opinion in the direction consistent with the other party, relative to those who were exposed but did not engage in discussions (*hypothesis 5*) (Druckman and Nelson 2003; Klar 2014).¹⁰

Group Effects on Those Not Exposed to Partisan Media

We now turn to how discussions affect those who were not previously exposed to a partisan media message. In so doing, we are exploring the two step communication flow model—that is, how media messages spread via discussion (Lazarsfeld, Berelson, and Guadet 1948; Katz and Lazarsfeld 1955). When it comes to the impact of

⁹ When individuals justify their opinions to others (e.g., in group settings), prior work suggests motivated reasoning subsides and individuals more carefully consider alternative arguments (e.g., Druckman 2012). In heterogeneous groups, alternative arguments will be put forth, considered, have an effect, and therefore moderate the opinions of those previously exposed. This is particularly the case when people do not enter the discussions with strong opinions, which likely is the case for us since their opinions were just moved due to partisan media exposure (c.f., Wojcieszak 2011: 599). Overall, Mercier and Landemore (2012: 252) explain that “[g]roup polarization has received substantial empirical support. So much support in fact that Sunstein has granted group polarization the status of law (Sunstein, 2002)... group polarization will mostly happen when people share an opinion to begin with... when groups do *not* share an opinion, they tend to *depolarize*” (italics in the original).

¹⁰ Our prediction is consistent with work that shows the inclusion in a group of people with opposing views (i.e., a cross-cutting group) causes individuals to have greater awareness of rationales for alternative perspectives (Mutz 2006; Huckfeldt, Johnson, and Sprague 2004). It also coheres with Vinokur and Burnstein (1978), who find that when two equal sized groups with conflicting opinions interact, the groups’ relative opinions converge toward one another (Druckman and Nelson 2003; Huckfeldt, Johnson, and Sprague 2004: 195).

homogenous groups on those not exposed, the prediction is straightforward. We expect that the messages introduced, by those exposed, will be persuasive for two reasons. First, since our instructions induce discussion of the political issue at hand (i.e., we told participants to discuss their opinions about the media just watched), people will likely identify the outlooks of others (who had watched the partisan media) in the discussion. They will then find those individuals from the same-party to be credible sources (Lupia and McCubbins 1998). Second, regardless of recognition of the source, the same-party arguments will resonate with individuals' values (Hornikx and O'Keefe 2009: 40). Thus, if a partisan is not exposed to a mass communication and then engages in a discussion with a partisan homogenous group, he/she moves his/her opinion further in the direction consistent with his/her party, relative to those who do not receive communications of any sort (*hypothesis 6*).

What happens to previously unexposed individuals in heterogeneous groups is less clear. On the one hand, they will hear differing perspectives, particularly from those who were previously exposed, and this could generate a cancelling effect such that there is no opinion change (e.g., Druckman and Nelson 2003), or it could even moderate their initial unexposed opinion. On the other hand, it is important to note that the unexposed individuals differ from those exposed insofar as their opinions have not been recently affected by partisan media content. This means that, for unexposed individuals, the group discussion will provide new information from both partisan sides. They may be more persuaded by their fellow partisans due to source credibility and value resonance, leading to movement in a partisan direction. We therefore lack a firm prediction for unexposed individuals who are in heterogeneous groups.

To summarize, we seek to test three effects: (1) do the opinions of those exposed to different types of partisan media differ from the opinions of those not exposed?; (2) do the opinions of those who were exposed to partisan media and then participate in homogenous or heterogeneous groups differ from those who were only exposed to partisan media?; and (3) do the opinions of those who were not exposed to partisan media but participate in homogenous or heterogeneous groups differ from those who were neither exposed nor participated in discussion?

Experimental Design

To test our hypotheses, we designed an experiment that varied the three factors discussed above: (1) exposure or non-exposure to a partisan mass political communication, (2) engagement in an interpersonal discussion or not, and (3) the composition of discussion groups, for those in discussions such that they were partisan homogenous or heterogeneous. This resulted in 16 distinct conditions, as displayed in Table 1.

[Insert Table 1 about here]

Condition 1—what we coin “No/No”—offers a baseline of opinions when individuals neither receive a mass partisan political communication nor engage in discussion. To avoid confounds of pure media exposure, we expose these individuals to a non-political mass communication that does not touch on political issues (i.e., neutral entertainment segments). In conditions 2 through 4, individuals either watch same-party (2) or out-party (3) partisan media, or choose among several (partisan and apolitical entertainment) media outlets (4). We can test hypotheses 1 and 2 (the direct effects of partisan media exposure) by comparing conditions 2 and 3 against condition 1—in each

case, we predict movement in the direction of the individual's party. We also can test hypothesis 3 by exploring the media choices made in condition 4, and we can further identify the effect of partisan media in the choice condition with comparisons against condition 1.

In conditions 5 through 10, individuals watch one of the partisan media outlets discussed above (a same-party outlet, an out-party outlet, or have a choice among outlets), and they then engage in discussions with a group consisting of either (1) several fellow partisans (homogenous) or (2) a mixed group that included one fellow partisan as well as two individuals from the other party (heterogeneous). Moreover, other individuals in the discussions—one from their party and one from the other party—entered the discussions without having seen any mass communication. The mix of the three types of exposure and two types of partisan make-up generate the six conditions (5-10) listed. Hypothesis 4 predicts that the opinions of (exposed) individuals who engage in discussions in homogenous groups will move even further in the direction of their party, relative to those who did not discuss. We can test this by comparing conditions with only partisan media exposure (e.g., 2, 3, 4) against conditions with exposure and homogenous discussion (e.g., 5-7). Similarly, we can test hypothesis 5—which suggests the heterogeneous discussions will moderate those exposed—with comparisons of exposed only to exposed and heterogeneous discussion (e.g., 8-10).

The remaining conditions (11-16) are the counterparts to conditions 5-10, but they focus on the individuals who enter the discussions *without having seen prior partisan media content*. Like individuals in condition 1, these individuals only watch non-political (entertainment) media prior to the discussions. In the discussion groups, they were paired

with the appropriate individuals from conditions 5-10. For example, those in condition 5 have conversations with those in condition 11—that is, it is a homogenous conversation where some were exposed to partisan consistent media (condition 5) and others were not (condition 11). These conditions allow us to test hypothesis 6—that the opinions of individuals not exposed to direct partisan media content, but who engage in homogenous discussion groups with those who were exposed, will move in a partisan direction. The test of this hypothesis is to gauge movement towards the in-party in conditions with non-exposed individuals who engaged in homogenous discussions (11-13) against non-exposure without discussion (1).

Finally, conditions 14-16 involve non-exposed individuals in heterogeneous groups. As explained, we do not have a firm hypothesis in this case (e.g., the in-party exposed may be more persuasive moving those non-exposed in a partisan direction, or it could be that the mix of partisan sentiments neutralizes any effect). We can assess for any effects with comparisons between non-exposed individuals who engaged in heterogeneous discussions (14-16) against non-exposure without discussion (1).

Stimuli

To implement our experiment, we needed to make a set of decisions related to both the partisan media exposure and the group discussion. First, for our partisan media stimuli, we opted for approximately 12 minutes of actual partisan cable news from the two leading outlets: Fox News and MSNBC. For Democrats (Republicans), MSNBC is the same-party (out-party) source, and Fox News is the out-party (same-party) source. This reflects the partisan slant of both networks (as characterized by outside observers), audience demographics, and previous research (see Levendusky 2013; Arceneaux and

Johnson 2013).¹¹ In cases where we allowed individuals to choose their media preference, we offered a limited choice of 7, all of which were shown to respondents as links from which to choose on a computer screen.

Second, we used the issue of the Keystone XL pipeline and the ensuing larger debate about America's domestic energy production, especially with regard to drilling. We identified two recent segments on the topic from each network, and edited them to be of equal combined length (approximately 12 minutes; transcripts are available in the supplemental appendix). The Fox segments focused on job creation resulting from more oil and gas drilling (a pro argument) while the MSNBC segments centered on the environmental risks posed by drilling (a con argument), consistent with the real-world arguments deployed by each side (e.g., the segments themselves came from actual partisan broadcasts).¹² The issue of drilling has been used in prior studies of partisan reasoning (Levendusky 2010; Druckman, Peterson, and Slothuus 2013) and, while clearly being an issue that divides the parties, it is also one on which participants were unlikely to have strong priors and thus their opinions were susceptible to influence given that the issue was never particularly salient during our study (Bartels 1993; Druckman and Leeper 2012).

We very much recognize that the use of clear partisan networks which offer partisan consistent arguments on a single (partisan) issue where individuals likely have weak prior opinions, and limited or no choice, significantly increase the likelihood of

¹¹ Moreover, we conducted a pre-test with individuals who did not participate in the main experiment, but were recruited with similar methods. We asked participants to rate the extent to which they trusted and found knowledgeable various networks. The results overwhelming showed that Democrats (Republicans) found MSNBC (Fox) to be substantially more trustworthy and knowledgeable than their partisan counterparts (also see Pew Research Center 2014).

¹² The use of real video segments has an obvious external validity advantage even if it means that it results in some loss of control over the details of the message. That said, Levendusky (2013) uses both real-world and manufactured stimuli in his experiments and finds the two have similar effects.

finding direct partisan media effects (see the supplemental appendix for discussion). This was sensible, and arguably critical, in our case given our focus on the impact of discussion (although see note 2).¹³ Our work establishes a critical baseline, and future studies can explore how variation in the partisan media stimuli would shape the size of these effects.

Third, to investigate the impact of discussion groups, individuals in the relevant conditions (see Table 1) engaged in small in-person homogenous or heterogeneous discussions immediately after media exposure. We follow prior work by forming groups that on average contained four individuals (e.g., homogeneous groups have 4 Democrats or 4 Republicans, heterogeneous groups have 2 Democrats and 2 Republicans; see Druckman and Nelson 2003; Druckman 2004; Klar 2014).¹⁴ This size coheres with empirical work that suggests political discussion networks often include 3-4 total people (Klofstad, McClurg, and Rolfe 2009).¹⁵ In each discussion group, half of the subjects are exposed (i.e., they watch the political video segments or choose among videos), and half are unexposed. For example, a homogeneous discussion group might include 4

¹³ In our aforementioned pre-test we also asked participants to rate the direction and the quality of the arguments used in our segments (for the quality ratings, we explicitly asked respondents to try to put aside partisan leanings). As mentioned, we intended to use valence consistent arguments (e.g., Fox's segment offered the conservative view) and this is exactly what we found: respondents found the Fox segments to be much more pro drilling and the MSNBC segments to be more con drilling. On perceived quality of the arguments, respondents generally found both arguments to be "strong" but there was a slight partisan difference with the pro drilling video being significantly more effective among Republicans than Democrats (and vice-versa for the con drilling video) even given the prompt to ignore partisan perspectives. This was our intent given we posited value resonance will affect the impact of the messages.

¹⁴ While we study the effects of group discussion, an important extension is to consider the effects of dyadic conversations, as these might have distinct dynamics.

¹⁵ Due to variation in the number of respondents per session (and the need to form heterogeneous/homogeneous groups), group size actually varies between 3 and 6 (homogeneous groups can have 3-6 respondents, heterogeneous groups have only 4 or 6 participants). 80% of groups have 4 respondents, 8% have 5 participants, 8% have 6 participants, and 3% have 3 participants. Controlling for the number of discussants per group does not change our substantive results below. Pure Independents were randomly assigned to deliberation groups, though we exclude them from our results below. Also, note that in every heterogeneous group, there was at least one individual from each party who received a partisan media message (i.e., no heterogeneous groups involved an individual from one party receiving a message and the only other individual receiving a message being a pure Independent).

Democrats, 2 of whom watch the MSNBC segments (condition 5) and 2 of whom do not (condition 11).¹⁶

Procedure

We fielded our experiment on 575 subjects between November 2013 and November 2014.¹⁷ We recruited participants from community, civic, religious, and hobby groups, as well as from University campuses, in a large city on the East Coast and a large city in the Midwest. Although the subjects in no way approximate a random sample, they are relatively diverse.¹⁸ Participants took part in our approximately one-hour experiment in exchange for a payment for themselves or a modest donation to their group (when relevant), as they preferred.

We implemented the experiment by inviting participants to attend a session at a particular time. In advance of a session, we randomly determined whether there would be discussion group conditions or not. The particular discussion group condition(s) implemented depended, in part, on the nature of the participants. Specifically, in sessions that were planned to include discussion groups, we queried subjects' partisan identifications on a pre-test questionnaire, administered at the start of the session.¹⁹ We then used that information—while subjects completed a filler task—to assign individuals

¹⁶ In a heterogeneous group of 4 subjects, 1 Democrat and 1 Republican would be exposed to political stimuli, and 1 Democrat and 1 Republican would not. In no conditions do we have discussion groups where all subjects are exposed or where all subjects engage in discussion with none being exposed to media. These types of experiments have already been done elsewhere (e.g., Druckman and Nelson 2003; Karpowitz and Mendelberg 2014; Klar 2014), and would not allow us to test our central hypotheses.

¹⁷ Over the course of our data collection, no major decisions were made about the Keystone XL pipeline and thus we believe sessions conducted at distinct times are comparable.

¹⁸ The sample is 53% Democrat and 32% Republican (including leaners), 49% female, 29% minority, 32% student-aged, and 38% have a household income of less than \$100,000 per year.

