

THE C-SPAN EFFECT

TELEVISED DEBATES AND POLITICIAN BEHAVIOR IN U.S. CONGRESS^{*}

Gloria Gennaro[†], Elliott Ash[‡]

May 8, 2026

Abstract

We study how C-SPAN, the public cable television network that broadcasts Congressional floor debates, affects U.S. politicians and voters. Using exogenous variation in C-SPAN viewership across districts induced by channel positioning, we show that House members in higher-viewership districts use more emotive language in floor debates. The effect is strongest in competitive districts, suggesting an electoral incentive mechanism. C-SPAN has no effect on concrete measures of legislative effort, and if anything it reduces attention to local constituency concerns. On the voter side, C-SPAN viewership increases attention, job approval, individual campaign contributions, and vote shares to incumbent House members. In contrast, newspaper coverage increases legislative effort but has little effect on rhetoric or electoral outcomes. These results highlight the importance of medium and audience in shaping the political consequences of increased visibility.

Key Words: Political Transparency, Political Rhetoric, U.S. Congress, C-SPAN

^{*}We wish to acknowledge helpful feedback from Michael Bailey, Constantine Boussalis, Steven J. Davis, Patricia Funk, Olga Gasparyan, Justin Grimmer, Massimo Morelli, Andrea Prat, and various discussants and seminar participants at the CEPR Workshop on Media, Technology, Politics, and Society, London School for Economics and Political Science, Collegio Carlo Alberto, Bocconi University, Harvard Applied Statistics Workshop, Trinity College Dublin, Universite de Paris Nanterre, the Center for C-SPAN Scholarship Education at Purdue University, the Women in Political Methodology Seminar Series, Zurich Political Economy Seminar Series, Using Text as Data in Policy Analysis Workshop, Monash-Warwick-Zurich Text-as-Data Workshop, CompText, UCL CPEB Workshop, and PolMeth Europe. A special thanks to Anton Boltachka and Matteo Pinna for excellent research assistance.

[†]University College London, Department of Political Science. Email: g.gennaro@ucl.ac.uk.

[‡]ETH Zurich, Center for Law and Economics. Email: ashe@ethz.ch.

1 Introduction

What happens when the proceedings of a legislative body become visible to the public? In 1979, the U.S. House of Representatives began broadcasting its floor debates live on the cable television network C-SPAN. For the first time, voters could directly observe the speeches and deliberations of their elected representatives. This paper studies how increased visibility affected House members' behavior in office, including their rhetoric and effort, as well as voters' interest in and approval of their incumbent legislators.

In the first speech broadcast on C-SPAN, Tennessee Rep. Al Gore predicted that “television will change this institution [...] just as it has changed the executive branch,” and that “the good will far outweigh the bad.” Republican House Speaker Newt Gingrich argued that C-SPAN offered a direct line to hundreds of thousands of viewers to observe unmediated politics, “an audience that was eager to follow politics and government without editing or distortions.”¹ The logic of these statements resonates with standard political agency models, where reducing the cost of monitoring politicians leads voters to hold them accountable for their actions and, consequently, incentivizes more effort in office (e.g. Ferejohn, 1986). However, a newer generation of models and theoretical frameworks suggest a more complicated story. When voters observe the deliberation process itself—rather than its outcomes—politicians are incentivized to use this visibility for posturing or electioneering instead of deliberation (Prat, 2005; Stasavage, 2007; Lindstedt and Naurin, 2010; Ash et al., 2017). In line with this more critical assessment, a commentator in the *Atlantic* retorts: “circumventing the press’s mediation means that politicians can also offer complete hogwash directly to the public without anyone stopping falsehoods [...] the ability to speak live on TV to the nation makes politics less about achieving things directly and more about scoring points.”²

This paper takes an empirical approach to these issues. C-SPAN has increased the visibility of incumbents' behaviors during the policy-making process. In line with Prat (2005), we argue that this change provides a chance to engage directly with voters and incentivizes legislators to use this opportunity to appeal to them if it is expected to gain votes. Conversely, voters exposed to House politics are more likely to be interested in their local representative and to observe politicians' behaviors in the House. Assuming that politicians are savvy communicators who are interested in winning their next elections, we ultimately expect that

¹See Newt Gingrich, “C-SPAN’s 40-year mark on our Republic”, *Newsweek* (March 3, 2019). Gingrich points to the political advantages of televised provocations and publicized personal attacks, which allowed a new cohort of “media savvy mavericks” to unsettle the “old guard thought.”

²See David A. Graham, “C-SPAN isn’t all good”, *Atlantic* (March 19, 2019).

House members’ rhetoric will garner more support among voters.

Our main identification strategy exploits exogenous variation in C-SPAN channel positioning across congressional districts as an instrument for local C-SPAN viewership. Because viewers tend to start at the bottom of the channel lineup and surf upward, a lower channel position increases viewership (e.g. Martin and Yurukoglu, 2017). We validate the instrument, documenting a strong first stage and providing evidence for exogenous positioning. We first examine the effects of C-SPAN on incumbent politicians. In reduced form and two-stage-least-squares regressions, we show that exogenously higher C-SPAN viewership in their home district increases the emotionality of floor speeches by the respective House Member. The effect is concentrated in electorally competitive districts, consistent with electoral incentives as an underlying mechanism. Next, we examine the effects of C-SPAN on voters. We show that higher C-SPAN viewership increases voters’ search interest in the locally elected House Member, improves their job performance evaluation, increases the share of campaign contributions from individual voters, and raises incumbent vote shares in subsequent elections. We further investigate the potential effect of C-SPAN on legislative effort on behalf of constituents; we find null effects of C-SPAN on traditional measures of effort (Snyder and Strömberg, 2010) and, if anything, a shift of attention away from local matters toward more nationalized rhetoric.

These results speak to a large literature on transparency and political accountability. Strong empirical support for a positive effect of transparency on accountability comes mostly from studies on newspapers (Snyder and Strömberg, 2010; Gentzkow et al., 2011; Drago et al., 2014; Myers, 2026). Conversely, studies on television present a mixed picture, showing positive effects only in highly competitive races (Larreguy et al., 2020; Balles et al., 2023) or for specific independent or educational networks (Enikolopov et al., 2011; Sørensen, 2019). The idea that television may reinforce incumbency advantage (Mayhew, 1974) finds, instead, broader support. Long before C-SPAN, Congressional offices produced materials for incumbents to share with local networks, thus creating a publicly-funded competitive advantage for House members against challengers (Prior, 2006). Moreover, television generally disengages voters (Prior, 2005; Gentzkow, 2006; Ellingsen and Hernæs, 2018; Durante et al., 2019), and creates opportunities for biased persuasion (Durante and Knight, 2012; Ash et al., 2021; Kim and Patterson Jr, 2025). Yet, none of those factors explains why C-SPAN floor transmissions may differentially affect incumbent politicians, since C-SPAN neither amplifies existing resource disparities among incumbents nor introduces slant.

We suggest that the unmediated nature of C-SPAN explains why higher visibility did not lead to greater accountability. While newspaper coverage improves legislative efforts, we show that televised floor debates—a different form of visibility—primarily affect the rhetorical

dimension of politics without increasing effort. As an informative comparison, we show that greater newspaper coverage has no effect on emotionality or electoral outcomes, but does increase legislative effort over the same time period, in line with previous findings in the literature (Snyder and Strömberg, 2010; Gentzkow et al., 2011). This contrast highlights the importance of *mediation* in determining the political consequences of increased politician visibility to voters. That is in line with models where visibility in the policy-making process creates incentives for performative acts in Parliament, rather than greater effort (Prat, 2005; Stasavage, 2007).³

We also contribute to the literature studying the effects of television on politicians. Some studies have focused on the effects of slanted cable news on roll call voting, investigating the feedback loop between voters exposed to slant and incumbent politicians who respond to their constituencies' preferences (Clinton and Enamorado, 2014; Arceneaux et al., 2016). Our setting differs in that C-SPAN broadcasts are almost unfiltered by journalists, allowing us to isolate the effect of visibility from the confounding influence of editorial slant. Other studies on legislative television document null effects of camera *entry* on legislators' ability to *compromise* (Lyons and Ryan, 2025) in State legislatures. Our study differs in the outcomes of interest, as well as on its focus on a time period when C-SPAN was already established. To connect more directly to this historical literature, we investigate the effects of C-SPAN entry in supporting analysis. A differences-in-differences design exploiting the staggered introduction of C-SPAN1 in the House (1979) and C-SPAN2 in the Senate (1986) shows that, when first introduced, C-SPAN temporarily lowered pre-C-SPAN incumbents' vote shares and favored the election of newer, more emotional politicians. While correlational evidence from Mixon Jr and Upadhyaya (2002) has suggested that C-SPAN2 may have lowered turnover in the Senate, we provide more mixed evidence for how C-SPAN1 affected incumbency in the House – by first weakening incumbency and then entrenching new incumbent members.

Finally, our study intersects with a rich literature on emotional rhetoric in politics (Webster and Albertson, 2022; Boussalis et al., 2021; Gennaro and Ash, 2021), suggesting how it can be strategically used to influence voter preferences and behavior (Brader, 2005; Valentino et al., 2011). We show that politicians increase emotional appeals in response to heightened visibility through televised debates, and that this shift is electorally rewarded. Complementary correlational evidence in this direction comes from Osnabruegge et al. (2021), who show that U.K. politicians use more emotional language in highly visible speeches.

The paper is organized as follows. We first provide a background discussion to make empirical predictions. Then we present the data and our main empirical strategy. Results on

³Related work on transparency in other domains includes Lim et al. (2015), which shows that newspaper coverage of judges increases sentencing harshness, and Hansen et al. (2018), which demonstrates that transparency increases conformity in central bank discussions.

the effects of C-SPAN on politicians and voters are presented separately. We then conclude.

2 Visibility and Political Incentives

This section develops our conceptual approach for how increased visibility affects political behavior, with a focus on the distinction between observing the policy-making process and observing policy outcomes. Building on models that refine the relationship between transparency and accountability (in particular Prat, 2005), we argue that C-SPAN primarily expands visibility of deliberation—floor speeches and debates—rather than of legislative outputs. This shift changes politicians’ incentives: when voters observe how representatives speak and act in the chamber, but have limited ability to assess policy outcomes, floor time becomes a direct channel for appealing to constituents. In this setting, legislators may prioritize communicative strategies that resonate with voters, such as emotional rhetoric, without necessarily increasing underlying legislative effort. The discussion below outlines the theoretical mechanisms behind these incentives and situates them within the broader literature on transparency and political accountability.

2.1 The complicated case for a disciplining effect of transparency

Standard political agency models understand the relationship between voters and politicians as one between principals and delegated agents. While voters (principals) delegate their representatives (agents) to define and implement their ideal policies, representatives may have incentives to deviate from their mandates. For example, they may slack, engage in corruption, or compromise with political opponents. This set-up suggests that any reduction in principals’ monitoring costs should enhance their ability to punish deviant agent behavior, enforce accountability, and ultimately re-align politicians’ incentives with voters’ preferences (e.g. Downs, 1957; Ferejohn, 1986; Ashworth, 2012).

Empirical tests of those models have shown mixed evidence on the effect of transparency on politicians’ actions in office, and in particular on exerted effort and willingness to compromise to advance legislation. In particular, a large body of evidence supports the idea that newspaper coverage increases effort and constituency representation (e.g. Besley and Burgess, 2002; Snyder and Strömberg, 2010; Myers, 2026), as does radio (Strömberg, 2004; Ferraz and Finan, 2008). However, the picture is mixed for television, which generally shows weak effects on voters’ knowledge and behaviors, mostly manifesting under conditions of high electoral pressure (Larreguy et al., 2020; Balles et al., 2023) or in authoritarian settings with no viable alternative independent media sources (Enikolopov et al., 2011).

Mixed findings on how transparency affects accountability may be rationalized by intuitions in Prat (2005) and Lindstedt and Naurin (2010), which suggest that transparency increases accountability only if it helps voters compare observed policy outcomes with their policy preferences. If newspapers, through their editorial process, inform voters better than television about policy outcomes (Druckman, 2005), this may explain why newspapers promote accountability, while television has – at best – weak and conditional effects.

2.2 Television-induced transparency and emotional rhetoric

A window into the policy-making process, while not necessarily promoting accountability, creates incentives for posturing by offering an unmediated communication channel with voters. Posturing – the use of electoral grandstanding strategies – may take many forms, from advertising to credit claiming (Mayhew, 1974). Inspired by a rich theoretical literature (e.g. Patty, 2016), empiricists have mostly focused on position-taking, gridlocks, and rejection of compromise, as tools that allow politicians to signal their qualities to voters. Those investigations have generally found null results (Harden and Kirkland, 2021; Lyons and Ryan, 2025). We argue that, while important, rejection of compromise is only one costly way for legislators to signal their virtues; a cheaper alternative is attracting voters’ attention through heightened political rhetoric.

Substantive evidence indicates that emotional rhetoric can attract voters’ attention. Using parliamentary debates, Osnabruegge et al. (2021) show that high profile speeches are more likely to use emotional rhetoric in the UK House of Commons, and Dietrich et al. (2018) shows that more emotive Congressional speeches are reported on more often by cable news shows. Beyond parliament, politicians modulate their emotional appeal in all communications to voters, from political advertisements (Brader, 2020) to party manifestos (Crabtree et al., 2020) and campaign rallies (Gennaro et al., 2019). Legislators’ use of emotional language is a rational choice due to its influence on voters. Eliciting emotions affects voters’ political preferences and behavior, including participation, vigilance, and information acquisition (e.g. Sullivan and Masters, 1988; Marcus and MacKuen, 1993; Marcus et al., 2000; Brader, 2005; Valentino et al., 2011). Emotional framing can inform voters’ opinions on policy issues (Gross, 2008; Brader et al., 2008; Renshon et al., 2015), can be used strategically to target specific subgroups in the wider audience of voters (Gault and Sabini, 2000; Loewen et al., 2017), and can serve to communicate major consensual values (Jerit, 2004).

Television, long before C-SPAN, has allowed incumbents to reach out to voters, with the effect of reinforcing the incumbency advantage (Prior, 2006). Yet, scattered evidence on legislative television has provided mixed results regarding its effect on politicians’ rhetorical strategies (Soroka et al., 2015; Yildirim, 2020) and the effectiveness of those strategies on

voter approval (Park, 2023). Early correlational studies suggested that the introduction of C-SPAN may have reduced turnover in the U.S. Senate (Mixon Jr and Upadhyaya, 2002), in line with our predictions below.

2.3 The case of C-SPAN

C-SPAN (Cable-Satellite Public Affairs Network) is a cable and satellite television network broadcasting the floor debates of U.S. Congress and related content on Congressional activities. The organization was founded in 1975 as a nonprofit public service. Four years later in 1979, the network began broadcasting the proceedings of the House of Representatives on the C-SPAN1 cable channel. C-SPAN2 started transmitting from the Senate in 1986. C-SPAN’s core programming is live coverage of the U.S. House and Senate, with C-SPAN1 covering the House and C-SPAN2 covering the Senate. When the House or Senate are not in session, C-SPAN channels broadcast other public affairs programming and recordings of previous events. Since 2001, a third channel C-SPAN3 was introduced in relatively few markets, focusing on such public affairs programming rather than the floor debates. Finally, C-SPAN live streams and video archives have been available on the `c-span.org` web site since 2007.

The audience for C-SPAN is large and growing. The share of regular viewers increased from 8.6% of the U.S. population in 1994, to 12% in 2004, to 14.8% in 2013.⁴ According to a 2021 survey, 60 million U.S. adults have watched C-SPAN in the last week, 73 million in the last month, and 85 million in the last 6 months.⁵ The audience is 58% male, 72% under-age-45, and ideologically balanced: 32% liberal, 37% moderate, 27% conservative. Nine out of ten survey respondents rate C-SPAN as a valuable source of information about U.S. politics.

We argue that C-SPAN increased the visibility of Congressional floor debates to the general public and, by doing so, altered the *audience* for floor speeches from fellow Members of Congress, government officials, and political journalists to the general public. Moreover, unlike newspaper coverage, where journalists select and interpret newsworthy content with a focus on policy outcomes, C-SPAN provides complete, unedited coverage of floor debates. The *unmediated* coverage of the policy-making process privileges the deliberation process over its results. In line with Prat (2005), we expect this change to have created incentives for politicians to use floor time as a direct communication channel with constituents. If voters respond more positively to emotional rhetoric than the traditional pre-television audience, then politicians would be expected to increase their use of emotional appeals in response to C-SPAN.

⁴See <https://en.wikipedia.org/wiki/C-SPAN>.

⁵See <https://static.c-span.org/files/pressCenter/Ipsos+2021+C-SPAN+Audience+Profile.pdf>.

These considerations lead to the following testable predictions, which guide our empirical analysis.

H1. C-SPAN exposure should increase the use of emotional rhetoric in floor speeches, as politicians use the visibility for appealing to voters rather than deliberation.

H2. The effect on emotionality should be stronger in electorally competitive districts, where the returns to voter appeals are highest.

H3. C-SPAN may have little or no effect on concrete measures of legislative effort on behalf of constituents, since the visibility it provides is on the deliberation process rather than policy outcomes.

H4. To the extent that emotional rhetoric is an effective strategy to appeal to voters, C-SPAN exposure should increase voters' approval of their incumbent legislator.

3 Data

We draw from registry data and relevant studies to compile a dataset covering C-SPAN channel position and viewership by county and electoral districts, including information on House incumbents, their actions, speeches, donations received, and vote shares from 1998 to 2014. Separately, we combined Google Trends search data and survey measures of voter approval of their representatives with C-SPAN data from the same period and geographical unit. In appendix results, we use a second dataset covering all speeches in the Senate and House around the introduction of C-SPAN in the House (1974–1985). Note that, when we discuss C-SPAN in the House, we are referring to C-SPAN1 (the focus of most of our analysis). When needed for clarity, we will distinguish C-SPAN1 vs C-SPAN2.

C-SPAN channel position and viewership. We obtain local C-SPAN1 and C-SPAN2 channel position data from Nielsen, covering cable systems at the zip-code level from 1998 to 2004. Following the county-level aggregation approach in Galletta and Ash (2020), we aggregate to Congressional election districts by taking population-weighted averages across zip codes. We create a time-invariant channel *Position* by averaging over 1998–2004, which reduces noise in measuring channel position due to variation in sampling of Nielsen data across years. We standardize to mean zero and unit standard deviation. *Viewership* is the average share of television-watching time in a zip code tuned to C-SPAN1, provided by Nielsen for 2004, aggregated and standardized in the same way.

Legislator-side outcome variables. Our text-based speech measures come from Gennaro and Ash (2021), who score 6 million floor speeches from the *Congressional Record* covering 1858–2014. *Emotionality* indexes each speech on an emotion-vs-rationality dimension constructed via word embeddings; higher scores reflect greater use of emotional appeals relative to fact-based argumentation. We standardize the original score within each sample period (1974–1985 for the appendix historical analysis and 1998–2014 for the main analysis). We also use their LDA-based speech topic classifications (aggregated to eleven categories) and readability measures (words per sentence, characters per word) from the same source.

To measure legislator effort, we draw from Snyder and Strömberg (2010) which covers several measures over the period 1998–2004. In particular, we obtain *Party Loyalty* (share of roll call votes with the party majority), *Effort* (number of witness appearances before congressional committees), and committee membership defining as *Constituency-orientation* the difference between membership in constituency-oriented and policy-oriented committees. We supplement these with politician demographics and DW-NOMINATE scores from Gennaro and Ash (2021). Finally, using the original speech texts from Gennaro and Ash (2021), we construct a novel measure of speech-based constituency orientation that we refer to as *localism*. More details are reported in the relevant results sections.

Voter-side outcome variables. We measure voter interest for House members using Google Trends data, retrieved via the SerpAPI Google Trends endpoint over U.S. Designated Market Areas (DMAs). Google Trends normalizes search volumes to a 0–100 index within each query, where 100 denotes the DMA with the highest relative search interest for that query in that year. We aggregate DMA-level data to congressional districts to construct a district-level interest index measuring each representative’s share of search interest in their home district over total search interest for any House member in the same district (see Section 6.1 for details). For electoral outcomes, we obtain incumbent vote shares from the *U.S. House Returns 1976–2020* dataset (MIT Election Data and Science Lab, 2017). For job approval, we use the *Cooperative Congressional Election Study* (Ansolabehere, 2012), drawing on pre-election wave responses from 2006–2014, where respondents report whether they approve of their House member. For campaign contributions, we use the *Database on Ideology, Money in Politics, and Elections* (Bonica, 2016), focusing on contributions from individuals and organizations from 1998 to 2014.

4 Empirical Strategy

We identify the causal effects of C-SPAN viewership on politicians and voters using an instrumental variables strategy. This section outlines the identification strategy common across multiple analyses. Variants on the main strategy are described in the relevant results sections.

C-SPAN channel position as an instrument for viewership. We aim to estimate the causal effect of C-SPAN viewership on residents or voters in a locality and the politicians they elect. However, many omitted factors may confound the relationship between C-SPAN viewership and outcomes of interest; for example, local education levels may affect C-SPAN viewership as well as vote share for the incumbent, campaign donations, and politicians' qualities. Appendix Table A.6 shows that districts with higher C-SPAN viewership also have a larger share of college graduates in their population. A simple regression of outcomes of interest on C-SPAN viewership would not deliver the causal effect of C-SPAN.

To address this identification challenge, we instrument local C-SPAN viewership in congressional districts using variation in C-SPAN channel position. Following Martin and Yurukoglu (2017), channel position affects viewership through mechanical features of channel navigation: viewers tend to start at the bottom of the lineup and surf upward until selecting a program. This generates systematic variation in exposure that is independent of content.

As shown by Martin and Yurukoglu (2017), channel ordering is largely determined by historical and technological factors within cable systems and is not systematically related to local political preferences or outcomes. We rely on the same institutional features in the case of C-SPAN. In particular, channel positions are assigned at the time a network enters a local cable system, typically following available slots in the lineup, and thereafter change infrequently. As a result, channel order varies across cable systems for reasons unrelated to local political conditions. Additionally, viewers cannot set personalized channel positions on their TVs or mark their favorite starting point in the channel lineup during the period under consideration. Together, these features imply that channel position provides plausibly exogenous variation in C-SPAN viewership, an assumption for which we provide supporting evidence below.

