

Are All Politics Still Local?*

Evidence from Televised U.S. Debates

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Abstract

Recent political science research shows a convergence in partisan political outcomes at the state and federal level; the parties of presidential and gubernatorial winners are increasingly correlated over time. National and state offices, however, have distinct responsibilities over a variety of political issues, and other research shows voters are not as neatly sorted along party lines on state-level issues as they are on national-level issues. In this paper, I consider how candidates in state-level elections may be incentivized to campaign on national-level issues, with potential consequences for the nationalization of electoral outcomes. Using supervised and unsupervised text analysis techniques, I analyze the national and state political content of presidential and gubernatorial electoral debates from 2000 to 2018. I find evidence that national political content is predominant in presidential debates and state content in gubernatorial debates, and gubernatorial debates have about as much national content as presidential debates have state content. Time trends in content, however, are relatively flat, suggesting campaign nationalization may have limited influence on the nationalization of state electoral outcomes.

*Field Paper submitted for PhD requirements for UCLA Department of Political Science. All errors and opinions are my own.

1 Introduction

Recent research in political science has documented the convergence of partisan electoral outcomes at the state and national level; if a party wins at the national level in a constituency, the same party is now more likely to win (and have a similar vote share) at the state level as well (Abramowitz and Webster, 2016; Hopkins, 2018; Sievert and McKee, 2019). For example, the Democratic candidate in Washington state presidential and gubernatorial elections has won every election year since 1988, but in the seven elections occurring between 1960 and 1984, the winning candidates were from the same party only twice. Scholars have called this phenomenon the “nationalization” of state politics, and its consequences for the representativeness and responsiveness of state politics have been the subject of spirited debate, as national and state offices are responsible for fundamentally different policy domains (Arceneaux, 2006; Caughey and Warshaw, 2018; Lax and Phillips, 2012; Tausanovitch, 2019).

The nationalization literature at the state level has identified at least three avenues through which electoral convergence could occur: voter partisanship and knowledge, party donor networks, and candidate campaign activities (Hopkins, 2018). In this paper, I focus on the least empirically analyzed mechanism thus far: candidate campaign activities. Theoretically, the incentive behind the mechanism is fairly straightforward; in attempting to win office, candidates try to influence the lens through which voters make electoral decisions via their campaign messaging in a way that is likely to produce a winning outcome (Carsey, 2001; Vavreck, 2009). For example, if an identifiable majority of the state wants the state to expand Medicaid, and a candidate can credibly commit to supporting such an expansion (while their opponent can’t), such a candidate would have an incentive to make the election out to be a referendum on Medicaid expansion in the eyes of the voters. Because voters are much more identifiably polarized along party lines with regard to national issues than state issues (Jensen et al., 2019), candidates may have incentives to focus their messaging on such national issues, thereby nationalizing campaigns at the state level and potentially nationalizing the electoral result.

I use a corpus of 984 presidential and gubernatorial speeches from 2000 to 2019 to train a structural topic model to understand which issues (or “topics” in text modeling) are state or national in nature. These speeches are largely made up of state of the union and state of the state addresses. I then use this trained model to test 394 presidential and gubernatorial electoral debates from 2000 to 2018 to determine the prevalence of state or national content in the campaign appeals made during the debates, which provides evidence on the questions of whether (a) campaign incentives result in nationalized rhetorical behavior and (b) such behavior is related to the increased trend in nationalized electoral outcomes. My results give weak evidence for (a) and none for (b). Gubernatorial candidates do incorporate national content in their campaign appeals, but much less than state content (at about the rate that presidential debates incorporate state content), and the prevalence of such national content incorporation over time is flat. Regressing the difference in presidential and gubernatorial election results on state-level prevalence of nationalized rhetoric yields similar null results.

The paper proceeds as follows. First, I review the literature on nationalization and its mechanisms, focusing specifically on campaign activities. Next, I describe my data and introduce the structural topic model approach to measuring nationalization. I then review the results, discuss implications, and explicate future avenues of research my method may open.

2 Nationalization in Gubernatorial Contests

The primary way in which nationalization has been measured at the state level is the statistical correlation between national-level (presidential, senatorial) and state-level (gubernatorial) two-party vote share. Looking at county-level election returns for presidential and gubernatorial midterm elections outside the South, Hopkins (2018) shows the correlation moving from a low of less than 0.2 in 1970 to a high of over 0.8 in 2010. Elections of presidents and governors occurring in the same year show a similar but less dramatic rise from

less than 0.3 in 1968 to around 0.7 in 2012. Abramowitz and Webster (2016) also document the rise in correlation between Democratic vote shares in state legislative elections and Democratic presidential vote shares from 0.4 between 1972 and 1988 to 0.73 between 2004 and 2012.

An alternative measure of nationalization uses survey results where individuals are asked which party they voted for at different levels of government, which confirms the trend from Hopkins (2018). Abramowitz and Webster (2016) use the ANES cumulative file from 1992 to 2012 to show a sharp rise in the rate of straight-ticket voting for presidential, House, and Senate races from around 50% amongst Democrats in 1972 (slightly under 70% for Republicans) to over 80% in 2012 (same for Republicans).¹

Convergence in electoral outcomes at the national level is not particularly worrying; the President, House, and Senate largely deal with similar policies and issues, and divergence in what a party stands for in Congress versus the presidency is minimal. What is more concerning to some is what the convergence between state- and national-level outcomes means for representation and responsiveness in the states. Constitutionally, the federal government has a set of policy jurisdictions over which it holds enumerated powers, while other powers are devolved to the states. While subsequent judicial and legislative actions have muddied the waters in terms of which government holds power where (Beer, 1978; Conlan and De Chantal, 2001; Kousser, 2014), it is generally understood that states still hold substantial and somewhat exclusive power over certain policy domains (education, infrastructure, and licensing, to name a few). It is therefore unclear why the partisan affiliation of state officials should imply the same set of policy preferences as the partisan affiliation of Congressional representatives and presidents, but polarization of state policymaking along national party lines suggests this is indeed the case (Garlick, 2017; Grumbach, 2018, 2019).