¹⁹ In assigning conditions (and in our analyses below), we treated leaners as partisans (Keith et al. 1992), which is consistent with other studies on partisan influence (e.g., Levendusky 2010; Druckman, Peterson, and Slothuus 2013). We also asked a variety of demographic questions on the pre-test questionnaire.

to homogenous or heterogeneous discussion groups.²⁰ We randomly assigned subjects to conditions (video exposure, as well as homogeneous versus heterogeneous discussion) subject to the constraint of who showed up at the session (i.e., some sessions may have more Democrats, others may have more Republicans, and so forth). This mode of assignments—based initially on session and then for discussion group sessions based on the partisan make-up of those who showed up—means some conditions may not be fully exchangeable (i.e. on average nearly identical on baseline characteristics); we address this in our analyses below.

We asked subjects to watch the video segments carefully; we also informed them—in the relevant conditions—that they would be deliberating about what they watched (see the supplemental appendix for the specific instructions and a discussion of how these design choices, including the instructions, may have affected the results). In terms of media exposure: in the forced exposure conditions (conditions 2, 3, 5, 6, 8 and 9; see Table 1), we showed subjects the (two) clips from Fox News or MSNBC, as appropriate. Subjects were not given any choice; they were simply instructed to watch the videos and then shown their segments. Subjects in the choice conditions (conditions 4, 7, and 10) were told they could choose what they wanted to watch. Subjects were given the choice of the segments from MSNBC and Fox News (the partisan content), as well as a neutral news segment (from the PBS News Hour), and several entertainment options (the segments shown to subjects in the no exposure conditions), for a total of 7 choices.

After the video stimuli, participants joined their assigned discussion groups, were given instructions on how to discuss, and then proceeded with group discussion. We asked

²⁰ Thus, if a given session lacked a sufficient partisan mix, we were only able to implement homogenous discussion groups.

participants to discuss what they thought of the segments they watched.²¹ As mentioned, the discussions came immediately after the videos, so the messages from the videos should have remained accessible in memory. After discussion, subjects completed the post-test questionnaire (we describe our specific measures below), received their compensation, and left.

Results

We begin by investigating the behavior of participants who had the opportunity to choose which media to watch. Recall that subjects in these conditions could choose from various, albeit not an overwhelming number (i.e., 7) of same-party, opposite-party, and apolitical entertainment options. We predicted individuals would be more likely to opt for information from sources consistent with their partisan identity than information from out-party sources (hypothesis 3). This is the pattern we find. In the choice conditions (conditions 4, 7, and 10; see Table 1), 80 percent of subjects report watching at least some same-party content (i.e., one of their choices was a same-party outlet) (19 percent *only* watched same-party content, and nothing else). The modal viewer in the choice condition watches 2 video segments; one of them is from a same-party source and the other is typically an entertainment video. Thus, like Arceneaux and Johnson 2013, we find that many respondents want to watch at least some entertainment options. In contrast, we find relatively little opposite-party exposure: only 11 percent of subjects opt

²¹ Everyone was given the opportunity to speak first about the media content, and were encouraged to state their opinions (though some people chose not to exercise it). After everyone spoke, the remaining time was left for free discussion. See the supplemental appendix for specific instructions.

for any opposite-party exposure. In sum, our findings show that at least in a limited choice environment, individuals looking for news strongly prefer same-party sources.²²

Next we turn to the effects of partisan media and discussion groups on individuals' attitudes. Before presenting the results, three points are relevant. First, recall that our news segments focused on the Keystone XL pipeline and drilling more generally. We gauged attitudes by asking three items on the post-test questionnaire: support for the Keystone XL pipeline, support for increased coastal drilling, and support for opening up more federal lands to drilling. The three items are strongly related ($\alpha = .92$), so we analyze them as one scaled item (the mean of these three items) below. Using a scaled item minimizes measurement error and creates a more stable measure (Ansolabehere, Rodden, and Snyder 2008).

Second, as with analogous work (e.g., Levendusky 2013), we fold the measure such that higher values indicate greater attitudinal extremity (in either direction). This means that increases indicate "same-party" movement for all respondents regardless of their party. This facilitates testing our hypotheses which, recall, offer predictions about relative movements in the direction of one's party (e.g., Democrats move in a more Democratic or, in this case, anti-drilling, direction; Republicans move in a more Republican or pro-drilling direction), or the other party.²³

²² Although the context differs, our results are similar to Taber and Lodge (2006: 764), who find that (sophisticated) respondents selected arguments from like-minded (akin to same-party) sources 70-75 percent of the time (also see Iyengar and Hahn 2009; Stroud 2011; Druckman, Fein, and Leeper 2012). However, as mentioned, others have found no or smaller effects in choice environments (e.g., Arceneaux and Johnson 2013): as we discuss, in detail, in the supplementary appendix, our participants may have been more inclined to watch political segments given we told them: 1) that the study is about learning from media, 2) that they should pay attention and we will be asking if they learned anything, and 3) (for those in discussions groups) that they would have to discuss the content of the segments in subsequent discussions.

²³ This implies the process works the same for both Democratic and Republican respondents. We did this because we do not have any theoretical predictions as to differences by party. Our operationalization also means that higher values on the measure reveal increased polarization since high values reflect more

Third, those in discussion groups were asked to discuss the news segments they had watched. Additionally, at the start of the discussion, we asked each person to state their opinions about what they watched, thereby making it likely that the media would be discussed. Fourth, as discussed above, our approach to assignment was to randomly assign conditions based on session and then, for discussion groups, based on who showed up for a given session. For example, in a typical session, more Democrats than Republicans attended, and hence, Republicans at that session would be more likely to be assigned to heterogeneous discussion groups. This follows because we need 4 Republicans to form a homogeneous Republican discussion group, but only 2 Republicans (and 2 Democrats) to form a heterogeneous one. The result of this assignment technique (i.e., first based on session and then, for discussion sessions, contingent on who attended) meant we did not strictly randomly assign individuals to conditions. This creates the potential for imbalance, particularly by partisanship. Thus, some conditions may not be fully exchangeable.

Because some conditions may not be fully exchangeable, we present our results below in two ways: (1) basic regressions of our dependent measure on condition dummy variables, as is standard for many experiments, and (2) using inverse probability weighting (IPW) to adjust for potential imbalance in the probability of assignment to particular conditions across individuals.²⁴ In the supplemental appendix, we also consider

overall movement toward one's own party (e.g., Democrats are becoming more liberally extreme, Republicans more conservatively so). If we analyze the results separately by party, we do find somewhat larger effects for Democrats, but this is likely due to sample size, given that we have more Democrats in our sample (see the supplemental appendix).

²⁴ We use the following variables, which were on our survey, to derive weights: partisan identification, gender, minority status, student status, income, political interest, political and oil knowledge (based on a knowledge quiz), and environmentalism (i.e., the extent to which one favors protecting the environment as opposed to maintaining jobs). This last variable was measured on the post-survey; however, we treat it as a stable value, and re-estimating all models without it would not change our substantive conclusions.

a wide variety of regression models that control for various pre-exposure covariates. The uniformity of results across these analyses gives us confidence in our results, although we recognize design limitations preclude definitive causal assertions.²⁵

Effect of Partisan Media Exposure

To test the direct effects of partisan media on opinions, absent discussion, we compare opinions in the exposure only conditions (2, 3, and 4) to the control (no exposure) condition (1). We use the two methodological approaches discussed above, both of which test our hypotheses by regressing our dependent measure on condition dummies, indicating exposure to same-party media, out-party media, or media choice. The first model in Table 2 contains only the condition dummies, and the second applies inverse probability weighting as discussed above.

[Insert Table 2 about here]

The results appear in Table 2, which shows support, across all models, for hypotheses 1 and 2: exposure to either same-party media or out-party media lead individuals to move significantly in a same-party direction, *relative to those not exposed*. As expected, out-party exposure from a clearly partisan outlet likely causes individuals to counter-argue the message and consequently move in the opposite direction (Arceneaux and Johnson 2013: 81-82; Bolsen, Druckman, and Cook 2014; Taber and Lodge 2006; Lavine et al. 2012). As Arceneaux and Johnson (2013: 88) explain, counter-attitudinal news “can be just as polarizing as exposure to proattitudinal news...” (also see Arceneaux and Johnson 2013: 104). We also find that those in the choice condition moved significantly in the

²⁵ Given the reality of recruiting non-student subjects, however, there is effectively no design that fully circumvents the assignment problem in group studies, and thus we view our results as an important advance. Note that the same problem exists in other studies of group decision-making that study factors such as race, gender, or ethnicity (e.g., Karpowitz and Mendelberg 2014).

same-party direction, consistent with the fact that they predominantly chose same-party media.²⁶ Our results are consistent in both direction and size with work on partisan media (e.g., Levendusky 2013, Arceneaux and Johnson 2013: 87) and partisan cues more generally (e.g., Bullock 2011; Nicholson 2012: 63; Druckman et al. 2013).²⁷ In short, partisan media exposure of any type led to the same outcome: movement of attitudes toward the subject's party's position.

Caution should be taken in generalizing these findings because we designed the experiment to maximize the likelihood of finding same-party direct partisan media effects. We did this to facilitate studying the impact of discussion networks, to which we turn now.

Group Effects on Those Exposed to Partisan Media

To model the effects of group discussion on the exposed, we compare those in homogeneous (conditions 5-7) or heterogeneous (condition 8-10) discussion groups to those who only watched partisan media but did not participate in discussion (conditions 2-4). In modeling the effects of group discussion, we do not differentiate among subjects who watched same-party content, out-party content, or chose their own content. We do so because our theory makes the same prediction for all of them: regardless of content, partisan media or choice should polarize subjects. Moreover, empirically, we find that all

²⁶ Interestingly, out-party exposure and choice generate larger, although not statistically significantly larger, movement in the same-party direction. We suspect this stems from the likelihood that both out-party exposure and choice generated increased elaborative thinking, which induced more extreme opinions. Prior work shows that direct experiences (e.g., the act of choosing information) leads individuals to think more about their attitudes and thereby likely increases counter-arguments and stronger/more extreme opinions (Krosnick and Smith 1994: 287; Visser, Bizer, and Krosnick 2006; Druckman, Peterson, and Slothuus 2013; also see Borah 2011). Similarly, as explained, counter-arguing with out-party messages often involves increased elaboration, resulting in stronger reactions (Lodge and Taber 2013: 163).

²⁷ That said, our work is in the same vein but distinct from work on partisan cues. That work finds that, under certain conditions, party cues have little or no effect when compared with policy information (Bullock 2011; Boudreau and MacKenzie 2014). Our work is not directly comparable since we employ both partisan sources and information, so we cannot distinguish source and content effects.

three types of exposure do polarize subjects (i.e., have identical effects; see Table 2 above). Some readers may be concerned that this could bias our results. However, when we analyze the data separately by the type of partisan media exposure, we find analogous results (see the supplemental appendix). Pooling across type of media exposure simplifies presentation of our results and gives us greater statistical power to test our key hypotheses.

[Insert Table 3 about here]

Table 3 reports the results of our analysis, using the same techniques as in Table 2 above. Here, the key variables are dummies indicating participation in homogenous (conditions 5-7) or heterogeneous groups (conditions 8-10), which we compare against the baseline of partisan exposure only (conditions 2-4). Across both models, we find strong support for hypotheses 4 and 5. Homogeneous group discussions lead those who already moved toward their party due to prior partisan media exposure to substantially move in the direction of their party (relative to those who were exposed but did not participate in discussion). This suggests that, as predicted, the repetition of arguments that go unchallenged by like-minded others generates further same-party movement (also see Druckman and Nelson 2003; Sunstein 2009; Schkade, Sunstein, and Hastie 2010: 232; Klar 2014). The discussion of partisan media messages generates powerful opinion polarization.

In contrast, we find the opposite pattern for subjects who engaged in heterogeneous deliberation. Consistent with hypothesis 5, these individuals became significantly more moderate than they were after just receiving partisan media exposure. This presumably stems from the presence of individuals from the other party challenging

the views of those on the other side. It is likely the need for public statement and justification that generates a moderating effect here, in contrast to mere exposure to out-party media (also see Druckman and Nelson 2003; Klar 2014). In sum, the differential impact of homogenous and heterogeneous groups accentuate the importance of accounting for the nature/make-up of discussion groups when it comes to understanding their effects on opinions.

Group Effects on Those Not Exposed to Partisan Media

The most novel part of our design is that it allows us to test whether the content of partisan news sources can diffuse to those who never watch via interpersonal discussion—a variant of the two-stage communication flow model. To that end, we turn to how discussion groups affected the opinions of those who were *not* previously exposed to partisan media (conditions 11-16). Again, the models we use are the same as those used above, with one exception. In this case, the appropriate baseline is the control (i.e., those who saw no political media nor participated in a discussion) group. Individuals in the control group match individuals who did not watch but were in discussion groups in all ways other than being in a discussion group (i.e., we isolate the discussion group effect). In short, we want to assess how the deliberation affected opinions relative to having no informative experiences

[Insert Table 4 about here]

Table 4 presents our results. We find support for hypothesis 6 that homogenous discussion significantly move people in the same party direction; this is sensible given these individuals interact with like-minded others who put forth value-resonant arguments. The key twist to our finding is that the movement reflects partisan content

that these individuals never actually watched. The sizable movement reflects the power of *both* persuasion and conformity processes on individuals who had fairly weak prior opinions (e.g., we suspect the effect on exposed individuals is smaller since those individuals had already moved in a polarized direction due to partisan media).