We adapt the channel position instrument approach to the case of C-SPAN and the U.S. Congress. As discussed in Section 3, we calculate average C-SPAN channel positions and viewership by Congressional District using data from 1998 to 2004. We estimate causal effects using cross-sectional variation in channel position within the same state and year. That is, we compare outcomes for voters and House members from the same state in the same year, but differing in the average channel position of C-SPAN in their home district. Our main

analysis includes all Democratic or Republican House members (and their constituents or their speeches) between 1998 and 2014. Senators are excluded from this analysis because they are elected at the state level, so we cannot exploit variation in the instrument across locally contingent areas.

First stage. While channel position has been used as an instrument for cable news viewership, this method has never been applied to C-SPAN. It is not obvious that the first stage should hold, given that C-SPAN is a public broadcaster with lower viewership than the cable news channels. Thus, we estimate the first stage effect of C-SPAN channel position on C-SPAN viewership, as:

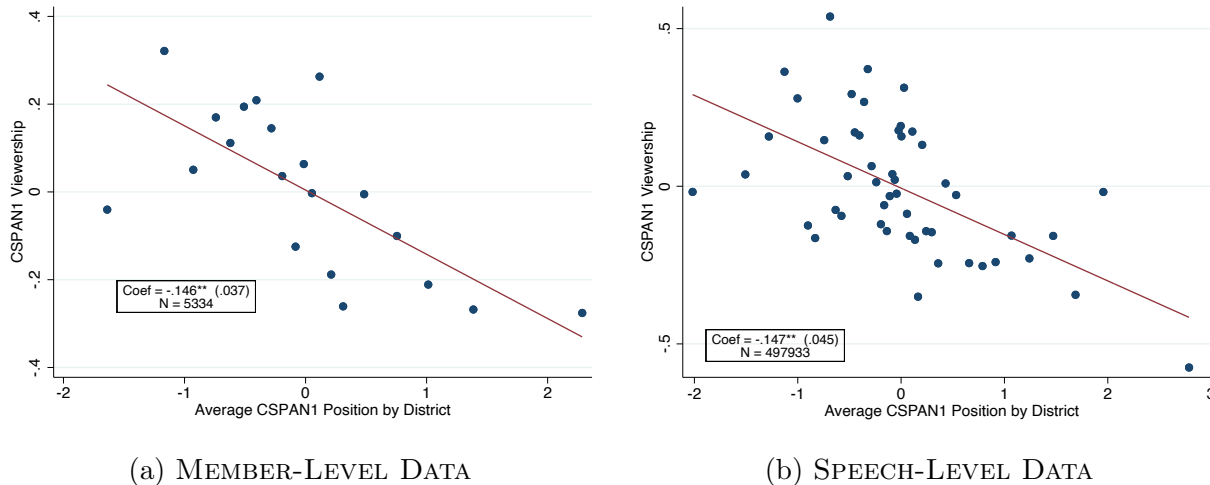
$$V_{js} = \alpha + \psi Z_{js} + \tau_{st} + X'_{js}\beta + \epsilon_{jst} \quad (1)$$

where V_{js} is C-SPAN viewership in electoral district j , state s in 2004; Z_{js} is the C-SPAN channel position in the same district averaged over 1998-2004, as described above; τ_{st} is a State-year or state-Congress (when outcomes are measure by Congress) fixed effect. From this basic structure, we run different specifications based on the analyses, which primarily vary by aggregation level. Depending on the specifications, X_{js} may include additional covariates for speeches, individual politicians, electoral districts, or survey respondents; the complete list of controls is included in the relevant result tables. Standard errors are clustered by House member.

The first stage has a causal interpretation under conditional exogeneity of the channel position Z_{js} with regard to viewership V_{js} . In that case, the estimate $\hat{\psi}$ gives the counterfactual prediction for how much viewership changes (in standard deviations) in response to a one-standard-deviation increase in the channel position. Given that a lower channel position makes a network easier to watch, we expect $\hat{\psi} < 0$.

The relevance of the C-SPAN channel position as an instrument for C-SPAN viewership is confirmed by a strong first stage effect. Figure 1 shows two binned scatter plots illustrating the relationship between viewership and the C-SPAN channel position in the electoral district, residualized on state-year fixed effects. The two plots present the first stage at the two most commonly used levels of aggregation in this paper: the House members on left, and speeches on the right. Regardless of the aggregation level, the main finding remains the same: as the channel position increases, C-SPAN viewership in the district decreases with $\hat{\psi} \approx -0.15$. In the results section below, we report reduced form and two-stage least-squares specifications alongside Kleinbergen-Paap cluster-robust first-stage F-statistics, which are consistently above 10. See Appendix B.1 for the full set of first-stage specifications.

Figure 1: FIRST STAGE: VIEWERSHIP AND C-SPAN CHANNEL POSITION



Binned scatter plot of C-SPAN viewership and C-SPAN channel position. The sample includes electoral House member-year observations (left panel), and speeches (right panel). The horizontal axis reports the average C-SPAN1 channel position in the House member’s electoral district-year (standardized); the vertical axis reports the average viewership in the House member’s electoral district (standardized). State-year fixed effects are absorbed. Standard errors are clustered by electoral districts (left panel) or House members (right panel).

Balance Tests. The key identifying assumption is that channel position affects political outcomes only through its effect on C-SPAN viewership. Following Martin and Yurukoglu (2017), this assumption is plausible because channel position is determined by cable system factors unrelated to local political behavior, conditional on observables.

The main threat to identification is that channel position may be correlated with unobserved district characteristics that also affect our outcomes (rhetorical style, legislative effort, or voter evaluation of incumbents). For example, if channel positions were systematically lower in more educated districts, and education independently affects these outcomes, then the instrument would be invalid.

To evaluate potential endogeneity, we test the balance of the channel position across a number of observable district characteristics. Appendix B.2 reports several regression estimates of the instrument on sets of local covariates that proxy for urbanization, education, racial and gender composition, and income. We see that, consistent with an exogenous channel position, the coefficients on almost all covariates are statistically insignificant. A handful of covariates are significant at the 5 percent level, as one would expect due to chance. In particular, higher channel positions are associated with lower population density and higher income. When we include all those variables as controls, our regression results do not change.

Local Average Treatment Effect. Our estimates identify a local average treatment effect (LATE) for districts where C-SPAN viewership responds to channel position. These “compliers” are viewers whose exposure is influenced by the mechanical features of channel navigation rather than strong prior preferences for political content. Appendix B.4 shows that compliance varies across demographic groups, with somewhat larger effects among working-age populations.

This interpretation is substantively meaningful in our setting. C-SPAN has a relatively niche audience, and shifts in exposure are most likely to affect marginal viewers who would not actively seek out political content. These individuals are plausibly more responsive to changes in visibility and thus particularly relevant for understanding how media exposure shapes political behavior. At the same time, our results should be interpreted as capturing the effects of increased exposure among these marginal viewers, rather than the broader population of highly engaged voters.

5 Effects of C-SPAN on Politicians

We start by examining the effect of C-SPAN on House members’ behavior. In line with our theoretical framework, we consider two dimensions of politician behavior: the emotional content of floor speeches and legislative effort on behalf of their constituents. We show that C-SPAN increases emotional rhetoric in floor speeches (H1), and more so when incumbents come from electorally competitive districts (H2). At the same time, we find no discernible effect on effort or constituency representation (H3). We interpret the lack of behavioral change alongside the presence of rhetorical change as evidence that C-SPAN is used to communicate with voters rather than promoting effort. The main summary statistics for all variables included in this analysis are reported in Appendix Table A.2.

5.1 Emotional language

We apply the instrumental variable strategy from Section 4 to test whether exogenously higher C-SPAN viewership in a House member’s home electoral district induces them to use more emotional language in floor speeches. Notably, we regress emotionality of a speech on C-SPAN viewership in the speaker’s home district:

$$Y_{ijst} = \alpha + \rho \hat{V}_{js} + \tau_{st} + X'_{ijst} \beta + \epsilon_{ijst} \quad (2)$$

where viewership \hat{V}_{js} is instrumented by the channel position in the legislator’s congressional district, as shown in the first stage equation (1). To assist interpretation, the outcome,

Table 1: C-SPAN VIEWERSHIP AND EMOTIONALITY

Emotionality	(1) OLS	(2) 2SLS	(3) 2SLS	(4) 2SLS	(5) 2SLS	(6) 2SLS	(7) 2SLS	(8) 2SLS
C-SPAN Viewership	0.024 [0.015]	0.289** [0.143]	0.366** [0.164]	0.351*** [0.135]	0.273** [0.108]	0.266** [0.112]	0.256*** [0.094]	0.158*** [0.058]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban			✓	✓	✓	✓	✓	✓
Income-Educ				✓	✓	✓	✓	✓
Individual					✓	✓	✓	✓
Cable News						✓	✓	✓
Speech							✓	✓
Topics								✓
KP F-stat		10.480	10.111	15.954	17.983	16.472	16.446	16.693
Observations	497910	497910	497910	497910	497910	497910	497910	497910

Notes. Each column shows the regression of the emotionality score in a given speech (standardized) on the C-SPAN viewership in the speaker’s district (standardized). Column 1 reports the OLS estimates; columns 2 to 8 report 2SLS estimates, where viewership is instrumented with C-SPAN channel position in the same district (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

endogenous treatment variable, and instrument are standardized by subtracting their means and dividing by the standard deviation. Standard errors are clustered by House member to account for the correlation across speeches from the same politician. The estimate $\hat{\rho}$ provides the local average treatment effect of higher viewership on emotional language due to exogenous differences in channel position.

Table 1 presents the main results, while reduced form results are in Appendix C.1.1. Column 1 reports the simple OLS estimates, with state-year fixed effects. The correlation between C-SPAN viewership and emotionality is positive, yet small in magnitude and not statistically significant. Columns 2 to 8 report the 2SLS estimates. In the baseline regressions of emotionality on viewership and state-year fixed effects (Column 2), population controls (Column 3), or education/income controls (Column 4), we see a positive and significant estimate. A one standard-deviation increase in viewership corresponds to a 0.29 to 0.37 standard-deviation increase in emotionality. Including individual House member characteristics in column 5 leaves the estimates almost unchanged; the effect of C-SPAN viewership

on use of emotional language is not channeled through a change in politicians’ demographic characteristics. In Column 6 we include a control for exposure to cable news networks, as the minimum channel position among CNN, Fox News and MSNBC; the coefficient does not change, indicating C-SPAN’s effect on emotionality is not driven by exposure to other news channels with possibly correlated channel positions. As shown in Columns 7 and 8, adding speech-level mediator covariates (such as length, complexity, and topics) reduces the coefficient magnitude, but the estimate remains positive and significant, suggesting that the main effect is composed of a shift towards more emotional topics, as well as an increase in emotionality within topics. Meanwhile, there is a strong and increasing first stage F-statistic.

We formally test the effect of C-SPAN on politicians’ demographics and other rhetorical choices in Appendix C.5 and C.6. Consistent with the role of controls in Table 1, we find that C-SPAN increases speech frequency and sentence length but not overall sentiment or word complexity. It shifts topics toward nationalistic themes and away from colleague tributes. Politicians’ demographics mostly remain unaffected, except that C-SPAN viewership may favor more educated and liberal politicians. Overall, these results support the interpretation that C-SPAN increases the electoral salience of floor speeches.

Notably, the OLS estimates for emotionality and viewership in Table 1 are negatively biased – they underestimate the effect of C-SPAN on House member emotionality. While there are multiple valid explanations behind the negative bias in the OLS, including reverse causality (from politician’s popularity to C-SPAN viewership) and measurement error, we highlight that this is consistent with standard political accountability models. In the OLS estimates, C-SPAN viewership captures latent constituency characteristics, such as interest in politics. Politically interested constituencies not only watch C-SPAN more, but they are also more likely to hold their representatives accountable for their policy decisions. These factors should lead to positive selection and a disciplining effect on politicians. To the extent that emotionality is used as a purely rhetorical tool that achieves political persuasion, we would expect that higher constituency political interest correlates with lower use of emotionality, and hence a downward bias in the main results. Emotionality hence increases when C-SPAN viewership is driven by conditions that are exogenous to local political interest such as, indeed, the channel position.

Robustness Checks. Appendix C.1.2 provides further evidence on the exogeneity of the instrument with respect to the use of emotional language by performing two placebo analyses. First, we show that there is no effect of C-SPAN channel position on emotionality of speeches pronounced in the two decades prior to the introduction of C-SPAN. The resulting reduced-form estimate is positive (flipped sign) and not statistically significant. This indicates that

the instrument is not selected based on pre-existing trends in the use of emotional rhetoric across electoral districts.

Second, we run the reduced form specification using the channel position for C-SPAN2 (rather than C-SPAN1) as the instrument. As C-SPAN2 broadcasts floor debates from the Senate, we should expect no effect on emotionality for House members. This expectation is confirmed in small point estimates that are not statistically significant.

Appendix C.3 explore the effects of other TV channel positions on emotional rhetoric. Results on other cable news channels (MSNBC, Fox News, CNN, and the minimum among those) suggest that their viewership might also marginally increase a House member’s emotional rhetoric. However, those effects are not statistically significant when C-SPAN channel position is included in the same regression.

Next, Appendix C.1.3 tests the robustness of the results against different variable and model specifications. First, we test the effects on alternative emotionality measures, with unchanged results. Second, we show that the results are driven by language becoming more emotional, rather than less logical. Third, given the skewed distribution of C-SPAN channel positions and viewership, we apply the inverse hyperbolic sine transformation to both variables and replicate the main results. Fourth, Appendix C.1.4 performs a sample perturbation test, dropping observations from each state and each year at a time; results are not driven by any specific state or year.

5.2 Emotional language by district competitiveness

Next, we explore whether House members are more responsive to C-SPAN when they run in competitive electoral districts. Such heterogeneity would suggest that responsiveness to C-SPAN is strategically motivated by expected electoral rewards. We designate a district as *competitive* if neither Democrats nor Republicans have held a strong majority historically. Specifically, we take the average two-party vote shares for 1988-1998 (dropping uncontested elections), and classify a district as safe if the historical vote share is greater or equal to 60% for a single party. Competitive districts are the complement of safe districts. The regression approach is the same as in the main results from Section 4, but splitting the sample by competitive and safe districts, or introducing an interaction term. We report the reduced form effect to ease the interpretation of the interaction term.

The results are reported in Table 2. Columns 1 through 4 show the baseline reduced-form specification for the subset of competitive districts, while Columns 5 through 8 show the same in safe districts. There is a statistically significant negative effect of channel position (positive effect of viewership) in competitive districts, but not in safe districts. In Column 9, we pool the sample and interact the instrument with our competitive district indicator.

Table 2: EMOTIONALITY AND C-SPAN CHANNEL POSITION, BY DISTRICT COMPETITIVENESS

	Competitive Districts				Safe Districts				All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Emotionality									
C-SPAN Position	-0.054*	-0.064**	-0.057*	-0.058**	-0.008	-0.012	-0.015	-0.015	-0.020
	[0.032]	[0.032]	[0.031]	[0.024]	[0.024]	[0.023]	[0.018]	[0.015]	[0.013]
Competitive District									0.037
									[0.028]
C-SPAN Position \times Comp.									-0.052**
									[0.025]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓		✓	✓	✓	✓
Income-Educ		✓	✓	✓		✓	✓	✓	✓
Individual			✓	✓			✓	✓	✓
Cable News				✓				✓	✓
Speech				✓				✓	✓
Mean DV	0.012	0.012	0.012	0.012	-0.024	-0.024	-0.024	-0.024	-0.006
Observations	244000	244000	244000	244000	250230	250230	250230	250230	494233
R-squared	0.052	0.067	0.073	0.218	0.080	0.095	0.118	0.229	0.209

Notes. Each column shows an OLS regression of the emotionality score in a given speech (standardized) on the average C-SPAN channel position in the speaker’s district (standardized). In Columns 1 to 4, the sample includes speeches pronounced by Democrat and Republican Members of the House of Representatives who run for re-election in competitive districts at the end of the Congress period. In Columns 5 to 8, the sample includes speeches pronounced Representatives who run for re-election in safe districts. Column 9 reports the analysis on the full sample, including an interaction term between C-SPAN channel position and a dummy equal to 1 for competitive districts. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

There is no effect on the channel-position baseline, but a statistically significant interaction with competitiveness.

These estimates show that politicians respond with more emotional language to C-SPAN in districts with intense electoral competition. This result remains robust when including other district covariates, suggesting the competitiveness interaction effect is not confounded by other correlated district characteristics.

5.3 Effort in office

We now turn to testing the proposition that C-SPAN should have little or no effect on concrete measures of legislative effort, described in Section 3. We estimate the following

Table 3: C-SPAN AND EFFORT IN OFFICE

	Witness Appearances					Party Loyalty				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Viewership	0.065 [0.300]	0.149 [0.347]	0.168 [0.349]	0.161 [0.345]	-0.059 [0.413]	-0.247 [0.340]	-0.041 [0.312]	0.017 [0.299]	-0.028 [0.294]	0.119 [0.358]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ		✓	✓	✓	✓		✓	✓	✓	✓
Individual			✓	✓	✓			✓	✓	✓
Cable News				✓	✓				✓	✓
Speech				✓	✓				✓	✓
Congruence					✓					✓
KP F-stat	14.135	12.145	11.053	11.579	8.046	14.135	12.145	11.053	11.579	8.046
Observations	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331

Notes. Each column shows the regression of the indicated dependent variable (standardized) on the C-SPAN *Viewership* in the speaker’s district (standardized), where viewership is instrumented with C-SPAN channel position in the same district (standardized). The dependent variables are *Witnesses Appearances*, and *Party Loyalty*. The sample includes all Democrat and Republican Members of the House of Representatives, between 1998 to 2004. All columns include State-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Congruence* is the measure of media market congruence in Snyder and Strömberg (2010), shown to drive newspaper circulation. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

equation at the politician-session level:

$$Y_{ijst} = \alpha + \rho \hat{V}_{js} + \tau_{st} + X'_{ijst} \beta + \epsilon_{ijst} \quad (3)$$

where Y_{ijst} is the outcome for representative i in district j , state s , and congressional session t ; \hat{V}_{js} is C-SPAN channel *Viewership* in j and s , instrumented by the channel position in the legislator’s congressional district, as shown in the first stage equation (1); τ_{st} is a Congress-year fixed effect; and X'_{ijst} includes additional covariates to be enumerated below. Standard errors are clustered by House member. Supportive reduced form results are reported in Appendix C.2.

Table 3 reports two-stage-least-square estimates for the first set of outcomes on legislator effort and independence. For each outcome, we include different sets of controls, in line with our emotionality analysis in Table 1. The first outcome of interest is the number of representatives’ *Witnesses Appearances* before Congress committees, a measure of politicians’ costly efforts. Columns 1 to 4 show no effect of C-SPAN viewership on effort, regardless of the specification used. The second panel examines representatives’ roll call votes’ alignment

Table 4: C-SPAN AND CONSTITUENCY ORIENTATION

	Constituency-orientation					Localism				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Viewership	0.667* [0.375]	0.278 [0.351]	0.249 [0.344]	0.315 [0.341]	0.246 [0.409]	-0.086* [0.048]	-0.077* [0.045]	-0.074 [0.046]	-0.065 [0.041]	-0.083 [0.052]
Congress-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ		✓	✓	✓	✓		✓	✓	✓	✓
Individual			✓	✓	✓			✓	✓	✓
Cable News				✓	✓				✓	✓
Speech				✓	✓				✓	✓
Congruence					✓					✓
KP F-stat		12.594	11.502	12.199	8.314	10.479	17.984	16.476	16.451	11.213
Observations	1323	1323	1323	1323	1323	497728	497728	497728	497728	497480

Notes. Each column shows the regression of the indicated dependent variable (standardized) on the C-SPAN1 *Viewership* in the speaker’s district (standardized), where viewership is instrumented with C-SPAN1 channel position in the same district (standardized). The dependent variables are *Constituency-Orientation*, and *Localism*. The sample includes all Democrat and Republican Members of the House of Representatives, between 1998 to 2004. All columns include State-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Congruence* is the measure of media market congruence in Snyder and Strömberg (2010), shown to drive newspaper circulation. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

with party leadership, a direct measure of *Party Loyalty* (as opposed to local responsiveness). Here again we find no effect of C-SPAN on party loyalty.

Table 4 reports additional results with outcomes indicating a localist/constituency-focused orientation. The first panel reports results for politicians’ *constituency-orientation*, measured as the participation in committees oriented towards appropriating funds for constituencies rather than broader policy-oriented committees (again, from Snyder and Strömberg, 2010). In column 1, higher C-SPAN viewership is significantly associated with higher constituency-orientation. However, this effect is no longer significant after introducing controls (Columns 2 to 4), suggesting rather a null effect of C-SPAN on this outcome. The second panel looks at a speech-based (rather than behavioral) measure of *localism*. To proxy for localist rhetoric, we take the frequency of mentions of localities in a politician’s district normalized by speech length (see Appendix C.4 for details). C-SPAN viewership has a noisy negative effect on localism, indicating that greater C-SPAN viewership, if anything, decreases speech time devoted to local matters.

Consistent with H3, we find that C-SPAN viewership (unmediated visibility) does not affect behavioral measures of effort in office or attention towards their home constituency. Our language-based measure of constituency orientation suggests, if anything, a negative

effect of C-SPAN viewership. This resonates with Appendix C.5’s findings that C-SPAN increases the discussion of more nationalistic topics related to American history and national party politics, in line with the increasing nationalization of American politics (Hopkins, 2018).

6 Effects of C-SPAN on Voters

Having established that politicians more exposed to C-SPAN use more emotional rhetoric in their speeches but do not exert more legislative effort, we now examine how C-SPAN exposure affects voters. By granting citizens direct access to their representatives’ floor speeches, C-SPAN may alter how voters perceive and engage with their House member. We show that voters are more interested in their local House member and have higher approval ratings across a number of outcomes (H4). In particular, we estimate effects of C-SPAN viewership on web searches for the local House member, job approval in surveys, campaign contributions, and the share of votes for the incumbent. We interpret those outcomes as indicative of how C-SPAN increases voters’ approval of their incumbent representatives.

