The Popular Origins of Legislative Jurisdictions: Petitions and Standing Committee Formation in Colonial Virginia and the Early U.S. House

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Abstract

Committee formation in early American legislatures happened when those assemblies were inundated with petitions, a relationship unexamined in institutional political science. We develop a model where a floor creates committees to respond to topic-specific petitions, predicting committee creation when petitions (1) are topically specific, (2) are spread across constituencies, and (3) have complex subject matter, and predicting committee appointments from petition-heavy constituencies. Analysis of case studies and with two original datasets – petitions sent to the Virginia House of Burgesses from 1766 to 1769, and over 100,000 petitions sent to Congress and recorded in the House Journal (1789-1875) – shows petitions, their complexity and their geographic dispersion predict committee creation. Our theoretical argument embeds asset specificity in legislative institutions, and helps reinterpret the entropy of political agendas and the origins of standing committees in American legislatures.

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1 Introduction: The Problem of Committee System Formation

Modern legislatures perform much of their work through committees, relying upon complex structures that refer policy details to a network of topic-focused sub-organizations. Standing committees in these systems often number in the dozens, and the committees have rough jurisdiction over the different policy topics in their domain (defense, agriculture, justice and courts, etc.), while also often competing over jurisdictions (King 1997).¹

There are few questions more central to institutional political science than that of how committees work, and yet two dynamics about their emergence have eluded much of the discipline's purview.

The first is that legislative committees are very old, indeed much older than the stylized facts that underlie their theorization. The theory of legislative committees is premised largely upon developments in the post-Civil-War United States. Weingast and Marshall (1988), along with Shepsle and Weingast (1987), discuss committees as mechanisms for facilitating the logrolling contracts that support distributive politics in legislatures, and their work stems in part from the abundant discretionary spending of the twentieth-century Congress. Gilligan and Krehbiel (1987) and Krehbiel (1992) theorize committees as investigative mechanisms to reduce policy uncertainty, and these scholars use as motivating examples the emergence of restrictive amendment procedures in the late-nineteenth-century United States. Well-known party control arguments about committees see them as tools of the majority party's "procedural cartel"; the emergence of a strong partian leadership comes deep into the nineteenth century (Jenkins and Stewart 2012; Gamm and Smith 2002). Epstein and O'Halloran (1999) focus largely on executive delegation, but argue as well that committee systems can be seen as mechanisms for executive and administrative oversight. Yet whatever the logic of committee politics – distributive, informational, partisan or oversight – these theories take the conditions under which committees are created and operate as relatively recent, or at least after the U.S. Civil War.

Committee systems are plausibly much older than these conditions – older than mass parties, older than modern logrolling, older than much of the administrative state.

Committees were common in the legislatures of the revolutionary states before they had disciplined parties (Squire 2012). Committee systems were created quickly after the Constitution in the U.S. House (Gamm and

¹We follow Gamm and Shepsle (1989, p. 43) and define a standing committee as "a subset of the legislature whose membership is well-defined, its subject-matter jurisdiction relatively fixed, and its life extending for the length of a legislative session or longer." These contrast with select committees, which generally served as spot drafting committees, assembling bills whose principles had been agreed upon in the Committee of the Whole. Select committees would then report back to the chamber.

Shepsle 1989; Cooper 1970), at about the time legislative parties emerged but well before mass parties did. By virtually any accounting, legislative committees predate mass distributive spending and logrolls of the nineteenth-century Congress, the technocratic policy space that undergirds informational theories, the emergence of disciplined parties in the Jacksonian period that underlies procedural cartel theory, or the development of the post-Civil War, Progressive-Era national administrative state apparatus (Skowronek 1982; Carpenter 2001) that underlies oversight theory. Indeed, standing committees are *much* older than this. The English Parliament had a developing committee system in the sixteenth-century, and American colonial legislatures such as Virginia's House of Burgesses had developed standing committee systems well before the American Revolution.

The second issue is that much of the theory devoted to committees in political science examines committees already created, setting aside the question of where committee systems came from. In informational theory, the decision to "make or buy" legislation – to "make" it on the Floor or to "buy" it from committees – presumes that there exists a well-informed sub-organization to which the floor can turn for expertise, with which the floor can strike up a contract of some sort, from which the floor can "purchase" policy. Similarly, much of the procedural cartel theory takes committees for granted; it does not discuss where committees came from. A historical and theoretical literature examines the development of standing committee systems in the House (Gamm and Shepsle 1989; Cooper 1970), yet it does not examine why some committees were created before others. Scholarship on the evolution of congressional committee jurisdictions focuses almost entirely on the twentieth century (King 1997; Baumgartner, Jones, and MacLeod 2000; Baumgartner and Jones 2015). Given the acknowledged importance of "layering" – of the force of previous legislative institutions in the evolution of new legislative institutions (Gamm and Shepsle 1989; Schickler 2001) – examining the origins of American standing committees both theoretically and empirically seems critical.

The present study focuses upon the early United States, and it rests upon a simple fact: American legislatures built their committee systems at a period when they were being inundated by petitions. From the Revolution through the Civil War, petitioning was surging across nearly every sector of American society – rich and poor, black and white, voters and non-voters, women and men, native Americans and European settlers. Dealing with these petitions occupied an immense amount of the time of these legislatures – often entire days of legislative proceedings – and petitions vastly outnumbered bills.

We document this fact and use it to build a model of committee system creation and "committee placement" in policy space. The model is decision-theoretic and leaves a number of important issues and dynamics to future theorization efforts, but it renders predictions about important variables: the number of committees created, the timing of committee creation, the topics on which committees will be created, the placement of those committees relative to one another in a space of information, and other dynamics. It allows scholars and students of committees to pose and address critical questions about the emergence of legislative committee systems: (1) Why did committee systems emerge during surges of petitioning and not before, not after? (2) Why did early committee jurisdictions subsume policy topics and not, say, geographic constituencies?² (3) Why do some policy topics receive committees, while others do not? Or, why are committees created for some policy domains *before* being created for others? (4) Why are petitions and bills not left to the members from whose constituencies they emerge? Put differently, why are petitions not left to individual legislators to deal with in their roles as ombudsmen?

The model embeds a simple political reality understood all too well by early American elites; failure to respond to petitions was associated with electoral losses, with citizen discontent that could spiral and diffuse, with political turbulence, and even with armed revolt. Thomas Jefferson's Declaration of Independence decried the failure of the Crown to answer American colonists' petitions. The right of petition was cherished (McKinley 2016), and the First Congress enshrined it in the First Amendment to the Constitution. Petitions could be used to organize against elites, even (indeed especially) when elites were not paying attention to them (Carpenter and Schneer 2015; Carpenter 2016). The linkages between petitioning and legislative development are, indeed, much older and probably extend to the late medieval period. Two important studies examine these developments in fourteenth-century France and England (Petit-Renaud, 2001, p. 281-301; Maddicott, 2010, p. 352-375).³

Representing petitions as a set of incoming demands, for which the failure to respond imposes losses upon the legislature, we analyze the decision of the floor to create committees as opposed to dealing with the petitions itself or leaving the petitions to individual members. We then draw upon two original datasets – petitions sent to the Virginia House of Burgesses from 1766 to 1769, and all petitions recorded in the House

²This counterfactual may seem absurd today – as legislator staff and state delegations can cover geographically specific concerns – but in the early United States it was not. Select committees in early American legislatures were geographically specific, and the nineteenth-century Congress had several standing committees dedicated to geographically specific issues (the Cumberland Road and the Pacific Railroads Committee).

³We have no reason to think that committees significantly pre-date the practice of petitioning; Maddicott (2010) for instance chronicles the increasing importance of petitioning under Edward I in the 13th century and ties it to the rise of Parliament as a less Baronial and more popular assembly.

Journal from 1789 to 1870 – to examine whether and how petitioning predicts the development of legislative committees in Virginia and the United States. We first examine the creation of an important topic-based committee – the Committee for Religion of Virginia's House of Burgesses – and show how an increase in petitioning, the petitioning's complexity, and its geographic distribution played an important role in the in the early development of the Committee for Religion. We then turn to the U.S. House and demonstrate that petitions predict standing committee creation in a more systematic statistical analysis. We include a second brief case study of how the split of the Committee of Commerce and Manufactures into two separate committees at the beginning of the 16th Congress coincided with a surge in manufacturing-related petitions. We conclude by outlining the importance of petitioning and legislative development as a critical dynamic for political scientists, legal scholars, historians and other social scientists, and discuss extensions to both the model and the empirics.

2 The Ubiquity of Petitioning in Colonial and Early American Legislatures

Early legislatures in North America were not much professionalized and met only occasionally, depending heavily upon geography (Squire 2012, 2017; Gailmard 2017). When they did meet, however, most of their business was determined by incoming petitions. Following Carpenter (2016), we define a petition as a document with two key features: (1) a prayer or declaration of principle, policy or grievance, and (2) a signatory list that includes names of people supporting the prayer. Petitions sent to Congress and to state legislatures were systematically tracked in specially designated sections of the records of proceedings in the legislature, and so for the empirical exercises in this paper we rely on the judgment of clerks recording the proceedings to determine what was and was not a petition.⁴ Table A.1 displays the calculations of colonial Virginia historian Raymond Bailey, who demonstrates that half or more of all bills passed by the Virginia House of Burgesses came from petitions (Bailey 1979). Elsewhere, colonial legislatures that had standing committees often created one or more (composing from a quarter to the entirety of their standing committee systems) just for the receipt and disposition of petitions (see Table A.2).