Recall that we did not have clear expectations about the impact of heterogeneous discussions on previously unexposed individuals. What we find is that those discussions did move the opinions of individuals in the same-party direction, although to a lesser extent than the homogenous groups. This suggests that, while they may have heard multiple perspectives in the discussions, they were moved more by their fellow partisans, who likely put forth value-resonant arguments. This is an intriguing finding as it suggests that heterogeneous discussions do not always moderate—that in fact they polarize when it comes to individuals who previously did not receive partisan information. Moreover, this shows that a two-stage communication flow can work even if the discussion groups involve a mix of different partisans. *Any* type of group discussion polarizes attitudes for those who were not exposed to partisan content.

These findings present clear evidence for the two-stage communication flow model in the context of partisan media: there is *no need to watch* for partisan media to influence opinions (Levendusky 2013). The implication is that the power of partisan media in shaping attitudes and ultimately producing mass polarization is *not* constrained *per se* by its small audience size. While these outlets reach only a relatively small audience, their effects can extend much more broadly because their polarizing power diffuses through discussion networks. As noted, the specifics of our experiments mean that generalizing our findings would require further study with varying parameters;

however, what our findings establish is that studying the direct or indirect effects of partisan media requires acknowledgment of the possible amplifying, nullifying, and spreading impact of personal discussion networks.

Discussion Preferences

Our results demonstrate that inter-group discussions have a substantial impact on the opinions of those who previously watched partisan media and of those who did not watch. Of course, outside of the laboratory, people maintain substantial agency in choosing the groups with whom they prefer to interact (e.g., homogenous or heterogeneous groups). We thus are interested in downstream effects of our treatments on preferences for future interactions: is there a path dependency such that interactions in a certain type of group affects preferences for future interactions? We expect that participating in homogeneous discussion groups will foster further preference for homogeneous discussion groups. This follows because homogeneous groups reinforce people's partisan identities, prompt partisan motivated reasoning, and strengthen subjects' preferences for like-minded information.

We test this expectation by using a question that asked respondents who participated in discussion: "In the future, if you were to discuss drilling and the Keystone XL pipeline with others, what kind of group would you be most interested in joining: one where most people disagree with you on this this issue, one where most people agree with you on this issue, or one where there is a mix of opinions?" (on a 7-point scale ranging from most disagree with me to most agree with me).

We again exclude pure Independents, since the partisan focus of the experiment means it is not clear what to expect for these individuals. Among the rest of the

respondents, we find the following average scores: 3.00 (std. dev.: .96; N = 117) for those not in discussions, 3.04 (.98; 134) for those in heterogeneous discussions, and 3.31 (1.26; 221) for those in homogenous discussions. This latter average is significantly greater than the others (e.g., for homogenous versus heterogeneous discussions ($t_{353} = 2.16, p \leq .05$ for a two-tailed test). This coheres with Klar's (2014) finding that "respondents in homogenous groups prefer a significantly... more like-minded group [for future interactions]" (699).

Our findings are particularly important within the context of polarization: they have the disturbing implication that experiences with like-minded individuals generate the preferences for more such experiences that, in turn, further polarize. Polarization as a result of homogeneous discussion can be a partially self-reinforcing process.

Conclusions

This paper explores how discussion can shape the power of partisan media messages. We show that, depending on prior exposure and the type of group discussion, that discussion can either amplify or moderate the effects of partisan media exposure. For those who are exposed to partisan media, homogeneous group discussion further polarizes opinion. Exposure to heterogeneous group discussion for those who were previously exposed, however, moderates opinion. "Hearing the other side" works to lessen the polarizing impact of these outlets.

More importantly, we find strong evidence that the reach of these outlets is not simply limited to their relatively modest audiences. We find that those who are not exposed to partisan media, but then participate in discussion with those who are, become more polarized as a result of that discussion—even if that discussion group consisted of a

heterogeneous mix of partisans. Part of the polarizing power of partisan media is that their messages spread through the mass public via interpersonal communication. These results are consistent with the two-stage communication flow model, but applied to the current partisan media environment.

Like all projects, ours faces limitations. In particular, as we discussed above, we likely present an upper bound on the ability of partisan media to influence subjects. This reflects our particular design decisions (see the supplemental appendix), and the general tendency of laboratory experiments to generate larger effects than those found in other settings (Hovland 1959; Barabas and Jerit 2010; Jerit, Barabas, and Clifford 2013; Coppock and Green 2015). Similarly, as in all experimental studies, we can only offer subjects a rather limited set of choices (in order to make the experiment actually feasible). In real-world settings with hundreds or thousands of options, people may consume more balanced media diets, making exposure to single partisan media outlets may be less likely (Prior 2013), and hence, partisan media might have a smaller effect.²⁸ We accept this as a necessary limitation of our setup, given our desire to focus on the group discussion (which is likely not possible absent a strong polarizing effect of partisan media). In other settings, with weaker partisan media effects, it would follow that discussion effects may be smaller as well.

That said, however, because those who actually watch partisan media are more knowledgeable and politically engaged (Stroud 2011; Prior 2013), they may actually have

²⁸ Indeed, perhaps, the main limitations of our study concern our limited media search environment and the “forced” nature of inter-personal discussion. Future work, that allows for broader searches, should explore whether individual attributes that influence the selection of partisan sources also influence a willingness to engage in discussion (and influence in discussions).

a greater effect on others in the real world. Here, we randomly assigned exposure to partisan media, but in the real world, it is strongly correlated with other factors that make individuals more persuasive (e.g., Thorson 2014). Further, while we study interpersonal discussion, many individuals encounter partisan messages not just in conversation, but also via social media. So even if someone is unlikely to engage in conversation about politics, they may be inadvertently exposed to it via Facebook and Twitter, by following a link posted via a social media communication (Messing 2013). These are alternative/additional “secondary audiences” for partisan media: audiences that do seek out such media but are ultimately affected nonetheless. In the real world, there are other factors (i.e., multiple secondary audiences) that heighten the reach of partisan media that we do not study here. Future work can explore how these different dynamics shape the effects, but our work here establishes an important benchmark.

Another avenue for future work is to vary the size, nature, and task of the discussion groups. First, we focused on groups of roughly four; yet, as mentioned in an above note, many inter-personal interactions may be dyadic and it is quite possible if such one-to-one exchanges introduce distinct dynamics. Second, our groups varied in the extent to which the members knew one another, but few, if any, involved people who knew each other well. It could be that norms of social interactions lead people in heterogeneous groups with others they do not know well to engage in perspective taking (e.g., leading to moderation among those exposed and smaller movements among those not exposed). Additional research can explore whether groups that include individuals who know each other well operate differently (e.g., there is less of a norm to engage in perspective taking). Finally, we explicitly asked people to discuss what they watched and

attempted to induce each person to speak; sans such instructions, it is possible that the discussions would have evolved differently. One other point concerns the choice of issues understudy—other issues where people possess stronger or weaker prior opinions may work differently.

With these caveats in mind, our findings do have important implications for how scholars understand the dynamics of preference formation, media effects, and political polarization. For preference formation, our findings uncover an important lacuna: how media shape the effects of discussion. Scholars have certainly studied how media and group discussion shape preferences separately, and in some cases how discussions interact among individuals who were all previously exposed to media communications. Yet few, if any, previous works have considered how one may build upon or extend the other (Batinic and Appel 2013). Our findings show that the effects of media exposure are strongly affected by the ensuing discussion, either amplifying or nullifying the effects of media exposure depending on the type of discussion. Further, discussion today shapes preferences over discussion tomorrow, suggesting that discussion has important downstream effects on preference formation as well. To understand how media or discussion shape preferences, they need to be studied together, not separately. This echoes and re-confirms a trend in the literature, suggesting any study of communication *must* consider interpersonal discussion as part of the process (e.g., Sinclair 2012).

Our findings also refine previous efforts to understand the effects of group discussion. Mutz (2006) argues that heterogeneous discussion (hearing the other side) promotes tolerance for other points of view. This is assuredly true, but our findings underline that for those who are unexposed, such discussion can still generate

polarization. Heterogeneous discussion has a downside, and its effects may be more subtle and conditional than recognized in the previous literature.

Of greatest significance, our findings demonstrate how partisan media effects spread through the mass public. We show how the effects of partisan media outlets extend beyond their narrow audience. Previous work suggested, but had not demonstrated, that the polarizing effects of partisan media spread via two-stage communication flows. We provide the evidence to support that claim, which has implications for how we think about not only the polarizing power of partisan media, but about the dynamics of polarization more generally.

Partisan media's audience may be limited, but because these people are somewhat more involved and partisan, they are especially likely to be opinion leaders (Stroud 2011). These individuals can then talk to others about what they watch, and the effects spread through the mass public more broadly. So even with a small audience, the net effects of partisan outlets need not be small (Levendusky 2013). While scholars have long understood how group discussion shapes attitudes, that insight has not translated into studies of mass polarization. Sidestepping debates about the level of mass polarization, our findings here point to the importance of considering how group discussion can work to shape attitudes and move individuals toward the extremes. To understand the dynamics of polarization, then, we need to understand how mechanisms like media exposure and group discussion contribute to polarization. Our findings here provide a step toward that goal.

Works Cited

- Ahn, T.K., Robert Huckfeldt, and John Barry Ryan. 2014. *Experts, Activists, and Democratic Politics: Are Electorates Self-Educating?* New York: Cambridge University Press.
- Ansolabehere, Stephen D., Jonathan Rodden, and James M. Jr. Snyder. 2008. "The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting." *American Political Science Review* 102(2): 215-232.
- Arceneaux, Kevin, and Martin Johnson. 2013. *Changing Minds or Changing Channels? Partisan News in an Age of Choice*. Chicago: University Chicago Press.
- Barabas, Jason, and Jennifer Jerit. 2010. "Are Survey Experiments Externally Valid?" *American Political Science Review* 104: 226-242.
- Bartels, Larry. 1993. "Messages Received: The Political Impact of Media Exposure." *American Political Science Review* 87(2): 267-85.
- Batinic, Bernard, and Markus Appel. 2013. "Mass Communication, Social Influence, and Consumer Behavior: Two Field Experiments." *Journal of Applied Social Psychology* 43(7): 1353-1368.
- Baum, Matthew, and Timothy Groeling. 2010. *War Stories*. Princeton, NJ: Princeton University Press.
- Bolsen, Toby, James N. Druckman, and Fay Lomax Cook. 2014. "The Influence of Partisan Motivated Reasoning on Public Opinion." *Political Behavior* 36(2): 235-262.
- Borah, Porismita. 2011. "Conceptual Issues in Framing Theory: A Systematic

- Examination of a Decade's Literature." *Journal of Communication* 61(2): 246-263.
- Boudreau, Cheryl, and Scott MacKenzie. 2014. "Informing the Electorate? How Party Cues and Policy Information Affect Public Information about Initiatives." *American Journal of Political Science* 58(1): 48-62.
- Brehm, Jack W., and Arthur R. Cohen. 1962. *Explorations in Cognitive Dissonance*. New York: John Wiley & Sons.
- Bullock, John. 2011. "Elite Influence on Public Opinion in an Informed Electorate." *American Political Science Review* 105(3): 496-515.
- Cacioppo, John, and Richard Petty. 1989. "Effects of Message Repetition on Argument Processing, Recall, and Persuasion." *Basic and Applied Social Psychology* 10(1): 3-12.
- Coppock, Alexander, and Donald P. Green. 2015. "Assessing the Correspondence between Experimental Results Obtained in the Lab and Field: A Review of Recent Social Science Research." *Political Science Research and Methods* 3: 113-131.
- Dalton, Russell, Paul Beck, and Robert Huckfeldt. 1998. "Partisan Cues and the Media: Information Flows in the 1992 Presidential Election." *American Political Science Review* 92(1): 111-126.
- Downing, James W., Charles M. Judd, and Markus Brauer. 1992. "Effects of Repeated Expressions on Attitude Extremity." *Journal of Personality and Social Psychology* 63: 17-29.
- Druckman, James N. 2004. "Political Preference Formation: Competition, Deliberation,

- and the (Ir)relevance of Framing Effects.” *American Political Science Review* 98(3): 671-686.
- Druckman, James N. 2012. “The Politics of Motivation.” *Critical Review* 24(2): 199-216.
- Druckman, James N., Jordan Fein, and Thomas Leeper. 2012. “A Source of Bias in Public Opinion Stability.” *American Political Science Review* 106(2): 430-454.
- Druckman, James N. and Thomas Leeper. 2012. “Learning More from Political Communication Experiments: Pretreatment and Its Effects.” *American Journal of Political Science* 56(4): 875-896.
- Druckman, James N. and Kjersten Nelson. 2003. “Framing and Deliberation: How Citizens’ Conversations Limit Elite Influence.” *American Journal of Political Science* 47(3): 729-745.
- Druckman, James N., Erik Peterson, and Rune Slothuus. 2013. “How Elite Partisan Polarization Affects Public Opinion Formation.” *American Political Science Review* 107(1): 57-79.
- Gamson, William A. 1992. *Talking Politics*. New York: Cambridge University Press.
- Hart, William, Dolores Albarracin, Alice H. Eagly, Inge Brechan, Matthew J. Lindberg, and Lisa Merrill. 2009. “Feeling Validated versus Being Correct: A Meta-Analysis of Selective Exposure to Information.” *Psychological Bulletin* 35(4): 555-588.
- Hornikx, Jos, and Daniel O’Keefe. 2009. “Adapting Consumer Advertising Appeals to Cultural Values: A Meta-Analytic Review of Effects on Persuasiveness and Ad Liking.” *Communication Yearbook* 33: 39-71.