The degree to which concern over state-level representation and responsiveness in a na-

¹Both of these measures are measuring phenomena distinct from an alternative type of nationalization in the comparative literature looking at consistency of partisan voter behavior across constituencies but at the same level of government (Alemán and Kellam, 2008). One can think of this as horizontal nationalization, whereas the American politics literature is largely focused on vertical nationalization.

tionalized context is justified is subject to substantial debate. Using survey research, Arce-neaux (2006) documents voter ability to assign credit/blame to the office of the level of government they identify as being responsible for particular policy areas. This finding is corroborated in part by comparative and observational research by Rodden and Wibbels (2011), although their research still finds some connection between national economic conditions and sub-national election results when incumbents of both offices are from the same party. Alternatively, Dynes and Holbein (2020) find Democratic or Republican control over state legislatures makes little difference in socioeconomic outcomes, making state retrospective voting a difficult task for voters. Taking a historical perspective, Tompkins (1988) examines variation in presidential and gubernatorial electoral outcomes in response to national-level forces from 1947-1986, concluding gubernatorial contests have become more distinct in that time frame. Caughey and Warshaw (2018) find that, from 1934-2014, state public liberalism (public opinion) is largely tracked by state policy liberalism, suggesting elected officials react and adapt to changes in state public ideology. Alternatively, Lax and Phillips (2012) show that public majority will on major policy issues in states is rarely correlated with policy outcomes.

Regardless of whether nationalized statehouse democracy is responsive to public demand, the mechanisms behind nationalization are interesting. If state elected officials are responsive to public demand even after nationalization, how is it the policy platforms of Republicans and Democrats diverged cleanly at both levels of government? If representation is lacking in nationalized elections, what is responsible for the disconnect? Therefore, it is prudent to examine the mechanisms behind nationalization, which I group into three categories: voters, parties, and candidates. I will briefly address the former two before focusing with more detail on the latter.

Perhaps the most obvious source of nationalized electoral outcomes are those that actually account for the votes: voters. Voter-centric explanations of nationalization often involve a combination of voter knowledge and the strength of partisan identification. Hayes and

Lawless (2018) note the long-term decrease in access to local news, indicating voters have higher informational hurdles to cross in order to cast knowledgeable votes at the state level. This coincides with the declining ability of voters to name their state-level elected officials (Hopkins, 2018; Songer, 1984). Furthermore, both Abramowitz and Webster (2016) and Hopkins (2018) note increased strength in partisan group affiliation. In particular, Abramowitz and Webster (2016) note the rise in “negative partisanship,” or the association of negative attributes to members of the opposing party. Voting decisions, then, may carry less information about policy preferences and more information about affective group identities, and voters may be more likely to default to these group identities when political information is more costly to obtain.

Additionally, parties themselves may also be active in the nationalization of state politics. Hopkins (2018) notes state-level differences in policy platforms (within party) have largely disappeared since 1970, while Coffey (2011) shows between-party state platforms have polarized in the same way the national parties have. Additionally, the primacy of state and local party organization relative to the national party has subsided as patronage positions were eliminated through party reforms (Hopkins, 2018). Other research confirms increased activity on the part of national party organizations (the RNC and DNC) in state races as such organizations nationalized (Bibby, 1979; Conway, 1983). Hopkins (2018) also notes campaign donations at the state level have largely remained constant as national-level donations have increased, indicating party donor networks may be nationalizing as well.

While voters are ultimately responsible for casting ballots, the manner in which those ballots are cast can be influenced by the nature and activities of the candidates competing for election, which is the focus of this paper. Recent 2019 gubernatorial elections offer some anecdotal evidence that nationalization may in part be influenced by the campaign strategies that candidates utilize.² Gubernatorial candidates in both Kentucky and Louisiana

²Furthermore, the consistent elevation of former state governors such as John Hickenlooper, Steve Bullock, Jay Inslee, and Deval Patrick to presidential nomination contests, regardless of their effectiveness, also indicates a certain level of national ambition arising from state-level offices.

both strongly aligned themselves with President Donald Trump during the campaign and characterized the gubernatorial elections as referenda on impeachment, even though both candidates lost their respective elections (Benen, 2019; Martin, 2019). The following are excerpts from the October 15, 2019 debate between Kentucky gubernatorial candidates Matt Bevin (R-Incumbent) and Andy Beshear (D-State Attorney General):

“National issues are also Kentucky issues.” — Bevin, on whether this race is a referendum on national or state issues.

“This governor is an extremist. He supports a total ban even for victims of rape and incest, something the President doesn’t support, nor does his Attorney General candidate support.” — Beshear

“The role of government is to protect the weak against the strong... [Beshear] is supported by NARAL and Planned Parenthood.” — Bevin

Both candidates invoke nationalized appeals here, both explicitly (in Bevin’s case in the first comment) and implicitly by referencing President Trump’s stance on abortion or national organizations like Planned Parenthood.