In the early U.S. House, entire days of legislative proceedings are taken up with the reading, assignment and disposition of petitions. Calculations from our data (displayed in Table A.3) show that petitions far

⁴The term "memorial" was also often used interchangeably in place of or in conjunction with the term "petition". A memorial generally refers to a statement of facts sent to a body of government, often with an explicit or implicit request attached.

outnumber bills during this time period, and from the 1810s through the 1830s outnumber bills and recorded roll-call votes by factors of four-to-one to eight-to-one or more. To be sure, much of legislative business during this period was conducted *viva voce*, but a glimpse at any sequence of days from the early legislative journals will reveal how much more time was spent on the adjudication of petitions than upon aggregation of voices or votes. Because many bills originated from petitions, moreover, the estimates presented likely underrepresent substantially the space and time taken up by petitions as opposed to bills.

An illustration of how petitioners followed their petitions through the legislature may be found from a petition sent by the residents of Indiana Territory (then governed by William Henry Harrison, the future president) to Congress in September 1814. In that petition, the memorialists remind the House and Senate that they have been tracking how those chambers dealt with previous petitions. In the midst of the War of 1812, with the "Old Northwest" highly contested territory, the alliances and fidelities of these settlers would have been important far beyond the value of their votes.

Also your Memorialists will further represent that the memorial of the Legislature of the Territory at their Session in the winter of the present year as far as your memorialists have learned was referred to a committee appointed by the House of Representatives in Congress who reporting among other things, that the Memorialists did not designate the particular companies of militia, and failing therein the committee could not say whether the companies of militia had been paid or not.⁵

In short, the following general patterns characterize many early American legislatures: (1) Petitions dominated early American legislation, composing the basis for half or more of the bills passed. (2) Colonial legislatures set up a range of committees devoted entirely to petition receipt and disposition alone. (3) In early national America, petitions far outnumbered bills and roll-call votes. (4) Legislators knew that constituents followed the legislative disposition of petitions.

We now use these patterns as the basis for a formal model of petition receipt and committee formation by a rational Floor. The model resembles a Gilligan and Krehbiel (1987) model but has a different focus, namely the decision-theoretic problem of *which* committees to create given limited resources.

⁵Memorial of the Legislature of the Indiana Territory to the Senate and House of Representatives, September 10, 1814; William Henry Harrison Papers, Box 2, Folder 13; Indiana Historical Society.

In developing our model and then testing it empirically, we primarily have in mind *legislatures where petitions contributed to a substantially increased workload for members*. This appears to have been more true in the House than in the Senate; previous research has noted that "one congressional chamber served as the primary site of petitioning activity... the House received considerably more petitions than the Senate" (Blackhawk et al. 2020, p. 11-12) and attributes this empirical pattern to traditions of petitioning a legislature's lower house as well as the physical accessibility of House members as compared to Senators (Spanbauer 1993). As a result, we focus here on the House and on state legislatures. We think that petitioning and the development of the committee system in the Senate – a body that created a committee system in one fell swoop seemingly mimicking the House and whose members were elected by state legislatures rather than a popular vote – likely departs from the conditions set forth in our model and demands a separate paper.

While petitions certainly represented constituency demands and interests, they were far more than mere vehicles or useful measures of public opinion. Petitioning certainly did sometimes reflect the currents of opinion, but it also did more than this: (1) petitions were embedded in a formal process for seeking consideration by a legislature; (2) petitioners explicitly created additional work for legislators who had to dispense with and, potentially, act upon petitions; and, (3) petitions signaled "activated" opinions, often reflecting significant levels of effort and organization by political groups. For instance, of the 200 petitions entertained by the House of Burgesses in their 1769 session, fully 83 (42.5 percent) came with the legislative journals' remark that the petitioners' "Names are thereunto subscribed," meaning that a signatory list was attached. Thus, we think the measure of petitioning departs from notions of public opinion in several key ways. In fact, it is difficult to envision meaningful demands made by a group or organization through a means other than by petition during the time period under study.

Our theory incorporates this view of petitioning by characterizing the petition as a device that binds together opinion actively expressed by members of the public with an implicit or explicit request for consideration by the legislature. At the same time, none of this implies that other channels of political expression play no role in the behavior of legislators. Indeed, members of Congress clearly paid close attention to issues identified by the executive branch, in newspapers, and through word of mouth. As a result, in the empirics we seek to disentangle the effects of petitioning from these other channels by (1) including additional controls for the content of presidential messages to Congress and (2) controlling for the frequency with which topics were covered in newspapers during each congressional session.

3 A Model of Petitioning and Committee Formation

We develop a one-dimensional spatial model that describes how a legislature processes incoming petitions on varying topics. Consider an interval $V \equiv [0,v]$ where v > 0 is a parameter representing the complexity of the policy space faced by the legislature. The floor F (i.e., full legislature or Committee of the Whole) occupies a point ϕ in this interval. A legislature receives petitions from a set of generators, one of which is represented by a topic τ occupying a point in V. A total of T topics are drawn from a uniform distribution on V, where T is a known parameter. At each topic τ , a number of petitions is drawn from a Poisson distribution with intensity λ_{τ} , where λ_{τ} is a known parameter for each topic. Note that it is always the case that $\lambda_{\tau} > 0$ due to the properties of a Poisson distribution.

The distance from the location of the floor to the location of a topic represents the level of knowledge or ignorance of the Floor about the topics that come before it. Because the topics that come before the floor have some degree of informational specificity, the floor has an incentive to create committees "close" to petition topics. But investing in committee creation and creating knowledge of one sort (on agriculture) is costly and may or may not translate into knowledge of another sort (on military policy), depending on the location of topics on the interval; investments in knowledge have some degree of *asset specificity*, such that expertise has properties of an experience good. The Floor may be generally uninformed about a range of topics, but perhaps two of those topics are sufficiently closely related to one another that investment in one committee will give the Floor sufficient information about both. In contrast, two topics that are quite different from one another (distant from each other on the interval) may require two separate committees.

Our model does not have strategic agents, though it creates a framework for developing a future model with them. Nonetheless, the model embeds the idea of *asset specificity* in policy information (knowledge about topic-specific petitions) and the more particular point that *specificity is always relative*, that is, defined by the differential capacities and knowledge of agents in a relational framework. In a world with one Floor and one committee (Gilligan and Krehbiel 1987), there is simply information asymmetry, not asset specificity more generally.

3.1 Setup: Floor of Legislature, Petition Topics and Committees

F can dispose of any topic τ itself in the Committee of the Whole, or by creating standing committees. (We later allow F to dispose of a topic by assigning it to a district or a member from that district.) Specifically,

F can create C committees, each located at a point $c \in V$ of F's choosing. Committees are created with constant marginal cost k_c . Costs of committee creation include the cost of members' time and effort as well as committee infrastructure costs. The floor allocates topics to committees with a surjective mapping $A:T \to C$. Every topic is allocated either to the floor alone or to a committee. The floor and any committee may be allocated multiple topics.

If F handles topic τ itself, it incurs loss $L_F^{\tau} = \lambda_{\tau} |\phi - \tau|$ from that topic; the loss depends on the distance between the location of the topic and the floor on the interval and the number of incoming petitions on a given topic. If committee c handles topic τ , then the floor incurs loss $L_c^{\tau} = \lambda_{\tau} |c - \tau|$.

Thus, given a set of topics T, we can define a committee system C_T by a triple: a number of committees C, the placement of each committee c in V, and an allocation of topics to committees A. F's objective in creating C_T is to minimize the total losses summed across topics. The following sequence of steps yields an optimal committee system C_T^* with respect to this objective.

3.2 Optimal Allocations of Topics to Committees, Number of Committees, and Placement of Committees

First, consider the optimal allocation A^* of topics to committees, given the number of committees C, their placement in the interval V, and the location of topics τ . Let c_{τ} denote the committee that is closest to τ .

Lemma 1 For any set of topics T and committees $C \ge 1$, the optimal allocation of topics to committees A^* is defined as follows: if $|\phi - \tau| \le |c_\tau - \tau|$, then F handles τ ; otherwise c_τ handles τ .

See Appendix A.1.1 for the proof of Lemma 1.

Second, we consider the optimal placement of committees, given that topics will be allocated optimally as shown by the previous lemma. That is, suppose F creates C committees. Let T_c denote the set of topics allocated to committee c in A^* , and T_{ϕ} the set of topics allocated to F in A^* . Given T, $\{\lambda_{\tau}\}_T$, and C, the optimal placement of the committees solves

$$\min_{\{c\}} L_C \equiv \sum_C \left(\sum_{T_c} L_c^{\tau} \right) + \sum_{T_{\phi}} L_F^{\tau}.$$
(1)

Lemma 2 The solution to equation 1, denoted L_C^* , exists for any parameters.

See Appendix A.1.2 for the proof of Lemma 2. It is also straightforward to show:

Lemma 3 Given $C \ge 1$ and λ_s for all topics $s \ne \tau$, $|c_{\tau} - \tau|$ is weakly decreasing in λ_{τ} . Further, for every $\tau \in T$, there exists a $\hat{\lambda}_{\tau}$ such that $|c_{\tau} - \tau|$ is strictly decreasing at $\hat{\lambda}_{\tau}$.