- Hovland, Carl I. 1959. "Reconciling Conflicting Results Derived From Experimental and Survey Studies of Attitude Change." *The American Psychologist* 14: 8-17.
- Huckfeldt, Robert, Paul Johnson, and John Sprague. 2004. *Political Disagreement: The Survival of Diverse Opinions with Communications Networks*. New York: Cambridge University Press.
- Isenberg, Daniel. 1986. "Group Polarization." *Journal of Personality and Social Psychology* 50(6): 1141-1151.
- Iyengar, Shanto, and Kyu S. Hahn. 2009. "Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use." *Journal of Communication*. 59: 19-39.
- Jerit, Jennifer, Jason Barabas, and Scott Clifford. 2013. "Comparing Contemporaneous Laboratory and Field Experiments on Media Effects." *Public Opinion Quarterly* 77: 256-282.
- Karpowitz, Christopher F., and Tali Mendleberg. 2014. *The Silent Sex: Gender, Deliberation, & Institutions*. Princeton N.J. Princeton University Press.
- Katz, Elihu, and Paul Lazarsfeld. 1955. *Personal Influence: The Part Played by People in the Flow of Mass Communications*. New York: Transaction Publishers.
- Keith, Bruce, David Magelby, Candice Nelson, Elizabeth Orr, Mark Westlye, and Raymond Wolfinger. 1992. *The Myth of the Independent Voter*. Berkeley: University of California Press.
- Klar, Samara. 2014. "Partisanship in a Social Setting." *American Journal of Political Science* 58(3): 687-704.

- Klofstad, Casey, Anand Sokhey and Scott McClurg. 2013. "Disagreeing about Disagreement: How Conflict in Social Networks Affects Political Behavior." *American Journal of Political Science* 57: 120-134.
- Klofstad, Casey, Scott McClurg, and Meredith Rolfe. 2009. "Measurement of Political Discussion Networks: A Comparison of Two 'Name Generator' Procedures." *Public Opinion Quarterly* 73(3): 462-483.
- Krosnick, Jon A., and Wendy A. Smith. 1994. "Attitude Strength." *Encyclopedia of Human Behavior* 1(1): 279-289.
- Lavine, Howard, Christopher Johnston, and Marco Steenbergen. 2012. *The Ambivalent Partisan*. New York: Oxford University Press.
- Lazarsfeld, Paul, Bernard Berelson, and Hazel Gaudet. 1948. *The People's Choice*. New York: Columbia University Press.
- Leeper, Thomas J., and Rune Slothuus. 2014. "Political Parties, Motivated Reasoning, and Public Opinion Formation." *Advances in Political Psychology* 35(S1): 129-156.
- Levendusky, Matthew. 2010. "Clearer Cues, More Consistent Voters: A Benefit of Elite Polarization." *Political Behavior* 32(1): 111-131.
- Levendusky, Matthew. 2013. *How Partisan Media Polarize America*. Chicago: University of Chicago Press.
- Levendusky, Matthew. 2014. Review of the book *Changing Minds or Changing Channels?* by Kevin Arceneaux and Martin Johnson. *Perspectives on Politics* 12(2): 474-475.
- Lodge, Milton, and Charles S. Taber. 2013. *The Rationalizing Voter*. New York:

- Cambridge University Press.
- Lupia, Arthur, and Mathew D. McCubbins. 1998. *The Democratic Dilemma*. New York: Cambridge University Press.
- McLeod, Jack, Dietram A. Scheufele, Patricia Moy, Edward M. Horowitz, R. Lance Holbert, Weiwu Zhang, Stephen Zubric, and Jessica Zubric. 1999. "Understanding Deliberation: The Effects of Discussion Networks on Participation in a Public Forum." *Communication Research* 26: 743–774.
- Mercier, Hugo, and Hélène Landemore. 2012. "Reasoning Is for Arguing: Understanding the Successes and Failures of Deliberation." *Political Psychology* 33: 243-258.
- Messing, Solomon. 2013. *How Social Influence Shapes the Diffusion of Elite Discourse, Public Opinion, and Participation*. Ph.D. Dissertation, Stanford University.
- Mutz, Diana. 2006. *Hearing the Other Side*. New York: Cambridge University Press.
- Neiheisel, Jacob, and Sarah Niebler. 2015. "On the Limits of Persuasion: Campaign Ads and the Structure of Voters' Interpersonal Discussion Networks." *Political Communication* 32(3): 434-452.
- Nelson, Thomas, and Jennifer Garst. 2005. "Values-Based Political Messages and Persuasion: Relationships among Speaker, Recipient, and Evoked Values." *Political Psychology* 26(4): 489-515.
- Nicholson, Stephen. 2012. "Polarizing Cues." *American Journal of Political Science* 56(1): 52-66.
- Pew Research Center. 2014. "Political Polarization and Media Habits," October.

- Prior, Markus. 2013. "Media and Political Polarization." *Annual Review of Political Science* 16(1): 101-127.
- Schkade, David, Cass Sunstein, and Reid Hastie. 2010. "When Deliberation Produces Extremism." *Critical Review* 22(2-3): 227-252.
- Sinclair, Betsy. 2012. *The Social Citizen*. Chicago: University of Chicago Press.
- Stroud, Natalie. 2011. *Niche News: The Politics of News Choice*. New York: Oxford University Press.
- Sunstein, Cass R. 2002. "The Law of Group Polarization." *Journal of Political Philosophy* 10: 175-195.
- Sunstein, Cass R. 2007. *Republic.com 2.0*. Princeton: Princeton University Press
- Sunstein, Cass R. 2009. *Going to Extremes: How Like Minds Unite and Divide*. New York: Oxford University Press.
- Taber, Charles S., and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3): 755-769.
- Thorson, Emily. 2014. "Beyond Opinion Leaders: How Attempts to Persuade Foster Political Awareness and Campaign Learning." *Communication Research* 41(3): 353-374.
- Vinkour, Amiram, and Eugene Burnstein. 1978. "Depolarization of Attitudes in Groups." *Journal of Personality and Social Psychology* 36(8): 872-885.
- Visser, Penny, George Bizer, and Jon Krosnick. 2006. "Exploring the Latent Structure of Strength-Related Attitude Attributes." *Advances in Experimental Social Psychology* 38:1-67.
- Visser, Penny, and Robert Mirabile. 2004. "Attitudes in the Social Context: The Impact

of Social Network Composition on Individual-Level Attitude Strength.” *Journal of Personality and Social Psychology* 87(6):779-795.

Wojcieszak, Magdalena. 2011. “Deliberation and Attitude Polarization.” *Journal of Communication* 61(4):596-617.

Condition Number/Name	Individual's exposure	Discussion Group Mix	Differential Exposure in Group ⁺	Directional Prediction → Relative Movement (always in in-party direction)
1. No/No (Control)	None	None	N/A	<i>Non-exposed Baseline</i>
Exposure Only Conditions				
2. In/No	Same-Party Forced	None	N/A	Will polarize (i.e., opinions will move in the same-party direction), relative to non-exposed baseline (H1)
3. Out/No	Out-Party Forced	None	N/A	Will polarize relative to non-exposed baseline (H2)
4. Cho/No	Choice	None	N/A	Will chose same-party options, and polarize relative to non-exposed baseline as a result (H3)
Homogeneous Deliberation, Exposed				
5. In/Homo/No	In-Party Forced	Homogenous	None	Will polarize relative to exposure only baseline (H4)
6. Out/Homo/No	Out-Party Forced	Homogenous	None	
7. Cho/Homo/No	Choice	Homogenous	None	
Heterogeneous Deliberation, Exposed				
8. In/Hetero/No	In-Party Forced	Heterogeneous	None	Will moderate relative to exposure only baseline (H5)
9. Out/Hetero/No	Out-Party Forced	Heterogeneous	None	
10. Cho/Hetero/No	Choice	Heterogeneous	None	
Homogeneous Deliberation, Unexposed				
11. No/Homo/In	None	Homogenous	In-Party Forced	Will polarize relative to no-exposure baseline (H6)
12. No/Homo/Out	None	Homogenous	Out-Party Forced	
13. No/Homo/Cho	None	Homogenous	Choice	
Heterogeneous Deliberation, Unexposed				
14. No/Hetero/In	None	Heterogeneous	In-Party Forced	No Clear Prediction
15. No/ Hetero /Out	None	Heterogeneous	Out-Party Forced	
16. No/ Hetero /Cho	None	Heterogeneous	Choice	

Table 1: Summary of Conditions and Predictions

Note: Cell entries give the name of each condition, what political video stimuli subjects watched (if any), the type of deliberation (if any), what others in their group watched, and our summary prediction for their attitudes.

⁺ This refers to what others in the group were exposed (or not exposed) that differed from the given individual, described in the row. Note virtually all groups also included at least one other individual with the same exposure as the given individual.

	(1) No Controls	(2) IPW
Same-Party Media	0.649 (0.250)	0.860 (0.304)
Out-Party Media	0.965 (0.241)	1.405 (0.469)
Media Choice	0.990 (0.237)	1.440 (0.356)
Constant	4.146 (0.167)	3.855 (0.327)
N	120	94
R-Squared	0.163	--

Table 2: Effects of Partisan Media Exposure

Note: Cell entries in column 1 are OLS regression coefficients, with associated standard errors in parentheses. Column 2 presents mean effects from an analysis using inverse probability weighting. Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

	(1) No Controls	(2) IPW
Homogenous Discussions	0.965 (0.143)	0.922 (0.135)
Heterogeneous Discussions	-0.314 (0.154)	-0.575 (0.147)
Constant	5.027 (0.113)	5.028 (0.103)
N	286	278
R-Squared	0.245	--

Table 3: Effects of Discussions on Those Exposed to Partisan Media

Note: Cell entries in column 1 are OLS regression coefficients, with associated standard errors in parentheses. Column 2 presents mean effects from an analysis using inverse probability weighting. Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

	(1) No Controls	(2) IPW
Homogenous Discussions	1.743 (0.195)	1.878 (0.212)
Heterogeneous Discussions	0.420 (0.211)	0.507 (0.257)
Constant	4.146 (0.170)	3.907 (0.180)
N	195	177
R-Squared	0.336	--

Table 4: Effects of Discussions on Those Not Exposed to Partisan Media

Note: Cell entries in column 1 are OLS regression coefficients, with associated standard errors in parentheses. Column 2 presents mean effects from an analysis using inverse probability weighting. Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

Supplemental Appendix for:
“No Need to Watch:
How the Effects of Partisan Media Can Spread via Inter-Personal Discussions”
September 15, 2015

The Impact of Our Design Choices

Our goal, as mentioned, was to design a study that isolated the potential for interpersonal discussions to influence partisan media effects. We thus made several design choices, which we believe were realistic, but also likely made finding initial direct partisan media exposure effect *more likely* (i.e., an upper bound) than in other scenarios. We did this because a failure to detect direct partisan media effects would likely have made exploring downstream interpersonal communication effects a moot point (although see note 2 in the paper). In this appendix, we describe some of these design choices, all of which we believe are aspects that could be varied in future research. We hope this discussion serves as a blueprint for future work aimed at exploring the precise conditions of partisan media direct and indirect effects.

Attitude Strength

We opted for an issue on which prior work suggested people hold opinions that are not so strong that they are difficult to move from partisan communications. Specifically, we chose oil drilling and the debate surrounding the Keystone XL pipeline. Levendusky (2010), Druckman et al. (2013), and Klar (2014) all find movement on this fairly partisan issue. If we had used an issue where people hold stronger, value-based opinions, we might have observed no movement due to exposure to partisan media. This is a consequence of pre-treatment effects: subjects come into the experiment with strong, crystallized opinions on these types of issues, so they are very unlikely to be shaped by the treatment (Druckman and Leeper 2012). This pattern may help to explain why

some studies of partisan media find weaker effects than others do (Levendusky 2010: 220; Levendusky 2014; also see Arceneaux and Johnson 2013: 88). Our choice of issues also may have increased the likelihood of partisan effects since it is an issue on which most probably do not directly connect their daily lives because it is not especially salient (Bullock 2011; Boudreau and MacKenzie 2014).

Out-Party Partisan Media Exposure

While we find that individuals polarize as a result of exposure to out-party partisan media sources, others find null effects. Such null effects could be consistent with a model where just as individuals likely follow the same-party source due to its perceived credibility and value resonance, they may reject (i.e., not be affected by) the out-party's message in light of no credibility and an incongruent message (Lupia and McCubbins 1998). For example, Levendusky (2013: 76) finds that "on average, cross-cutting media have no effect." While our focus is somewhat similar to Levendusky's, there are two notable differences. First, his media messages included four issues whereas we focus on the presentation of a single issue. The inclusion of more issues could increase task complexity which makes counter-arguments more difficult, leading people to rely on simpler decision making rules (e.g., a non-credible source means ignore the message entirely, see Payne et al. 1993: 34). A second difference is that Levendusky employs a within-subject design, which could induce a consistency effect (whereas we use a between-subject design). Thus, our focus on a single issue and a between-subjects design may have been consequential.

Further, our instructions told individuals to watch their video segments carefully, and that we were interested if they learned anything from the segments.¹ In addition, subjects who would

¹ The instructions read: "Please pay attention and when it is over, raise your hand. Remember we are interested in if you learn anything from the segments...."

later participate in a group discussion were told that as well.² Both of these choices may have also induced subjects to carefully process the messages, which would increase the likelihood of partisan motivated reasoning and careful counter-argumentation (and hence a polarization finding, rather than a null finding).