6.1 Voters’ search interest in their House members

We use Google Trends search data to measure voter interest in individual House members. Starting from the complete list of U.S. legislators whose terms overlap with the 2004–2014 window, we scrape Google Trends results for each legislator’s year of service. We query the SerpAPI Google Trends endpoint using the representative’s full name over U.S. Designated Market Areas (the smallest available unit). Google Trends normalizes search volumes to a 0–100 index within each query, where 100 denotes the DMA with the highest relative search interest for that query in that year. We pre-process the data by substituting N/A (indicating no searches) with 0s, and entries recorded as < 1 (Google Trends’ indication of very low but nonzero search volume) are set to 0.5. Failed person-year queries are re-submitted with the same parameters and a 4-second delay between requests to respect API rate limits; any queries that fail again are not searched further but are logged as failed. We map DMA-level interest scores to counties and then to electoral districts. The first step uses available crosswalks (Schneider), which record which DMA(s) each U.S. county belongs to. We assign to each county the interest score of its DMA. Counties straddling two DMAs are assigned the mean of the two DMA values.

To map county-level interest to electoral districts, we use four period-specific crosswalks from the Missouri Census Data Center’s GEOCORR application, each linking county FIPS codes to congressional districts along with an allocation factor representing the share of

Table 5: C-SPAN AND WEB SEARCH ATTENTION

	Reduced Form					Two-Stage-Least-Square				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Position	-0.065*	-0.101***	-0.082**	-0.084**	-0.080*					
	[0.036]	[0.038]	[0.037]	[0.041]	[0.041]					
Viewership						0.242	0.460**	0.412*	0.398*	0.391*
						[0.150]	[0.211]	[0.223]	[0.225]	[0.232]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable News					✓					✓
KP F-stat						20.005	17.652	13.244	13.813	12.573
Observations	2514	2514	2514	2514	2514	2514	2514	2514	2514	2514
R-squared	0.277	0.306	0.320	0.323	0.324					

Notes. Column 1 to 5 show the reduced-form regression of the search interest score for House members (standardized), on the average C-SPAN1 channel position in their electoral district (standardized). Columns 6 to 10 show the two-stage-least-squares of the search interest score on C-SPAN1 viewership, instrumented by C-SPAN1 channel position. All columns include State-Year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

each congressional district’s population residing in that county. The district-level interest score is a weighted average of the county-level scores, where weights are the GEOCORR allocation factors (population-based). Our main outcome variable is the interest score for House member i in year t in their home district d , normalized by the sum of the interest scores obtained by all House members j in that same district d in year t :

$$\text{Interest}_{idt} = \frac{I_{idt}}{\sum_j I_{j \neq i, dt}}$$

The denominator reflects the total search interest that residents of district d direct at any House member in that year. When the denominator is zero, this ratio is undefined.

Supportive reduced form results are reported in Appendix D.2. Table 5 reports the estimated effect of C-SPAN on the search-based interest score for the locally elected House member. The reduced form regression of the interest score on C-SPAN channel position (columns 1 to 5) has a negative and consistently statistically significant coefficient across specifications. This magnitude suggests that a standard deviation increase in channel position leads to a 0.07-0.10 standard deviations decrease in interest devoted specifically to the House member in their own electoral districts. The two-stage least-squares specification (columns

6 to 10) confirms those results, and further suggests that a one standard deviation increase in viewership leads to a 0.24-0.46 standard deviations increase in interest.

6.2 Job Approval

Next, we show that exposure to C-SPAN increases voters’ approval of their House representative. Our first test uses survey data from the Cooperative Congressional Election Study (Ansolabehere, 2012). The survey includes pre-election and post-election waves for each congressional election, collecting responses from a nationally representative sample of voters. Respondents are asked about their demographic characteristics as well as their political attitudes.

We use responses from the pre-election waves for 2006-2014, since the start of the survey until the last year in our main dataset. We focus on the main approval question: “Do you approve of the way each is doing their job. . . [US House member]”, where each respondent is asked about the House member from their electoral district. Respondents have 4 options, ranging from “Strongly approve” to “Strongly disapprove”. We code a binary variable as 1 if the respondent approves or strongly approves of their representative, and 0 otherwise.⁶ We match each respondent with the C-SPAN channel position and ratings in their zip code. Then, we regress respondent’s job approval on the C-SPAN channel position in their zip code. We cluster standard errors at the zip code level to account for correlation among respondents exposed to the same channel position.

Table 6 reports the results. Columns 1 to 4 show that exposure to a lower C-SPAN channel position (and thus higher viewership) increases approval of a respondent’s representative in Congress. This holds when controlling for respondents’ demographic characteristics, economic situation, and political identities. Columns 5 to 8 confirm those results in the instrumental variable specification. Those estimates suggest that a one-standard-deviation increase in C-SPAN viewership increases the probability of expressing approval by 15 to 16 percentage points.

Supportive reduced form binned scatter plots are reported in Appendix D.2.1. Appendix D.2 shows that C-SPAN effect on job approval is mediated by House members’ use of emotional language. When estimating the same regressions, but separately by politicians who use more or less emotions than the median, we find that C-SPAN increases incumbent politicians’ approval more in the high-emotion sample. The coefficient for the low-emotion sample is 9-fold lower in magnitude and not statistically significant. In the same Appendix, we also report some falsification tests. First, we look at job approval results for House members who

⁶Missing instances occur when the respondent fails to provide an answer.

Table 6: C-SPAN AND APPROVAL OF HOUSE REPRESENTATIVES

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	-0.005*** [0.002]	-0.005*** [0.002]	-0.005*** [0.002]	-0.005*** [0.002]				
Viewership					0.155** [0.063]	0.154** [0.062]	0.153** [0.062]	0.160*** [0.062]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					20.688	20.803	21.005	20.993
Mean DV	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583
Observations	169807	169807	169807	169807	168084	168084	168084	168084
R-squared	0.007	0.011	0.017	0.017				

Notes. Columns 1 to 4 show the OLS regression of the respondents’ binary approval for their House representatives on the average C-SPAN1 channel position in respondents’ zipcode. Columns 5 to 8 show the two-stage-least-square regression, where C-SPAN1 viewership is instrumented with C-SPAN1 channel position. All columns include State-Congress fixed effects. *Demographics* indicates the inclusion of respondent-level controls for gender, age, race, religion citizenship, marital status, having children. *Economics* indicates the inclusion of respondent-level controls for employment status and home-ownership. *Political* indicates the inclusion of respondent-level controls for being republican, democrat or independent. Standard errors are clustered at the zipcode level. **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

never speak in Congress. Consistent with the idea that C-SPAN affects approval by exposing respondents more to their politicians’ interventions, we find precisely estimated null effects. Second, we look at the effect of C-SPAN channel position on the approval of politicians in other offices – i.e. Governors and the President. As those figures receive most of their media attention outside C-SPAN, we expect that C-SPAN does not affect their approval ratings. Those intuitions are confirmed in the data.

6.3 Individual Campaign Contributions

Next, we look at campaign contributions to incumbent House members as another expression of voter support. In particular, we are interested in how individual campaign contributions respond to C-SPAN exposure, rather than those from organized groups. Since our instrumental variable approach likely elicits exogenous viewership by individual residents, but does not affect organized groups already attuned to politics, we expect higher C-SPAN viewership to result in larger donations specifically from individuals.

We use data from the Database on Ideology, Money in Politics, and Elections (Bonica, 2016), which collects information on campaign contributions made by individuals and organizations to political candidates, and focus on data from 1998 to 2014 to match the main

Table 7: C-SPAN AND INDIVIDUAL CAMPAIGN CONTRIBUTIONS

	Reduced Form					Two-Stage-Least-Square				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Position	-0.042 [0.043]	-0.075* [0.043]	-0.083* [0.043]	-0.083** [0.041]	-0.079* [0.042]					
Viewership						0.262 [0.276]	0.515 [0.325]	0.577* [0.346]	0.544* [0.312]	0.532* [0.321]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable News					✓					✓
KP F-stat						14.796	14.591	14.302	15.882	14.755
Observations	2576	2576	2576	2576	2576	2576	2576	2576	2576	2576
R-squared	0.150	0.200	0.215	0.273	0.275					

Notes. Columns 1 to 5 show the reduced-form regression of House members’ share of individual campaign contributions (over total received campaign contributions) (standardized), on the average C-SPAN1 channel position in their electoral district (standardized). Columns 6 to 10 show the two-stage-least-squares estimate of the outcome on C-SPAN1 viewership, instrumented by C-SPAN1 channel position. All columns include State-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

period of analysis. We analyze the share of total receipts that come specifically from individual campaign contributions, and that incumbents receive ahead of the next election. This outcome variable is not defined for incumbents who have not received any contribution, who are excluded from this sample. We then regress campaign contributions on C-SPAN channel position in the representative’s home district. We cluster standard errors at the House member level to account for repeated observations of the same representative over time.

Table 7 reports the results. Columns 1 to 5 show that exposure to a lower C-SPAN channel position (and hence higher viewership) increases individual campaign contributions. This result holds when controlling for district’s characteristics as well as politicians’ demographic characteristics and other cable news channel positions. Columns 6 through 10 report the two-stage least-squares estimates, which, while less precisely estimated in some specifications, provide strongly consistent evidence of a positive effect of C-SPAN viewership on the share of individual campaign contributions. They suggest that a 1 standard deviation increase in C-SPAN viewership leads to about a 0.5 standard deviation increase in individual contributions. Supportive reduced form binned scatter plots are reported in Appendix D.3.1. Meanwhile, Appendix D.3 shows that C-SPAN does not boost the share of PAC donations (as opposed

Table 8: C-SPAN AND INCUMBENT VOTE SHARE

	Reduced Form					Two-Stage-Least-Square				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Position	-0.101*** [0.037]	-0.095*** [0.036]	-0.102*** [0.035]	-0.118*** [0.033]	-0.120*** [0.033]					
Viewership						0.649** [0.285]	0.661** [0.297]	0.697** [0.290]	0.761*** [0.282]	0.794*** [0.297]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable					✓					✓
KP F-stat						13.770	14.104	14.397	16.006	14.652
Observations	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462
R-squared	0.206	0.295	0.306	0.340	0.340					

Notes. Columns 1 to 5 show the reduced-form regression of House member’s vote share (standardized) on the average C-SPAN1 channel position in their home electoral district (standardized). Columns 6 to 10 show the two-stage-least-squares estimate of the outcome on C-SPAN1 viewership, instrumented by C-SPAN1 channel position. All columns include State-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

to individuals), aligning with our expectations.

6.4 Incumbent Vote Share

Our last test for whether C-SPAN increases support for incumbent House members asks whether C-SPAN increases their vote shares in the next election. We merge MIT Election Data and Science Lab (2017) data on House election results with our dataset of House members who speak at least once in Congress, including their demographic characteristics and district-level variables. We regress the incumbent vote share for House members on C-SPAN channel position in their home district, clustering standard errors by House member to account for incumbents running multiple times. We exclude House members who do not re-run for election and uncontested races.

The results for incumbent vote shares are reported in Table 8. We find clear evidence that C-SPAN viewership favors incumbents in re-election bids. Across specifications (Columns 1-5), a lower C-SPAN channel position (higher viewership) corresponds to a larger vote share for incumbent House members. These results are confirmed in the two-stage least-squares estimates reported in columns 6 to 10, where a one standard deviation increase in C-SPAN viewership translates into a ≈ 0.7 standard deviation increase in vote shares. Supportive reduced form binned scatter plots are reported in Appendix D.4.1. Appendix Table A.26

shows that those effects are not driven by C-SPAN increasing voter turnout.

7 Additional results

This section presents additional evidence that probes the mechanisms underlying our main results and evaluates their robustness across alternative empirical settings. We first examine the effects of C-SPAN at the time of its introduction, allowing us to distinguish between behavioral responses of incumbents and changes in political selection. We then compare the effects of C-SPAN to those of newspaper coverage, highlighting how different forms of visibility—unmediated versus mediated—generate distinct patterns in rhetoric, effort, and voter response.

7.1 C-SPAN historical introduction in the House

Our main analysis focuses on the effect of C-SPAN during a period when it is an established institution. These results are unable to speak to what happens when cameras are *first* introduced in the House. Yet, the effect of C-SPAN on politicians and their voters may differ importantly in those two phases. For example, C-SPAN may enable the entry of new types of politicians who use more emotional language; in the adjustment phase, this may reduce rather than increase incumbent vote shares. Most literature on legislative television has focused on camera introduction, finding that it favors incumbent Senate members (Mixon Jr and Upadhyaya, 2002), and that it does not affect State legislators’ ability to compromise or exert effort in office (Lyons and Ryan, 2025). Both results align with our findings on the null effect of C-SPAN on effort and the positive effect on incumbent approval and vote share.

To better speak to these results, we test whether C-SPAN effects are also found at the onset, when C-SPAN was first introduced in the US House of representatives. We estimate a difference-in-differences regression, exploiting the staggered introduction of C-SPAN in the House (1979) and Senate (1986), on various outcomes of interests. See Appendix E.1 for the details.

Figure A.11 shows that the introduction of televised debates increased the emotionality of House debates compared to contemporary Senate debates. Before the introduction of C-SPAN, the House and Senate exhibited parallel trends in emotional language usage. However, in the years after, particularly from 1981 (when the first Congress elected in the post C-SPAN period begins), a difference between the chambers emerges and becomes statistically significant. To disentangle selection and incentive effects of introducing C-SPAN, we look at the effect on newly joining politicians, versus incumbent politicians (Appendix Figures A.12

and A.13. The evidence suggests that both channels matter, but the selection effect for more emotive new politicians was especially important.

Second, we use the same strategy to identify the effect of C-SPAN's introduction in the House on the vote share of incumbent House members, compared to contemporary incumbent Senators. Pre-C-SPAN, the vote share difference between House and Senate incumbents is nearly zero and statistically insignificant, consistent with parallel pre-trends. After the introduction of C-SPAN, the coefficient on the House–Senate difference becomes negative, suggesting that it disadvantaged incumbent politicians. That then led to the introduction of more emotive politicians.

7.2 Effect of Newspaper Coverage on Emotionality and Effort

In the theoretical framework, We compare C-SPAN to newspaper coverage to assess how different forms of visibility affect rhetoric and effort. This feature sets C-SPAN apart from newspapers, and creates attention-grabbing incentives for incumbent members, a behavior that is rewarded by voters. To better assess the unique effects of C-SPAN, Appendix F examines the impact of newspaper coverage of locally elected House members on the same outcomes.

We obtain a district-level proxy for newspaper coverage from Snyder and Strömberg (2010). In their work, *Congruence* measures the geographical overlap between newspaper markets and U.S. congressional districts; they show that higher congruence drives greater newspaper coverage of the local Member of Congress, and this is plausibly exogenous to other relevant district characteristics. The logic behind this instrument is that newspapers catering to an audience distributed across different electoral districts are less likely to speak about any local politician, who would only be of interest to part of their audience; conversely, higher congruence of their geographical market with political geographies will lead to greater attention devoted to locally elected politicians.

We create a time-invariant congruence measure by Congressional district by averaging from 1998 to 2004 and standardizing to mean zero with a unit standard deviation. This variable is analogous to our C-SPAN channel position regarding plausible exogeneity and time coverage. We use this instrument in reduced form regressions to understand the effect of congruence (and thus newspaper coverage) on legislator and voter outcomes.

First we ask whether newspaper coverage, like C-SPAN, affects emotionality. We find that higher local news coverage does not change the emotionality of House members' speeches. We also find that media market congruence does not systematically affect the topics discussed in

Congress.⁷ This null result is consistent with the theoretical distinction drawn in Section 2: because newspaper coverage is mediated by journalists who focus on policy substance, it does not create the same incentives for emotional rhetoric that C-SPAN's unmediated visibility does. Next, we reproduce the main result from Snyder and Strömberg (2010) in our sample, showing that congruence of media markets increases constituency service on committees, as well as legislator effort and independence.

Second, we ask whether newspaper coverage provides electoral advantages. We estimate the reduced form model of the effect of media market congruence on vote share for the incumbent. Higher media market congruence does not systematically translate into higher vote share in the next election, consistent with the finding by Gentzkow et al. (2011) that local newspaper entry does not affect incumbent vote share. Higher media market congruence appears also to only marginally increase the share of individual campaign contributions, while having a negative effect on citizens' approval of their politicians.

These results suggest that C-SPAN and newspaper coverage of local politicians have opposite effects on politicians behaviors and rhetoric. Moreover, mediated transparency through newspapers has, at best, mixed effects on voter approval of their politicians, in sharp contrast to the pro-incumbent effects of C-SPAN across multiple outcomes .

8 Conclusion

This paper studies how increased visibility of Congressional floor debates via C-SPAN affected the rhetoric, legislative behavior, and electoral fortunes of U.S. House members. We find that C-SPAN exposure increases emotional appeals in floor speeches. The emotionality effect of C-SPAN is concentrated in electorally competitive districts, indicating that electoral pressures are the key mechanism. C-SPAN exposure generates electoral rewards for incumbents: higher vote shares, job approval, and individual campaign contributions. In contrast to this sizable effect of rhetoric, C-SPAN shows no discernible impact on concrete measures of legislative effort for constituents, including witness appearances before committees, deviations from party lines, and constituency-oriented committee membership. If anything, C-SPAN shifts attention from local matters toward more nationalized rhetoric. Our results are consistent with theories where visibility of deliberation induces electoral signaling rather than effort, contrasting sharply with findings from studies on newspapers, which we replicate. This contrast underscores the importance of medium and audience in determining the political consequences of increased visibility.

⁷We observe a small increase in discussions about Economic Policy, and a similar reduction in discussions about Immigration.

Our results show that legislative television increases emotional appeals without impacting effort, but the general welfare effects of C-SPAN remain unclear. Indeed, while we don't find evidence for beneficial effects, neither do we find evidence of harmful effects, contrary to some theoretical accounts and public discussions. This resonates with recent examinations of the effect of legislative television in state legislatures, which find no effect on gridlock (Lyons and Ryan, 2025). For example, the shift to emotional speech on camera may not have replaced other discussions, but rather pushed them off-camera (and off the debate floor), meaning we don't observe them any more. Moreover, C-SPAN may have affected the information environment through other channels not studied in this paper; for example, it may have facilitated access to national politics for local journalists, opened up educational opportunities, and supported research. In this sense, this paper does not offer an easy one-size-fits-all recommendation to contemporary debates on increasing transparency in governing bodies, but rather it adds nuance to that debate with causally identified evidence on a specific aspect of the issue.

This paper invites future work in several directions. Some of these are closely linked to this work and would deepen our understanding of the mechanisms behind the C-SPAN effect on voters. For example, we do not explore the effect of televised debates on local political knowledge, nor its interaction with the electoral cycle. We consider these to be promising areas for future analysis. More broadly, this work speaks to at least two adjacent scholarships. First, some results suggest that C-SPAN may have contributed to shifting congressional attention from local to national matters, and perhaps towards more nationalistic rhetoric. These suggestive results are relevant to the literature on party control and the nationalization of U.S. politics, consistent with a party-centric model where emotionality serves to strengthen voters' party identity (Jacobson, 2015). Recent work has suggested that the driving forces of nationalization are the decline in local news sources (Moskowitz, 2021) and the increasing concentration of TV ownership (Martin and McCrain, 2019); further work could consider the role of C-SPAN in that process.

Second, a natural question is what this case of early unmediated transparency teaches us regarding ubiquitous contemporary forms of unmediated transparency, namely social media communications by politicians for voters. A direct translation of our results would suggest that the multiplication of opportunities for unmediated communication should increase the approval of already more visible politicians. Yet, unlike C-SPAN, those communications today compete with each other and often enable lower-resource challengers to emerge due to reduced access barriers, which is quite different from C-SPAN. At the same time, voters may respond to the overwhelming information by evaluating competing claims in a different way. Understanding the impact of unmediated communication via social media on legislative

speech and voter emotions would be a natural next step in this research program.