Example 1 Suppose C = 1, T = 2, $\phi < \tau_1 < \tau_2$, $|\tau_2 - \tau_1| < |\tau_1 - \phi|$, and $\lambda_1 > \lambda_2$. Clearly $c \notin [\tau_1, \tau_2]$ is dominated for F, and for any $c \in [\tau_1, \tau_2]$, A* entails $T_{\phi} = \emptyset$ and $T_c = \{\tau_1, \tau_2\}$. The loss as a function of c's placement is $L_1(c) = \lambda_1(c - \tau_1) + \lambda_2(\tau_2 - c)$, which is continuous in c. Note that if $c = \tau_1$ the loss can be written as $L_1 = \lambda_2(\tau_2 - \tau_1) = \lambda_2(\tau_2 - c) + \lambda_2(c - \tau_1) < \lambda_1(c - \tau_1) + \lambda_2(\tau_2 - c)$ for any $c > \tau_1$. Therefore, the loss is minimized at $c^* = \tau_1$. The committee is allocated both topics and is located at the higher intensity topic.

Example 2 Suppose C = 1, T = 2, $\tau_1 < \phi < \tau_2$, $\lambda_1 > \lambda_2$, and $|\phi - \tau_1| < |\tau_2 - \phi|$. If $c \leq \phi$, then $T_c = \tau_1$ and $T_{\phi} = \tau_2$ and $L_1(c) = \lambda_1(c - \tau_1) + \lambda_2(\tau_2 - \phi)$. If $c > \phi$, then $T_c = \tau_2$ and $T_{\phi} = \tau_1$ and $L_1(c) = \lambda_1(\phi - \tau_1) + \lambda_2(\tau_2 - c)$. Thus for any placement c, the Floor is allocated one topic. Moreover, $L_1(c)$ is continuous in c. Finally, if $\lambda_1 - \lambda_2$ is small relative to $|\tau_2 - \tau_1|$, the optimal committee placement is $c^* = \tau_2$. The committee is allocated the lower intensity topic and placed exactly on that topic.

See Appendix A.1.3 for the proof of Lemma 3.

Third and finally, consider the optimal number of committees C^* , given that topics will be allocated per Lemma 1, and committees will be placed per Lemma 3. For any $C \ge 1$, define $U_C = L_C^* - L_{C-1}^*$. This is the marginal value of adding one committee on top of C-1.

Lemma 4 For any set of topics T and intensities $\{\lambda_{\tau}\}_T$, U_C is nonpositive for $C \ge 1$; U_C is strictly decreasing in C for $1 \le C \le T$; $U_C = 0$ for C > T.

See Appendix A.1.4 for the proof of Lemma 4.

The optimal number of committees C_T^* is the smallest $C \ge 0$ such that $U_C \le k_c$ and $U_{C+1} > k_c$.

Lemma 5 For any cost k, set of topics T, and intensities $\{\lambda_{\tau}\}_T$, C_T^* exists in [0,T] and is unique.

See Appendix A.1.5 for the proof of Lemma 5.

Proposition 1 For any set of topics T and intensities $\{\lambda_{\tau}\}_{T}$, an optimal committee system C_{T}^{*} exists. The allocation of topics, placement of committees, and number of committees are given by lemmas 1, 2, and 5 respectively. *Proof*: This follows immediately from lemmas 1, 2, and 5 using backward induction. For a given optimal allocation of topics to committees A^* and optimal placement of standing committees c with loss function L_C^* , there exists an optimal number of standing committees to create C_T^* by Lemma 5. For an optimal allocation of topics to committees A^* , there exists an optimal placement of standing committees by Lemma 2. And, for any set of topics T and committees $C \ge 1$, there exists an optimal allocation of topics to committees A^* by Lemma 1.

Additional comparative statics are also straightforward. Recall that the parameter v is the upper limit of the information space. We can show:

Lemma 6 For any Floor position ϕ , cost k_C and number of topics T, C_T^* is weakly increasing in v.

See Appendix A.1.6 for the proof of Lemma 6.

Lemma 7 For any number of topics T, $|T_{\phi}|$ is weakly decreasing in v.

See Appendix A.1.7 for the proof of Lemma 7.

3.3 District Referral Strategies and the Geographic Distribution of Petitions

We now extend the analysis to incorporate the possibility that the floor can assign a topic (or petitions on that topic) to a member from the district or constituency from which (some or all of) its petition arose. It was not uncommon for colonial assemblies to do this, or for the early U.S. Congress to assign petitions to ad hoc committees (not select committees with a particular title). For example, on December 7, 1766 the House of Burgesses considered the "Petition of the Vestry of Lunenburg Parish, in the County of Richmond" for permission to sell some of its Glebe lands (Kennedy 1906, 1766-1769, p. 51). The Burgesses referred the petition to Mr. Landon Carter, the representative from Richmond County. At this time there was no standing committee on religious matters.

Similar patterns occurred in the early House, where the third petition received was referred to an ad hoc committee of three members. The petition, from a David Ramsay of South Carolina, asked Congress for a subvention to produce a volume entitled "The History of the Revolution of South Carolina, from a British Province to an independent State." The Ramsay petition was combined with another petition (from an individual of unstated geographical origin) and referred to a makeshift committee of three members, the first of whom was from South Carolina. It seems no coincidence that a petition from South Carolina, asking for a subvention to produce a volume on South Carolina, was referred to a makeshift committee with a South Carolina representative in the lead (U.S. 1826, April 15, 1789, p. 14). The two previous petitions sent to the U.S. Congress were entertained in the Committee of the Whole.

One rationale for referrals based on member geography stems from the idea that representatives knew their district's petitions better than other members.

We consider the option of the Floor assigning a topic to a district at cost $k_D > 0$. The floor may now allocate topics to committees or to a district. In the event of a multi-member district, we assume that the Floor randomizes among the available members, choosing one from the district to review the petition. The key assumption is that losses incurred by the Floor from district assignment are less than those from committee assignment ($k_D < k_C$).

An important quantity in the analysis that follows is the fraction of topic τ petitions from district z, which we denote by $\pi_z^{\lambda_{\tau}}$. We begin by writing the Poisson intensity for topic τ as a sum of the district-specific intensities (since the sum of Poisson processes is itself a Poisson process with intensity equal to their sum).

$$\lambda_{\tau} = \sum_{z=1}^{N_D} \lambda_{\tau,z} \tag{2}$$

Then for any topic τ , the proportion of petitions on that topic from district z' can be written as

$$\pi_{z'}^{\lambda_{\tau}} = \frac{\lambda_{\tau,z'}}{\sum_{z=1}^{N_D} \lambda_{\tau,z}} = \frac{\lambda_{\tau,z'}}{\lambda_{\tau}} \tag{3}$$

Example 3 (Ombudsman Referral of a Topic to a District or Committee)

Assume a single topic τ and a distribution of petition intensities across districts. The Floor considers whether to create a committee or to assign the topic to a member chosen from a district. Assigning all petitions (or the entire topic) to a single member (an "ombudsman strategy" for district z=z') yields informational losses of $(1-\pi_{z'}^{\lambda_{\tau}})\lambda^{\tau_i}|\phi-\tau|$, the distance from the floor weighted by the number of petitions on the topic not assigned to a local member. Note that we assume there are no losses incurred by the local member disposing of petitions emanating from his or her district (e.g., the term $\pi_{z'}^{\lambda_{\tau}}|\tau-\tau|$ drops out of the equation). The Floor assigns the topic to a member from district z=z' in lieu of creating a committee for the topic if

$$\left(1 - \pi_{z'}^{\lambda_{\tau}}\right)\lambda_{\tau}|\phi - \tau| + k_D < \lambda_{\tau}|c_{\tau} - \tau| + k_c \tag{4}$$

or if

$$\pi_{z'}^{\lambda_{\tau}} + \frac{|c - \tau|}{|\phi - \tau|} + \frac{k_c - k_D}{\lambda_{\tau} |\phi - \tau|} - 1 > 0 \tag{5}$$

The operative condition for Example 3 is clearly increasing in $\pi_{z'}^{\lambda_{\tau}}$, namely the concentration of the topic's petitions in the district. If members are perfectly informed only about petitions from their own district, then the reduction in informational losses is only partial when all petitions in a topic are assigned to one person.

The condition in Equation (5) is rather conservatively stated, as it assumes that the relevant standing committee does not yet exist, and that in order for the topic to be handled, the costs of district referral (k_D) must be borne in full by the Floor. This formal conservatism does not affect our hypothesis, however, which concerns the marginal effect of the concentration or entropy of petitions across districts. Note, too, that district referral costs depend on the number of petitions (λ_{τ}) for which it is a chosen strategy, whereas standing committee creation has zero marginal cost for additional petitions.

Proposition 2 For any given τ and placement of ϕ , the probability of committee creation is increasing in the entropy of petitions across across districts.

Proof: Since topics and the floor's position are fixed, we can focus solely upon the distribution of petitions and the concentration in districts. We start by examining the limit cases of the entropy function. As all topic petitions fall into district z', then $\pi_{z'}^{\lambda_{\tau}} \to 1$ and informational losses from the district assignment strategy are minimized. In contrast, as topic petitions become uniformly distributed across districts $(\forall z, \pi_z^{\lambda_{\tau}} \to N_z^{-1})$, then $\pi_{z'}^{\lambda_{\tau}}$ is decreasing, which according to Equation 5, means that it is less likely to be optimal to assign district-based petitions to a single member. This follows since Equation 5 is linear in $\pi_{z'}^{\lambda_{\tau}}$.