In more scholarly work, Das et al. (2019) give evidence from Twitter that rhetoric from governors strongly mirror Congressperson rhetoric. Hirano et al. (2015) find evidence suggesting senatorial and gubernatorial primary campaigns are effective at aligning vote ideologies with their candidate of choice, although whether the ideological criteria are national- or state-centric is unclear. Tidmarch, Hyman, and Sorkin (1984) analyze campaign press agendas from House, Senate, and gubernatorial elections in 1982 and contend the content of such campaigns are distinct, but this analysis occurs prior to the major decline in state and local media (Hayes and Lawless, 2018). Therefore, while voters may receive limited information about state-level contests, research is divided on if the information they do receive may be more nationalized in nature, which may result in more nationalized electoral results.

3 Nationalized Expectations of Campaign Theories

While the literature above suggests candidates for governorships may be active in nationalizing their campaign messaging, it is not immediately clear why they would have incentives to do so; governors still hold exclusive power over certain policy domains which could be credibly campaigned on. Most research on political campaigns takes place at the national political level, and the research that does exist on gubernatorial campaigns focuses on a period of time largely prior to the nationalization phenomenon noted in contemporary research (Carsey, 2001). What expectations regarding state nationalization, then, might theories of national political campaigns yield?

Vavreck (2009) offers a compelling theory of campaign effects based on a Downsian spatial voting framework. When the election occurs, voters are expected to vote for the candidate that maximizes their own utility or, in spatial terms, is closest to them ideologically. Thus,

Candidates can engage in three behaviors in order to affect voters' assessments. The first is simply agenda setting – an attempt to refocus an election or change the weights associated with certain issues [...] The second behavior is persuading – an attempt to educate votes that a candidate holds a specific position on an issue, regardless of whether that is truly the candidate's position [...] The third and final thing that candidates can do in campaigns to influence votes is to clarify their position on an issue that is of great importance to voters (Vavreck, 2009).

Implicit within this spatial voting framework is the notion that candidates must campaign in a way that makes an *identifiable majority* (or, at the very least, plurality) of voters perceive them as the most favorable option.³ Given the behaviors candidates can engage in under this framework, how might the nature of state politics influence how gubernatorial campaigns are run?

With regard to agenda setting, Vavreck (2009) notes it is much easier to increase the salience of an already important issue than to raise the salience of a non-important issue.

³Identifiability is important due to the costs of campaigning. If there is uncertainty with regard to the majority status of the voting group being targeted by campaigns, the risk of spending money on ineffective advertising increases.

Thus far, there is no research that directly compares the relative importance of national versus state issues, but there exist a number of studies suggestive of the primacy of national issues. Hopkins (2010, 2011) suggests attention to national issue debates primes constituents to extend concern of the national issue to the local context, especially with regard to immigration. Craig, Kane, and Gainous (2005) note low levels of baseline state issue awareness during the 1998 governor’s race in Florida, although we lack a national issue baseline to compare it to. Finally, Palmgreen and Clarke (1977) theorize the agenda-setting capacity of local media should be less than that of national media because state issues are more directly observable, local information can be disseminated through interpersonal communication networks, and the media (writ large) focuses much more on national issues. They find network television to be the greater agenda-setter for national issues and newspapers to be the greater agenda-setter for state issues, but given the decline of local media (Hayes and Lawless, 2018), the only remaining source of issue information may be network television. The finding that the effects of campaign advertisements (especially temporally sporadic ones) in sub-national contests are almost null compounds this concern over state issue position-taking (Hill et al., 2013). Therefore, candidates in state contests may have incentives to campaign on national issues that are already important and salient in the eyes of voters. The nationalized expectations with regard to agenda-setting in state campaigns extend to persuading and clarifying behaviors as well. Candidate efforts to take an identifiable position on a non-salient state issue will likely be much more difficult than efforts to take positions on national issues.

The identifiability of a majority voting coalition is also a concern when campaigning on local issues. Jensen et al. (2019) evaluate the relative importance of a number of local issues relevant to state government (such as education and development spending) and whether they divide voters along partisan lines. For most issues, partisans are not well sorted along party lines, and the largest effect of any one policy was only around a 5% increase in support. Therefore, gubernatorial candidates may find it more cost-effective and less risky to campaign on national issues.

Additionally, the fairly low salience and importance given to state issues may make such issues more susceptible to voter learning during campaigns; if voters don't hold strong opinions on state-level issues, they may change their preference on that issue to match the position of a candidate that holds a similar opinion on an issue the voters care more about. This phenomena was examined by Tesler (2015), who finds voters are primed by more "crystallized" issues where positions are more deeply held. However, if voters agree with a candidate on a crystallized issue and not on a non-crystallized issue, they are susceptible to changing their preference on the non-crystallized issue. This may mean that candidates who hold unpopular positions on a low-salience state issue and can't credibly persuade voters they don't hold such a position may be able to overcome such unpopularity by taking a more popular position on a national issue, where they have no prior votes or actions that would prevent them from credibly claiming such a position.

To summarize, when we apply theories of national campaign strategies to the gubernatorial context, which is characterized by low information and low issue salience, the expectation is that candidates will campaign using national issue positions. I empirically test this expectation below.