References

- Stephen Ansolabehere. Cooperative Congressional Election Study, 2012. URL <http://cces.gov.harvard.edu>.
- Kevin Arceneaux, Martin Johnson, René Lindstädt, and Ryan J Vander Wielen. The influence of news media on political elites: Investigating strategic responsiveness in congress. *American Journal of Political Science*, 60(1):5–29, 2016.
- Elliott Ash, Massimo Morelli, and Richard Van Weelden. Elections and divisiveness: Theory and evidence. *The Journal of Politics*, 79(4):1268–1285, 2017.
- Elliott Ash, Sergio Galletta, Matteo Pinna, and Christopher Warshaw. The effect of fox news channel on us elections: 2000-2020. *Center for Law & Economics Working Paper Series*, 2021 (07), 2021.
- Scott Ashworth. Electoral accountability: Recent theoretical and empirical work. *Annual Review of Political Science*, 15(1):183–201, 2012. doi: 10.1146/annurev-polisci-031710-103823. URL <http://dx.doi.org/10.1146/annurev-polisci-031710-103823>.
- Patrick Balles, Ulrich Matter, and Alois Stutzer. Television market size and political accountability in the us house of representatives. *European Journal of Political Economy*, 80:102459, 2023.
- Timothy Besley and Robin Burgess. The political economy of government responsiveness: Theory and evidence from india. *The quarterly journal of economics*, 117(4):1415–1451, 2002.
- Adam Bonica. Database on ideology, money in politics, and elections: Public version 2.0 [computer file]. <https://data.stanford.edu/dime>>, 2016.
- Constantine Boussalis, Travis G Coan, Mirya R Holman, and Stefan Müller. Gender, candidate emotional expression, and voter reactions during televised debates. *American Political Science Review*, 115(4):1242–1257, 2021.
- Ted Brader. Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions. *American Journal of Political Science*, 49(2):388–405, 2005.
- Ted Brader. *Campaigning for hearts and minds: How emotional appeals in political ads work*. University of Chicago Press, 2020.
- Ted Brader, Nicholas A Valentino, and Elizabeth Suhay. What triggers public opposition to immigration? anxiety, group cues, and immigration threat. *American Journal of Political Science*, 52(4):959–978, 2008.
- Joshua D Clinton and Ted Enamorado. The national news media’s effect on congress: How fox news affected elites in congress. *The Journal of Politics*, 76(4):928–943, 2014.
- Charles Crabtree, Matt Golder, Thomas Gschwend, and Indrii H Indriason. It is not only what you say, it is also how you say it: The strategic use of campaign sentiment. *The Journal of Politics*, 82(3):1044–1060, 2020.
- Bryce Dietrich, Dan Schultz, and Tracey Jaquith. This floor speech will be televised: Understanding the factors that influence when floor speeches appear on cable television. Technical report, 2018.
- Bryce J Dietrich, Matthew Hayes, and Diana Z O’Brien. Pitch perfect: Vocal pitch and the emotional

- intensity of congressional speech. *American Political Science Review*, 113(4):941–962, 2019.
- Anthony Downs. *An Economic Theory of Democracy*. Harper, New York, 1957.
- Francesco Drago, Tommaso Nannicini, and Francesco Sobbrío. Meet the press: How voters and politicians respond to newspaper entry and exit. *American Economic Journal: Applied Economics*, 6(3):159–188, 2014.
- James N Druckman. Media matter: How newspapers and television news cover campaigns and influence voters. *Political communication*, 22(4):463–481, 2005.
- Ruben Durante and Brian Knight. Partisan control, media bias, and viewer responses: Evidence from berlusconis italy. *Journal of the European Economic Association*, 10(3):451–481, 2012.
- Ruben Durante, Paolo Pinotti, and Andrea Tesei. The political legacy of entertainment tv. *American Economic Review*, 109(7):2497–2530, 2019.
- Sebastian Ellingsen and Øystein Hernæs. The impact of commercial television on turnout and public policy: Evidence from norwegian local politics. *Journal of Public Economics*, 159:1–15, 2018.
- Ruben Enikolopov, Maria Petrova, and Ekaterina Zhuravskaya. Media and political persuasion: Evidence from russia. *American economic review*, 101(7):3253–3285, 2011.
- J. Ferejohn. Incumbent performance and electoral control. *Public Choice*, 50(1-3):5–25, 1986. ISSN 0048-5829. doi: 10.1007/bf00124924.
- Claudio Ferraz and Frederico Finan. Exposing corrupt politicians: the effects of brazil’s publicly released audits on electoral outcomes. *The Quarterly journal of economics*, 123(2):703–745, 2008.
- Sergio Galletta and Elliott Ash. How cable news reshaped local government. *Available at SSRN 3370908*, 2020.
- Barbara A Gault and John Sabini. The roles of empathy, anger, and gender in predicting attitudes toward punitive, reparative, and preventative public policies. *Cognition & Emotion*, 14(4):495–520, 2000.
- Gloria Gennaro and Elliott Ash. Emotion and reason in political language. *Economic Journal*, 2021.
- Gloria Gennaro, Giampaolo Lecce, and Massimo Morelli. Intertemporal evidence on the strategy of populism. 2019.
- Matthew Gentzkow. Television and voter turnout. *The Quarterly Journal of Economics*, 121(3): 931–972, 2006.
- Matthew Gentzkow, Jesse M Shapiro, and Michael Sinkinson. The effect of newspaper entry and exit on electoral politics. *American Economic Review*, 101(7):2980–3018, 2011.
- Kimberly Gross. Framing persuasive appeals: Episodic and thematic framing, emotional response, and policy opinion. *Political Psychology*, 29(2):169–192, 2008.
- Stephen Hansen, Michael McMahon, and Andrea Prat. Transparency and deliberation within the fomc: a computational linguistics approach. *The Quarterly Journal of Economics*, 133(2):801–870, 2018.

- Jeffrey J Harden and Justin H Kirkland. Does transparency inhibit political compromise? *American journal of political science*, 65(2):493–509, 2021.
- Daniel J Hopkins. *The increasingly United States: How and why American political behavior nationalized*. University of Chicago Press, 2018.
- Gary C Jacobson. It’s nothing personal: The decline of the incumbency advantage in us house elections. *The Journal of Politics*, 77(3):861–873, 2015.
- Jennifer Jerit. Survival of the fittest: Rhetoric during the course of an election campaign. *Political Psychology*, 25(4):563–575, 2004.
- Eunji Kim and SHAWN Patterson Jr. The american viewer: Political consequences of entertainment media. *American Political Science Review*, 119(2):917–931, 2025.
- Horacio Larreguy, John Marshall, and James M Snyder Jr. Publicising malfeasance: When the local media structure facilitates electoral accountability in mexico. *The Economic Journal*, 130(631):2291–2327, 2020.
- Claire SH Lim, James M Snyder, and David Strömberg. The judge, the politician, and the press: newspaper coverage and criminal sentencing across electoral systems. *American Economic Journal: Applied Economics*, 7(4):103–35, 2015.
- Catharina Lindstedt and Daniel Naurin. Transparency is not enough: Making transparency effective in reducing corruption. *International political science review*, 31(3):301–322, 2010.
- Peter John Loewen, Christopher Cochrane, and Gabriel Arsenault. Empathy and political preferences. 2017.
- Jeffrey Lyons and Josh M Ryan. Lights, camera, inaction? the effects of gavel-to-gavel floor coverage on us state legislatures. *American Political Science Review*, pages 1–21, 2025.
- George E Marcus and Michael B MacKuen. Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87(3):672–685, 1993.
- George E Marcus, W Russell Neuman, and Michael MacKuen. *Affective intelligence and political judgment*. University of Chicago Press, 2000.
- Gregory J Martin and Joshua McCrain. Local news and national politics. *American Political Science Review*, 113(2):372–384, 2019.
- Gregory J Martin and Ali Yurukoglu. Bias in cable news: Persuasion and polarization. *American Economic Review*, 107(9):2565–99, 2017.
- David R Mayhew. Congressional elections: The case of the vanishing marginals. *Polity*, 6(3):295–317, 1974.
- MIT Election Data and Science Lab. U.S. House 1976–2020, 2017. URL <https://doi.org/10.7910/DVN/IGOUN2>.
- Franklin G Mixon Jr and Kamal P Upadhyaya. Legislative television as an institutional entry barrier: The impact of c-span2 on turnover in the us senate, 1946–1998. *Public Choice*, 112(3):433–448, 2002.

- Daniel J Moskowitz. Local news, information, and the nationalization of us elections. *American Political Science Review*, 115(1):114–129, 2021.
- Andrew CW Myers. Press coverage and accountability in state legislatures. *American Political Science Review*, 120(1):207–225, 2026.
- Moritz Osnabruegge, Sara Hobolt, and Toni Rodon. Playing to the gallery: Emotive rhetoric in parliaments. *American Political Science Review*, pages 1–15, 2021.
- Ju Yeon Park. Electoral rewards for political grandstanding. *Proceedings of the National Academy of Sciences*, 120(17):e2214697120, 2023.
- John W Patty. Signaling through obstruction. *American Journal of Political Science*, 60(1):175–189, 2016.
- Andrea Prat. The wrong kind of transparency. *American economic review*, 95(3):862–877, 2005.
- Markus Prior. News vs. entertainment: How increasing media choice widens gaps in political knowledge and turnout. *American journal of political science*, 49(3):577–592, 2005.
- Markus Prior. The incumbent in the living room: The rise of television and the incumbency advantage in us house elections. *The journal of Politics*, 68(3):657–673, 2006.
- Jonathan Renshon, Jooa Julia Lee, and Dustin Tingley. Physiological arousal and political beliefs. *Political Psychology*, 36(5):569–585, 2015.
- Jacob Schneider. Research resources. <https://sites.google.com/view/jacob-schneider/resources>. Accessed: 25 August 2025.
- James M Snyder and David Strömberg. Press coverage and political accountability. *Journal of political Economy*, 118(2):355–408, 2010.
- Rune J Sørensen. The impact of state television on voter turnout. *British Journal of Political Science*, 49(1):257–278, 2019.
- Stuart N Soroka, Olga Redko, and Quinn Albaugh. Television in the legislature: The impact of cameras in the house of commons. *Parliamentary Affairs*, 68(1):203–217, 2015.
- David Stasavage. Polarization and publicity: rethinking the benefits of deliberative democracy. *The Journal of Politics*, 69(1):59–72, 2007.
- David Strömberg. Radio’s impact on public spending. *The Quarterly Journal of Economics*, 119(1):189–221, 2004.
- Denis G Sullivan and Roger D Masters. Happy warriors: Leaders’ facial displays, viewers’ emotions, and political support. *American Journal of Political Science*, pages 345–368, 1988.
- Nicholas A Valentino, Ted Brader, Eric W Groenendyk, Krysha Gregorowicz, and Vincent L Hutchings. Election night’s alright for fighting: The role of emotions in political participation. *The Journal of Politics*, 73(1):156–170, 2011.
- Steven Webster and Bethany Albertson. Emotion and politics: Noncognitive psychological biases in public opinion. *Annual Review of Political Science*, 25:19.1—19.18, 2022.
- T Murat Yildirim. Politics of constituency representation and legislative ambition under the glare of camera lights. *Legislative Studies Quarterly*, 45(1):101–130, 2020.

The C-SPAN Effect

Supporting Information

Table of Contents

A	Additional Material on Data	2
A.1	Text and Vocal Pitch Measures of Emotionality	2
A.2	Summary Statistics	3
B	Instrument Validity	4
B.1	First stage	4
B.2	Instrument Balance	6
B.3	Endogenous Determinants of Viewership	8
B.4	Analysis of Compliers	9
C	Additional Results: Effects on Politicians	11
C.1	C-SPAN and Emotional Language	11
C.1.1	Reduced form estimates	11
C.1.2	Placebo estimates	11
C.1.3	Variable specification checks	14
C.1.4	Sample Perturbation	16
C.2	C-SPAN1 and Effort - Reduced form estimates	21
C.3	Other cable TV networks and emotionality	21
C.4	C-SPAN1 and Localism	23
C.5	C-SPAN1 and other speech characteristics	26
C.6	C-SPAN1 and other politician characteristics	28
D	Additional Results: Effects on Voters	29
D.1	Search interest	29

D.2	Approval of Public Officials	29
D.2.1	Reduced form estimates	29
D.2.2	Approval of high and low emotionality House members	29
D.2.3	Falsification test: approval of House members who do not speak	29
D.2.4	Approval of Higher Level Politicians	29
D.3	Campaign Contributions	36
D.3.1	Reduced form estimates	36
D.3.2	Contributions from organizations	36
D.4	Effect of C-SPAN1 on Elections	38
D.4.1	Reduced form estimates	38
D.4.2	C-SPAN1 and Turnout	38
E	C-SPAN1 entry in the House	40
E.1	C-SPAN1 entry and Emotionality	40
E.2	C-SPAN1 entry and Incumbent Vote Share	47
E.3	Effects on Other Outcomes	50
F	Newspaper Coverage	51
F.1	Legislator Outcomes	51
F.1.1	Emotionality	51
F.1.2	Other speech outcomes	53
F.1.3	Effort	53
F.2	Voter Outcomes	56
F.2.1	Approval on the Job	56
F.2.2	Campaign Contributions.	56
F.2.3	Electoral Outcomes	56

A Additional Material on Data

A.1 Text and Vocal Pitch Measures of Emotionality

Table A.1 shows the OLS relationship between our text-based measure of emotionality from Gennaro and Ash (2021) with the vocal pitch measure from Dietrich et al. (2019), which captures emotionality as reflected in voice modulations. Dietrich et al. (2019) use speech extracts over the period 2009-2014, and include indications of the day and politician name. We aggregate those data at the politician-day level, and match them with aggregates from all speeches by politician-day in Gennaro and Ash (2021).

Column 1 shows that the unconditional correlation between the two measure is positive and significant. Column 2 includes a gender control, and shows that the correlation hold after removing between-gender variation in vocal pitch and semantic choices. Similarly, column 3 shows that the correlation survives the inclusion of party controls. In column 4 we include individual politician fixed effects. The correlation is smaller in magnitude, but still positive and significant. This suggests that the text-based measure of emotionality captures relatively subtle variation in semantic expressions of emotions that correspond to changes in vocal (non semantic) modulations, both across and within individuals.

Table A.1: CORRELATION BETWEEN TEXT AND VOICE BASED EMOTIONALITY

Emotion in Text	(1)	(2)	(3)	(4)
Emotion as Vocal Pitch	0.11*** (0.01)	0.10*** (0.01)	0.10*** (0.01)	0.09*** (0.01)
Male		-0.04 (0.02)		
Republican			-0.08*** (0.01)	
R-squared	0.01	0.01	0.01	0.16
Observations	23796	23796	23796	23796

Notes. Each column shows the OLS regression of emotionality by day and speaker as measured in Gennaro and Ash (2021) (standardized), and emotionality as measured in Dietrich et al. (2019) (standardized). Column includes a dummy for gender, column 3 includes a dummy for party, column 4 includes individual fixed effects. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

A.2 Summary Statistics

Table A.2: SUMMARY STATISTICS: IV VARIABLES

	Count	Mean	SD	Min	Max
Main Variables					
Emotionality	497910	1.068	0.233	0.380	1.884
Emotionality (Standardized)	497910	-0.006	0.998	-2.957	3.492
C-SPAN1 Share 2004	497910	0.086	0.061	0.000	0.525
C-SPAN1 Channel 1998-2004 Avg	497910	33.509	10.281	6.073	76.937
Speech Variables					
Speech Length	497910	96.004	170.343	1	10289
Avg Word Length	497910	5.666	0.705	2.000	15.000
Avg Sentence Length	497910	16.581	8.136	1.000	277.500
Individual Variables					
Female	497910	0.125	0.330	0	1
Catholic	497910	0.294	0.456	0	1
Jewish	497910	0.069	0.254	0	1
Republican	497910	0.510	0.500	0	1
Black	497910	0.107	0.309	0	1
Hispanic	497910	0.025	0.155	0	1
Asian	497910	0.008	0.092	0	1
Native	497910	0.002	0.042	0	1
Age	497910	57.801	10.062	27	91
District Variables					
Population	497910	638668.553	87402.803	395349	1030361
Population Density	497910	1443.789	3013.071	19.156	33783.345
% Urban	497910	0.712	0.288	0.000	1.000
% Hispanic	497910	0.149	0.145	0.008	0.822
% Black	497910	0.141	0.158	0.004	0.838
% Asian	497910	0.045	0.051	0.003	0.412
% White	497910	0.716	0.178	0.099	0.970
% Female	497910	0.509	0.009	0.484	0.553
% Working Age Population	497910	0.641	0.025	0.574	0.769
% High-School Dropouts	497910	0.147	0.061	0.036	0.500
% College Graduates	497910	0.281	0.101	0.071	0.656
Median Households Income	497910	56563.065	15533.456	25655.431	113044.365
(mean) med value	497910	235083.189	145072.067	68893.325	869927.488
% Households on Food Stamps	497910	0.114	0.054	0.021	0.448

Notes. Main summary statistics for all variables included in the IV analysis. Individual observations are speeches included in the sample to produce Table 1.

B Instrument Validity

B.1 First stage

This section reports the effect of C-SPAN1 channel position on its viewership, i.e. the first stage effect that underpins the two-stage least-squares specifications in this paper. Following up on Figure 1, we report first stage estimates on two different samples used in the next sections, i.e. the sample of House members in Table A.3 and the sample of speeches in Table A.4. Across the two tables, the effect of C-SPAN1 channel position on viewership is negative and statistically significant. The magnitude of the effect is stable across specifications and suggests an effect ranging between 0.13 and 0.15 of a standard deviation.

Table A.3: EFFECT OF C-SPAN CHANNEL POSITION ON VIEWERSHIP, HOUSE MEMBER-LEVEL ANALYSIS

Viewership	(1)	(2)	(3)	(4)	(5)	(6)
Position	-0.146*** [0.040]	-0.131*** [0.036]	-0.137*** [0.036]	-0.144*** [0.037]	-0.140*** [0.037]	-0.139*** [0.037]
State-Year	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓	✓
Income-Educ			✓	✓	✓	✓
Individual				✓	✓	✓
Cable					✓	✓
Speech						✓
Mean DV	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
Observations	5334	5334	5334	5334	5334	5334
R-squared	0.211	0.271	0.346	0.361	0.363	0.365

Notes. Each column shows the regression of C-SPAN1 Viewership on the C-SPAN1 channel position in each electoral district. The sample includes all electoral districts - year observations, between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for average speech length (log), word length (log), sentence length (log). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.4: EFFECT OF C-SPAN CHANNEL POSITION ON VIEWERSHIP, SPEECH-LEVEL ANALYSIS

Viewership	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Position	-0.147*** [0.045]	-0.124*** [0.039]	-0.144*** [0.036]	-0.154*** [0.036]	-0.149*** [0.037]	-0.149*** [0.037]	-0.150*** [0.037]
State-Year	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓	✓	✓
Income-Educ			✓	✓	✓	✓	✓
Individual				✓	✓	✓	✓
Cable News					✓	✓	✓
Speech						✓	✓
Topics							✓
Mean DV	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
Observations	497910	497910	497910	497910	497910	497910	497910
R-squared	0.289	0.348	0.428	0.448	0.449	0.449	0.451

Notes. Each column shows the regression of C-SPAN1 Viewership on the C-SPAN1 channel position in each electoral district. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

B.2 Instrument Balance

Table A.5 reports the results of a balance check of the instrument on several pre-C-SPAN characteristics in the same district. Specifically, we regress the instrument on the specific set of characteristics at the district-level. C-SPAN1 has higher channel position in places with lower population density, a larger share of urban population, and a lower share of people using food stamps, a proxy for poverty.

Table A.5: INSTRUMENT BALANCE: DISTRICT LEVEL

	(1)	(2)	(3)	(4)
Population (log)	0.001 [0.735]	0.040 [0.776]	0.224 [0.975]	-0.033 [0.913]
Population Density (log)	-0.302** [0.113]	-0.320*** [0.114]	-0.404** [0.174]	-0.432** [0.183]
Urban Population (%)	1.855*** [0.511]	1.891*** [0.546]	2.393*** [0.688]	2.270*** [0.655]
High-school dropouts (%)		0.501 [1.663]	2.861 [3.594]	7.474 [4.566]
College educated (%)		0.173 [1.314]	-0.671 [1.740]	-1.940 [1.577]
Hispanic (%)			-0.751 [1.629]	-0.383 [1.220]
Black (%)			-0.126 [2.806]	4.043 [2.909]
Asian (%)			0.753 [3.370]	1.823 [2.857]
White (%)			0.806 [2.826]	3.651 [2.804]
Female (%)			7.660 [14.533]	12.856 [14.858]
Working Age (%)			6.402 [6.183]	6.127 [6.732]
Median household income (log)				-0.566 [0.802]
Median individual income (log)				0.639* [0.347]
Use of Food Stamps (%)				-9.888*** [3.403]
Observations	351	351	351	351
R-squared	0.24	0.24	0.26	0.30

Notes. Each column shows the regression of the instrument on the indicated variable set. The sample includes a cross-section of all electoral districts in the main sample. All regressions include State fixed effects. Standard errors are clustered at the State level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

B.3 Endogenous Determinants of Viewership

Similar to the previous section, Table A.6 reports the results of regressing district C-SPAN1 viewership – the endogenous regressor – on district characteristics. C-SPAN1 has higher ratings in districts with higher college education rates and lower household income.

Table A.6: DETERMINANTS OF C-SPAN VIEWERSHIP

	(1)	(2)	(3)	(4)
Population (log)	-1.084 [0.692]	-1.901** [0.739]	-0.652 [0.869]	-0.108 [0.839]
Population Density (log)	0.005 [0.193]	-0.001 [0.221]	-0.144 [0.236]	-0.217 [0.237]
Urban Population (%)	-0.421 [0.687]	-0.957 [0.736]	-1.152 [0.776]	-0.652 [0.793]
High-school dropouts (%)		0.049 [1.413]	0.879 [2.391]	-2.613 [3.161]
College educated (%)		3.443** [1.328]	4.321*** [1.244]	6.243*** [1.526]
Hispanic (%)			1.030 [0.810]	1.136 [0.949]
Black (%)			4.113** [1.821]	3.405 [2.595]
Asian (%)			1.676 [2.349]	2.766 [2.555]
White (%)			2.326 [1.588]	1.820 [2.062]
Female (%)			5.142 [12.389]	-5.543 [12.732]
Working Age (%)			2.997 [6.389]	-4.423 [7.237]
Median household income (log)				-2.391*** [0.641]
Median individual income (log)				0.387 [0.317]
Use of Food Stamps (%)				-0.794 [3.065]
Observations	402	402	402	402
R-squared	0.19	0.24	0.27	0.29

Notes. Each column shows the regression of the endogenous regressor, C-SPAN1 viewership, on the indicated variable set. The sample includes a cross-section of all electoral districts in the main sample. All regressions include State fixed effects. Standard errors are clustered at the State level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

B.4 Analysis of Compliers

Table A.7 reports the results of regressing C-SPAN Viewership on the instrument linearly, several pre-C-SPAN characteristics of the districts, and their interactions. The interaction terms provide insight on compliers – that is, which types of Congressional districts are being moved most by the instrument. Column 1 reports results estimated at the electoral district level; Column 2 reports results estimated at the speech level. Most characteristics are unrelated to first stage compliance. Districts with more white people have a larger complier effect at the 10% level. The biggest differences in compliers are found in population density, median income (only in Column 2), and working age. For population density and median income, the negative coefficients indicate that areas with high density and median income are more responsive to the treatment. The positive coefficient for working age indicates that retired populations are more responsive to the instrument.