3.4 Pairwise Comparisons for Appointment Strategies

We now extend the model by rewriting the committee establishment cost so that it is potentially influenced by the availability of already-informed district representatives. Let \mathcal{M}^c represent the subset of members (districts) chosen for a given committee, whose number is fixed exogenously (each committee has fifteen members, say). The fixed cost of standing committee creation is κ and the variable cost ranges in an interval from [0,q]. We adopt a simple representation for standing committee costs as a function of members' "home expertise," as follows

$$k_{c,\tau} = \kappa + q \cdot \left(1 - \sum_{z \in \mathcal{M}^c} \pi_z^{\lambda_\tau} \right) \tag{6}$$

The cost function consists of a fixed cost κ and a variable cost q, weighted by the share of committee members from districts where relevant petitions have originated. Thus if all of the topic's petitions are captured within the constituencies from which committee members are appointed, the variable cost falls to zero. This structure captures the constrast in instances where committee members (1) already have the relevant background to dispose of local petitions (low variable cost), or (2) must instead gather additional relevant information to dispose of each additional petition (high variable cost).

Proposition 3 For each τ , members from the most petition-intense districts will be appointed to the standing committee nearest that topic.

Proof: For any possible membership, take any pairwise comparison of members from districts z=1 and z=2, only one of whom can be included. Ceteris paribus, the Floor selects the second member if $\pi_2^{\lambda^{\tau}} > \pi_1^{\lambda^{\tau}}$. But z_1 and z_2 are arbitrary, and as $k_{c,\tau}$ is monotonically decreasing in any included member's $\pi_z^{\lambda_{\tau}}$, the pairwise comparisons must lead the floor to select the member with the maximum $\pi_z^{\lambda_{\tau}}$ by the transitive property of inequality.

3.5 Hypotheses

Before listing hypotheses generated by the model, we note first what our model does *not* predict. The simple presence of more petitions does not imply a greater incentive for the Floor to create more committees. Put differently, the model does not predict that a legislature that receives more petitions in general at one time will create more committees. The reason is that the Floor has ways of dealing with petitions that do not involve standing committees. If complexity is low enough, which implies higher general knowledge of the Floor, the Floor – acting as Committee of the Whole – will deal with the petitions itself, without a need to refer them to standing committees. (As we discuss below, early American legislatures often did just this when dealing with a petition that was easily adjudicated.) Moreover, if petitions are highly concentrated in a small set of constituencies, the Floor may decide to allow individual members to deal with them in an ombudsman

strategy or a select committee strategy. Put differently, our model predicts that increasing petition rates generate new committees only conditional on topics and the petitions produced on those topics, in particular the combination of specific knowledge and entropy (dispersion of petitions across districts or constituencies).

The model we have described produces the following stylized facts.

- H1. C is increasing in v; (Lemma 6): the number of committees is increasing in complexity.⁶
- H2. For any T and any C, $|c_{\tau} \tau|$ is decreasing in λ_{τ} (Lemma 3): Increasing numbers of petitions on a topic increase the likelihood of a standing committee being located near to that topic.
- H3. For any given τ and placement of ϕ , the probability of committee creation is increasing in the entropy of petitions across across districts (Lemma 2).
- H4. For each τ , members from more petition-intense districts are more likely to be appointed to the standing committee nearest that topic (Proposition 3).

We now examine how historical evidence aligns with these theoretical predictions by examining historical cases as well as data on committee formation and petitioning.

4 An Illustrative Case: Religious Petitions and the Committee for Religion in Late-Colonial Virginia

Virginia was the largest British American colony and, after Independence, the largest and politically most powerful American state. The Virginia House of Burgesses was, moreover, the first representative assembly in British North America, established in 1619 (Greene 2014). Early in the Burgesses' history, the chamber did in fact structure much of its work upon petitions: As mentioned earlier, Bailey (1979) shows that roughly half of all bills passed by the Burgesses from the late 1600s to the late 1700s started as petitions (see Table A.1). However, in this period, the topics were sufficiently undifferentiated that the House had established two general petitions committees – Propositions and Grievances, and Claims – to deal with petitions, claims and memorials. The Elections Committee also dealt with contested elections cases, which often derived from petitions regarding elections.

⁶Relatedly, the number of topics handled by F is decreasing in v (Lemma 7): the share of topics handled by the floor is decreasing in complexity.

In May 1769, in the midst of the Townshend Act crisis and in the midst of significant tension between Anglicans and Protestant religious minorities (called "Dissenters") (Longmore 1995, 1996), the Burgesses created one of the most important topical committees in American legislative history, the Committee for Religion (Longmore 1996). This committee would persist into the Revolutionary period as the Committee of Religion from 1776 onwards, and would later help draft Virginia's famous statute for religious freedom in 1786.

We examine the Burgesses' Committee for Religion as an illustrative case of an early topic-based committee being created in the midst of increasing (and increasingly complicated) topic-based petitioning. We pose several key questions motivated by our model: (1) Did religious petitioning increase before or as the Committee was created? (2) Did the patterns of assignment to committee for religious petitions change after the creation of the Committee for Religion? (3) Was the geographic distribution of petitions broad enough to plausibly make district referral (which did occur for some religious petitions before 1769) a suboptimal strategy for the Floor? How did the geographic distribution of religious petitions compare to petitions for other subjects? (4) Did the Burgesses populate the new Committee for Religion with members from districts that sent more religious petitions?

To address these questions, we created a new dataset of all 475 petitions introduced to the Burgesses and recorded in the *Journal of the House of Burgesses* beginning in 1766 and covering the next four sessions in the *House* (Kennedy 1906, 1766-1769, 1770-1772). We recorded each petition's county or town of origin (when available), prayer subject, time and order of introduction, and mode of disposition (dealt with in the Committee of the Whole, sent to a member for drawing up a bill, or referred to a standing committee).⁷

The behavior of the House of Burgesses in processing petitions related to religion is presented in Table 1. As suggested by our model, before a topic-specific committee on religious matters was created, the Burgesses assigned most of these petitions to a general committee (the Committee of Propositions and Grievances), but also sent others to the Floor and to individual members. But in 1769, coincident with the creation of the Committee for Religion, the number of petitions incoming to the Burgesses rose threefold compared with the average over the previous three years, and the number of petitions with religious content increased fivefold (from 4.33 to 23).

⁷We coded the subject of the prayer based on keywords ("land," "tobacco," "ferry/ferriage," "allowance," "vestry," "road/roads," etc.) from the Burgesses description of the prayer. We coded a petition as having "religious content" if it concerned a vestry or parish, or a general issue of the rights of religious minorities. Petitions coded as "Vestry" represent are a subset of petitions coded as religious.

Session	Committee	Petitions with	Religious	content petitions	referred to:	
/ Year	for Religion	religious content	Committee for	Committee of	One or More	Committee for
	Created	(total petitions)	Propositions and Grievances	Whole	Members	Religion
1766	No	8 (109)	6 (75%)	1	1#	—
1767	No	5(65)	4 (80%)	0	1	—
1768	No	0(23)	0	0	0	—
1769	Yes	23 (200)	3 (13%)	0	0	20
1770	Yes	11(76)	0	0	0	11

 Table 1 – Religious petitions and the Committee for Religion

Note: difference in probability of referral of a religious petition to Propositions and Grievances before and after May 1769 is statistically significant (t = -4.84; p < 0.001; two-tailed test).

– Referral to members was, in the one (1766) case where the petitioner's geographic constituency

is identified (Lunenberg Parish of Richmond County), to the member from Richmond County.

The 1767 petition was a general petition from Quakers across the colony.

Even as more religious petitions were coming in, religion was also becoming a more complicated topic, and the Burgesses would probably have had a more difficult and costly time dealing with religious petitions in the Committee of the Whole or a general petitions committee. In the midst of the crisis over imposition of the Townshend duties, one historian notes that "the sense of moral crisis" increased (Longmore 1996), and in 1770 Virginia parishioners began petitioning and claiming the right to vote for vestrymen. These vestry matters made for *complicated* hearings. For a single vestry dissolution petition from Stafford County in 1770, the Committee for Religion heard from eight different witnesses who each traveled at least 110 miles to appear at the Burgesses (in Williamsburg) for two days, spending 4,686 (tobacco) pounds in the process.⁸ As religious debate was common in Virginia in 1769-1770, the Burgesses likely anticipated many of these vestry dissolution and voting rights petitions coming in 1769 and even before. A reasonable interpretation was not only that λ_{τ} had increased for the petitions topic, but that the informational distance separating the Floor from the topic of religion (the quantity $|\phi - \tau|$ in our model) had also grown considerably by 1769 and 1770 (Longmore 1995, 1996).

Furthermore, the very first activities of the Committee for Religion were to receive petitions (Longmore 1996; Purdie 1777, p. 781, pp. 195-196); in his study of the Committee, historian Paul Longmore emphasizes its work with religious petitions, especially on vestry matters (see also (Pargellis 1927).) In 1769, the Burgesses referred all but three petitions with religious content (over eight-five percent) to the Committee for Religion. The remaining three were referred to the Committee for Propositions and Grievances. Unlike the previous three years, not one religious petition was referred to an individual member, nor were any disposed of in the Committee of the Whole. An even heavier reliance upon the Committee for Religion is witnessed

⁸See Purdie (1777, p. 78). The Burgesses told the petition subscribers to pay these expenses, but the imposition upon the Burgesses' time would still have been considerable, especially for a single petition.

in the 1770 session, when all of the religious-themed petitions were referred to this new standing committee. While this case study does not position us to untangle precise causal pathways, the available historical accounts (Longmore 1995, 1996) do make clear the central role of petitions in the new committee's activities.