4 Data and Methods

In this paper, I consider one avenue through which candidates have to act on incentives to make nationalized issue appeals in campaigns: televised election debates. Specifically, I analyze the text of an original corpus of 394 electoral debates (82 presidential and 312 gubernatorial) between 2000 and 2018 retrieved from closed-captioned transcripts from the C-SPAN video archives to assess the proportion of national versus state rhetoric over time.⁴ These debates are typically broadcast either directly on C-SPAN or through local public affiliates.

⁴Transcripts were retrieved using a combination of headless web browsing and scraping. Transcripts for non-closed-captioned videos are not available.

Research on gubernatorial debates is rare, but the few studies that have been conducted conclude candidates largely focus on policy positions rather than character (Benoit, Brazeal, and Airne, 2007) and viewers of debates are often able to correctly identify the eventual winner of the contest (Benjamin and Shapiro, 2009). Research on the effects of presidential debates largely conclude such events have some short-term effect on candidate preference (Hillygus and Jackman, 2003) and issue knowledge/salience (Benoit, Hansen, and Verser, 2003). Therefore, debates provide a comparable campaign event across states and levels of government to examine the potential existence of nationalized issue appeals, especially in environments where baseline voter knowledge is low. The standard structure of debates, however, also makes it a particularly hard test of the theory. Moderators wield a decent amount of power in setting the agenda of topics for the debate, so candidates must actively work to pivot to other topics or stay on-brand with messaging.

I analyze the state and national content of these debates over time using a structural topic model (hereafter STM). A full technical description of STM is beyond the scope of this paper (but see Roberts, Stewart, and Airolidi (2016)), so I will briefly cover its main functionality here. As a general class of generative text models, topic models treat texts as “bags of words,” where each document (in this case, debate transcript) is made up of various topics and each topic is made up of various words. Words have different probabilities of belonging to different topics and can belong to multiple topics with different probabilities. Latent Dirichlet allocation (LDA) models are a class of topic models where the researcher specifies only the number of topics in the corpus of documents. The output of an LDA model gives the word probabilities associated with each topic and the topic proportions for each document.⁵ STM builds upon LDA by allowing researchers to include covariate effects from document metadata; the topic proportion within a document is treated as a function of both word frequency and covariates instead of only the former. STMs (and topic models generally) offer a unique opportunity to analyze large quantities of text data in a systematic

⁵See Blei, Ng, and Jordan (2003) for a more technical description of LDA models.

way, and have recently gained popularity in political science (Cryer, 2019; Das et al., 2019; Parthasarathy, Rao, and Palaniswamy, 2019).

A naive approach to determining the prevalence of state versus national content in debates, then, would be to fit a STM to the debate corpus, analyze the resulting topics, categorizing them as being of either state or national content, and measuring the proportion of each debate associated with each state or national topic. Unfortunately, this runs afoul of many pitfalls associated with topic modeling. Perhaps the most egregious of these is reading too much into the noise of the resulting topics. When topic models generate topics, all that is given to the researcher are the words that are the most probable for each topic. For example, one can imagine a topic model applied to a corpus of Gospel and country music songs. One topic resulting from this model may include words like “God,” “prayer,” and “blessed,” while another might include words like “truck,” “horse,” and “farm.” A researcher may justifiably associate these topics with Gospel and country songs (respectively) and call the first topic “religiosity” and the second “rural.” The problem is that such intervention on the part of the researcher is not a result of the actual topic model but simply a subjective interpretation of the words in each topic. Indeed, it is rare that topics contain *only* words with such clear meanings. In many ways, topic modeling resembles principle component analysis in that it reduces the corpus to a series of frequent and meaningful words, but interpreting those words is still subject to researcher bias. One can use split-sample designs to avoid overfitting topic models (Cryer, 2019), but the inference problem still exists. Parthasarathy, Rao, and Palaniswamy (2019) use surveys of village meeting attendees to validate the proportion of time spent discussing each topic generated by the model, but similar validation techniques are infeasible here.

My solution is to remove myself from the interpretation of topical content by training a STM on a corpus known to contain state and national political content, extracting the topics associated with the state or national origin of each document, and applying the trained model to a test corpus (the debate transcripts) to measure the prevalence of the topics associated

with state and national content over time. At no point do I intervene as a researcher to determine whether a topic has state or national content; this is done purely by the trained model.

For this strategy to succeed, I must collect a training corpus of documents where we know the topics being discussed are of state or national origin. For documents of national topical origin, I gather every public presidential address made between 1998 and 2019, relying heavily on State of the Union and inaugural addresses. For documents of state origin, I gather every available State of the State (or Commonwealth) Address or State Budget Address given by governors from 2000 to 2019.⁶ These addresses are often mandated by state constitutions and deal specifically with the political issues that face each state, making them ideal for training a topic model. This yields an original corpus of 984 speeches (116 presidential, 868 gubernatorial). Following best practices for text data, for both the training and test corpuses I remove the first 750 characters (as they often involve only thanking specific members of the audience), stem, lemmatize, and stopword (Parthasarathy, Rao, and Palaniswamy, 2019). Because speeches often contain direct references to the state or occasion each speech is from, it is plausible such words may end up in topics that become significant predictors of state or national content without referencing actual political issues. Therefore, I create a custom list of stopwords that include state names, names and nicknames for residents of certain states (e.g. Hoosiers), names of elected positions, and words common in transcriptions of public speeches (such as “applause,” “laughter,” and “crosstalk”).

One remaining issue with the training corpus is its class imbalance; there are many more documents from governors than there are from presidents. This is not due to undersampling, as the corpus contains almost the universe of cases for each level of government, but rather because there are simply more gubernatorial speeches than there are presidential ones. This presents a problem because the resulting topic distribution will be skewed heavily toward state content, making future categorization of rare events (national content) more difficult.