Table A.7: COMPLIERS: HETEROGENEITY IN FIRST STAGE

	(1)	(2)
C-SPAN1 Position	-0.082 [0.051]	-0.148*** [0.042]
C-SPAN1 Position \times Population (log)	-0.063 [0.039]	-0.017 [0.037]
C-SPAN1 Position \times Population Density (log)	-0.304* [0.171]	-0.333** [0.134]
C-SPAN1 Position \times Urban Population (%)	0.033 [0.155]	0.119 [0.122]
C-SPAN1 Position \times Hispanic (%)	0.011 [0.125]	0.028 [0.118]
C-SPAN1 Position \times Black (%)	-0.382 [0.249]	-0.373 [0.255]
C-SPAN1 Position \times Asian (%)	-0.062 [0.110]	-0.058 [0.106]
C-SPAN1 Position \times White (%)	-0.400 [0.268]	-0.480* [0.273]
C-SPAN1 Position \times Female (%)	-0.067 [0.086]	-0.005 [0.075]
C-SPAN1 Position \times Working Age (%)	0.299** [0.117]	0.277*** [0.090]
C-SPAN1 Position \times High-school dropouts (%)	0.046 [0.135]	-0.035 [0.119]
C-SPAN1 Position \times College educated (%)	-0.046 [0.139]	-0.093 [0.128]
C-SPAN1 Position \times Median household income (log)	0.301 [0.189]	0.194 [0.132]
C-SPAN1 Position \times Median individual income (log)	-0.198 [0.137]	-0.177** [0.088]
C-SPAN1 Position \times Use of Food Stamps (%)	0.131 [0.112]	0.023 [0.086]
Observations	4990	497910
R-squared	0.38	0.46

Notes. The table reports the regression of C-SPAN1 viewership on C-SPAN1 channel position, interacted with district characteristics. The sample includes all electoral districts in the main sample in Column 1, and speeches in Column 2. All regressions include State fixed effects and linear district characteristics. Standard errors are clustered at the electoral district, or politician level respectively. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

C Additional Results: Effects on Politicians

C.1 C-SPAN and Emotional Language

C.1.1 Reduced form estimates

We estimate the reduced form model, regressing emotionality on the exogenous instrument:

$$Y_{ijst} = \alpha + \phi Z_{js} + \tau_{st} + X'_{ijst} \beta + \epsilon_{ijst} \quad (4)$$

where the emotion outcome Y_{ijst} is for speech i , district j , state s , time t . The other items are the same as with the first stage, equation 1. Standard errors are clustered by House member.

Under conditional exogeneity of the channel position Z_{js} with regard to speech emotionality Y_{ijst} , $\hat{\phi}$ estimates the change in emotionality (in standard deviations) due to a one-standard-deviation increase in the channel position. Based on our theoretical framework, we expect higher C-SPAN viewership to increase emotionality. Given the negative first stage, then, we also expect a negative reduced-form estimate, $\hat{\phi} < 0$, as higher C-SPAN channel position coincides with lower viewership and, we expect, lower emotionality.

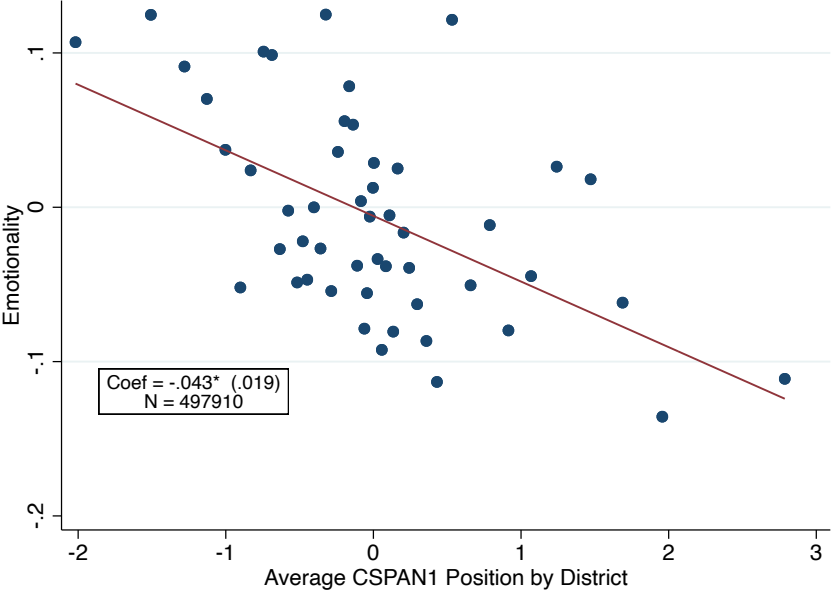
To visualize the reduced-form relationship, Figure A.1 shows a binned scatter plot of the relationship between emotionality in speeches and the C-SPAN channel position in the associated speaker’s electoral district, both residualized on state-year fixed effects. As the district’s channel position increases, speeches pronounced by the respective House member display lower emotionality ($\hat{\phi} = -0.043$). Combined with the negative first stage, we thus have some initial evidence for a causal effect of C-SPAN viewership increasing the use of emotional appeals rather than more rational, fact-based arguments.

The visual reduced-form relationship is confirmed by the regression estimates in Table A.8. A simple regression of emotionality on C-SPAN channel position and state-year fixed effects shows a negative relationship, similar to the binscatter plot. Progressively including the same controls as in Table 1 reduces the coefficient’s magnitude (particularly for topics), but it remains negative and statistically significant. A one-standard-deviation increase in channel position (leading to lower viewership) corresponds to a 0.04 to 0.05 standard deviation decrease in emotionality.

C.1.2 Placebo estimates

Placebo in time. In this section, we report a placebo analysis that adds confidence in the exogeneity of the instrument. In particular, we regress emotionality in the two decades before the introduction of C-SPAN, on C-SPAN channel position. A non-significant association

Figure A.1: REDUCED FORM: EMOTIONALITY AND C-SPAN CHANNEL POSITION



Binned scatter plot of emotionality and channel position. The horizontal axis is the average C-SPAN1 channel position in the speaker’s district-year (standardized); the vertical axis is the average emotionality score by bin (standardized). State-year fixed effects absorbed. Standard errors are clustered by House member.

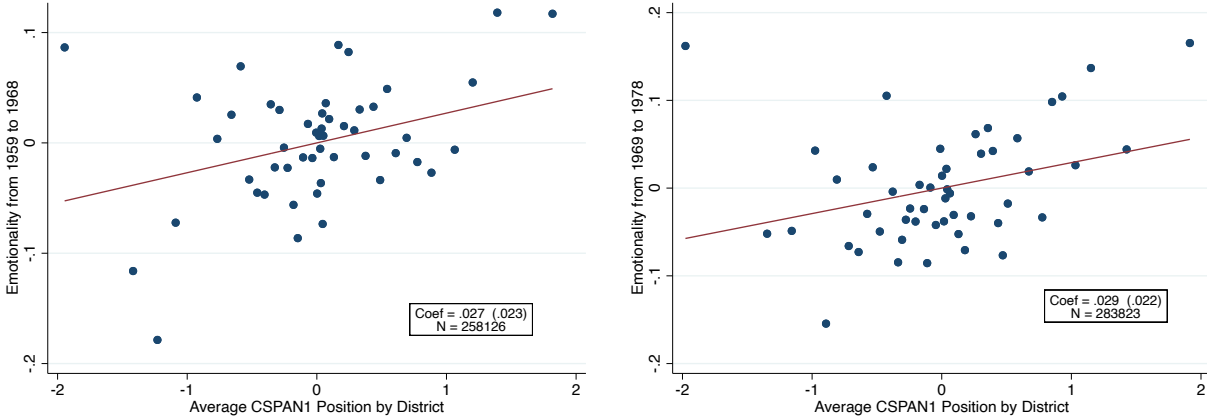
Table A.8: REDUCED FORM: EMOTIONALITY AND C-SPAN POSITION

Emotionality	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Position	-0.043** [0.019]	-0.045** [0.018]	-0.051*** [0.018]	-0.042*** [0.016]	-0.040** [0.016]	-0.038*** [0.013]	-0.024*** [0.008]
State-Year	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓	✓	✓
Income-Educ			✓	✓	✓	✓	✓
Individual				✓	✓	✓	✓
Cable News					✓	✓	✓
Speech						✓	✓
Topics							✓
Mean DV	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
Observations	497910	497910	497910	497910	497910	497910	497910
R-squared	0.045	0.054	0.057	0.072	0.073	0.208	0.507

Notes. Each column shows the OLS regression of the emotionality score in a given speech (standardized) on the average C-SPAN1 channel position in the speaker's district (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native), and controls for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for speech length (log), word length (log), and sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

indicates that C-SPAN channel position does not depend on pre-C-SPAN emotionality levels. Figure A.2 plots the main associations.

Figure A.2: PLACEBO: REDUCED FORM EFFECT ON PRE-C-SPAN EMOTIONALITY



Binned scatter plot of emotionality in two decades before the introduction of C-SPAN1 (1959-1968 and 1969-1978), and C-SPAN1 channel position. The horizontal axis reports the average C-SPAN1 channel position in the speaker’s district-year; the vertical axis reports the average emotionality score by bin.

Placebo with C-SPAN2. We report an additional placebo analysis. We regress emotionality in House members’ speeches on their C-SPAN2 channel position in the home district. C-SPAN2, however, does not cover the House but transmits from the Senate. We should not find any effect of C-SPAN2 channel position on House member use of emotional language. Results in Table A.9 show no causal effect of C-SPAN2 on emotionality in the House.

C.1.3 Variable specification checks

I.h.s. transformation. In this section, we test the robustness of our results to outliers. We replicate the same results after applying an inverse hyperbolic sine transformation to the C-SPAN Channel Position and C-SPAN Viewership variables. Figure A.3 reproduces the main plots of the first stage and reduced form specifications. Table A.10 reports the two-stage least-squares results. All results are unchanged.

Vector-distance measure of emotionality. Gennaro and Ash (2021) propose a second measure of emotion and cognition, that is calculated as the cosine similarity between each document vector and an affect-cognition dimension in language. This measure captures variations along a semantic dimension in language, and hence captures any trade-off between

Table A.9: EMOTIONALITY AND C-SPAN2 POSITION: PLACEBO

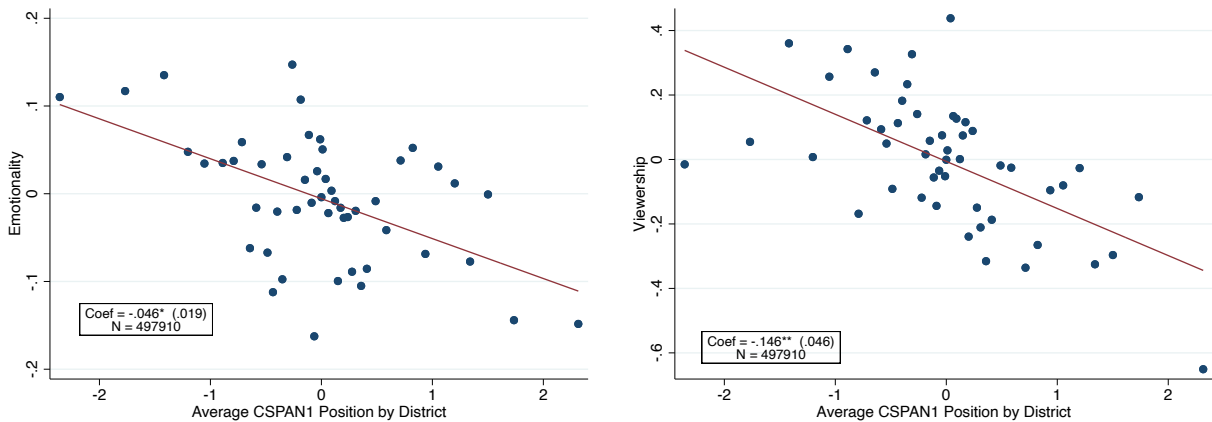
Emotionality	(1)	(2)	(3)	(4)	(5)	(6)	(7)
C-SPAN2 Position	-0.013 [0.023]	-0.013 [0.021]	-0.013 [0.020]	-0.008 [0.018]	-0.008 [0.019]	-0.010 [0.015]	-0.001 [0.010]
State-Year	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓	✓	✓
Income-Educ			✓	✓	✓	✓	✓
Individual				✓	✓	✓	✓
Cable					✓	✓	✓
Speech						✓	✓
Topics							✓
Mean DV	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
Observations	497910	497910	497910	497910	497910	497910	497910
R-squared	0.044	0.053	0.055	0.071	0.072	0.207	0.507

Notes. Each column shows placebo specifications, i.e. the OLS regression of the standardized emotionality score in a given speech on the average C-SPAN2 channel position in the speaker's district. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native), and controls for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for speech length (log), word length (log), and sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

emotion and cognition more explicitly. Table A.11 reproduces the main results using this alternative measure.

Separate results for *emotion* and *reason*. Gennaro and Ash (2021) provide separate measures for emotion and cognition. These measures capture closeness to the Emotion and Reason centroid separately, and allow us to explore which one of the two drives the main results. Table A.12 reproduces the main results using these two separate measures. The emotionality measure seems to be driving the main results.

Figure A.3: REDUCED FORM AND FIRST STAGE EFFECT WITH I.H.S. TRANSFORMATION



Notes. On the left: binned scatter plot of emotionality and channel position. The horizontal axis is the average C-SPAN1 channel position in the speaker’s district-year (standardized, i.h.s.); the vertical axis is the average emotionality score by bin (standardized). On the right: binned scatter plot of C-SPAN1 viewership and C-SPAN1 channel position. The horizontal axis reports the average C-SPAN1 channel position in the speaker’s district-year (standardized, i.h.s.); the vertical axis reports the average viewership in the speaker’s district (standardized). State-year fixed effects absorbed.

C.1.4 Sample Perturbation

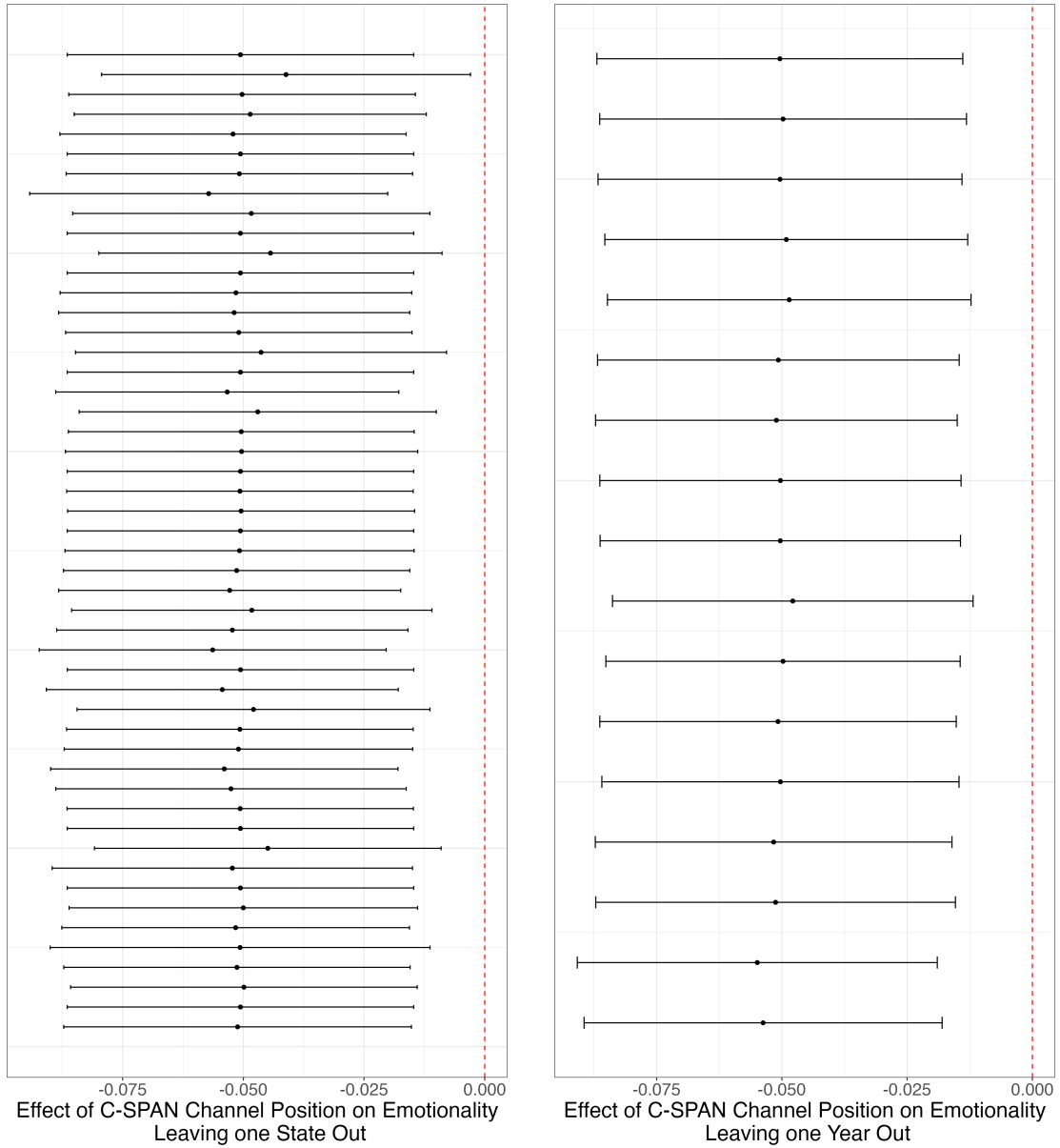
Figure A.4 reports the main estimates as in Column 3 of Table 1, while dropping either one state (left panel) or one year (right panel) for each estimate. Results are stable across estimates, suggesting that there is no specific state or year driving the results.

Table A.10: EMOTIONALITY AND C-SPAN1 POSITION (I.H.S.)

Emotionality	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Viewership (ihs)	0.024 [0.015]	0.311** [0.150]	0.350** [0.160]	0.352** [0.140]	0.268** [0.111]	0.260** [0.115]	0.241** [0.095]	0.152** [0.060]
State-Year		✓	✓	✓	✓	✓	✓	✓
Urban			✓	✓	✓	✓	✓	✓
Income-Educ				✓	✓	✓	✓	✓
Individual					✓	✓	✓	✓
Cable						✓	✓	✓
Speech							✓	✓
Topics								✓
KP F-stat		10.031	9.511	13.691	15.770	14.179	14.153	14.387
Mean DV	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
Observations	497910	497910	497910	497910	497910	497910	497910	497910

Notes. Each column shows the two-stage least-squares regression of the emotionality score in a given speech (standardized), on the average C-SPAN1 channel position in the speaker's district (i.h.s. and standardized), instrumented by C-SPAN1 channel position (i.h.s. and standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.4: LEAVE-ONE-OUT: EMOTIONALITY AND C-SPAN1 CHANNEL POSITION, DROPPING ONE STATE AND YEAR AT A TIME



Regression of emotionality on C-SPAN1 channel position, leaving one group of observation out. Observations are dropped by State (on the left) and by Year (on the right)

Table A.11: EMOTIONALITY ALTERNATIVE MEASURE AND C-SPAN1 VIEWERSHIP

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Viewership	0.019 [0.017]	0.286* [0.146]	0.375** [0.172]	0.367** [0.144]	0.298** [0.119]	0.287** [0.122]	0.274*** [0.100]	0.176*** [0.063]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban			✓	✓	✓	✓	✓	✓
Income-Educ				✓	✓	✓	✓	✓
Individual					✓	✓	✓	✓
Cable						✓	✓	✓
Speech							✓	✓
Topics								✓
KP F-stat		10.480	10.111	15.954	17.983	16.472	16.446	16.693
Mean DV	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
Observations	497910	497910	497910	497910	497910	497910	497910	497910

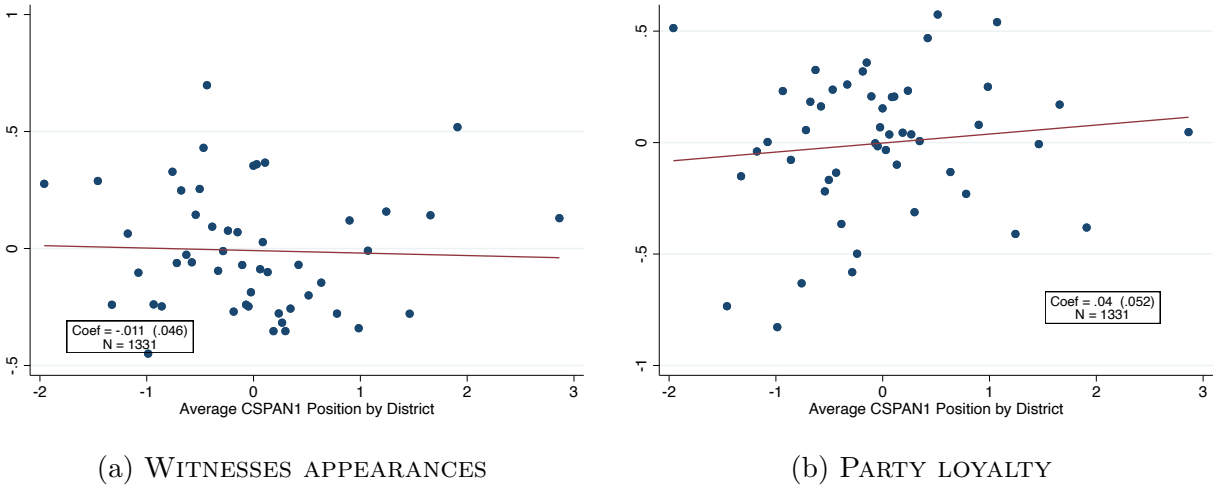
Notes. Each column shows the regression of the emotionality score in a given speech (measured as vector distance, and standardized) on the C-SPAN1 viewership in the speaker's district (standardized). Column 1 reports the OLS estimates; columns 2 to 8 report two-stage least-squares estimates, where viewership is instrumented with C-SPAN1 channel position in the same district (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.12: EMOTIONALITY, REASON AND C-SPAN1 VIEWERSHIP

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel 1: Outcome is Emotion								
Viewership	0.015 [0.017]	0.256* [0.141]	0.349** [0.170]	0.348** [0.145]	0.290** [0.123]	0.276** [0.125]	0.258** [0.101]	0.171*** [0.065]
Panel 2: Outcome is Reason								
Viewership	-0.005 [0.014]	0.038 [0.098]	0.089 [0.121]	0.108 [0.105]	0.112 [0.098]	0.097 [0.098]	0.076 [0.085]	0.066 [0.065]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban			✓	✓	✓	✓	✓	✓
Income-Educ				✓	✓	✓	✓	✓
Individual					✓	✓	✓	✓
Cable						✓	✓	✓
Speech							✓	✓
Topics								✓
KP F-stat		10.480	10.111	15.954	17.983	16.472	16.446	16.693
Observations	497910	497910	497910	497910	497910	497910	497910	497910

Notes. Each column shows the two-stage least-squares regression of the emotionality (Panel 1) or reason (Panel 2) in a given speech (standardized) on the C-SPAN1 viewership in the speaker’s district (standardized). Viewership is instrumented with C-SPAN1 channel position in the same district (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.5: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON EFFORT



Binned scatter plot of Witnesses appearances (left panel) or Party loyalty (right panel) and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member's electoral district-year (standardized). State-year fixed effects are absorbed. Standard errors are clustered by House members.