4.1 The Geographic Distribution of Vestry-related Petitions

To address the entropy hypothesis, we calculate the average geographic entropy of religious petitions compared to a selection of other topics (see Table A.4). In addition to the "religious content" measure used earlier, we also highlight petitions specifically covering "vestry" issues, following Longmore (1995), as the subjects of vestry management, vestry dissolution and vestry division were critical in church politics in Virginia.

Of the petition-based subjects, only tobacco had a higher entropy than vestry-related petitions; ordering the topics based on magnitude of the entropy, Religion follows Vestry immediately. Consistent with our model, Vestry petitions were also commonly referred to a standing committee rather than to specific members, even before creation of the Committee for Religion. Examining the entropy of petitions that were referred to committees, only the Elections committee received petitions with greater geographic entropy than that of the petitions referred to the Committee for Religion.⁹

4.2 Appointments and the Geography of Religious Petitions

Finally, for a given committee, our theory suggests that the Floor will tend to appoint representatives from districts that supply more petitions related to the committee's topic.

We leverage an interesting moment in the history of the Committee for Religion, namely that it doubled in size (with George Washington as one of the Burgesses added) shortly after it was created. The Committee on Religion's original size was 22 Burgesses. By the end of the spring 1769 session, 26 Burgesses had been added to the Committee. Neither the size nor the scale of committee growth was observed for other Burgesses Committees in the 1769 session. To take the two largest committees of the time, the Committee

⁹In Figure A.2, we show that the geographic pattern of petitions on vestries and "division" (which was often for the division of an Anglican parish) were also not as highly correlated with the most common petition topics of the period (relief and allowances ("claims"), tobacco, roads, ferry and ferries, land). The geographic patterns for religious petitions correlate slightly more with those of other topics, but on the all-divisive issue of vestries and parish division (Longmore 1995, 1996), petitions came from a distinct set of counties and districts. This geographic pattern further boosts the rationale for creating a new standing committee, since other committees or the Floor would have had to expend resources to dispose of these petitions.

on Propositions and Grievances started with 47 members, to which ten Burgesses were added by the end of Spring session. The Committee of Claims' original size in the 1769 session was 30, to which five Burgesses were added by end of Spring session.

We regard these changes as important because religious issues were being actively discussed in the 1769 session (Longmore 1995). We measure new appointments from counties after the initial creation of the Committee on May 6, 1769 to the end of the session on May 17th, 1769. We regress this quantity upon the petitions aggregates from these counties; the results appear in Table 2. In columns 1 and 2 we use all petitions to May 1769. For column 3 we use only those petitions that arrived between May 6th and May 17th. The first approach uses all petitions, while the second provides a more exact measure of the most relevant petitions, received only after the creation of the Committee but before its expansion.

Table 2 – Committee Appointments and Petitions, Virginia House of Burgesses, by County

	Change in Appointments				
	(1)	(2)	(3)		
Vestry (Pre-Additions)	0.355**	0.350**			
	(0.148)	(0.158)			
Vestry (May Interval)	. ,		0.314*		
			(0.161)		
Relief		0.113			
		(0.201)			
Tobacco		-0.080			
		(0.153)			
Land		0.019			
		(0.079)			
Ferry		0.031			
		(0.083)			
Election		-0.224			
		(0.304)			
Allowance		-0.056			
		(0.352)			
Division		0.108^{**}			
		(0.046)			
Warehouse		0.031			
		(0.147)			
Roads		-0.025			
		(0.232)			
Constant	0.406^{***}	0.327**	0.373***		
	(0.081)	(0.129)	(0.081)		
Ν	60	60	63		
\mathbb{R}^2	0.090	0.221	0.058		

p < .1; p < .05; p < .01

Standard errors in parentheses

The regression results in Table 2 suggest that among the various petition subjects, districts sending vestry-related petitions were more likely to supply additional appointments to the Religion committee in the May 1769 session. Each vestry-related petition from a district is associated with another 0.36 appointments to the committee, and the results are statistically distinguishable from zero in a small sample (p < 0.05). Even with a stricter measure of vestry petitions, restricting only to petitions that arrived in the 11 days between the creation of the Committee and the end of the May 1769 session, the value of the coefficient estimate roughly equals the estimate for the other measure of Vestry petitions. The standard error of the estimate is slightly larger but still statistically distinguishable from zero at p < 0.10. As we know that vestry petitions came from different constituencies relative to other topics, the results also accord with Detweiler's (1972) study of political factionalism in eighteenth-century Virginia. As Detweiler notes, the Speaker was usually from the eastern "Tidewater" region, which also dominated the standing committee assignments. Yet the petitions that came in on vestry matters in 1769 represented a number of western counties,¹⁰ and members from these counties were correspondingly added to the Committee for Religion (though Detweiler does not identify petitions as a critical mechanism linking constituencies to the Committee for Religion).

The intertwined development of petitioning and committee formation in North American colonial assemblies needs further investigation. While the link is clear in the case of Virginia religious petitions we discuss here, the relationship may or may not prevail in other colonies or across colonies. In any such investigation, our model and theory would emphasize the changing complexity of petitions, the distribution of petitions and topics across constituencies, and the disposition of petitions by newly created committees.

5 Petitions and Committee Formation in the Early House

Like Virginia's House of Burgesses and other early American legislatures (Squire 2012), the early U.S. House found itself flooded with petitions. The early congresses wrestled with how to manage them, deliberate upon them, and dispose of them: "By the middle of Congress's second session, the process of petitioning began to be stifled by its own success. The flow of petitions – mostly Revolutionary War Claims – was at full flood" (Bowling, DiGiacomantonio, and Bickford 1998, p. xi). So consumed by the discussion of petitions was the early Congress that one editorial writer ("Candidus") wrote in 1790 in the *Gazette of the United States* and

¹⁰Four from Spotsylvania, others from Loudoun, which Detweiler codes as "western counties," and others from Prince William and Stafford, which Detweiler codes as 'western-Tidewater" counties (Table IV.A, 282)

wondered aloud "Why is so much attention paid to trifling memorials? [...] And why should we support men at Congress to trifle away their time upon them?" (Bowling, DiGiacomantonio, and Bickford 1998, p. xi).

The answer to questions of this kind is obvious. Justice is uniform. It is the same when administered to an individual, a state or a nation... Much depends on public opinion in matters relating to government. Some deference therefore should be paid to it. *In order to gain the confidence of the people they must be fully convinced that their memorials and petitions will be duly attended to...* [Emphasis added.]

Candidus' words reminded his fellow readers, and remind us now, that petitioning was sacrosanct in early America. Petitioning was protected along with the rights of speech, press and peaceful assembly in the First Amendment. No such protection was accorded to voting at the time. The idea that each and every individual citizen had a privilege of hearing before the American government – according to a principle of justice – became a form of equal standing before the legislature, one that echoes equality of standing in American courts (McKinley 2016). And while congressional petitioning patterns owed much to British precedent, the protections for petitioning in the American constitution were stronger than those in Britain. Britain, after all, continued to be governed (albeit as much in the breach as in the fidelity) by the Act Against Tumultuous Petitioning of 1662 (Carpenter 2016). And when British mass petitioning exploded in the Chartist movement of the late 1830s and early 1840s, it was met with suppression of the sort that would never have been counseled in the United States.

5.1 Tracing and Classifying Petitions through The House Journal – A New Dataset

Scholars and students of U.S. history and the U.S. Congress have lacked access to systematic data tracking petitioning because petitions can be difficult to trace. Assuming the fidelity of archival collections, systematic research in archives can offer data for aggregation of petitions over time and across geographical constituencies (Carpenter and Moore 2014). Yet the reliability of these archives varies heavily – many antislavery petitions after the 28th Congress, for instance, have been lost to deterioration or fire – and the collection of systematic data remains highly costly.

We adopt an alternative strategy, exploiting the fact that each petition sent to Congress would customarily be read on the Floor of the appropriate chamber. Using legislative records that trace legislative action on a daily basis permits researchers to capture the daily introduction and initial disposition of petitions. Other scholars have followed this lead, though usually only for specific issues or bills. Theriault (2003) draws upon the *Congressional Record* to construct a measure of petitions received per member in the debate over the Pendleton Act of 1883. Carpenter and Schneer (2015) draw upon the *Globe* and the *Register of Debates* to track petitions sent to Congress on the issue of reauthorization of the Second Bank of the United States. Schneer (2016) draws upon the *Congressional Record* to construct a measure of petitioning activity before and after the 17th Amendment.

We created an original data set consisting of 141,696 petitions presented to the House between 1789 (1st Congress) and 1875 (43rd Congress) as recorded in the *Journal of the House of Representatives*. Appendix A.2 reports details on construction of this data set.