Alternatively, it could be that the out-party messages could be construed as worthwhile information and move opinions in the direction of the information: that is, counter to the individual's same party. Indeed, Guess and Coppock (2015) find that, regardless of prior opinions, individuals largely update their beliefs across three issues (the death penalty, the minimum wage, and climate change) in the direction of the information received (e.g., even those who previously opposed the death penalty became more supportive when provided with pro-death penalty arguments). This is compelling evidence given it includes varying issues that map onto partisan divides. Yet, one particular difference in their focus, compared to ours, is that they relied on "relatively sterile descriptions of academic studies" for the pro and con arguments. They (36) note that in more contentious environments, people may counter-argue contrary evidence. In many ways, the introduction of clear partisan media sources may indeed capture (or at least prime) such a contentious environment. Also, we are looking at the anchoring effect of party whereas they looked at opinions. Thus, we believe our focus on more partisan sources played an important role. Finally, in some situations, an out-party source could be persuasive if the put forth a message discordant with expectations (e.g., if Fox news had argued against drilling, see Hetherington and Kam 2015, Baum and Groeling 2010: 123). Our messages were concordant, however, though a discordant message (while rare in the real world) would make for an interesting future test.

² Their instructions include the following: "we will place you into small groups to discuss the media segments you had watched for five to six minutes." Then, later, they are told: "Now we will have short small group discussions of about 5 OR 6 minutes about the news segments each of you had watched. First we will put in you groups. We will call out the names of people who go in each group and ask that you go and sit with people in your group. For the discussion, we ask that each of you begin by stating in up to a minute what you thought about what you watched and your opinion..."

Media Selection

Our predictions for the choice/search conditions reflect a number of design choices. First, we provided limited choice: Prior (2013: 118) notes that in the “real world” there an infinite number of choices that could lead to less and less selection of news, much less partisan news. He (118) accurately refers to our type of design as “highly stylized choice in the selection stage.”³ Second, prior work suggests a number of factors can vitiate partisan selection including variation in issue content (e.g., people opt to choose content on issues important to them; Iyengar et al. 2008), alternative source cues (e.g., endorsements that 10,000 Facebook users recommend the story; Messing and Westwood 2014), recommendations from others with whom an individual has strong social ties (Messing and Westwood 2013), and media type (internet searching and social media tend to lead to more balanced exposure; Gentzkow and Shapiro 2011, Bakshy et al. 2015; also see Levendusky 2013: chapter 1 for discussion). Thus, our predictions reflect our focus on cable news coverage of a single issue without additional cues.

Third, various aspects of our design—including our instructions and the nature of our choice environment—may have increased the likelihood of partisan selection. This becomes evident when comparing our design to Arceneaux and Johnson (2013), who also study cable news and the impact of selection on attitudinal effects (also see Arceneaux, Johnson, and Murphy 2012). Arceneaux and Johnson find, in contrast to our results, that “introducing even a modicum of agency in the choice to watch partisan news as opposed to entertainment significantly attenuates the polarizing effects of partisan news” (89).⁴ Indeed, in their choice conditions (which just offered four options), they find

³ Arceneaux and Johnson (2013: 61-62) explain that with limited choice, one cannot draw inferences about choice in general.

⁴ Arceneaux and Johnson offer two main explanations for their finding that introducing media choice vitiates direct partisan media effects. First, they point to dilution such that some simply opt to not watch the news programming and thus are not affected by it. Second, they demonstrate that much of the effects of partisan news exposure is on individuals who prefer “entertainment seekers” as opposed to “news seekers.” They (86-86) find entertainment seekers are affected, adjusting (polarizing) their attitudes in response to both same-party and out-party programming. In

little impact of partisan media, even though subjects did typically tune in to some mix of political content—more than 60% watched some, and many of them watched from both liberal and conservative networks (Arceneaux and Johnson 2013: 82-84).⁵

We suspect our findings differ from theirs due to various design choices. Arceneaux and Johnson described their study as “information processing” (Arceneaux, Johnson, and Murphy 2012: 180) and this may have influenced participants coming in who had no interest in processing/exerting effort. We differed insofar as we informed participants that our study “focused on how people evaluate how different news sources cover issues.” Then in the instructions, we told people they would be watching “news segments” and that they should pay attention as we would later ask what they learned. All of this may have primed participants towards opting for news. We also presented our options in the choice condition as links on a single webpage that listed the different options (4/7 of which were news). Thus, it was more of a discrete choice that may have led people to watch full segments rather than more varied (mixed) media. In contrast, Arceneaux and Johnson (2013: 61) provided individuals with a remote control, allowing them to flip around as they pleased, second to second. This may, in fact, be one of the key differences insofar as individuals in Arceneaux and Johnson’s study could “graze” at different channels whereas participants in our study were likely to watch an entire segment (or at least most of it) once they opted to choose a link.

In sum, we acknowledge that various aspects of our design likely increased the likelihood of finding direct partisan media effects (thereby putting an upper bound on these effects). These factors include the issue used, the discussion of just that one issue, the between-subject design, the

contrast, news seekers are much less influenced. Thus, the very people who opt to watch news when given a choice (news seekers) are not affected (especially by same-party news). In our experiments, we did not probe for individual heterogeneity along these lines.

⁵ Arceneaux and Johnson (2013: 197) do find some partisan media polarizing effects—the effects are just substantially smaller than what we find.

use of highly partisan sources that offered value consistent messages, the number of media choices, the lack multiple issues from which to choose, the lack of cues, the use of cable television sources, the instructions, and the presentation of choices.

Pre-Test Results

We conducted a pre-test with individuals who did not participate in the main experiment. We randomly assigned participants to watch the MSNBC segment or the Fox segment.⁶ We asked these individuals to then rate the respective segments' arguments both in terms of effectiveness (on a 1 to 7 scale with 7 indicating "definitely effective") and direction (on a 1 to 7 scale from "definitely opposed" to "definitely supportive" of domestic production of oil). Note that in asking for effectiveness ratings, we requested that respondents view the arguments in an evenhanded way and put the source of the segment aside. We also told them they would have to justify their opinions. We took these steps to ensure a more authentic rating of argument quality, not driven by the source (for discussion, see Bolsen et al. 2014).

We find that respondents viewed the two segments as quite distinct in terms of direction with the Fox segment (average of 5.87; std. dev. = .85; N = 47) being much more supportive of drilling compared to MSNBC (3.02 1.21; 44) ($t_{89} = 13.07$; $p < .01$ for a two-tailed test). In contrast, despite directional differences, respondents reported both the Fox and MSNBC segments as effective (or strong) arguments with respective average scores of 4.98 (1.53; 47) and 5.07 (1.56; 44) ($t_{89} = .28$; $p < .80$ for a two-tailed test).⁷

We additionally asked pre-test participants to rate the extent to which they trusted various media outlets and how much knowledge they believed each outlet had (both measures on 7-point

⁶ A third group of respondents were randomly assigned to assess the non-political segments; details on those pre-tests results, which are much less relevant for our design, are available from the authors.

⁷ That said, we note that when broken down by party, the Fox video was *marginally* significantly less effective among Democrats. This is sensible since, as we suggested in our theoretical discussion, that arguments that cohere with individuals' values will be seen as stronger.

scales with higher scores reflecting more trust and knowledge). We find substantial partisan effects such that Democrats scored Fox's trust at 2.54 (1.17; 80) and knowledge at 2.33 (1.04; 80), while the respective scores for Republicans were 5.46 (1.46; 37) and 4.03 (.87; 37) (all partisan differences are significant at the .01 level). For MSNBC, Democrats rated knowledge and trust at 5.81 (1.02, 80) and 5.46 (1.09; 80) while the respective Republican ratings were 2.24 (.86; 37) and 2.38 (.92; 37) (again, partisan differences are significant at the .01 level).⁸

Taken together, our pre-test results confirm that differences in the impact of the media programs largely reflect variations in their partisan reputations (i.e., credibility) and directional messages, and less so the pure effectiveness of their arguments (however, see note 7). In short, results are due to partisan reputations and argument direction and less so argument quality.

⁸ We excluded pure Independents from these analyses.

Additional Results

In the body of the paper, we presented models both without controls and models using inverse probability weighting to adjust for any potential covariate imbalances. Below, we present results (using OLS regressions, rather than inverse probability weighting) controlling for various covariates.

VARIABLES	(1) Exposure Only	(2) Discussion & Exposure	(3) Discussion Only
Same-Party Media	0.556 (0.219)		
Out-Party Media	1.206 (0.215)		
Media Choice	1.280 (0.215)		
Homogeneous Deliberation		0.872 (0.147)	1.784 (0.185)
Heterogeneous Deliberation		-0.494 (0.160)	0.317 (0.204)
Democratic Respondent	-1.233 (0.168)	-0.706 (0.139)	-0.787 (0.207)
Jobs vs. Environment Scale (Folded)	-0.0226 (0.0702)	0.0841 (0.0544)	0.131 (0.0733)
Political Interest	0.127 (0.0795)	0.203 (0.0584)	0.0678 (0.0988)
Political and Oil Knowledge	-0.0419 (0.0450)	-0.0239 (0.0359)	0.102 (0.0555)
Income	0.135 (0.0874)	0.0548 (0.0630)	-0.110 (0.0661)
Racial/Ethnic Minority	0.00258 (0.232)	-0.160 (0.138)	0.322 (0.152)
Student Aged	-0.182 (0.195)	-0.170 (0.135)	-0.236 (0.180)
Female	0.126 (0.162)	0.0436 (0.120)	-0.0748 (0.186)
Constant	4.689 (0.553)	4.764 (0.467)	3.539 (0.533)
Observations	109	259	175
R-squared	0.486	0.370	0.465

Table A1: Replication of Tables 2-4, with Control Variables. Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

Table A1 shows largely the same substantive results as tables 2-4 in the body of the paper.⁹ The only minor difference is that now the heterogeneous discussion condition for those who were unexposed to partisan media falls just shy of statistical significance, though that's likely an effect of sample size. Two other points merit discussion here. First, note that the coefficient for Democratic respondent is negative and statistically significant, indicating that Democrats are less polarized in our model than Republicans are. This is generally true in our experiment: even in the control condition, Republicans are somewhat more polarized than Democrats on this issue (in the control condition, the Republican mean is 5.21, and the Democratic mean is 3.42, $p < 0.01$ in a standard difference of mean comparison). This is consistent with other survey data: one study by Pew found that 84% of Republicans approved of the Keystone XL pipeline, but Democrats were much more divided, 38% in favor, 49% opposed (Pew 2014). Otherwise, however, none of the controls show a consistent pattern of results.

Given this party split above, we also investigated heterogeneous treatment effects by party. Table A2 shows the treatment effect by party.

⁹ The number of observations drop largely due to missing values on minority and the job versus environment scale. If we run the models without these variables, the main difference is that the heterogeneous deliberation variable becomes significant in the discussion only regression.

	(1) Exposure Only	(2) Discussion & Exposure	(3) Discussion Only
Same-Party Media	0.0373 (0.313)		
Democratic Respondent	-1.784 (0.275)	-0.799 (0.214)	-1.784 (0.350)
Same-Party Media*Democratic Respondent	1.008 (0.409)		
Out-Party Media	0.587 (0.343)		
Out-Party Media*Democratic Respondent	0.856 (0.418)		
Media Choice	0.700 (0.358)		
Media Choice*Democratic Respondent	0.799 (0.427)		
Homogeneous Deliberation		0.519 (0.233)	0.657 (0.320)
Homogeneous Discussion*Democratic Respondent		0.615 (0.283)	1.821 (0.413)
Heterogeneous Discussion		-0.175 (0.224)	0.160 (0.315)
Heterogeneous Discussion*Democratic Respondent		-0.624 (0.292)	0.210 (0.425)
Constant	5.205 (0.212)	5.590 (0.177)	5.205 (0.257)
Observations	120	286	195
R-squared	0.474	0.380	0.533

Table A2: Heterogeneous Treatment Effects by Party. Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

Table A2 shows that, when we explore effects by party, the effect of heterogeneous discussions only significantly affects exposed Democrats (i.e., it moderates them). Perhaps of more interest is that, with one exception, the effects are larger for Democrats than Republicans. The

reason why is not clear, but there are two main potential explanations. First, it could be that because Republicans came in somewhat more polarized than Democrats (see the discussion above), they are more difficult to move (i.e., a type of pre-treatment effect; see Druckman and Leeper 2012). Second, because there are somewhat more Democrats than Republicans in our sample, it could simply be an issue of statistical power. There is no ex ante theoretical reason to suspect that Democrats would respond more fully to the treatment, so we suspect it is some combination of these two features, but leave additional exploration for future work.

Finally, we present one last cut of the data. In the analysis in the body of the paper (and in supplemental tables A1 and A2 above), we pool across media exposure conditions. In table A3 below, we separate out each condition and compare it to the relevant baseline. This is not the correct analysis (in that it ignores the gains to be made by pooling across similar conditions), but it is the strictest analysis, so we present it in that spirit. The results below are from an OLS regression of the treatment assignment variable (all 16 conditions) on the dependent variable, so each coefficient tells us the effect of each condition relative to the baseline condition (condition 1, the control). The table then also lays out the correct comparison, gives the relevant test statistic, and conclusion.