C.2 C-SPAN1 and Effort - Reduced form estimates

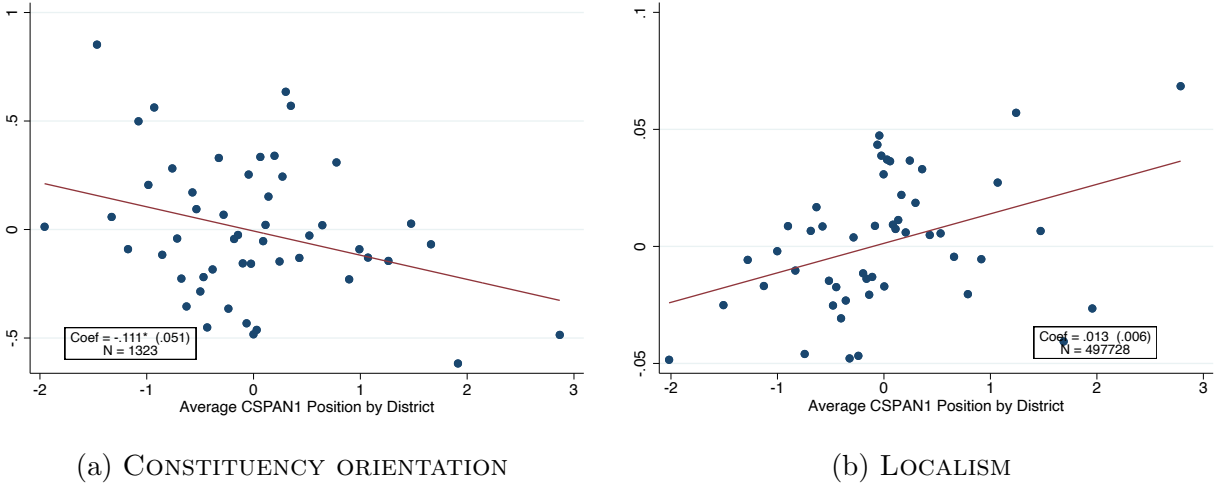
Figures A.5 and A.6 show the reduced form regressions for the two-stage least-squares regressions in Tables 3 and 4 in the main text. All binscatter plots include congress-state or year-state fixed effects. Those results confirm the null effect of C-SPAN channel position on effort, as well as the suggestively positive effect on localism.

C.3 Other cable TV networks and emotionality

This section explores the effects of other TV channels on Emotionality. We present separately results for News channels (MSNBC, Fox News, CNN) in Table A.13. For the set of channels, we also include the minimum channel position in the batch.

Table A.13 shows mixed results on the effect of news channel positions on emotionality. House members whose home electorate is more likely to watch CNN because of its position in the channel lineup are more likely to use emotional rhetoric in their speeches. The effects are qualitatively similar to those found for C-SPAN1, but less precisely estimated and smaller in magnitude. MSNBC and Fox News, however, appear to have no effect on emotionality. Overall, the evidence on the effect of general news channels on emotionality is inconclusive. Importantly, though, C-SPAN1 channel position is always negative and significant when included in the same regression.

Figure A.6: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON CONSTITUENCY ORIENTATION



Binned scatter plot of Constituency orientation (left panel) or Localism (right panel) and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member’s electoral district-year (standardized). State-year fixed effects are absorbed. Standard errors are clustered by House members.

Table A.13: EMOTIONALITY AND OTHER NEWS CHANNELS

	MSNBC		Fox News		CNN		Min	
Emotionality	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Channel position	-0.027 [0.022]	-0.022 [0.020]	-0.022 [0.018]	-0.018 [0.018]	-0.048* [0.026]	-0.033 [0.025]	-0.054** [0.024]	-0.039 [0.024]
C-SPAN1 position		-0.049*** [0.018]		-0.049*** [0.018]		-0.042** [0.019]		-0.040** [0.018]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban	✓	✓	✓	✓	✓	✓	✓	✓
Income-Educ	✓	✓	✓	✓	✓	✓	✓	✓
Observations	497910	497910	497767	497767	497910	497910	497910	497910
R-squared	0.056	0.057	0.056	0.057	0.056	0.057	0.057	0.058

Notes. Each column shows the OLS regression of the emotionality score in a given speech (standardized), on the average channel position in the speaker’s district (standardized). *Min* indicates the minimum value between the channel positions in the previous columns. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

C.4 C-SPAN1 and Localism

For each House member, we create a “localism” dictionary, which includes names of all cities within the politician’s home state as well as generic references to “my district” and “my constituents”. City names are retrieved from the United States Cities Database⁸ We then break all speeches into unigrams and count the number of occurrences of a given locality name/phrase from the dictionary. For each speech, only the localities of the state represented by the speaker are counted. The measure of localism is the share of “local” mentions over speech length. All city names and phrases from the dictionary with more than one word are transformed into unigrams by replacing spaces with underscores. That is a necessary step that allows us to avoid double counting. For example, if a speech contains “New York State”, it can be counted twice: as a city (“New York”), and then as a state (“New York State”). The implementation of unigrams resolves this issue. This ratio is then transformed with inverse hyperbolic sine (to smooth outliers) and standardized to ease interpretation.

Table A.14 reports reduced form and two-stage least-squares estimates of the effect of C-SPAN1 on localism. This shows that there is some limited support to the hypothesis that C-SPAN1 accelerates the nationalization of American politics. We find an effect of C-SPAN1 decreasing mentions of cities in their own states. Table A.15 performs the same analysis, on mentions of a House member state. One could wonder if C-SPAN1 reduces attention to geography in general, e.g. by moving attention towards topics like international affairs. This does not seem to be the case as State mentions are unaffected by C-SPAN1.

⁸the Database includes over 108,000 cities and towns from all 50 states. We take the database that has an update from May 11, 2022.

Table A.14: C-SPAN1 AND LOCALISM

	Reduced Form				2SLS			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	0.012*	0.012*	0.012*	0.010*				
	[0.006]	[0.006]	[0.006]	[0.006]				
Viewership					-0.084*	-0.082*	-0.078*	-0.066
					[0.047]	[0.048]	[0.044]	[0.041]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓		✓	✓	✓
Income-Educ		✓	✓	✓		✓	✓	✓
Individual			✓	✓			✓	✓
Cable News				✓				✓
Speech				✓				✓
KP F-stat					10.479	15.955	17.984	16.451
Observations	497728	497728	497728	497728	497728	497728	497728	497728
R-squared	0.034	0.035	0.035	0.050				

Notes. This table reports the reduced form (columns 1-4) and two-stage least-squares regressions of the score of localism in a given speech (standardized) on the average C-SPAN1 channel position in the speaker’s district or its instrumented viewership (standardized). The measure of localism is the share of “local” mentions over speech length. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives between 1998 and 2014. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.15: C-SPAN1 AND STATE MENTIONS

	Reduced Form				2SLS			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	0.002 [0.005]	0.001 [0.005]	0.001 [0.005]	-0.002 [0.005]				
Viewership					-0.013 [0.037]	-0.005 [0.038]	-0.007 [0.033]	0.013 [0.030]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓		✓	✓	✓
Income-Educ		✓	✓	✓		✓	✓	✓
Individual			✓	✓			✓	✓
Cable News				✓				✓
Speech				✓				✓
KP F-stat					10.479	15.955	17.984	16.451
Observations	497728	497728	497728	497728	497728	497728	497728	497728
R-squared	0.034	0.035	0.035	0.050				

Notes. This table reports the reduced form (columns 1-4) and two-stage least-squares regressions of state mentions in a given speech (standardized) on the average C-SPAN1 channel position in the speaker's district or its instrumented viewership (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives between 1998 and 2014. All columns include state-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

C.5 C-SPAN1 and other speech characteristics

This section reports additional results on the effect of C-SPAN1 on language used in Congress. Table A.16 reports the two-stage least-squares estimates of the effect of C-SPAN1 viewership (instrumented with C-SPAN1 channel position) on various linguistic features. Table A.17 shows the effect of C-SPAN1 viewership on topic prevalence (panel 1) and emotionality use by topic (Panel 2). C-SPAN1 appears to moderately increase sentence length and the number of speeches in Congress. It also seems to increase the time spent on highly emotional topics, such as national narrative and party politics, while reducing time spent paying tribute to fellow House members. Emotionality increases appear concentrated in the areas of economic policy, foreign policy, social policy, and party politics and tributes.

Table A.16: C-SPAN1 AND OTHER SPEECH CHARACTERISTICS

	(1)	(2)	(3)	(4)	(5)
	Sentiment	Speech Length	Word Length	Sentence Length	Number of Speeches
Viewership	0.040 [0.083]	0.077 [0.110]	0.075 [0.078]	0.185* [0.110]	0.509* [0.264]
State-Year	✓	✓	✓	✓	✓
Urban	✓	✓	✓	✓	✓
Income-Educ	✓	✓	✓	✓	✓
KP F-stat	15.954	15.954	15.954	15.954	15.954
Observations	497910	497910	497910	497910	497910

Notes. Each column shows the two-stage least-squares regression of the speech characteristic on C-SPAN1 viewership in the speaker's district, instrumented with the channel position. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects, Urban controls and Income-Educ Controls (defined as in Table 1). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.17: C-SPAN1 AND TOPICS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Economic Policy	Fiscal Policy	Foreign Policy	Gover nance	Immi graiton	Monetary Policy	National Narrative	Party Politics	Social Issues	Tribute
Panel 1: Outcome is Topic Probability										
Viewership	-0.023 [0.021]	-0.009 [0.022]	-0.002 [0.023]	-0.008 [0.009]	-0.007 [0.005]	-0.001 [0.001]	0.036*** [0.013]	0.027*** [0.010]	0.001 [0.031]	-0.058* [0.034]
KP F-stat	16.078	16.078	16.078	16.078	16.078	16.078	16.078	16.078	16.078	16.078
Observations	476539	476539	476539	476539	476539	476539	476539	476539	476539	476539
Panel 2: Outcome is Emotionality by Topic										
Viewership	0.517*** [0.175]	0.047 [0.210]	0.382** [0.150]	0.247 [0.157]	-0.070 [0.186]	0.596 [0.368]	0.047 [0.138]	0.664** [0.312]	0.293** [0.146]	0.385*** [0.110]
KP F-stat	14.454	13.270	11.841	11.574	14.198	9.156	5.627	5.788	9.832	22.785
Observations	50158	29852	42484	18098	4310	1741	31013	18529	77857	55746

Notes. In Panel 1, each column shows the two-stage least-squares regression of the speech topic on C-SPAN1 viewership in the speaker's district, instrumented with the channel position. In Panel 2, outcomes are measures of emotionality by topic. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects, Urban controls and Income-Educ Controls (defined as in Table 1). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

C.6 C-SPAN1 and other politician characteristics

Tables A.18 and A.19 report the effect of C-SPAN1 on political selection, looking at ideology and demographics. Higher viewership seems to marginally favor Democrats and more educated politicians; however, there is no significant effect on politicians' demographic characteristics.

Table A.18: C-SPAN1 AND SELECTION OF POLITICIAN TYPES (1)

	(1) Democrat	(2) DW Nom 1	(3) Extremism	(4) Tenure Start Year	(5) Age	(6) Education
Viewership	0.351* [0.183]	-0.807** [0.385]	-0.065 [0.046]	1.971 [4.010]	0.378 [3.437]	0.495** [0.202]
KP F-stat	15.954	16.094	16.094	15.954	15.954	18.127
Observations	497910	495588	495588	497910	497910	461377

Notes. Each column shows the two-stage least-squares regression of speaker's ideology and other characteristics on C-SPAN1 viewership in the speaker's district, instrumented with the channel position. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects, Urban controls and Income-Educ Controls (defined as in Table 1). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.19: C-SPAN1 AND SELECTION OF POLITICIAN TYPES (2)

	(1) Female	(2) Black	(3) Asian	(4) Hispanic	(5) Native	(6) White	(7) Catholic	(8) Jewish
Viewership	0.178 [0.119]	-0.055 [0.107]	0.019 [0.036]	0.042 [0.036]	-0.002 [0.001]	-0.005 [0.110]	0.236 [0.184]	0.084 [0.117]
KP F-stat	15.954	15.954	15.954	15.954	15.954	15.954	15.954	15.954
Observations	497910	497910	497910	497910	497910	497910	497910	497910

Notes. Each column shows the two-stage least-squares regression of the speaker's demographic characteristics on C-SPAN1 viewership in the speaker's district, instrumented with the channel position. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects, Urban controls and Income-Educ Controls (defined as in Table 1). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

D Additional Results: Effects on Voters

D.1 Search interest

Figure A.7 shows the estimated reduced form of C-SPAN channel position on approval of House members, as detailed in Table 5.

D.2 Approval of Public Officials

D.2.1 Reduced form estimates

Figure A.8 shows the estimated reduced form of C-SPAN channel position on approval of House members, as detailed in Table 6.

D.2.2 Approval of high and low emotionality House members

We show that C-SPAN1 effect on job approval is mediated by House members' use of emotional language. We estimate the same regressions as in Table A.35, but separately by politicians who use more (Table A.20) or less emotions (Table A.21) than the median. Low Emotion and High Emotion split the sample based on the median emotionality over the entire period (after collapsing). We find that C-SPAN1 increases incumbent politicians' approval more in the high-emotion sample. The coefficient for the low-emotion sample is 9-fold lower in magnitude and not statistically significant.

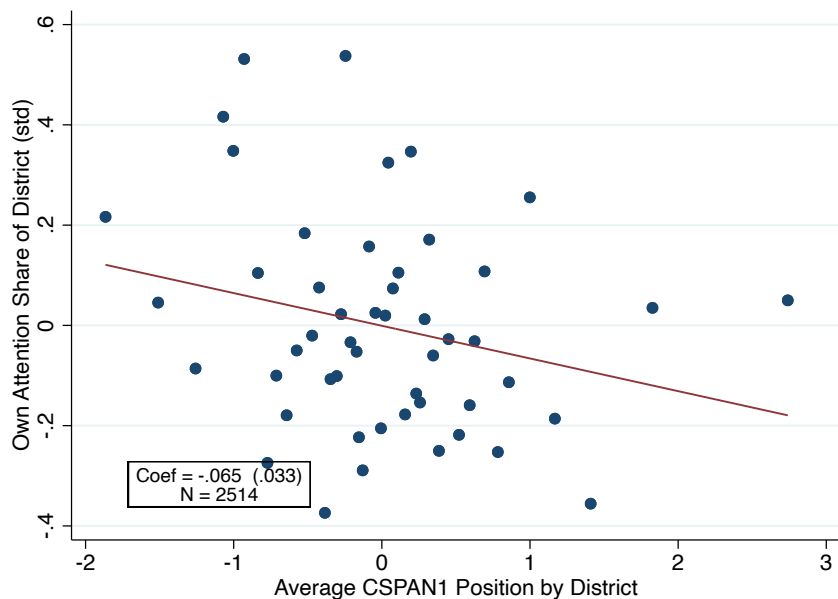
D.2.3 Falsification test: approval of House members who do not speak

Table A.22 reports a falsification test, and more precisely the results of regressing approval on the job for incumbent House members who did not intervene over the previous Congress, on C-SPAN1 channel position and viewership. To the extent that C-SPAN1 channel position affects approval through the fact that respondents can see their House representatives act in Congress, C-SPAN1 should not matter at all for those representatives who do not intervene. This intuition is confirmed in the null results.

D.2.4 Approval of Higher Level Politicians

Table A.23 reports the results of regressing approval on the job for incumbent Governor on C-SPAN1 channel position and viewership. To the extent that the peculiarity of C-SPAN1 is to focus on the works of the House of Representatives, and that Governors have more chances to appear in television through other channels, C-SPAN1 should affect Governors' approval much less, or at all. This intuition is confirmed in the null results. We apply a similar logic

Figure A.7: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON SEARCH INTERESTS



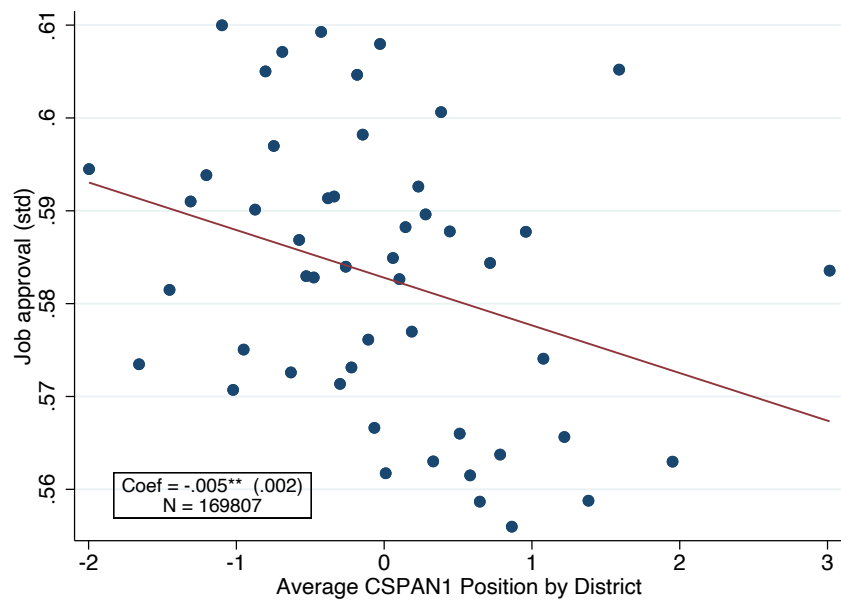
Binned scatter plot of search interest index and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member’s electoral district-year (standardized). State-year fixed effects are absorbed. Standard errors are clustered by House members.

Table A.20: C-SPAN1 AND APPROVAL OF HIGH-EMOTIONALITY POLITICIANS

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	-0.009*** [0.002]	-0.009*** [0.002]	-0.009*** [0.002]	-0.009*** [0.002]				
Viewership					0.317** [0.129]	0.312** [0.127]	0.315** [0.127]	0.328** [0.130]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					10.232	10.284	10.295	10.283
Mean DV	0.588	0.588	0.588	0.588	0.588	0.588	0.588	0.588
Observations	85115	85115	85115	85115	84311	84311	84311	84311
R-squared	0.011	0.016	0.020	0.020				

Notes. Columns 1 to 4 show the OLS regression of the respondents’ approval for their representatives on the average C-SPAN1 channel position in respondents’ zipcode. Columns 5 to 8 show the two-stage-least-square regression. The sample includes respondents whose Representative uses more emotionality than the median politician in Congress. All specifications are as in the main table 6. Standard errors are clustered at the zipcode level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.8: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON JOB APPROVAL



Binned scatter plot of Job approval and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member's electoral district-year (standardized). State-year fixed effects are absorbed. Standard errors are clustered by House members.

Table A.21: C-SPAN1 AND APPROVAL OF LOW-EMOTIONALITY POLITICIANS

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	-0.002 [0.002]	-0.002 [0.002]	-0.001 [0.002]	-0.001 [0.002]				
Viewership					0.043 [0.069]	0.043 [0.068]	0.039 [0.067]	0.035 [0.066]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					13.576	13.758	13.996	14.012
Mean DV	0.577	0.577	0.577	0.577	0.577	0.577	0.577	0.577
Observations	84692	84692	84692	84692	83773	83773	83773	83773
R-squared	0.011	0.015	0.025	0.025				

Notes. Columns 1 to 4 show the OLS regression of the respondents' approval for their representatives on the average C-SPAN1 channel position in respondents' zipcode. Columns 5 to 8 show the two-stage-least-square regression. The sample includes respondents whose Representative less more emotionality than the median politician in Congress. All specifications are as in the main table 6. Standard errors are clustered at the zipcode level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.22: C-SPAN1 AND APPROVAL OF POLITICIANS WHO DO NOT PARTICIPATE

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	0.000 [0.003]	-0.001 [0.003]	-0.001 [0.003]	-0.002 [0.003]				
Viewership					0.000 [0.046]	0.021 [0.046]	0.022 [0.046]	0.029 [0.046]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					22.253	21.892	21.936	21.972
Mean DV	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580
Observations	67799	67799	67799	67799	67085	67085	67085	67085
R-squared	0.016	0.020	0.020	0.027				

Notes. Columns 1 to 4 show the OLS regression of the respondents' approval for their representatives on the average C-SPAN1 channel position in respondents' zipcode. Columns 5 to 8 show the two-stage-least-square regression. The sample includes respondents whose Representative did not participate in Congress. All specifications are as in the main table 6. Standard errors are clustered at the zipcode level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

to approval of the President of the United States in Table A.24, and find again consistent null results.