Examining the formation of select and standing committees from petitions also requires topical classifications that place each petition into a plausible category linking the subject of the petition with the subject of the committee.¹¹ The difficulty of performing this classification points to the inherent complexity of jurisdictions (King 1997). Jurisdictions were all the more complicated in a new legislature whose categories were being defined by a new nation facing new problems. In a way, we think, the early House faced a problem not unlike that of a strategic but informationally and behaviorally constrained statistical classifier attempting to produce a "topic model" for a set of expressions. The desiderata of these early Congresses were of course quite different: electoral incentives, the ever-looming threat of armed insurrection by disgruntled petitioners (especially military veterans), or individual turf incentives for issues they or their constituents cared about.

Furthermore, the classification step, which is crucial to tracing the inflow of petitions to committees, must occur without using information on committee referrals. To do this, we have adopted a supervised learning approach where human coders have classified petitions into a set of mutually exclusive categories based primarily upon codings used by Poole and Rosenthal (1997) for bills. We have then used these codings to infer the correct classification for the remaining petitions (See Appendix A.3 for technical details of the classification process).

We have selected a standard set of topic categories already widely used in studies of legislative voting over the long run (Poole and Rosenthal 1997). The problem of creating a set of topics to categorize petitions is not vastly different from the problem of classifying legislation, but classifying petitions does depart from classifying legislation in a few important ways and, as a result, we do supplement the existing codes from Poole and Rosenthal (1997). First, because roll call votes reflect a later stage of the legislative process than petitions, we have also incorporated a set of categories developed by the Library of Virginia (LOV),

¹¹Doing otherwise would bias petition topic classifications towards the topics covered by existing committees.

which has digitized thousands of pre-Reconstruction legislative petitions. One important addition from the LOV effort is a category on Native Americans or "Indians," which is missing from the Poole and Rosenthal categorization. The other categories drawn from the LOV include Private Relief/Compensation, Roads/Turnpike Companies, Schools/Universities, Free Negroes, Manufacturers/Manufacturing Companies and Militia/Public Guard. Second, the Poole and Rosenthal codes employ several categories, such as nuclear arms, that apply little or not at all to the period covered by our database. We have removed these topics. Table A.6 (left column) lists the full set of categories used.

5.2 Standing Committee Formation

Building on classic studies by McConachie (1898) and Cooper (1970), recent political science research has shown that critical developments in the standing committee system of the House occurred between 1810 and 1825, and that party and chamber leadership (especially of Henry Clay) was crucial to the development of these committees and to their assignments (Gamm and Shepsle 1989; Jenkins 1998; Jenkins and Stewart 2012).

The emergence of petitions and jurisdictions in the early U.S. Congress is itself difficult to study, given not least that petitions were often sent to particular committees (whose members and chairs may have invited them), and that House leaders likely created certain committees to deal with business that had been composed substantially by petitions in the first place. The question of whether *particular* thematic committees formed in this period, for some jurisdictions before others, has not attracted as much scholarly attention.

The analysis of standing committees over time is complicated by the fact that many standing committees were created only later in the antebellum period, with few standing committees created before 1800 (Gamm and Shepsle 1989). Students and scholars interested in detecting linkages will therefore note that only as select committees begin to fade away do a large number of standing committees begin to emerge. These standing committees and their order of appearance appear in Table A.5 (Canon, Nelson, and Stewart 2010).

5.3 Linking Petitions to Standing Committees By Topic

As an analytic starting point, we draw upon the thematic categories introduced in Section 5.1. We know that petitions arrived in these categories variably over time.

To trace the creation of new standing committees as a function of the inflow of petitions, we must identify how petitions are linked to standing committees in terms of subject matter. We have done this manually, assigning at least one committee (and sometimes several) to topics. The idea is that petitions classified on a topic would likely be referred to one of the linked committees if the committee existed when Congress received the petition. We endeavored to define these linkages in as unbiased a way as possible, though the nature of this task is unavoidably subjective to some degree. First, we defined the links entirely ex ante – before conducting analysis. Second, multiple researchers evaluated the topics and committees in order to agree upon a consensus list. Third, and perhaps most importantly, it is crucial to keep in mind that any debatable or potentially problematic links (i.e., instances where a link should exist but does not or a case where a link does not exist but should) can be seen as a source of random error that will on average add additional noise to our estimates and make it more difficult to observe an empirical relationship between petitioning and the development of standing committees. For reference, Table A.6 denotes the mapping of standing committees to topics.

5.4 Panel Estimation

We can observe time-series cross-sectional variation in the emergence of standing committees based on the inflow of petitions on different topics. We then turn to examine *whether changes in petitioning by topic were associated with changes in standing committee formation*, one of the key hypotheses derived from our model.

Turning to estimation, our dependent variable is, for each topic and each congress, the number of standing committees that exist at that time. Our principal independent variable is, again for each topic and each congress, the number of petitions recorded in the *House Journal*. With data spanning 43 congresses, our number of time periods is relatively large and resembles a "long panel" (though we still have t < i); as a result, the model that best fits the data will likely be dynamic (Greene 2003, p. 410). The standard approach to fitting data in a long panel to an empirical model is to include a group fixed effect and a lagged dependent variable. However, given concerns about inconsistency and bias arising from including a lagged dependent variable, particularly in the presence of serially correlated errors, we elect to report results taking several different estimation approaches.

First, results from fixed-effects panel estimation appear in Table 3. The specifications control for time effects with a linear Congress time trend, and we do not include the lag of committees from the previous period. We are cautious about making any strong causal inference claims from these data because for one there may exist "pure" endogeneity, whereby petitions arriving in a given congress are sent because there is a (new) committee to receive them or because constituents expect such a committee to be created in the future.

We initially estimated the relationship linearly, with number of committees regressed upon number of petitions and with different lag structures, which produces a positive and statistically significant estimate.

Table 3 – Log-log regressions of standing committees upon petitions, by topic and congress, 1st through 43rd Congresses. Topics Paired With Multiple Committees

				All				1st-36th C	ongresses
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)
$\ln(Petitions)$	0.048^{***} (0.006)			0.019^{**} (0.007)	0.040^{***} (0.009)	0.025^{**} (0.011)	0.042^{***} (0.011)	0.035^{***} (0.009)	0.044^{***} (0.013)
Entropy		0.066^{**} (0.010)				-0.005 (0.016)	0.015 (0.015)		0.006 (0.018)
Complexity			0.019 (0.049)		0.108^{**} (0.048)		0.138^{**} (0.048)		0.166^{***} (0.061)
$\ln(PresMessage)$					0.001 (0.001)	0.002^{**} (0.001)	0.002 (0.001)		0.002 (0.001)
$\ln(Petitions_{t-1})$				0.018^{**} (0.008)	0.027^{**} (0.008)	0.020^{**} (0.008)	0.025^{***} (0.008)	0.015 (0.010)	0.018^{*} (0.010)
$\ln(Petitions_{t-2})$				0.011 (0.008)	0.027^{***} (0.008)	0.018^{**} (0.008)	0.025^{***} (0.008)	(0.008)	0.014 (0.010)
$\ln(Petitions_{t-3})$				0.005 (0.008)					
$\ln(Petitions_{t-4})$				0.002 (0.008)					
$\ln(Petitions_{t-5})$				0.006 (0.008)					
Share Newspaper Articles On Topic							-0.015 (2.445)		
Constant	0.163^{**} (0.010)	0.172^{***} (0.010)	0.284^{***} (0.041)	0.269^{***} (0.011)	0.154^{**} (0.045)	0.197^{***} (0.011)	0.046 (0.050)	0.118^{**} (0.012)	-0.016 (0.056)
Congress Trend Topic FEs N	Yes Yes 3483	Yes Yes 3483	Yes Yes 1415	Yes Yes 3078	Yes Yes 1176	Yes Yes 3321	Yes Yes 1386	Yes Yes 2673	Yes Yes 990
Standard errors in $p < 0.10, ** p < 0$.	parentheses $.05, *** p <$	0.01							

However, a log-log relationship, where there are diminishing returns both to high numbers of petitions and high numbers of committees, strikes us as conceptually appropriate and we quickly turned to it.

As reported in the Table, we regressed standing committees on the inflow of petitions by topic while including a Congress time trend as a control. In this sparse specification, we observe a positive relationship between the inflow of petitions and creation of standing committees in a given topic. When regressing committees in a topic area on the geographic spread (entropy) of the petition inflow, we similarly observe a positive and statistically significant relationship between these two factors. On the other hand, regressing committees in a topic area on the complexity of the petitions in that topic, we do not observe a statistically significant relationship.

Next, we explore the time structure of the relationship between petitioning and committee formation by estimating the relationship with five lags of the petition count variable. We found that only the most recent petition variables (current congress and one and two congress lags) yielded substantively or statistically significant coefficient estimates. The relationship between petitions from the previous Congress and committee formation was particularly strong. Given these results, we elected to include petitions and their lags from the last two congresses in subsequent specifications, based on the logic that creation may take several congresses to occur; sustained petitioning in a topic area for several congresses would therefore be predictive of committee formation.

Because Specifications 1 and 4–9 regress the logarithm of committees on the logarithm of petitions, the estimates are amenable to interpretation as elasticities. Specification 5 of Table 3 suggests, for instance, that a 100-percent increase in petitions on a topic for three congresses in a row is associated with a nine percent increase in the number of standing committees devoted to that same topic in that congress (.04 + .026 + .027 = .093). These estimates persist when controlling for measures of what topics are on the national agenda. Specifically, we determined the word count apportioned to each topic over time in the President's Annual Messages to Congress, and we include this as a control variable in Models 5, 6, 7, and 9. Similarly, we included as a control a measure of contemporaneous newspaper coverage of the issues in each topic area (detailed in Section A.4). In each case, controlling for measures of the outside agenda does not alter the relationship between our key variables and committee formation in a topic area.