⁶Speeches from 2000-2010 were gathered from a pre-existing repository, but speeches from 2011 to 2019 were gathered mostly by hand via local news transcripts and archives of gubernatorial websites.

To solve this, I implement a Synthetic Minority Over-sampling Technique (SMOTE) to create equal numbers of synthetic documents originating from presidents and governors (Chawla et al., 2002). The resulting training corpus contains 442 synthetic documents equally split between presidential and gubernatorial speeches.⁷

5 Results

The STM model I apply to the synthetic training corpus contains covariates for year (pooled in two-year intervals) and level of government (state or national). I determine the optimal number of topics (70) using cross validation techniques recommended by Roberts, Stewart, and Airolidi (2016), although getting the “correct” number of topics here is less important than getting a set of topics distinctly related to state and national content.⁸ Figure 1 shows the words that appear with the highest probability for four topics highly associated with state or national origin. As you can see, the nationally-associated topics include references to America, the nation as a whole, national institutions, and security, while state-associated topics have words associated with education, business, and budgeting. Because I do not analyze these word proportions closely to avoid researcher interference, this exercise is more to show that the topic model is returning topics with policy/political content rather than procedural words or other vocabulary that might be indicative of the origin of the document but not its content. This issue should largely be remedied by the text-preprocessing done previously.

⁷See appendix A1 for additional details on the SMOTE process I apply to the training data.

⁸I also run the same analysis in this section on models with 60 and 80 topics, and the results are similar. See appendix A2 for robustness check results. A different approach using the topic proportions as part of a classification model could check classification accuracy using a validation set, but such an approach is beyond my current computational resources.

<p>Topic 62:</p> <p>america, american, year, peopl, must, tonight, world, congress, help, need, economi, secur, work, nation, support</p>
<p>Topic 2:</p> <p>iraq, peopl, secur, iraqi, troop, american, afghanistan, must, america, serv, nation, qaeda, forc, home, afghan</p>
<p>Topic 50:</p> <p>school, year, educ, make, peopl, work, help, teacher, children, everi, must, student, need, time, famili</p>
<p>Topic 34:</p> <p>govern, must, budget, time, year, busi, work, make, econom, educ, peopl, futur, fund, economi, reform</p>

Figure 1: Highest probability words for selection of topics. Topics 62 and 2 are highly associated with national content, while topics 50 and 34 are highly associated with state content.

Figure 2 shows the difference in expected topic proportions given the national or state origin of the document. We see noticeable variation in topics associated most strongly with national or state content, and the substantive size of the difference in proportion effect is fairly large given that the most prevalent topic from the model has an expected proportion of only about 0.04 across all documents. This suggests the model is doing an adequate job distinguishing between state and national content, allowing me to separate the topics into 3 categories; significant predictors of state content, significant predictors of national content, and predictors of neither.

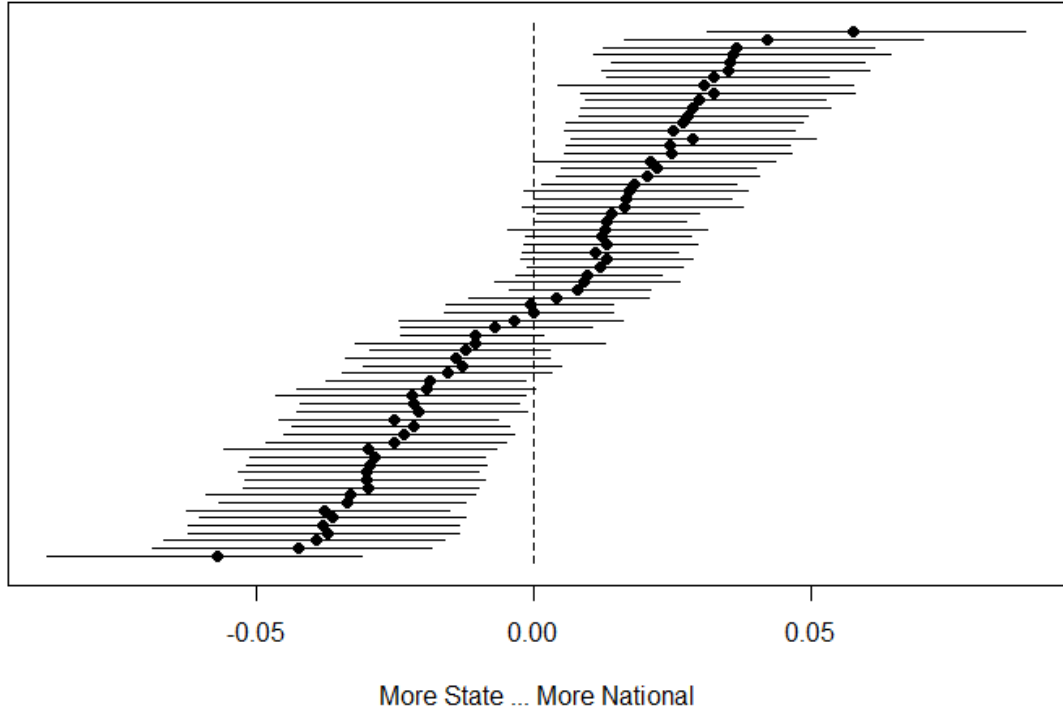


Figure 2: Difference in topic proportion by state or national content. Each point is a topic with a simulated 95% confidence interval, with positive values appearing more in national documents and negative values appearing more in state documents. Topic labels are excluded for simplicity and because I don't specifically analyze the content of any one topic.