Table A.23: C-SPAN1 AND APPROVAL OF GOVERNOR

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	-0.002 [0.001]	-0.002 [0.001]	-0.002 [0.001]	-0.002* [0.001]				
Viewership					0.062* [0.037]	0.061* [0.037]	0.058 [0.037]	0.064* [0.037]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					30.532	30.518	30.683	30.712
Mean DV	0.497	0.497	0.497	0.497	0.497	0.497	0.497	0.497
Observations	264130	264130	264130	264130	261381	261381	261381	261381
R-squared	0.054	0.055	0.055	0.058				

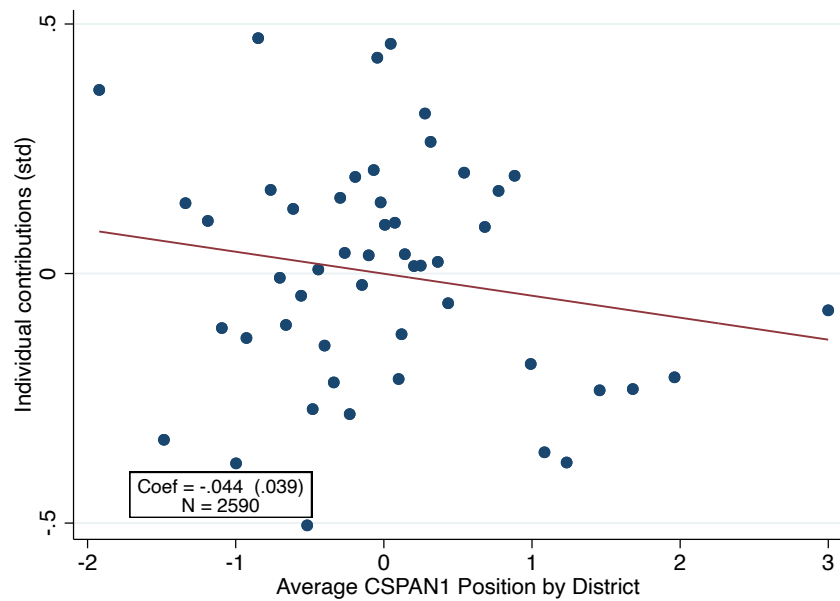
Notes. Columns 1 to 4 show the OLS regression of the respondents' approval for their State Governor on the average C-SPAN1 channel position in respondents' zipcode. Columns 5 to 8 show the two-stage-least-square regression. All columns include State-Congress fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.24: C-SPAN1 AND APPROVAL OF PRESIDENT

	Reduced Form				Two-Stage-Least-Square			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Position	0.003** [0.001]	0.002 [0.001]	0.001 [0.001]	0.001 [0.001]				
Viewership					-0.089** [0.043]	-0.047 [0.034]	-0.039 [0.034]	-0.026 [0.030]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓	✓		✓	✓	✓
Economics			✓	✓			✓	✓
Political				✓				✓
KP F-stat					31.116	31.116	31.272	31.292
Mean DV	0.439	0.439	0.439	0.439	0.440	0.440	0.440	0.440
Observations	280733	280733	280733	280733	277799	277799	277799	277799
R-squared	0.026	0.070	0.072	0.151				

Notes. Columns 1 to 4 show the OLS regression of the respondents' approval for the president on the average C-SPAN1 channel position in respondents' zipcode. Columns 5 to 8 show the two-stage-least-square regression. All columns include State-Congress fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.9: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON INDIVIDUAL CAMPAIGN CONTRIBUTIONS



Binned scatter plot of individual campaign contributions and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member’s electoral district-year (standardized). State-congress fixed effects are absorbed. Standard errors are clustered by House members.

D.3 Campaign Contributions

D.3.1 Reduced form estimates

Figure A.10 shows the estimated reduced form of C-SPAN channel position on individual campaign contribution shares, as detailed in Table 7.

D.3.2 Contributions from organizations

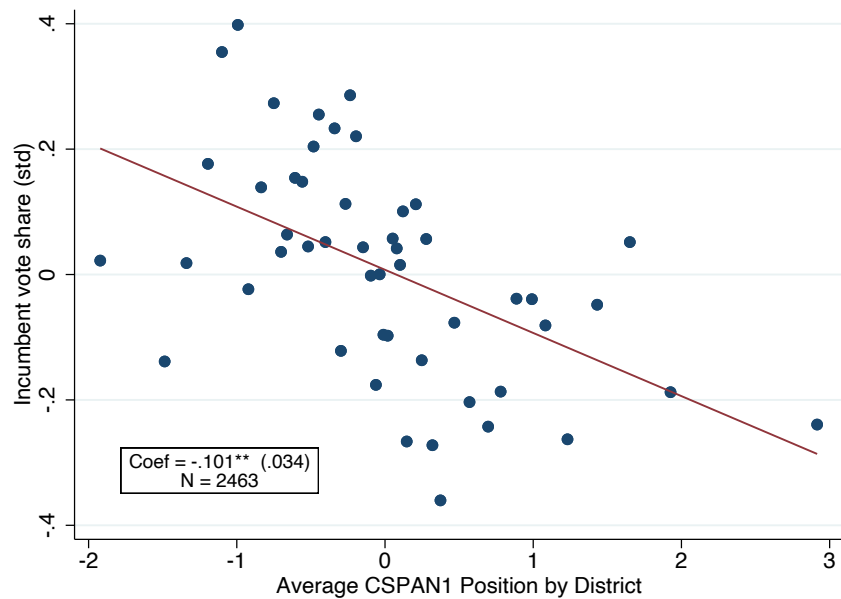
We analyze the share of total receipts from PACs that incumbents receive before the next election. This outcome variable is undefined for incumbents who have not received contributions and are excluded from this sample. We regress received campaign contributions on C-SPAN1 channel position in the representative’s home district. We cluster standard errors at the House member level to account for repeated observations of the same representative over time. Null results on the effect of C-SPAN1 on organized campaign contributions are reported in Table A.25.

Table A.25: C-SPAN1 AND PAC CAMPAIGN CONTRIBUTIONS

	Reduced Form					Two-Stage-Least-Square				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Position	0.009 [0.041]	0.047 [0.041]	0.052 [0.041]	0.051 [0.040]	0.047 [0.041]					
Viewership						-0.057 [0.255]	-0.322 [0.291]	-0.364 [0.303]	-0.337 [0.281]	-0.315 [0.290]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable News					✓					✓
KP F-stat						14.796	14.591	14.302	15.882	14.755
Observations	2576	2576	2576	2576	2576	2576	2576	2576	2576	2576
R-squared	0.148	0.207	0.213	0.257	0.260	-0.004	-0.005	-0.024	0.057	0.069

Notes. Columns 1 to 5 show the OLS regression of the share of PACs campaign contributions on the average C-SPAN1 channel position in the House member home district. Columns 6 to 10 show the two-stage-least-square regression. The sample includes all Democrat and Republican Members of the House of Representatives who pronounced a speech, between 1998 and 2014. All columns include State-Congress fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.10: REDUCED FORM EFFECT OF C-SPAN CHANNEL POSITION ON INCUMBENT VOTE SHARE



Binned scatter plot of incumbent vote share and C-SPAN channel position. The horizontal axis reports the average C-SPAN1 channel position in the House member’s electoral district-year (standardized). State-congress fixed effects are absorbed. Standard errors are clustered by House members.

D.4 Effect of C-SPAN1 on Elections

D.4.1 Reduced form estimates

Figure A.10 shows the estimated reduced form of C-SPAN channel position on incumbent vote share, as detailed in Table 8.

D.4.2 C-SPAN1 and Turnout

This section explores the effects of C-SPAN1 on voters’ turnout. Table A.26 reports the reduced form (columns 1 to 5) and the two-stage least-squares specification (columns 6 to 10). Across all specifications, higher C-SPAN1 viewership (lower channel position) is weakly associated with increased voter turnout. However, none of those estimates are statistically significant, suggesting that C-SPAN1 is not a main driver of voters’ turnout.

Table A.26: C-SPAN1 AND TURNOUT

	Reduced Form					Two-Stage-Least-Square				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Position	-0.032 [0.026]	-0.032 [0.019]	-0.022 [0.018]	-0.018 [0.017]	-0.020 [0.017]					
Viewership						0.207 [0.176]	0.219 [0.153]	0.147 [0.135]	0.117 [0.118]	0.132 [0.123]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable					✓					✓
KP F-stat						13.770	14.104	14.397	16.006	14.652
Observations	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462
R-squared	0.768	0.840	0.852	0.868	0.868					

Notes. Each column shows the reduced-form regression of turnout in House elections (total votes cast over population, standardized), on the average indicated channel position in the speaker’s district (standardized, i.h.s.). All columns include State-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker’s gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

E C-SPAN1 entry in the House

E.1 C-SPAN1 entry and Emotionality

This appendix subsection provides complementary difference-in-differences evidence on the effect of C-SPAN1 on emotionality in Congress. We exploit the staggered introduction of C-SPAN1 in the House (1979) and C-SPAN2 in the Senate (1986), to ask whether House members increased their use of emotional appeals relative to their Senate colleagues after being exposed to television. We estimate the event-study model:

$$Y_{ijt} = \alpha + \sum_{m=-4}^7 \beta_m H_j \times L_{1978+m} + H_j + \tau_t + \epsilon_{ijt} \quad (5)$$

where Y_{ijt} is emotionality in speech i , chamber j , year t . H_j is a dummy variable equal to one if the speech is given in the House and zero if in the Senate. L_{1978+m} are dummies for leads and lags around 1978, the year before C-SPAN1 was introduced in the House, that is the left-out category. τ_t are year fixed effects capturing average emotionality in the Senate in the years before and after the introduction of C-SPAN1. Standard errors are clustered at the speaker level.

Figure A.11 reports the coefficient estimates and 95% confidence intervals from equation (5). Before the introduction of C-SPAN1, the House and Senate exhibited parallel trends in emotional language usage. However, in the years after, particularly from 1981 (when the first Congress elected in the post C-SPAN1 period begins), a difference between the chambers emerges and becomes statistically significant. The introduction of televised debates increased the emotionality of House debates compared to contemporary Senate debates.

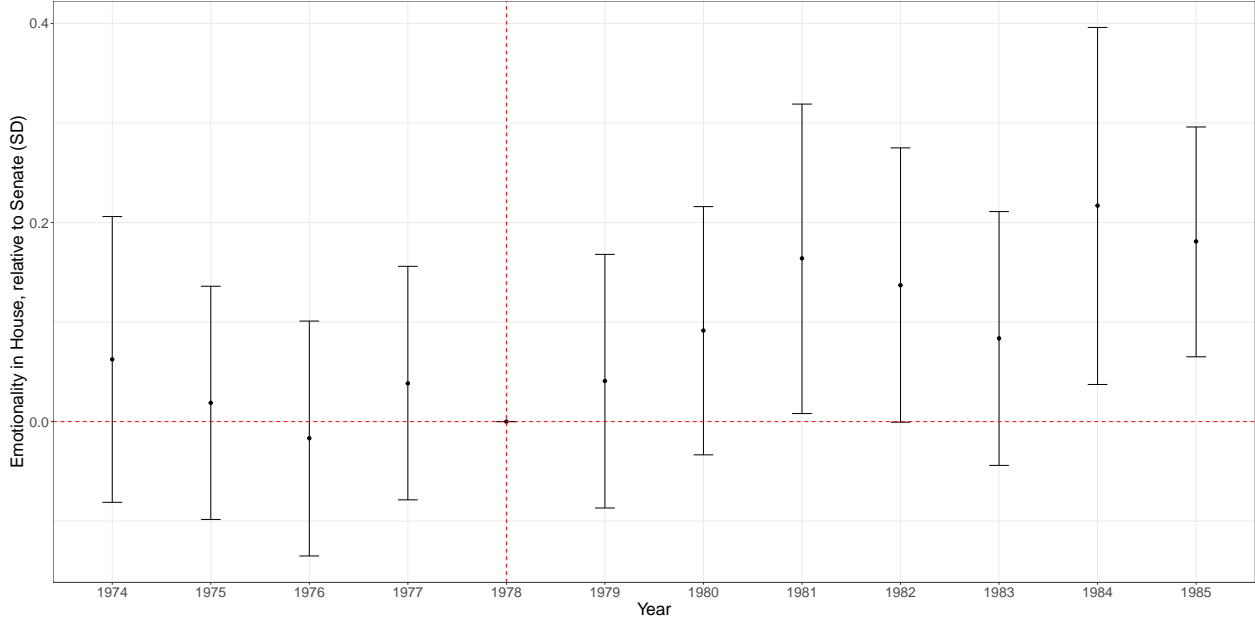
Difference-in-Differences Regression. Table A.27 reports the results of a simple difference-in-differences model. In particular, we estimate

$$Y_{ijt} = \alpha + \beta_m H_j \times Post_{jt} + H_j + Post_{jt} + \tau_t + \epsilon_{ijt} \quad (6)$$

where $Post_{jt}$ is a dummy equal to 1 for speeches pronounced during or after 1979, and all other variables are described in Equation 5. Standard errors are clustered by speaker. The estimated coefficient suggests that the introduction of C-SPAN1 increased the use of emotionality by 0.07 to 0.10 standard deviations in the House relative to the Senate.

Difference-in-differences within the House. Table A.28 reports the results of an alternative difference-in-differences model. In particular, we estimate the difference in emotional-

Figure A.11: EMOTIONAL APPEALS AND C-SPAN1 INTRODUCTION



Event-study estimates of the effect of C-SPAN1 on Emotionality (equation 5). The horizontal axis indicates Years around the introduction of C-SPAN1 in the House of Representatives (1979); the vertical axis reports the difference in emotionality between the House and the Senate. Vertical lines give 95% confidence intervals, from clustered standard errors by House member.

Table A.27: DIFFERENCE-IN-DIFFERENCES

	1977-1981		1975-1983		1973-1985	
	(1)	(2)	(3)	(4)	(5)	(6)
House	0.108*** [0.030]	0.075*** [0.023]	0.100*** [0.021]	0.064*** [0.017]	0.110*** [0.019]	0.068*** [0.016]
House \times Post	0.073* [0.042]	0.079** [0.031]	0.088*** [0.032]	0.096*** [0.026]	0.105*** [0.028]	0.109*** [0.023]
Year FE	✓	✓	✓	✓	✓	✓
Individual		✓		✓		✓
Mean DV	-0.029	-0.029	-0.020	-0.020	-0.000	-0.000
Observations	390631	390631	689579	689579	892694	892694
R2	0.006	0.016	0.007	0.013	0.010	0.017

Notes. Each column shows the regression of emotionality on indicator variables for the House of Representatives, the period after C-SPAN, and their interaction. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1977 and 1981 in columns 1-2, 1975 and 1983 in columns 3-4, and 1973 and 1985 in columns 5-6. All columns include year fixed effects. *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

ity across House members whose district has a high or low channel position, before and after the introduction of C-SPAN1 in Congress:

$$Y_{ijt} = \alpha + \beta_m Position_j \times Post_{jt} + Position_j + Post_{jt} + \tau_t + \epsilon_{ijt} \quad (7)$$

where $Post_{jt}$ is a dummy equal to 1 for speeches pronounced during or after 1979, and $Position_j$ is the C-SPAN1 channel position in j 's electoral district obtains in 1998-2004 (the instrument in the instrumental variable specification). Standard errors are clustered by speaker.

Table A.28 shows that before C-SPAN1 introduction, House members from districts that would later receive higher (or lower) channel positions do not significantly differ in their use of emotional language. After C-SPAN1 was introduced in 1979, some differences emerged. House members elected in districts with higher channel positions (or lower viewership) use less emotional language than those elected in districts with lower channel positions (or higher viewership). The effect is always negative, yet it becomes statistically significant only when looking at a 4-year window around the introduction date (at minimum).

While this specification allows to exploit different comparison groups, it also suffer from some shortcomings that main explain the less precise estimates. First, by leveraging the same source of variation as the instrumental variable analysis, this specification does not capture the global effect of C-SPAN1, but rather its effect through viewership. Second, our channel position data is only available for 1998-2004, as explained in section 3; in the analysis, we assume that C-SPAN1 channel position is highly persistent over time, and attribute our posterior channel positions to the relevant electoral district in 1974-1985 (the period covered by this analysis). Third, when C-SPAN1 was first introduced in 1979 only around 3.5 million households had access to it. This number raised to 11 millions in 1982, 50 millions in 1990, and 80 millions in 2001. In this setting, the effect of C-SPAN1 viewership on the behavior of House members is likely downplayed in the early phases.

C-SPAN1 selection versus incentive effect. The C-SPAN1 effect on emotionality could arise from two sources. First, it may be driven by House members altering their behavior in response to C-SPAN1 introduction. Alternatively, it might result from the selection of more emotive members due to the new environment. To disentangle these effects, we use an alternative difference-in-differences model to get at the selection channel based on the member's starting year.

The first post-C-SPAN1 election occurred in 1980. Thus, the 97th Congress, taking office in 1981, is the first to include new politicians who ran and won under the new information environment. To get at the selection effect, we compare House members newly elected in a

Table A.28: DIFFERENCE-IN-DIFFERENCES IN THE HOUSE

	1977-1981		1975-1983		1973-1985	
	(1)	(2)	(3)	(4)	(5)	(6)
Position	-0.011 [0.015]	-0.003 [0.013]	-0.005 [0.011]	0.002 [0.010]	-0.006 [0.010]	0.001 [0.009]
Position \times Post	-0.010 [0.020]	-0.014 [0.017]	-0.025* [0.015]	-0.030** [0.013]	-0.022* [0.013]	-0.028** [0.012]
Year FE	✓	✓	✓	✓	✓	✓
Individual		✓		✓		✓
Mean DV	-0.228	-0.228	-0.221	-0.221	-0.191	-0.191
Observations	148860	148860	263364	263364	351797	351797
R-squared	0.003	0.018	0.004	0.014	0.007	0.018

Notes. Each column shows the regression of emotionality on the C-SPAN1 channel position in each House representative's home district, an indicator variable for the period after C-SPAN, and their interaction. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1977 and 1981 in columns 1-2, 1975 and 1983 in columns 3-4, and 1973 and 1985 in columns 5-6. All columns include year fixed effects. *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. Standard errors are bootstrapped and clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

given year to Senators elected in the same year.⁹ Formally, we estimate:

$$Y_{ijt} = \alpha + \sum_{m=-2}^3 \beta_m H_j \times C_{96th+m} + H_j + \sum_{m=-2}^3 C_{96th+m} + \tau_t + \epsilon_{ijt} \quad (8)$$

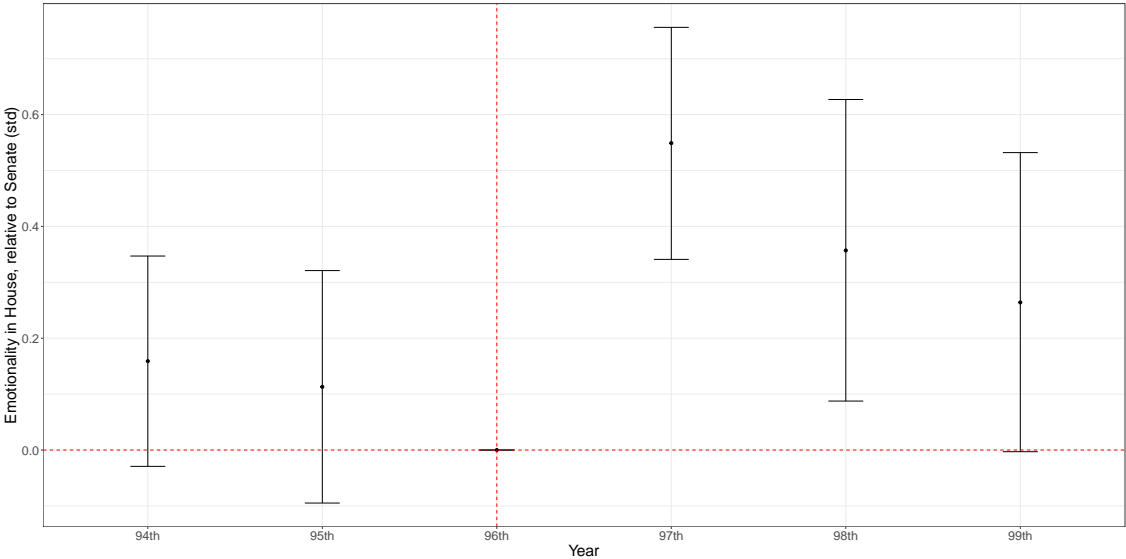
where now C_{96th+m} are dummies equal to 1 for each speech pronounced by a politician whose first Congress was $96th + m$. The $96th$ Congress was the last Congress elected before C-SPAN1. Standard errors are clustered by speaker. The results are reported in Figure A.12. For House members joining Congress in the pre-C-SPAN1 cycles (before the 96th), there is no difference between the House and the Senate, consistent with parallel trends in the starting year. However, House members first elected after C-SPAN1 was introduced (in the 97th Congress) use significantly more emotionality than Senators elected in the same cycle.

Next, we investigate whether C-SPAN1 changes the use of emotional language by incumbent politicians. Appendix Figure A.13 shows the event-study specification from equation 5 but limited to the sub-sample of House members elected in 1979 or earlier, and excluding politicians who are only elected after C-SPAN1 entry. While we still get positive coefficients, they are noisier and not all significant.

This analysis suggests that C-SPAN1 increased emotionality through selection and incentive effects. First, it selected for more emotive House member. Second, the incumbents became more emotive.

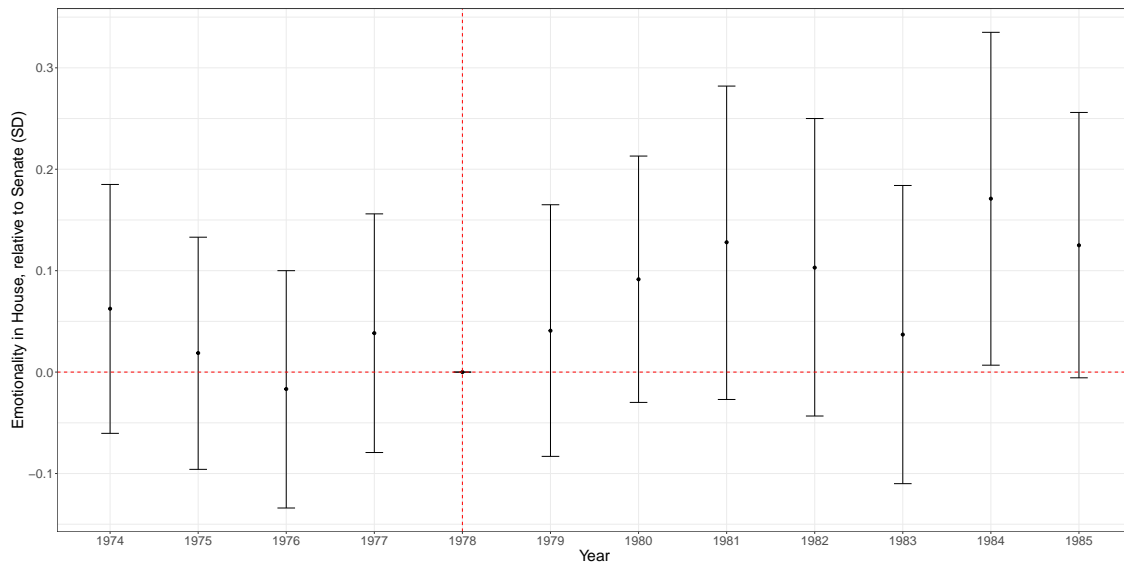
⁹We include only those whose tenure starts in the year after the election, i.e., those elected in the general congressional election, and exclude special election cases.