Similarly strong results are obtained when restricting the sample to pre-Civil War congresses. For example, in Specification 8 of Table 3 we estimate that a doubling of the number of petitions in a given congress and the two congresses before are associated with a six percent increase in the number of committees associated with that topic. Specification 9, which includes controls, yields similar results. While these elasticities may not appear large, it is important to keep in mind that the congress-to-congress variation in petitions is much higher than the congress-to-congress variation in standing committees. Many-fold increases in petitions by topic across congresses occur quite commonly, in fact, not least for the earlier congresses of our period. Hence the results offer plausible explanatory power for the creation of a number of committees by topic in different general themes.

Next, we account explicitly for control of Congress by a specific political party, or control of the chamber by a specific Speaker of the House, in the development of standing committees. Failing to account for changes in Speaker or party could lead us to attribute to petitions changes in committee development that are better explained by other institutional factors. Table A.7 in the Appendix reports results for our basic specifications from Table 3 while also including dummy variables for each party holding a majority in Congress and for individual House Speakers. Including these additional controls does not meaningfully alter our conclusions from our primary specifications. We continue to find significant relationships between committee development and the number of petitions and geographic spread of petitions.

One concern with the regression framework we have used is that the outcome variable is highly persistent, or "sticky," from congress to congress. Furthermore, because Congress has generally been more likely to create additional committees rather than eliminate them, the outcome variable does not ever revert to zero. In this sense, past values of committees clearly relate to future values. We therefore also estimate a set of specifications that include a lagged dependent variable, which we present in Table A.8. Although inclusion of a lagged dependent variable may downwardly bias other coefficients in the presence of even mild serial correlation (Achen 2000; Wooldridge 2015), we observe a positive and significant effect for petitions or lagged petitions for all of the 7 specifications that include measures of petitioning, though with diminished magnitudes as compared to Table 3.¹²

5.4.1 Petitions Invited by Legislators

While the panel data techniques applied thus far point towards petitions predicting formation of standing committees, plausible alternatives also exist. One such account might be that petitions resulted from the actions of members of Congress. For example, Carpenter and Schneer (2015) detail Henry Clay's attempts to encourage constituents to petition against Andrew Jackson's removal of deposits from the Bank of the

¹²We present an another approach designed to account for violations of strict exogeneity due to including a lagged dependent variable in Appendix Table A.9.

United States. In this top-down account, members of Congress would place issues on the agenda by seeking support from petitioners.

We have several responses to this concern. First, if petitions were invited by legislators, then clearly petitions played a meaningful role in the proceedings of Congress. Members went through the trouble of having them sent in, which partially supports our theoretical account of the importance of petitioning. Second, our controls for presidential messages to Congress and newspaper coverage ought to pick up and control for issues placed on the agenda by elites. When including these controls, we do not observe meaningful changes in our estimates.

5.4.2 Complexity of Petitions and Committee Formation

Our theoretical model also predicts that more complex topics will increase the probability of committee formation. To test this hypothesis, we developed a measure of complexity based on the similarity of textual descriptions for each petition in a given topic, based on the idea that a topic with petitions all making the same type of request is less complex than a topic in which there are a more varied set of requests.¹³¹⁴

We calculated measures of complexity for each topic pooling across all years in our sample and, separately, for each Congress. Figure 1 shows the relationship between committee formation and complexity of a petition topic when collapsing across time. Our measure of complexity ranges from 0 to 2, though in our data the least complex topic, "Presidential Impeachment," has a value of 0.37. The plot is relatively flat, but with a slight upward slope particularly for issues with higher levels of complexity. For example, "Public Works" is an outlier both in its complexity and in the number of committees that fall into that category in our time period. Other topics that are more complex and have a high number of committees include Budget

$$\operatorname{similarity}_{\tau} = \frac{\mathbf{I} \cdot \mathbf{J}}{\|\mathbf{I}\|_2 \|\mathbf{J}\|_2} \tag{7}$$

where **I** and **J** are vectors of the two petitions' word frequencies. Then, for a topic τ with petitions 1,2,..., λ_{τ} , calculate the topic's *complexity*

$$r_{\tau} = 1 - \frac{\sum_{1}^{\lambda_{\tau}} \text{similarity}_{\tau}}{\lambda_{\tau}} \tag{8}$$

¹³One notable exception might be instances where a topic generated a few well-organized campaigns all making the same request and therefore producing the same text in the account of proceedings in the House.

¹⁴For a given topic, consider a document term matrix where the rows correspond to petitions on a topic, λ_{τ} , and the columns correspond to word frequencies. To calculate the cosine similarity between petitions *i* and *j*, find

and Militia/Public Guard. Overall, however, collapsing across time and over other covariates appears to obscure any robust relationship between complexity and committee formation.



Figure 1 – Committee Formation and Complexity of Petition Topics

We also include our measure of complexity as a covariate in our regressions of standing committees on petitions in Table 3. Including this measure restricts our sample to only those observations for which we observed two or more petitions for a given topic and Congress. Nonetheless, we observe a positive association between committee formation and complexity across all of our specifications. When we include the full set of covariates (Specification 7), the relationship between complexity of petitions and committee formation is statistically distinguishable from zero at p < 0.05. Furthermore, when we restrict the sample to the pre-Civil War Congresses, the relationship between complexity and committee formation is positive and significant at p < 0.01. In terms of magnitude, an increase in the complexity of petitions from the level of "Presidential Impeachment" to the level of complexity of petitions on "Public Works" represents an increase in the probability of committee formation of about 6 percent (Specification 7).

5.4.3 Geographic Spread / Entropy of Petitions and Committee Formation

Beyond the volume of petitions, our formal model also predicted a link between the geographic entropy of petitions and committee formation. That is, as the geographic entropy of the petitions received increases, so too should the likelihood of committee formation. To assess this prediction, we first included a measure of geographic entropy within topics. Here, because we lack fine-grained data on the geographic origins of some petitions, we code petitions by state and use variation across states to construct the entropy measure, $S_t = -\sum_i p_{it} \cdot log(p_{it})$ with p_{it} representing the share of petitions from a given state for a Congress. The entropy score S_t takes on a higher value when the geographic spread of petitions is more dispersed, and it takes on a lower value when the geographic spread of petitions is more concentrated.

We included this variable in our primary estimation framework in Table 3. In Specification 2, we observe a positive correlation with committee formation when we include geographic dispersion as the only explanatory variable in the model. However, we do not find evidence as robust in favor of a link between geographic dispersion of petitions and committee formation as we did for the sheer volume of petitions. When including other controls, the point estimate on entropy is close to (and the 95% confidence intervals overlap with) zero. One reason for this is that entropy is highly correlated with the number of petitions; a high level of geographic spread requires a high level of petitions in the first place.

We also calculated entropy scores for each topic in the aggregate (i.e., collapsing across time). Figure A.3 in the Appendix plots the number of total committees created that are related to a topic area against the topic's entropy score. The relationship appears relatively flat, but slopes upwards for committees with entropy scores greater than 2.

Overall, the evidence is mixed when it comes to the relationship between creation of committees and geographic spread of petitions. In a regression framework, there is a positive correlation between geographic entropy and committee creation, but it is not robust; when conditioning on the number of petitions the relationship weakens. Similarly, collapsing across time and examining a cross section of topics, we observe a weakly positive relationship between the geographic entropy of petitions and committee formation.

Last of all, individual examples from the historical record of committee creation and development appear to accord with our model's predictions about petition inflows and committees. One notable case involves the Committee on Commerce and Manufactures – initially one committee addressed these two related but distinct topics; however, after an increase of petitions on manufacturing occurred for several congresses, the benefits of a two-committee configuration grew clearer. Appendix A.5 provides a more detailed historical case study of this episode, and Figure A.1 illustrates the uptick in Manufactures-related petitions occurring before the committee split. In terms of our model's framework, the pre-1819 configuration amounted to having one committee placed between topics of "commerce" and "manufactures" – not an optimal placement based on our theory. When the ratio of manufactures to commerce petitions became large enough (and informational losses mounted), it triggered the creation of a new committee allowing each topic to be dealt with separately.

6 Conclusion

Petitions inundated early American legislatures but figure little in scholarly accounts of the development of these chambers. Petitions anticipated committee development not so much in the aggregate as in specific topics, the themes of citizen discontent or aspiration to which they gave voice. Our argument centers on the varied ways that emerging legislatures could deal with petitions – by disposition on the Floor itself, by assignment to a select committee without durable jurisdiction, by individual ombudsmanship, or by referral to a standing committee. Petitions generated new committees when they exhibited *topical specificity* and *geographic generality* – when they arrived on particular topics for which the legislature had no expertise, but where the topics were sufficiently geographically dispersed so that reference to representatives of local constituency was clearly inefficient or inappropriate.

Our theory of the development of committees explicitly accounts for the vast and varied inflow of petitions to legislatures at precisely the time when committees were developing. Our model makes several key predictions. We predict that the formation of a committee to deal with a given topic is a positive function of (1) the inflow of petitions on that topic, (2) the geographic spread or entropy of petitions, and (3) the complexity of the subject matter captured in a topic's petitions. Furthermore, members from districts sending more petitions on a topic will be more likely to be appointed to a standing committee related to that topic. The theory is at present decision-theoretic – early committees were created by the Floor and by the Floor alone – yet rich theoretical progress will be made, we think, when more dynamic and strategic considerations are explicitly theorized.