	Coefficient	Comparison	Test Statistic	Conclusion
Condition 2 (Same-Party (SP) Media)	0.649 (0.267)	Condition 1 vs. Condition 2	t=2.43, p ≤ 0.01	Same-Party media polarize
Condition 3 (Out-Party (OP) Media)	0.965 (0.257)	Condition 1 vs. Condition 3	t=3.75, p ≤ 0.01	Out-Party media polarize
Condition 4 (Media Choice)	0.990 (0.253)	Condition 1 vs. Condition 4	t=3.91, p ≤ 0.01	Media choice polarizes
Condition 11 (No Exposure + Homog Disc)	1.578 (0.259)	Condition 1 vs. Condition 11	t=6.08, p ≤ 0.01	Two-Step communication flows
Condition 5 (SP Media + Homog Disc)	1.718 (0.235)	Condition 2 vs. Condition 5	F(1,468) = 15.75, p ≤ 0.01	Discussion + SP media polarize
Condition 12 (No Exposure + Homog Disc)	2.139 (0.255)	Condition 1 vs. Condition 12	t=8.39, p ≤ 0.01	Two-Step communication flows
Condition 6 (OP Media + Homog Disc)	2.100 (0.243)	Condition 3 vs. Condition 6	F(1,468)=17.61, p ≤ 0.01	Discussion + OP media polarize
Condition 13 (No Exposure + Homog Disc)	1.554 (0.240)	Condition 1 vs. Condition 13	t=6.47, p ≤ 0.01	Two-Step communication flows
Condition 7 (Media Choice + Homog Disc)	1.753 (0.236)	Condition 4 vs. Condition 7	F(1,465)=10.45, p ≤ 0.01	Discussion + choice polarizes
Condition 14 (No Exposure + Heterog Disc)	0.607 (0.264)	Condition 1 vs. Condition 14	t=2.30, p ≤ 0.05	Two-Step communication flows
Condition 8 (SP Media + Heterog Disc)	0.469 (0.253)	Condition 2 vs. Condition 8	F(1,465)=0.46, p>.1	--
Condition 15 (No Exposure + Heterog Disc)	0.146 (0.310)	Condition 1 vs. Condition 15	t=0.47, p>0.1	--
Condition 9 (OP Media + Heterog Disc)	0.714 (0.293)	Condition 3 vs. Condition 9	F(1,465)=0.72, p>0.1	--
Condition 16 (No Exposure + Heterog Disc)	0.388 (0.288)	Condition 1 vs. Condition 16	t=1.34, p>0.1	--
Condition 10 (Media Choice + Heterog Disc)	0.581 (0.280)	Condition 4 vs. Condition 10	F(1,465)=2.12, p>0.1	--
Constant (Condition 1)	4.146 (0.179)			
N	481			
R-Squared	.314			

Table A3: Summary of Effects on Polarization, by Experimental Condition

Note: Cell entries in column 1 are OLS regression coefficients with associated standard errors in parentheses. The second column gives the relevant comparison to determine whether polarization occurred, the third column gives the relevant test statistic, and the fourth column gives the conclusion.

The main difference here with the results presented in the body of the paper is that we find weaker effects for the heterogeneous discussion conditions, but as we explain in the paper, this is largely a function of a lack of statistical power. Again, because our theoretical expectation is that any type of partisan media will polarize viewers, it makes good theoretical and empirical sense to pool across exposure types, as we do in the paper.

Assessing Balance on Pre-Treatment Covariates

Tables A4-A6 below assess balance on pre-treatment covariates in our three comparisons: among those who were in sessions with no discussion (conditions 1-4, paralleling Table 2 in the paper), among those who were exposed to partisan media and then discussed, as well as their baseline comparison group who only watched partisan media (conditions 2-4 (baseline), and conditions 5-10, paralleling Table 3 in the paper), and those who did not watch partisan media but then discussed, as well as their baseline in the control condition (condition 1 (baseline), conditions 11-16). We group the conditions this way because these are the bases for our comparisons in the body of the paper. Tables A4-A6 present the results. The analysis here is a series of multinomial logits, using covariates to predict treatment assignment.

	Control vs. Media Choice	Same- Party Media vs. Choice	Out- Party Media vs. Choice
Democratic Respondent	-0.943 (0.723)	-1.182 (0.763)	-0.279 (0.729)
Jobs vs. Environment Scale	-0.00774 (0.198)	-0.110 (0.213)	-0.0534 (0.191)
Political Interest	0.298 (0.302)	0.333 (0.322)	-0.0121 (0.283)
Political and Oil Knowledge	-0.145 (0.174)	-0.200 (0.183)	-0.137 (0.162)
Income	-0.168 (0.335)	0.0932 (0.355)	-0.379 (0.336)
Racial/Ethnic Minority	0.443 (0.890)	1.090 (0.898)	-0.459 (0.937)
Student Aged	-0.0990 (0.741)	-0.355 (0.789)	0.415 (0.720)
Female	-1.065 (0.601)	-1.424 (0.659)	-0.470 (0.563)
Constant	1.832 (1.749)	1.824 (1.828)	2.362 (1.674)
Observations	109	109	109

Table A4: Covariate Balance, Conditions 1-4 (Exposure Only Conditions). Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

	Exposure Only vs. Homog. Discussion	Homog. Discussion vs. Heterog. Discussion
Democratic Respondent	0.420 (0.377)	-0.749 (0.382)
Jobs vs. Environment Scale	-0.0622 (0.108)	-0.123 (0.112)
Political Interest	-0.369 (0.166)	-0.217 (0.175)
Political and Oil Knowledge	0.134 (0.0959)	0.0517 (0.0967)
Income	0.114 (0.145)	-0.00700 (0.149)
Racial/Ethnic Minority	-1.326 (0.423)	-0.458 (0.419)
Student Aged	-0.768 (0.378)	-0.0455 (0.416)
Female	-0.712 (0.325)	-0.710 (0.344)
Constant	0.529 (0.951)	0.999 (0.962)
Observations	259	259

Table A5: Covariate Balance, Exposure + Discussion vs. Exposure Only Conditions (Conditions 2-4, and Conditions 5-10). Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($\alpha < 0.10$, two-tailed) are given in **bold**

	Control vs. Homog. Discussion	Control vs. Heterog. Discussion
Democratic Respondent	0.157 (0.544)	-0.535 (0.559)
Jobs vs. Environment Scale	-0.0796 (0.155)	-0.0679 (0.162)
Political Interest	0.108 (0.287)	-0.405 (0.306)
Political and Oil Knowledge	-0.216 (0.165)	-0.155 (0.177)
Income	-0.107 (0.204)	-0.295 (0.217)
Racial/Ethnic Minority	1.201 (0.609)	0.0163 (0.657)
Student Aged	1.569 (0.598)	0.998 (0.604)
Female	0.871 (0.523)	-0.389 (0.565)
Constant	1.009 (1.340)	3.373 (1.357)
Observations	175	175

Table A6: Covariate Balance, No Exposure + Discussion vs. Control Condition (Conditions 1, and Conditions 11-16). Coefficients that can be distinguished from 0 at conventional levels of statistical significance ($p < 0.10$, two-tailed) are given in **bold**.

As noted, coefficients that can be distinguished from 0 are given in bold—there are some suggestions of imbalance. That said, given that there are 56 comparisons being made in the table above (8 covariates in each model, with outcomes of 3-4 levels), several would be significant due to chance alone. If we were to apply some sort of correction (like a Bonferroni correction), we would

find a much smaller number of significant effects. However, we present the above to be more conservative, and hence conduct the analysis as we describe in the paper and above in the appendix.

Survey Items: Pre-Test Instrument

Generally speaking, which of the options on the scale below best describes your party identification?

strong weak lean Independent lean weak strong
Democrat *Democrat* *Democrat* *Republican* *Republican* *Republican*

Are you male or female?

Male Female

What is your age? (*Student status variable*)

under 18 18-24 over 24

Which of the following do you consider to be your primary racial or ethnic group?

White African American Asian American Hispanic Native American other

What is your estimate of your family's annual household income (before taxes)?

< \$30,000 \$30,000 - \$69,999 \$70,000-\$99,999 \$100,000-\$200,000 >\$200,000

In general, how interested are you in politics?

not at all not too somewhat very extremely
interested *interested* *interested* *interested* *interested*

How much of a majority is required for the U.S. Senate and House to override a Presidential veto?

Cannot 1/3 1/2 2/3 3/4 Don't know
override

Do you know what country is the world's largest exporter of crude oil?

United States Russia Iran Saudi Arabia Don't know

Which of the following is NOT a renewable energy source?

Hydroelectricity Biomass Coal Solar Hydrogen Don't know

Do you happen to know which party currently has the most members in the House of Representatives in Washington, D.C.?

Survey: Post-Test Instrument

Some people think it is important to protect the environment, even if it costs some jobs or otherwise reduces our standard of living. Other people think that protecting the environment is not as important as maintaining jobs and our standard of living. Using the scale below, which of these positions comes closest to your own point of view? (*Environmentalism variable, which was flipped such that favoring the environment denoted higher scores*)

1	2	3	4	5	6	7
<i>Protect the environment, even if it costs jobs</i>						<i>Jobs are more important than the environment</i>

To what extent do you personally oppose or support efforts to increase drilling off the coastal waters of the United States?

1	2	3	4	5	6	7
<i>strongly oppose</i>	<i>moderately oppose</i>	<i>slightly oppose</i>	<i>neither oppose nor support</i>	<i>slightly support</i>	<i>moderately support</i>	<i>strongly support</i>

To what extent do you personally oppose or support efforts to increase drilling on federal lands?

1	2	3	4	5	6	7
<i>strongly oppose</i>	<i>moderately oppose</i>	<i>slightly oppose</i>	<i>neither oppose nor support</i>	<i>slightly support</i>	<i>moderately support</i>	<i>strongly support</i>

To what extent do you personally oppose or support the proposed Keystone XL pipeline that would carry oil from Canada to the U.S.?

1	2	3	4	5	6	7
<i>strongly oppose</i>	<i>moderately oppose</i>	<i>slightly oppose</i>	<i>neither oppose nor support</i>	<i>slightly support</i>	<i>moderately support</i>	<i>strongly support</i>

In the future, if you were to discuss drilling and the Keystone XL pipeline with others, what kind of group would you be most interested in joining: one where most people agree with you on this this issue, one where most people disagree with you on this issue, or one where there is a mix of opinions?

1	2	3	4	5	6	7
<i>most agree with me on this issue</i>			<i>mix of opinions</i>			<i>most disagree with me on this issue</i>

Instructions Read to Study Participants

Below are the instructions read to study participants explaining the procedures used in the study.

[Distribute consent forms.]

Please read the consent form, which is the first one or two pages, and if you would like to participate in today's study, please sign and date the form. Please *do not look at the pages following the consent form.*

We will ask you to put your name on surveys simply so we can match two different surveys you complete, but it is entirely confidential and we will discard all names once data are entered.

Today's date is **YYY XX**.

[Hand out and then collect the consent forms.]

Today's study is on learning from the media. It has **five (for NO DISCUSSION)/six (FOR DISCUSSION)** parts beyond the consent form you filled out.

First, you will be asked to fill out a brief preliminary questionnaire. Second, you be asked to complete an unrelated activity that takes only a few minutes. Third, you will be asked to watch a few media segments on the computer from different outlets on the flash drive we provide. The source of the segments will be apparent as you watch them. Again, we are interested in seeing if you think you learned anything from the segments. **(DISCUSSION CONDITIONS ONLY – IF NOT, CHANGE NEXT TO “FOURTH” INSTEAD OF “FIFTH” and “FIFTH” INSTEAD OF “SIXTH”)** **Fourth, we will place you into small groups to discuss the media segments you had watched for five to six minutes. We will describe how this works specifically at the time.** **Fifth**, you will be asked to fill out another brief questionnaire. **Sixth**, we will pay you, and you can leave.

Unless instructed otherwise, please do not communicate with any other participant during the study. If you have any questions, please raise your hand, and we will assist you.

Let us begin. We will now hand out the first survey to complete. **[HAND OUT.]** Please answer every question you can, but if you'd rather not you may leave it blank. Please take your time. When you are complete please raise your hand so we know you are finished and we will collect your survey. **[WAIT UNTIL EVERYONE APPEARS DONE AND THEN COLLECT.]**

We are now taking a small break to do a very brief unrelated task that we will now pass out. This is completely unrelated to this study and there is no need to write your name on it. **[PASS OUT FILLER TASK. [WAIT UNTIL EVERYONE APPEARS DONE THEN COLLECT AND MOVE ON AND MAKE SURE GROUPS READING TO GO IN THOSE CONDITIONS.]**

Next we will ask you to watch the news segments we mentioned. **[MAKE SURE ALL**

SUBJECTS HAVE CORRECT VIDEO CORRESPONDING TO CONDITION]. Please pay attention and when it is over, raise your hand. Remember we are interested in if you learn anything from the segments. **(IF A CHOICE CONDITION SAY: Notice you get to choose from multiple videos and will have 12 minutes to do so – choose what you prefer and watch as many or as few as you would like.) [WAIT UNTIL EVERYONE APPEARS DONE AND MAKE SURE PEOPLE GET CHOICE.]**

(FOR DISCUSSION CONDITIONS ONLY): Now we will have short small group discussions of about 5 OR 6 minutes about the news segments each of you had watched. First we will put in you groups. We will call out the names of people who go in each group and ask that you go and sit with people in your group.

For the discussion, we ask that each of you begin by stating in up to a minute what you thought about what you watched and your opinion – you may opt to say nothing but everyone gets a turn. Then after everyone has a turn, please spend up to 3 minutes of open discussion about the segments and your opinions. We will bring it to an end after five or six minutes.