Figure A.12: SELECTION EFFECT: EMOTIONALITY AMONG NEWLY ELECTED POLITICIANS



Difference -in-Differences estimates of the effect of C-SPAN1 on Emotionality (equation 8). The horizontal axis indicates Congresses around the first introduction of C-SPAN1 in the House of Representatives (during the 96th Congress); the vertical axis reports the difference in emotionality between the House and the Senate. Vertical lines give 95% confidence intervals.

Figure A.13: INCENTIVE EFFECT: EMOTIONALITY AMONG POLITICIANS ELECTED PREVIOUSLY



Difference -in-Differences estimates of the effect of C-SPAN1 on Emotionality (equation 5). The sample includes all Republican and Democrats elected for the first time 1970, 1972, 1974, 1976, 1978. The horizontal axis indicates Years around the first introduction of C-SPAN1 in the House of Representatives (1979); the vertical axis reports the difference in emotionality between the House and the Senate. Vertical lines are 95% confidence intervals.

E.2 C-SPAN1 entry and Incumbent Vote Share

This subsection estimates the effect of C-SPAN’s introduction in the House on the vote share of incumbent members of the House and the Senate (as control group), using the same difference-in-differences strategy as Section E.1. We estimate equation (5) replacing the emotionality outcome with the standardized vote share of the incumbent in their election. We use election outcomes from MIT Election Data and Science Lab (2017), and include all Democratic and Republican incumbents in the House and Senate who ran in a contested election in election years between 1976 and 1984. For consistency with the emotionality analysis above, we maintain the focus on incumbents who speak in Congress at least once ahead of the next election. The reference category is 1978, the last election year before C-SPAN1 was introduced in the House. Standard errors are clustered at the House member level.

Figure A.14 reports the coefficient estimates and 95% confidence intervals. In 1976, the only pre-C-SPAN1 election in the window (note that the MIT election data series starts in 1976), the difference in vote shares between House and Senate incumbents is close to zero and statistically insignificant, consistent with parallel pre-trends. After the introduction of C-SPAN, the coefficient on the House–Senate difference becomes negative and grows in magnitude across successive election cycles, reaching -0.53 standard deviations by 1984 and becoming statistically significant at the 5% level. This result is consistent with the selection effects shown in Figure A.12, where we show that C-SPAN1 changed the type of elected politician towards individuals more likely to use emotional language. The decline in incumbent vote share further suggest a reshuffling of the House composition shortly after the introduction of C-SPAN.

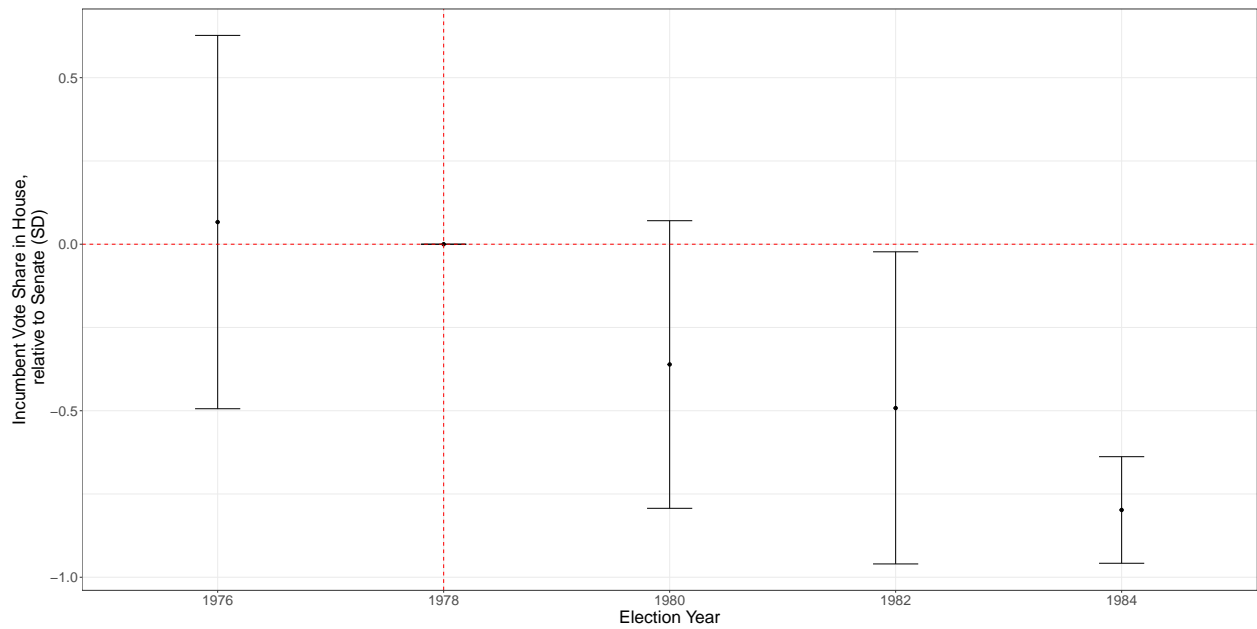
Difference-in-Differences Regression. Table A.29 reports the results of a simple difference-in-differences model analogous to equation (6), with standardized incumbent vote share as the outcome. The sample consists of Democratic and Republican incumbents in the House and Senate who ran in a contested election, collapsed to one observation per incumbent and election year. Three bandwidth windows are considered: ± 2 years (elections 1978 and 1980, $N = 627$), ± 4 years (elections 1976–1982, $N = 1,249$), and ± 6 years (elections 1976–1984, $N = 1,576$). The coefficient on the interaction $Post \times House$ is $+0.067$ in the narrow window, -0.105 in the medium window, and -0.229 in the wide window. None of the estimates are statistically significant.

Table A.29: DIFFERENCE-IN-DIFFERENCES: INCUMBENT VOTE SHARE

	1978-1980		1976-1982		1976-1984	
	(1)	(2)	(3)	(4)	(5)	(6)
House	1.043*** [0.191]	0.918*** [0.245]	0.980*** [0.135]	0.984*** [0.154]	0.980*** [0.135]	0.966*** [0.150]
House \times Post	0.067 [0.286]	0.154 [0.318]	-0.105 [0.170]	-0.050 [0.184]	-0.229 [0.154]	-0.167 [0.167]
Year	✓	✓	✓	✓	✓	✓
Individual		✓		✓		✓
Mean DV	-0.01	-0.01	-0.02	-0.02	-0.00	0.00
Observations	627	621	1249	1243	1576	1569
R-squared	0.07	0.13	0.05	0.12	0.05	0.09

Notes. Each column shows the regression of standardized incumbent vote share on indicator variables for the House of Representatives, the period after C-SPAN, and their interaction. The sample consists of Democratic and Republican incumbents who ran in a contested election, at the incumbent-election year level. Columns (1)–(2) use a ± 2 -year bandwidth around 1979; columns (3)–(4) use ± 4 years; columns (5)–(6) use ± 6 years. All columns include year fixed effects. Odd-numbered columns include no individual controls; even-numbered columns absorb individual-level controls (gender, party, age, age²). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Figure A.14: INCUMBENT VOTE SHARE AND C-SPAN1 INTRODUCTION



Event-study estimates of the effect of C-SPAN1 on incumbent vote share (equation 5). The sample includes all Democratic and Republican incumbents who spoke at last once in the House and Senate, who ran in a contested election between 1976 and 1984, at the incumbent-election year level. The horizontal axis indicates election years around the introduction of C-SPAN1 in the House of Representatives (1979); the vertical axis reports the difference in incumbent vote share between the House and the Senate, relative to 1978. Vertical lines give 95% confidence intervals, from standard errors clustered by Congress member.

E.3 Effects on Other Outcomes

Table A.30 reports the difference-in-differences estimates for the effect of C-SPAN1 on additional outcome variables. In those estimates, we use the most restrictive time window of ± 2 years around C-SPAN1 introduction in the House. Outcomes are DW-Nominate scores (first dimension) to measure ideology, its squared transformation to measure extremism, and speech-level outcomes from Gennaro and Ash (2021). While the House and Senate differ in some rhetorical aspects, these are mostly not systematically affected by the introduction of C-SPAN1 in the House. The exception is speech length. With the introduction of C-SPAN, speeches become shorter.

Table A.30: EFFECT OF C-SPAN1 INTRODUCTION ON OTHER OUTCOMES

	(1)	(2)	(3)	(4)	(5)	(6)
	DW-NOM	Extremism	Sentiment	Speech Length	Word Length	Sentence Length
House	0.163 [0.128]	-0.001 [0.013]	0.168*** [0.030]	0.236*** [0.025]	0.039** [0.017]	0.170*** [0.021]
House \times Post	-0.115 [0.176]	0.022 [0.017]	0.035 [0.039]	-0.074** [0.035]	0.015 [0.024]	-0.025 [0.030]
Year FE	✓	✓	✓	✓	✓	✓
Observations	388568	388568	390665	390665	390665	390665
R2	0.013	0.008	0.009	0.012	0.001	0.006

Notes. Each column shows the regression of a different dependent variable on indicator variables for the House of Representatives, the period after C-SPAN, and their interaction. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1977 and 1981. All columns include year fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

F Newspaper Coverage

We obtain a district-level measure of newspaper coverage from Snyder and Strömberg (2010). In their work, *Congruence* measures the geographical overlap between newspaper markets and U.S. congressional districts; they show that higher congruence drives greater newspaper coverage of the local Member of Congress, and this is plausibly exogenous to other relevant district characteristics. The logic behind this instrument is that newspapers catering to an audience distributed across different electoral districts are less likely to speak about any local politician, who would only be of interest to part of their audience; conversely, higher congruence of their geographical market with political geographies will lead to greater attention devoted to locally elected politicians. Starting from the Snyder and Strömberg (2010) dataset, we produce a time-invariant congruence measure by Congressional district by averaging over 1998–2004 and standardizing to mean zero and unit standard deviation. This variable then is analogous to our C-SPAN1 channel position in terms of plausible exogeneity and time coverage. We use this instrument in a series of reduced form regressions to understand the effect of Congruence (and thus newspaper coverage) on legislator and voter outcomes. We find that congruence affects legislators’ concrete measures of effort and constituency representation in office, but not their rhetorical strategies, generally decreasing job approval without affecting donations or vote shares.

F.1 Legislator Outcomes

F.1.1 Emotionality

This section documents the (null) effect of media-market congruence on emotionality. Table A.31 reports the regression results for emotionality on congruence, including the same control sets as in our main specification in Table A.8. The first column suggests that House members from districts with higher congruence (higher newspaper coverage) use less emotionality in their floor speeches compared to House members from the same state with lower coverage, speaking in the same year. Yet, this correlation becomes a well estimated zero as soon as controls for local population (Urban) are introduced. We conclude that newspaper coverage of House members does not affect the emotionality of their floor speeches.

Table A.31: CONGRUENCE AND EMOTIONALITY

Emotionality	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Congruence	-0.056*** [0.021]	0.000 [0.027]	0.009 [0.028]	0.024 [0.026]	0.028 [0.026]	0.022 [0.020]	0.018 [0.013]
State-Year	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓	✓	✓
Income-Educ			✓	✓	✓	✓	✓
Individual				✓	✓	✓	✓
Cable					✓	✓	✓
Speech						✓	✓
Topics							✓
Observations	506717	506717	506717	506717	506717	506717	506717
R-squared	0.047	0.053	0.056	0.072	0.072	0.208	0.508

Notes. Each column shows the OLS regression of the emotionality score in a given speech (standardized) on the average Congruence in the speaker's district (standardized). The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* indicates the minimum channel position among other cable news channels. *Speech* indicates controls for speech length (log), word length (log), sentence length (log). *Topics* indicates topic fixed effects. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

F.1.2 Other speech outcomes

Table A.32 shows the effect of media market congruence on topic selection in Congress. There is no clear pattern in topic selection, although we observe a minimal increase in the probability of discussing economic policy issues and a decrease in immigration-related speeches.

Table A.32: CONGRUENCE AND TOPICS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Economic Policy	Fiscal Policy	Foreign Policy	Gover- nance	Immi- gration	Monetary Policy	National Narrative	Party Politics	Social Issues	Tribute
Congruence	0.011** [0.005]	0.006 [0.005]	-0.005 [0.006]	0.000 [0.002]	-0.005** [0.002]	0.000 [0.000]	0.000 [0.003]	0.001 [0.001]	0.001 [0.008]	-0.008 [0.006]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Income-Educ	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mean DV	0.107	0.063	0.089	0.038	0.009	0.004	0.066	0.039	0.163	0.116
Observations	485160	485160	485160	485160	485160	485160	485160	485160	485160	485160
R-squared	0.024	0.024	0.029	0.016	0.022	0.005	0.020	0.007	0.024	0.029

Notes. Each column shows the OLS regression of the speech topic on Congruence in the speaker’s district. The sample includes all speeches pronounced by Democrat and Republican Members of the House of Representatives, between 1998 and 2014. All columns include State-year fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

F.1.3 Effort

We now turn to testing the effect of congruence on measures of effort from Snyder and Strömberg (2010). This exercise is meant to confirm that the accountability result in their work survives in our sample and to compare the effects of mediated transparency through newspapers with unmediated transparency through C-SPAN1 on the same sample. We fit the same regression model as in the main analysis (equation 3) but substitute C-SPAN1 channel position with congruence.

Table A.33 reports the results for the first set of outcomes, notably *Witness Appearances* before Congress committees, a measure of politicians’ costly efforts, and *Party Loyalty*, a measure of independence from party leadership in favor of constituency aligned voting. Congruence enhances effort and reduces party loyalty, similar to the original result in Snyder and Strömberg (2010). Table A.34 presents additional results on politicians’ *constituency* orientation, measured by their participation in committees focused on securing funds for constituencies over broader policy-oriented committees and language-based *localism*. Again,

we find consistent positive effects of congruence on concrete measures of constituency representation, but no effect on rhetoric in the House.

Table A.33: CONGRUENCE AND EFFORT IN OFFICE

	Witnesses Appearances					Party Loyalty				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Congruence	0.140** [0.066]	0.318*** [0.091]	0.318*** [0.091]	0.315*** [0.092]	0.315*** [0.092]	-0.264*** [0.056]	-0.183** [0.074]	-0.184** [0.074]	-0.187** [0.074]	-0.187** [0.074]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ		✓	✓	✓	✓		✓	✓	✓	✓
Individual			✓	✓	✓			✓	✓	✓
Cable News				✓	✓				✓	✓
Speech				✓	✓				✓	✓
C-SPAN1					✓					✓
Observations	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331
R-squared	0.275	0.349	0.349	0.350	0.350	0.155	0.299	0.302	0.313	0.313

Notes. Each column shows an OLS regression of the share of votes received by the speaker over total votes cast in the upcoming election (standardized) on media market congruence in speaker's district. In Columns 1 to 5, The sample includes Democrat and Republican Members of the House of Representatives who spoke in the House at least once, and run for re-election at the end of the Congress period. In Columns 6 and 7, the sample is split over the median level of emotionality. All columns include state-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log), averaged over Congress and District. Standard errors are clustered at the House member level. **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.34: CONGRUENCE AND CONSTITUENCY REPRESENTATION

	Constituency-orientation					Localism				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Congruence	0.259*** [0.060]	0.169** [0.082]	0.170** [0.082]	0.170** [0.081]	0.170** [0.081]	-0.018** [0.007]	-0.004 [0.009]	-0.005 [0.009]	-0.002 [0.009]	0.001 [0.009]
State-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ		✓	✓	✓	✓		✓	✓	✓	✓
Individual			✓	✓	✓			✓	✓	✓
Cable News				✓	✓				✓	✓
Speech				✓	✓				✓	✓
C-SPAN1					✓					✓
Observations	1323	1323	1323	1323	1323	506741	506741	506741	506741	497685
R-squared	0.162	0.262	0.262	0.275	0.275	0.032	0.032	0.033	0.049	0.049

Notes. Each column shows an OLS regression of the share of votes received by the speaker over total votes cast in the upcoming election (standardized) on media market congruence in speaker's district. In Columns 1 to 5, The sample includes Democrat and Republican Members of the House of Representatives who spoke in the House at least once, and run for re-election at the end of the Congress period. In Columns 6 and 7, the sample is split over the median level of emotionality. All columns include state-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. *Cable News* includes the minimum channel position among other cable news networks. *Speech* indicates controls for speech length (log), word length (log), sentence length (log), averaged over Congress and District. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

F.2 Voter Outcomes

F.2.1 Approval on the Job

In this section, we report the effect of media market congruence on job approval for House members, Governors and the President. Results are reported in Appendix Table A.35. Results suggest that higher media market congruence and increased local media coverage decrease citizens' approval of their House representatives. Interestingly, this also decreases job approval for State Governors and Presidents alike.

Table A.35: CONGRUENCE AND APPROVAL OF POLITICIANS

	Member of Congress			Governor			President		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Congruence	-0.014*** [0.005]	-0.014*** [0.005]	-0.014*** [0.005]	-0.009** [0.004]	-0.011** [0.004]	-0.010** [0.004]	-0.037*** [0.004]	-0.018*** [0.003]	-0.008*** [0.002]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓
Demographics		✓	✓		✓	✓		✓	✓
Political			✓			✓			✓
Mean DV	0.584	0.584	0.584	0.502	0.502	0.502	0.435	0.435	0.435
Observations	168882	168882	168882	188527	188527	188527	200296	200296	200296
R-squared	0.007	0.011	0.017	0.054	0.055	0.057	0.027	0.072	0.155

Notes. Each column shows the OLS regression of the respondents' binary approval for their House representatives (1-3), State Governor (4-6) or President (7-9) on congruence in respondents' electoral district. All columns include State-Congress fixed effects. *Demographics* indicates the inclusion of respondent-level controls for gender, age, race, religion citizenship, marital status, having children. *Economics* indicates the inclusion of respondent-level controls for employment status and home-ownership. *Political* indicates the inclusion of respondent-level controls for being republican, democrat or independent. Standard errors are clustered at the electoral district level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

F.2.2 Campaign Contributions.

Next, we estimate the effect of congruence on the share of individual campaign contributions and contributions from organizations. Results are reported in Table A.36. Congruence (leading to higher newspaper coverage) seems to increase the share of total campaign contributions from individuals. at the same time, there is a decrease in the share from organizations.

F.2.3 Electoral Outcomes

Appendix Table A.37 shows the effect of congruence on incumbent vote share and turnout. Higher media market congruence, hence higher local news coverage of local House members, does not systematically translate into higher vote share in the next election. That null result is consistent with the finding by Gentzkow et al. (2011) that local newspaper entry does not affect incumbent vote share.

Table A.36: CONGRUENCE AND CAMPAIGN CONTRIBUTIONS

	Individuals					Organizations				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Congruence	0.032 [0.048]	0.047 [0.058]	0.108* [0.060]	0.122** [0.058]	0.127** [0.058]	-0.075 [0.048]	-0.099* [0.053]	-0.137** [0.058]	-0.141** [0.055]	-0.148*** [0.055]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable					✓					✓
Observations	2649	2649	2649	2649	2649	2649	2649	2649	2649	2649
R-squared	0.148	0.194	0.212	0.271	0.274	0.150	0.209	0.217	0.260	0.264

Notes. Each column shows an OLS regression of the speaker's received individual (columns 1 to 5) to organization (columns 6 to 10) campaign contributions in a given congress (standardized) on media market congruence in speaker's district (standardised). The sample includes Democrat and Republican Members of the House of Representatives who spoke in the House at least once, and run for re-election at the end of the Congress period. All columns include state-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. Standard errors are clustered at the House member level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table A.37: CONGRUENCE AND ELECTORAL OUTCOMES

Vote Share	Incumbent vote share					Turnout				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Congruence	-0.159*** [0.050]	0.007 [0.054]	-0.020 [0.056]	-0.012 [0.056]	-0.014 [0.056]	0.126*** [0.028]	0.031 [0.025]	0.055** [0.025]	0.031 [0.025]	0.029 [0.024]
State-Congress	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban		✓	✓	✓	✓		✓	✓	✓	✓
Income-Educ			✓	✓	✓			✓	✓	✓
Individual				✓	✓				✓	✓
Cable					✓					✓
Speech										
Observations	2533	2533	2533	2533	2533	2533	2533	2533	2533	2533
R-squared	0.212	0.293	0.302	0.332	0.333	0.774	0.840	0.853	0.869	0.869

Notes. Each column shows an OLS regression of the incumbent House member's voter share (columns 1 to 5) and turnout (columns 6 to 10) (standardized) on media market congruence in the politician's district (standardised). The sample includes Democrat and Republican Members of the House of Representatives who spoke in the House at least once, and run for re-election at the end of the Congress period. All columns include state-Congress fixed effects. *Urban* indicates the inclusion of controls for population (log), density (log), the share of urban population, of Hispanic, Asian, black and white population, of women, and of working age population. *Income-Educ* includes the share of college educated, high-school dropouts, food stamp recipients, and median household income (log). *Individual* includes dummy variables for speaker's gender, religion (Catholic, Jewish), party, race (Black, Hispanic, Asian, Native) and control for age and age squared. Standard errors are clustered at the House member level. **, *** denote significance at the 10%, 5%, and 1% levels, respectively.