These results indicate the existence of topics that are common and rare with regard to state and national content. The next step, then, is to apply the trained model to the debate transcript data. In doing so, the model searches for terms in the debate corpus associated with the trained topics and integrates prior covariate values for year. Crucially, the model is *not* given covariate values for the state or national origin of the debate (whether it was a gubernatorial or presidential debate). This would assign prior values on topic prevalence based on state or national origin, but we simply want to see whether the topics *resulting* from the trained state/national distinction occur in equally distinct ways when applied to

the new corpus. The model *is* given covariate values for year, since one would expect the types of issues discussed to vary from year to year without having an effect on the probability of being of national or state origin.

To get the national/state topic prevalence results for the debate test data, I first identify which topics are significant predictors of state or national content (from Figure 2). These topics are assigned a binary “state” or “national” indicator, which I refer to as the topical content of the document. From the STM model I applied to the debate data, I recover the estimated individual topic proportions for each document and sum them by topical content. Therefore, every debate starts with 70 values (one proportion per topic) and ends with two values; the estimated proportion of the debate taken up by national content, and the estimated proportion taken up by state content.⁹ Simply plotting these proportions would be misleading, however, since the baseline propensity for topic prevalence (as estimated by the training model) varies by topic and year.¹⁰ Put differently, certain topics may be discussed more than others on average, and certain topics may be discussed more in some years than in others. Therefore, to get a more informative comparison of topical content proportions, I subtract from each debate-topical content observation the baseline topical content proportion for the document’s year. For example, say a presidential debate in 2000 was estimated to have a national topical content proportion of 0.6. If the training model estimated a baseline national topical content proportion of 0.5, the estimated difference in topical content from the baseline would be 0.1, suggesting content that is more national than would be expected.

Figure 3 shows the resulting average differences in topical content proportions to the baseline in the debate corpus from 2000 to 2018. There is a clear lack of any discernible upward or downward trend in national or state topical content from 2000 to 2018, suggesting the nationalization of campaign rhetoric either began earlier than this time period or has always been this way. Second, the topical content of presidential and gubernatorial debates

⁹I exclude topics that were non-significant predictors of state or national content.

¹⁰This is also why the results of Figure 2 are not precisely mirrored; not every topic has the same effect or prevalence.

seemed to be mirrored; presidential debates tend to show a higher (lower) prevalence of national (state) content relative to the baseline, while gubernatorial debates show the opposite. If one were to interpret this result in a purely mechanical way, the interpretation would be that debates over this time period share more textual similarities with documents sharing their jurisdictional origin; presidential debates look more like state of the union and other presidential speeches, while gubernatorial debates look more like state of the state addresses. A generous interpretation of the results may conclude the topic proportions in gubernatorial debates are closer to each other than in presidential debates, but the substantive size of this difference is difficult to interpret.¹¹

¹¹The current process being utilized makes standard errors very difficult to estimate, hence the lack of confidence intervals. Because each iteration of the training model takes several hours to run, bootstrap estimation of standard errors is beyond the computational resources I have available.