Let's start with the person on the far left.

[MAKE SURE EVERYONE GETS A CHANCE – MONITOR GROUPS AND THEN END AFTER SIX MINUTES IF NOT DONE; ONCE EVERYONE HAS A CHANCE, MAKE SURE SOME OPEN DISCUSSION; TIME AND GIVE ONE MINUTE WARNING.]

Finally, we ask you complete a brief questionnaire. **[DISTRIBUTE SURVEY.]**

[WAIT 15 minutes or until everyone appears done.]

I will now collect your questionnaire.

Thank you for your participation; I will now pay you for your participation.

[Pay each subject. Give each subject a receipt SIGNED AND KEEP IT – if they want a copy give them another copy. WE NEED ALL RECEIPTS BACK.]

Transcripts of Partisan Media Segments Used:

ALL IN WITH CHRIS HAYES for April 1, 2013

BYLINE: Chris Hayes, Rachel Maddow, Goldie Taylor

GUESTS: Glen Hooks, Dan Dicker, Bernie Sanders, May Boeve, Derrell Bradford, Pedro Noguera

CHRIS HAYES, HOST:

That is oil. More precisely, that is heavy crude oil from the tar sands of Canada spewing out onto the lawns and sidewalks and the streets and past the basketball hoops of the Northwoods subdivision.

The amount of fossil fuel extraction we're doing now on and the amount we're set to do particularly at the 1,200-mile Keystone XL Pipeline is ultimately approved, means that whether it's fracking in your backyard or a pipeline that's going to run underneath your subdivision, this is the future of fossil fuel America unless we decide collectively to choose another future.

Joining me at the tables tonight, my great pleasure to welcome, Senator Bernie Sanders, independent from Vermont, May Boeve, executive director and co-founder of 350.org, a grassroots climate change campaign, and Dan Dicker, a veteran oil trader and president of MercBloc, and CNBC contributor.

And, from Mayflower, Arkansas, we're joined by Glen Hooks, executive director of the Serra Club of Arkansas.

No one from ExxonMobil or the American petroleum institute was available to join us tonight.

HAYES: My producers and I were going through local news accounts of the spill. It was so startling. No one knew -- almost no one seemed to know that they were atop this oil pipeline.

HOOKS: No, they don't know that. And actually, what Exxon has been telling folks, the story seems to be that this is just regular old west Texas crude, when in fact it is tar sands thick Canadian oil that's coming from Alberta, as you mentioned.

This is a much bigger mess than just a simple crude spill. This is something if it gets in the water is going to sink. We're talking about dredging.

This is a big deal. You're right, not a lot of people knew that this pipeline existed, and certainly didn't know it was carrying this really dirty Canadian tar sands.

HAYES: Yes, will you explain why it's harder to clean up this stuff than your normal crude?

HOOKS: Yes. Well, you know, a lot of times when you have an oil spill, you can use skimmers and skim it off the water because the oil will float. This is not your typical crude oil. This is much heavier, it's much thicker, it's much dirtier, therefore a lot more dangerous. So, if it gets in the waterways, it's going to sink, it's not going to float. And, so, you're talking about a potentially disastrous dredging process in an area that is right here in the natural state. Not where you would expect to find Canadian tar sands oil.

HAYES: This -- a few years ago, there was an oil spill in Kalamazoo, Michigan, which was also this heavy oil. And it's fascinating, EPA staff that worked on this, they had responded to oil spills

over many, many years, had never encountered a spill of this type of material and this unprecedented volume under these kinds of conditions.

It -- what you get a sense of this is stuff that is different than what people are used to being able to clean up.

MAY BOEVE, EXEC. DIRECTOR, 350.ORG: Right, so tar sands oil has the highest carbon content of any oil we know of. And right now, the spill we're seeing in Arkansas is a devastating problem. And the real shocker about it, as you alluded to, is that this pipeline carries one tenth of what the proposed Keystone XL Pipeline would carry.

And so, imagine the photos we're seeing from Arkansas times 10, and that overlaid over the Ogallala aquifer in Nebraska, our nation's largest source of freshwater.

As a senator for the Energy Committee and someone who's talked a lot about the Keystone, when you see these images, Senator Sanders, what's your response?

SEN. BERNIE SANDERS (I), VERMONT: My response is it reminds me of what happened in the Gulf Coast. It reminds me of Exxon Valdez, which are even a hell of a lot worse than we're seeing there in Arkansas.

But I'll tell you what, Chris? It really raises the border question, and that is whether we continue to be a carbon based economy, whether we finally recognize that if we don't get a handle on greenhouse gas emissions, that this planet is going to be facing some disastrous problems in years to come.

As a member of the Energy Committee and the Environmental Committee, we have talked to scientists. And you know what these scientists tell us? They say, you know, the projections that we made about the damage for global warming, we were wrong. We understated the problem.

What they're now saying is that if we don't get our act together and start cutting in a very significant way, greenhouse gas emissions, we're talking about this planet heating up by eight degrees Fahrenheit by the end of the century. And that is calamitous for this planet.

BOEVE: And you know what? Here's the thing. There are alternatives, and you never hear about a solar spill. When you hear about a solar spill, we call it a beautiful day.

(LAUGHTER)

HAYES: OK, but Keystone has become this kind of flash point for the environmental movement. And, obviously, this being in the news is useful. It's a catalyzing moment, right?

As we all think about building this massive new pipeline, there's already - - part of that pipeline is already built, part of it is being built, the last part which crosses the border in the north is the one that's awaiting approval. And the idea here is that the reason this is so important isn't just because you're going to get oil spills and that's part of it, and I want to talk about the rest from that, it's that this will push us over into some new territory.

But, Dan, I mean, the argument that gets made by the State Department and their draft environmental impact study, the argument that gets made by a lot of people is that oil is coming out no matter what. And when you look at how much money there is to be made from it and the amount of capital investment that firms are willing to do to extract it, that seems like there's something to do that argument.

DICKER: It is an economic equation. And, in fact, this spill proves to you, for example, that Keystone is just one pipeline. And in fact, Canadian sands are coming down to this country. And even if the president were to disallow Keystone from being built, it would not stop Canadian oil sands from coming to this country.

We already, if you talk to oil schedulers, they will tell you that they don't particularly need Keystone XL in order to move the amount of Canadian sands that they, in fact, want to move. It just makes things a whole heck of a lot easier if they get this extension (ph).

Remember, Keystone already exists.

HAYES: Right.

DICKER: The reason they call it XL is because it's made bigger, not because it's not there already.

So, one of the issues that you have to deal with is -- and I think this is an important point that you have to take on Keystone because it's a symbol, an important one. That shouldn't be lost.

But what should be remembered are the truths about Canadian oil sands. They are coming into this country already. They will continue to come into the country whether or not Keystone is stopped.

SANDERS: Well, I think very simply, here's what the truth is: the truth is the president of the United States, the Congress and the American people have got to say this is it. Not only do we not want a Keystone XL pipeline, but we have got to fundamentally transform our energy system away from coal, away from oil, and into sustainable energy and energy efficiency.

What we are fighting for -- you know, people talk about economics -- we are fighting for the future of the planet. We are talking about more and more Sandys and Irenes, which cost huge amounts of money in terms of rebuilding those communities, not to mention the future disasters that we'll see.

THE RACHEL MADDOW SHOW for March 15, 2013

BYLINE: Chris Hayes

HAYES: On the occasion of being sworn in as president for the second time, when he likely commanded about as much attention of the country as he ever will, President Obama put climate change front and center. It's one of the first issues he talked about in detail in his inaugural address after first addressing the economic issues that are obviously at the front of everyone's minds. He went right to climate change, came before immigration before he talked about detail in war even.

He did the same thing during his State of the Union Address less than a month later, after first tackling the economy. He went directly to climate change.

(BEGIN VIDEO CLIP)

OBAMA: I urge this congress to get together, pursue a bipartisan market-based solution to climate change, like the one John McCain and Joe Lieberman worked on together a few years ago. But, if Congress won't act soon to protect future generations, I will. I will direct -- I will direct my cabinet to come up with executive actions we can take now and in the future to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy.

(END VIDEO CLIP)

HAYES: It's provoked both bouts of hope and angst preemptive disappointment among the ranks of people fighting to save the planet from burning to a crisp, because there are two very important things a president can do alone without having to go through Congress. Without having to overcome a certain filibuster in the Senate or go through the House.

One has gotten a lot of attention. Chances are, you have already heard about it. It is the approval of the Keystone XL pipeline designed to bring the tar sands of Canada all the way down to the Gulf of Mexico. Tar sands, of course, are dirtier, more carbon intensive form of oil. And creating this pipeline would be in the words of NASA climate scientist James Hansen, would be like creating the fuse to the biggest carbon bomb on the planet.

The people in the know had supposed all along that Keystone was a done deal. But a remarkable movement of activist have mobilized to delay it at every turn and are continuing to mobilize and delay it, which in turn has made it a top tier issue for Republicans who simply cannot understand why we are still not pumping Canadian oil sand into Texas already.

(BEGIN VIDEO CLIP)

SEN. MITCH MCCONNELL (R-KY), MINORITY LEADER: You know there's one major shovel-ready project ready to go, and that's the Keystone pipeline.

REP. JOHN BOEHNER (R-OH), SPEAKER OF THE HOUSE: It's called the Keystone XL pipeline. And it's a no-brainer. But it's been blocked by the Obama administration now for four years.

UNIDENTIFIED MALE: We are absolutely committed as the Republican team to keep the Keystone pipeline on the front burner.

UNIDENTIFIED MALE: Approving this pipeline seems like a no-brainer.

MCCONNELL: Keystone was an obvious choice.

BOEHNER: There is no reason for the Keystone pipeline to be blocked another day.

HAYES: In case you are curious, that third to last clip there was a Republican jeans caucus coming up in favor of the Keystone pipeline.

That is the Keystone XL pipeline that is one piece of climate change policy the president can affect on his own. The other thing the president can do on his own, without going through Congress, which in the grand scheme of things might even more significant to Keystone, is that thanks to the Supreme Court's ruling in Massachusetts versus EPA in 2007, a decision little noticed outside of energy circles, it was determined that the EPA could under its existing authority, under the Clean Air Act, regulate carbon as a pollutant, which means the EPA could promulgate rules, binding rules that would make it very difficult for dirty power plants, like coal- power plans, to continue operating as they are now.

This was the crucial freighted subtext when the president said in his State of the Union Address that he'd prefer a cap and trade plan like John McCain and Joe Lieberman had proposed, but that if Congress didn't act, he would. That was the subtext that hung in the air when he said he would act on climate change if Congress did not.

That was the subtext when the president nominated Gina McCarthy to be the new head of the EPA, because Gina McCarthy, aside from having been one of Mitt Romney's top environmental officials during his tenure as governor of Massachusetts, back when he accepted the science on climate change, aside from that, Gina McCarthy is also the person who is most recently running the division that oversees clean air at the EPA and proposed rules, quite good stringent ones, on new power plants, which brings us to today's news, which is really important but also completely and totally buried.

As part of this on-going battle that's happening outside the view of the public, we got notice today that those regulations, the one that Gina McCarthy oversaw of new power plants, which could dramatically reduce carbon emissions, they are going to be delayed. They're going to be reviewed further, and likely revised. This is, of course, occasion for the wailing and gnashing of teeth by the perpetually, preemptively disappointed environmentalist with whom I personally cast my lot.

But if there's one thing we have learned from watching the Keystone pipe is that public attention matters. And in the absence of public attention, the White House will only hear from one side, the dirty energy companies. Your government right now, as you sit and watch this, has the power without Congress to take what would be the most significant step in our country's history to curtail carbon emissions through the EPA process. And there are people around the country and swarming around Capitol Hill and in Washington, D.C., and in Texas, and in West Virginia, and everywhere that fossil fuels are produced and extracted who will stop at nothing to make sure that does not happen.

Right now, the White House is more or less only hearing from those people. If you don't like how that sounds, they should probably hear from you, too.

FOX NEWS SEGMENTS

How the Administration's Policies have Affected the Economy

BYLINE: Sean Hannity

April 6, 2012

SEAN HANNITY, HOST, "HANNITY": And tonight for the hour, we have assembled some of the brightest minds of business industry and beyond as we focus how the [Obama administration's](#)  agenda has shaped our economy over the past three years. In particular, this special edition of HANNITY will focus on the issue of gas prices and how rising costs have and will continue to hurt your family. Now, as frustrating as it has been to fill up your tanks in recent months it has been more frustrating watching [Barack Obama](#) both as a candidate and as President as he has tried to downplay the severity of this energy crisis. For example, on this program, we have been reminding viewers about some of the so called quick solutions that the President has offered for reducing pain at the pump. You might remember these.

(BEGIN VIDEO CLIP)

[BARACK OBAMA](#), PRESIDENT OF THE UNITED STATES: There are things that you can do

individually, though, to save energy. Making sure your tires are properly inflated. Simple things but we could save all of the oil that they are talking about getting off drilling if everybody was just inflating their tires and getting regular tune-ups you could actually save just as much. We are making new investments in the development of gasoline and diesel and jet fuel that is actually made from a plant-like substance. Algae. You got a bunch of algae out here, right? If we can figure out how to make energy out of that we will be doing all right.
(END VIDEO CLIP)

HANNITY: And President Algae, inflate your tires, get tune-ups. Now, some of those suggestions were made before the President took the oath of office in January of 2009 and if you remember back to that time, you may recall that the average price of a gallon of gasoline was approximately \$1.85. Now, fast forward only a few years under this President and Americans are paying more than \$4 a gallon just a few steps from the White House.