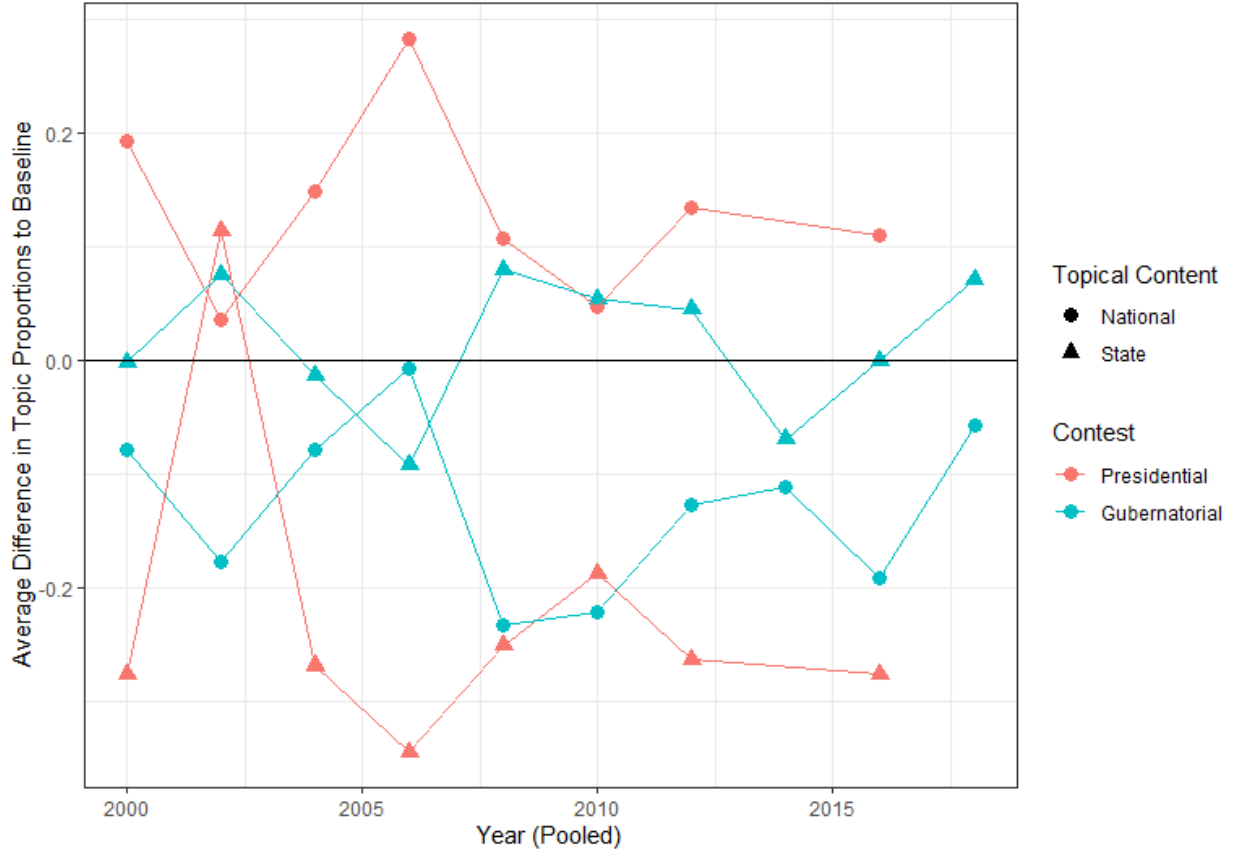


Figure 3: Average difference in topical content proportions to the baseline in electoral debates. Topical content for presidential debates are in red, gubernatorial in blue, while national topical content is indicated by a circle and state topical content by a triangle.

It is worth briefly noting the sharp uptick in state topical content in presidential debates in 2002 in Figure 3, where 2002 is the pooled indicator of debates taking place in 2002 and 2003. This is likely due to the existence of only one Democratic presidential debate during this time period (in 2003) with closed-captions. The topical content of debates in the 2002/2003 period is thus completely decided by what was discussed in that Democratic debate by candidates very early in the presidential nomination contest. This is a rare instance where SMOTE is unable to generate any true synthetic documents, since the technique needs at least two instances. This gives us ample reason to be suspicious of any substantive conclusions drawn from this one year in the data.

The preceding results give fairly weak (if any) evidence for gubernatorial candidates engaging in substantial amounts of nationalized rhetoric during debates. The flat time trend suggests the limited degree to which candidates do engage in this behavior is not related to nationalized electoral outcomes, but there is state-level variation in nationalized rhetoric that allows me to explore this relationship further. To do so, I pool the debate transcripts by state and gubernatorial election year to find the average difference in national and state topic proportions to the yearly baseline, making each individual observation a state-gubernatorial election year. This gives a state-level measure of national versus state rhetoric prevalence. I then gather every gubernatorial election result from 2000 to 2018 and calculate the two-party Republican vote percentage share. By taking the negative absolute difference between this value and the two-party Republican vote share for same-year or closest preceding year presidential elections, I get a basic measure of electoral nationalization. As this value goes up (closer to zero), state and national electoral results grow closer together. I show the simple bivariate relationship between these two measures in Figure 4 with a regression line.

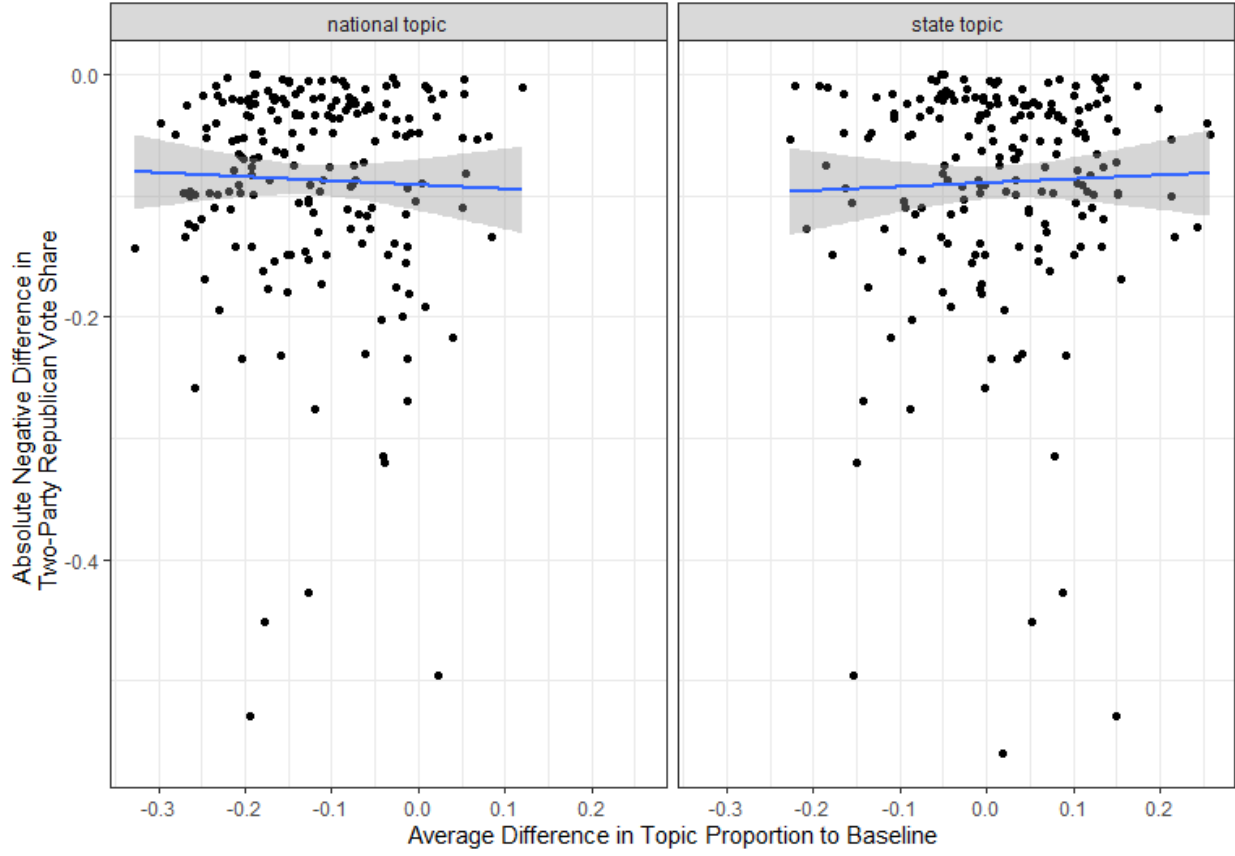


Figure 4: Bivariate relationship between average difference in state and national topic proportions to baseline (more simply, prevalence of state and national content) and the absolute negative difference in Republican two-party vote share between presidential and gubernatorial elections. A positive slope would indicate increases in topic proportions being positively correlated with nationalized electoral outcomes, and an negative slope would indicate the opposite.

The results from Figure 4 confirm that there is no discernible relationship between nationalized campaign appeals and nationalized electoral outcomes; for both types of rhetoric, the regression lines are flat. These results hold after adding state and year fixed effects, suggesting within-state effects are minimal (if they exist at all). While these results are very simple and can in no way be interpreted as causal, they add additional evidence against the relationship between nationalized campaigns and nationalized electoral results.

6 Discussion and Conclusion

The results of this paper are not entirely consistent with campaign behavior incentives to increase the salience of national-level issues and positions relative to state-level issues and positions; candidates in gubernatorial debates use rhetoric more consistent with state content than national content. The results are also inconsistent with the notion that campaign rhetoric has caused or is caused by the nationalization of election results in states. The time trend in nationalized rhetoric is fairly straight, whereas the trend amongst electoral results is positive. These two observations are not at odds with each other. Incentives to nationalize can remain constant over time while the effect of resulting behavior is null. A simple bivariate regression of nationalized electoral results on state-level topic prevalence also suggests nationalized rhetoric and results are not clearly connected. More survey research is needed to determine the effect of nationalized rhetoric on voter perceptions of candidates.

One of the persistent difficulties of analyzing campaigns has been determining what the content of any given treatment is. For example, is a campaign ad negative or positive? Is the ad focusing on a particular issue? These analyses have often involved time-consuming researcher categorization of various campaign events, limiting the scope of the analysis. Text models such as the one implemented in this paper can be utilized to perform this sort of analysis at scale and without researcher intervention. As such, additional work can be done to validate the results of this analysis. There are existing data on campaign websites and advertisements that can have similar text models run on them. It is possible candidates highlight different issues through different mediums to target particular types of voters, so widening the net of campaign activities is prudent. The nationalization of campaign activities is crucial to our understanding of how voters make decisions in low-information elections. If voters are making decisions on criteria inappropriate for the office being contested, there are potential negative downstream implications for the representativeness of state politics. The same concern exists if candidates are campaigning on state-level issues but voters continue to make decisions on national-level criteria.

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7 Appendix

7.1 A1: SMOTE

SMOTE uses a k nearest neighbors approach amongst minority class instances to create synthetic minority instances; in this particular case, the data structure supplied to SMOTE has one observation per document, with variables included for year (pooled into two-year intervals), document origin (state or national), and a count variable for every word in the corpus. For example, imagine I’m creating a model to distinguish between pop songs and nursery rhymes, and one of my observations in the training set is the following nursery rhyme as an example: “Mary had a little lamb, little lamb, little lamb.” The data version of this would have one factor variable column for the class (nursery rhyme) and five others, one for each distinct word. The “Mary,” “had,” and “a” columns would each contain the value 1 since each word occurs only once, while the “little” and “lamb” columns would each contain the value 3. You can then imagine each instance as an observation in n -dimensional space (each dimension being the count for a distinct word). SMOTE creates synthetic instances by looping over each instance, choosing one of the K closest neighbors, connecting them by a line through the n -dimensional space, and synthesizing a new instance. Because topical content is likely to vary between years in my speech data, I split the data by year, apply SMOTE separately to each data-year to solve class imbalance within that year, and recompile. Importantly, SMOTE can only create synthetic instances with words that existed in the true minority instance documents, so the process does not introduce words from the majority class.

7.2 A2: Topic Number Robustness



7.3 A3: Regression models

Table 1:

	<i>Dependent variable:</i>			
	Absolute negative difference Republican two-party vote			
	Nat Topic	State Topic	Nat Topic	State Topic
Topic Prevalence	−0.033 (0.070)	0.032 (0.069)	0.046 (0.135)	−0.047 (0.111)
Constant	−0.091*** (0.011)	−0.090*** (0.007)		
State/Year Fixed Effects?	No	No	Yes	Yes
Observations	190	190	190	190
R ²	0.001	0.001	0.445	0.412
Adjusted R ²	−0.004	−0.004	0.181	0.132
Residual Std. Error	0.088 (df = 188)	0.094 (df = 188)	0.079 (df = 128)	0.087 (df = 128)

*p<0.1; **p<0.05; ***p<0.01