Joining me tonight to explain how we got where we are today is a very special audience, it is comprised of energy executives, business leaders, small business owners experts alike and many of the faces you will recognize and some of the best brightest smartest, richest in America. The top one percent is right here.

Good to see you all. Thanks for being with us. [Herman Cain](#).

[HERMAN CAIN](#), FORMER PRESIDENTIAL CANDIDATE: Yes, sir.

HANNITY: Nine-nine-nine. I'm afraid that might be the price of a gallon of gasoline, soon.

CAIN: That is the Obama 999 plan, \$9.99 cents a gallon.

HANNITY: You just scared all of America, Herman.

CAIN: You know, that's right. But it could be capital formation that we need for energy independence. Let's face it. This administration has done nothing but increase the barriers, regulatory barriers as well as barriers relative to exploration of our resources right here in United States.

HANNITY: Well, Steve Forbes, good to see you. The President says that wait a minute, if you hear anybody says drill, baby, drill, he says, we've been doing that. But yet, leases the ability to drill. Ninety six percent of the increases come from private lands where they haven't been able to control it.

STEVE FORBES, FORBES MEDIA CEO: Yes, it is an election year and he wants you to forget what he has been doing in the last three years which blocking or hindering the development, whether it is offshore and not having sensible regulations and doing it in an expedited manner, Alaska, Anwar, Arctic National Refuge been on the table for 20 years. We know, there are globs of oil and gas there. He won't allow that to be open, to be explored. So, if he could do something or come up with sensible, encouraging rules on fracking instead of dragging his feet, I mean, there is a revolution going on. We could be an energy exporter.

STEPHEN MOORE, "THE WALL STREET JOURNAL": Why should you be surprised about these high oil and gas prices? This is what [Barack Obama](#) told us would happen with his energy policy. Remember when ran for president, he said my energy policies will necessarily mean higher energy costs.

HANNITY: He did say. And he did say, he would have preferred a more gradual increase in energy. Well, it's interesting, I paid \$5.09 in Armonk, New York and I tweeted it out and I have by the way for those that are green energy oriented, this is a hybrid, an escalade hybrid but it is a hybrid. And \$5.09 cents a gallon. That is a lot of money. And who is getting hurt the most here?

MARCUS: It's the people that he talks about. The low income, the medium income. They are getting killed.

MOORE: Look, the point here is, remember, the President thinks that oil and natural gas and coal are evil fuels, so those are the fuels that we have the most of. We have so much oil and natural gas and we, as you said it is a revolution going on and the President is opposed to those where he is spending billions and billions of dollars on things like Solyndra and things like the wind mills. We get two percent of our electricity from those. So, he is not serious about a real pro-America energy policy.

UNIDENTIFIED MAN: There is two debates here, there's debate about oil production, there's also debate about inflating the economy which obviously the President supports and that comes down to the fed. If we didn't have zero about percent interest rates, I guarantee oil prices would be lower.

Hannity, August 2nd, 2012

HANNITY: It is a project that would create thousands of jobs and generate much needed revenue in towns that stretch from Alberta, Canada all the way down to the oil refineries in Texas. But dreams of work and prosperity remain just that, dreams because the Keystone pipeline XL oil pipeline remains stonewalled by the President and staunch environmentalists. Now, we traveled to Nebraska to investigate.

(BEGIN VIDEO CLIP)

OBAMA: We can't afford to just wait for Congress. You can't afford to wait. So, where Congress won't act, I will.

(END VIDEO CLIP)

HANNITY (voice-over): But there is one issue where President Obama does want to wait and that is the proposed 1,700-mile Keystone XL oil pipeline. That would be a stretch from Alberta, Canada to refineries in Texas and his opponents say, time is up.

(BEGIN VIDEO CLIP)

ROMNEY: I'm going to make sure we build the pipeline in from Canada, that Keystone Pipeline.

(END VIDEO CLIP)

HANNITY: Now, there have already been over 10,000-pages of environmental reports and review on this project, the Obama administration has postponed approvals until after more studies are done and that is not sitting well with many in Congress.

(BEGIN VIDEO CLIP)

REP. ED WHITFIELD (R), KENTUCKY: It's time to decide, President Obama and his administration have made a decision not to decide.
(END VIDEO CLIP)

HANNITY: At the center of this battle is farmlands in Nebraska. On the one side, environmentalists.

(BEGIN VIDEO CLIP)

PROTESTERS: The people united will never be defeated.
(END VIDEO CLIP)

HANNITY: On the other side, workers.

(BEGIN VIDEO CLIP)

UNIDENTIFIED MAN: What do we want?

PROTESTERS: Jobs!

UNIDENTIFIED MAN: When do we want them?

PROTESTERS: Now.

RON KAMINSKI, LABORERS UNION LOCAL 1140: Hearing the state of Nebraska, we are talking up to 2,000 jobs for up to two years. We are talking about tax revenue for the State of Nebraska and the local communities that this pipeline is going to go through. And I think the private capital issue is a major part of this. We are not looking for taxpayer dollars. We are working with the company that is investing the money to provide jobs and I think it is beneficial for everybody including the country as a whole.

(END VIDEO CLIP)

HANNITY: Now, the environmentalists have big money and celebrity endorsements on their side.

(BEGIN VIDEO CLIP)

UNIDENTIFIED MAN: It's called the Keystone XL and it is such a terrible idea that every clear headed environmental organization you can think of is against it. So, who can stop this mega stupid mega pipeline? You can, President Obama.

(END VIDEO CLIP)

HANNITY: Now, the project's environmental impact study finds the pipeline would not threaten the environment and local lawmakers argue that most critics don't know the facts.

(BEGIN VIDEO CLIP)

SEN. KEN HAAR (R), NEBRASKA: With all due respect, you don't give a damn about Nebraska.

(CHEERS AND APPLAUSE)

(END VIDEO CLIP)

HANNITY: The project owner TransCanada has agreed to reroute the pipeline away from the Nebraska sand hills, it's a fragile ecosystem that lies over a huge underground water source which supplies much of the water to the center of America.

(BEGIN VIDEO CLIP)

ALEX POURBAIX, TRANSCANADA PRESIDENT: I can't tell you how many times people came up to me and said, we support this pipeline, we support the jobs and we support the energy security that it is bringing to our country. We just wish you could move it out of the sand hills. And so, I'm

hoping by doing what was agreed to today, we are going to make the vast majority of Nebraskans happy.

(END VIDEO CLIP)

HANNITY: But some activists and farmers are still not buying it.

(BEGIN VIDEO CLIP)

RANDALL THOMPSON, NEBRASKA RANCHER: I have never witness any project that has stirred the emotions in my fellow Nebraskans like the Keystone XL has. Even with their voluntary agreement to move the pipeline out of the sand hills, we remain very skeptical.

(END VIDEO CLIP)

HANNITY: Yet to see the impact a pipeline can have, they only have to look a few miles away where TransCanada came through and built their first Keystone Pipeline just a few years ago.

(BEGIN VIDEO CLIP)

DENNIS HOUSTON, NORFOLK AREA CHAMBER OF COMMERCE: We had, you know, 750 construction workers that came into our community that had an economic impact of more than \$10 million. And this happened to our community at the height of the recession which was summer of 2009.

(END VIDEO CLIP)

HANNITY: Tony Miles owns Tony's Steakhouse just outside of Norfolk, Nebraska.

(BEGIN VIDEO CLIP)

TONY MILES, TONY'S STEAKHOUSE OWNER: It was just a total boon for the entire area. You know, they had to buy diesel fuel, grass, food, RV parks.

JOE FERGUSON, NORTHEAST COMMUNITY COLLEGE: It was a tremendous boost in our sales tax revenues throughout the region. Not just in the Norfolk area but surrounding communities.

MILES: From my point of view and the business people's point of view in this area, they were nothing but a boon for us, they were great. And for that reason, we would like to have them come back through.

(END VIDEO CLIP)

HANNITY: And it's not just a temporary boost to the economy to support the pipeline.

TransCanada will be upgrading the power grid which benefits all residents and pushing their power rates lower.

(BEGIN VIDEO CLIP)

JOHN KUEHN, SOUTHERN POWER DISTRICT: When a company such as TransCanada comes in and puts in a large electrical facility like these multiple pumping stations along the route, they actually pay for the construction of those very expensive substations which enhances the capabilities of our grid. So, it is much more than just a pipeline. It is a utility and that puts downward pressure on the rates for even our residential customers. You are struggling and, you know, with some tough economic times in a heat wave, just simply pay utility votes.

(END VIDEO CLIP)

HANNITY: So, those who have lived through the pipeline construction dismiss concerns and say that not only is it a huge economic boost but it's safe and virtually invisible.

(BEGIN VIDEO CLIP)

LEE KLEIN, BOARD OF COMMISSIONERS: They did an immaculate job. If you -- the Norfolk today, and if you can find that pipeline, the only reason you can find is if you know where the pumping station is. They've been a tremendously good neighbor and we anticipate them being a good neighbor in the next pipeline just as well. I think it is probably one of the most monitored pipelines ever to be created in the United States.

(END VIDEO CLIP)

HANNITY: Now, Nebraska Congressman Lee Terry says that enough is enough. With thousands of jobs being jeopardized by the delays, he is now introducing legislation to start construction of all of the pipeline other than the Nebraska portion while the new route is being studied.

(BEGIN VIDEO CLIP)

REP. LEE TERRY (R), NEBRASKA: We want the environmental studies done. But the question is why do you want to shut down the northern route when construction should be approved and starting?

(END VIDEO CLIP)

HANNITY: As for the President, the people of Nebraska have a message. We can't wait.

(BEGIN VIDEO CLIP)

KAMINSKI: There is a huge project with a lot of private capital that is not going to rely on taxpayer dollars. And it is going to put thousands of folks to work. Especially where we have such high unemployment.

(END VIDEO CLIP)

(END VIDEOTAPE)

HANNITY: And joining me now, two of the people featured in that piece, Nebraska Congressman Lee Terry and Norfolk Area Chamber of Commerce, President and CEO, Dennis Houston.

Guys, thank you for being here. All right. So, let me see if I understand this. Thousands of jobs would be created. We are helping to limit our dependency on foreign oil. We can lower gas prices at the pump. Creating jobs, increasing revenue. Where is the downside?

TERRY: I haven't found the downside. You would think that creating tens of thousands of jobs having the third largest pool of oil in the world 200 miles from your northern border with the greatest trading partner and friend we can have in Canada would be enough. But I'm even concerned now with the President's inaction here because China is taking up all of the oil sands. They've reached a significant -- created a significant beachhead on those oil sands in North America now.

HANNITY: All right. So, what has it been like from this area? You have got all of this oil available, you've got all of these jobs waiting but then you see the environmentalists that are protesting. How bad has it been in your area?

HOUSTON: Well, in our example, Sean, we are a real life experience of how good it can do for a community. I mean when the original pipeline came through our community three years ago, you know, it brought all those new jobs to our community. It created the third largest employer in the rural community. And I think this is the time when main street and rural America, you know, needs to reach out and say, how can we get those jobs in our communities?

HANNITY: If [Barack Obama](#) is president for the next four years, will this ever get completed?

TERRY: I really don't have the confidence in our President to allow the permit which is why I wrote the bill and gave that power to Congress if we can get that bill passed. He is so tied into the environmental groups and this is their number one issue. They said, killing the keystone pipeline is their number one issue. So, if it is their number one issue where is it on the President's agenda?

HANNITY: All right, guys, thank you very much for coming in and talking about this.

Works Cited (*Not In Main Body of the Paper*)

- Arceneaux, Kevin, Martin Johnson, and Chad Murphy. 2012. "Polarized Political Communication, Oppositional Media Hostility, and Selective Exposure." *Journal of Politics* 74(1): 174-186.
- Bakshy, Eytan, Solomon Messing, and Lada A. Adamic. 2015. "Exposure to Ideologically Diverse News and Opinion on Facebook." *Science* 348(6239): 1130-1132.
- Gentzkow, M., and Jesse M. Shapiro. 2011. "Ideological Segregation Online and Offline." *Quarterly Journal of Economics* 126: 1799–1839.
- Guess, Andrew, and Alexander Coppock. 2015. "Back to Bayes: Confronting the Evidence on Attitude Polarization." Unpublished paper, Columbia University.
- Hetherington, Marc J., and Cindy D. Kam. 2015. "Institutional Cue-Giving and Persuasion: Enlisting the Military as Environmental Protector." Unpublished paper, Vanderbilt University.
- Iyengar, Shanto, Kyu Hahn, John Krosnick, and John Walker. 2008. "Selective Exposure to Campaign Communication." *Journal of Politics* 70(1): 186-200.
- Messing, Solomon, and Sean J. Westwood. 2013. "Friends that Matter: How Social Influence Drives Attention in Social Media." Unpublished Paper, Stanford University.
- Messing, Solomon, and Sean J. Westwood. 2014. "Selective Exposure in the Age of Social Media: Endorsements Trump Partisan Source Affiliation When Selecting News Online." *Communication Research* 41: 1042-1063.
- Payne, John W., James R. Bettman, and Eric J. Johnson. 1993. *The Adaptive Decision Maker*. New York: Cambridge University Press.
- Pew Research Center. 2014. "Keystone XL Pipeline Divides Democrats." March 14.