Our empirical analysis begins illustratively, examining one of the most important topical committees established by any early American legislature, the Committee for Religion of the Virginia House of Burgesses established in May 1769, using original data on the petitions sent to the Burgesses from 1766 to 1770. We further examine the development of standing committees in the U.S. House of Representatives by gathering and analyzing a large, original dataset of over 100,000 petitions sent to the U.S. House from the First through Forty-Third Congresses, combined with analysis of related standing committee data. Our findings suggest that mass arrival of petitions on a given topic was indeed a forerunner of standing committee creation in that general thematic area, and that the geographic spread of petitions and their complexity were also positively linked to the formation of standing committees. These predictions could easily be applied to other emerging legislatures in the American context (Squire 2012) or in a comparative historical context. Testing these accounts requires granular data on the petitions themselves or other constituent demands, both the subjects they represent and the constituencies from which they flow.

What do these patterns mean for theories of legislative organization and accounts of institutional development in early legislatures? In part, our account supports the original interpretation of Cooper (1971), who pointed to workload considerations of the chamber. Like Cooper, our study points to the need to respond to petitions as a rationale complementary to reducing corruption in the early development of American institutions (Gailmard 2017). Yet far beyond workload, petitions represented informative constituency claims, both identifying problems for discussion and proposing particular solutions. They also represented information conveyed in statistics, in narrative and testimonials, in accounts of monies lost, in maps and projections. And increasingly in the nineteenth century and into the twentieth century, as petitions were accompanied by mass signatory lists, they conveyed political information, signals to the legislature of the size or growth of an issue-specific constituency.

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Appendix: Supporting Information for

Petitions and Legislative Committee Formation: Theory and Evidence from Revolutionary Virginia and the Early U.S. House

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A.1 A Model of Petitioning and Committee Formation: Proofs

A.1.1 Proof of Lemma 1

Proof: We begin by showing that F will never allocate to any committee besides c_{τ} , the committee closest to topic τ .

Suppose in addition to c_{τ} there exists another committee c_{η} . Denote the location of c_{τ} as t on the interval Vand denote the location of c_{η} as $t' = t + \epsilon$. By definition, $|c_{\tau} - \tau| \equiv |t - \tau| \leq |t + \epsilon - \tau| \equiv |c_{\eta} - \tau|$. As a result, the loss function for disposing of the petition for topic τ using committee c_{η} is $L_{c_{\eta}}^{\tau} = \lambda_{\tau} |c_{\eta} - \tau| \geq \lambda_{\tau} |c_{\tau} - \tau| = L_{c_{\tau}}^{\tau}$ for all $\lambda_{\tau} > 0$. This holds true for any alternative committee at a location t'.

Next we show that if $|\phi - \tau| \leq |c_{\tau} - \tau|$, then F handles τ itself. This follows from a comparison of the loss functions L_F^{τ} and $L_{c_{\tau}}^{\tau}$. Given the preceding inequality, we know that $L_F^{\tau} = \lambda_{\tau} |\phi - \tau| \leq \lambda_{\tau} |c_{\tau} - \tau| = L_{c_{\tau}}^{\tau}$ for all $\lambda_{\tau} > 0$. A floor seeking to minimize the loss function will therefore always choose to handle these petitions on its own when $|\phi - \tau| \leq |c_{\tau} - \tau|$ and will defer to committee c_{τ} otherwise.

A.1.2 Proof of Lemma 2

Proof: We start by showing that lemma 1 implies L_C is continuous in each value of c. Recall that c occupies a point on the interval V so this is equivalent to showing that L_C is continuous on the interval V. Furthermore, using the fact that a sum of a finite number of continuous functions is also continuous, it should suffice to show that L_c^{τ} and L_F^{τ} are continuous on V. But recall that each of these functions is an absolute value function of the form $a \cdot |x-h| + k$, which is known to be continuous everywhere.

Further, the choice space for committee placements is $\times_{i=1}^{C} V$, which is compact because V is compact. The conclusion follows from the extreme value theorem.

A.1.3 Proof of Lemma 3

Proof: To generalize the results to a fixed number of topics T and fixed number of committees $C \ge 1$, first note that an optimal placement of committees will coincide with locating the committee exactly at the location of a topic. This follows from the fact that costs increase linearly as distance between topics and committees increase.

Define $L_i^F = \lambda_i | \phi - \tau_i |$ where we index a sequence of L_1^F, \dots, L_T^F in order of increasing (petition-weighted) distance of the topics from the location of the floor, so that $L_1^F \leq L_2^F \leq \dots \leq L_T^F$. For $C \in [1,T]$, placement of the first committee will be at τ_T . For placement of the next committee, recalculate $Z_i = \min(\lambda_i | \phi - \tau_i |, \lambda_i | \tau_T - \tau_i |)$ and place in order of increasing magnitude, so that $Z_1 \leq Z_2 \leq \dots \leq Z_{T-1}$. Placement of the next committee will be exactly at the location of the topic with the greatest loss function Z_{T-1} . The algorithm continues until all committees have been placed.

To see the proof of why this approach must be optimal, suppose that a committee placement did not follow this sequence for placement of a committee c, which was instead placed at the value that minimized Z_j rather than Z_k where $Z_j < Z_k$. By definition we know we could always further reduce L_C from Equation 1 by choosing the location that minimizes Z_k .

Now, returning to Lemma 3, consider an increase in λ_{τ} for a topic τ . The quantity $|c_{\tau} - \tau|$ is determined by the placement of the closest committee. First note that an increase in the number of petitions in a topic area will not change the allocation of topics to committees versus the floor, by Lemma 1, unless the placement of a committee changes. As demonstrated above, Congress evaluates the sequence $Z_1 \leq Z_2 \leq \cdots \leq Z_{\tau} \leq \cdots \leq Z_T$. For $\lambda_{\tau} \leq \lambda'_{\tau}$, note that $Z_{\tau} = \min(\lambda_{\tau} | \phi - \tau |, \lambda_{\tau} | c_{\tau} - \tau |) \leq \min(\lambda'_{\tau} | \phi - \tau |, \lambda'_{\tau} | c_{\tau} - \tau |) = Z'_{\tau}$ when the change in λ_{τ} does not change the ordering of Z_i 's. Under this scenario, the quantity $|c_{\tau} - \tau|$ is weakly decreasing since the location of c_{τ} does not change. On the other hand, if the increase in λ_{τ} does change the ordering, it will only do so by increasing Z_{τ} to the point where $Z_{\tau} > Z_T$ and a committee is placed directly at τ . For the $\hat{\lambda}_{\tau}$ such that $Z_{\tau} > Z_T$, $|c_{\tau} - \tau| = 0$ and therefore some $\hat{\lambda}_{\tau}$ exists such that $|c_{\tau} - \tau|$ is strictly decreasing.

A.1.4 Proof of Lemma 4

Proof: U_C is nonpositive because C committees cannot have a strictly larger total distance from T topics than can C-1 committees.

To see that U_C is strictly decreasing in C for $1 \leq C \leq T$: Recall from Lemma 3 that the placement of committees depends on the sequence $Z_1 \leq Z_2 \leq \cdots \leq Z_\tau \leq \cdots \leq Z_T$ where $Z_\tau = \min(\lambda_\tau | \phi - \tau |, \lambda_\tau | c_\tau - \tau |)$. An additional committee, always placed on a topic τ , can only decrease the quantity $|c_\tau - \tau|$, and in fact will mean $Z_\tau = 0$ for the Cth committee placed at τ . Since $L_1 < L_2 < \cdots < L_T$, the size of the loss reduced decreases for each additional committee (recall from Lemma 3 committees are allocated for topics T, T-1 and so on. As a result, L_C^* is strictly decreasing in C and $U_C = L_C^* - L_{C-1}^* < L_{C-1}^* - L_{C-2}^* = U_{C-1}$, that is, U_C is strictly decreasing in C.

When C > T, $U_C = 0$ because a committee can be placed directly at the location of each topic.

A.1.5 Proof of Lemma 5

Proof: When we set C = T + 1, note that we get $U_{T+1} = L_{T+1}^* - L_T^* = 0$ since a committee can be placed directly at each topic for C = T committees, and adding an additional committee does not change that. As a result for any $k_c \ge 0$, we know $C_T^* \le T$. By Lemma 4, U_C is strictly decreasing in C on [1,T], which implies existence and uniqueness.

A.1.6 Proof of Lemma 6

Proof: First, we show that as v increases, $E[|\phi-\tau|]$ increases for any topic. Recall $\tau \sim \text{Unif}[0,v]$ and ϕ is a constant. So, $E[|\phi-\tau|] = \int_0^v |\phi-\tau| \cdot f(\tau) d\tau$. We would like to know the sign of $\frac{d}{dv} \int_0^v |\phi-\tau| \cdot f(\tau) d\tau$. Note that:

$$\begin{aligned} \int_{0}^{v} |\phi - \tau| \cdot f(\tau) d\tau &= \left(\int_{0}^{\phi} (\phi - \tau) \cdot f(\tau) d\tau + \int_{\phi}^{v} (\tau - \phi) \cdot f(\tau) d\tau \right) \\ &= \left(\int_{0}^{\phi} (\phi - \tau) \cdot \frac{1}{\phi} d\tau + \int_{\phi}^{v} (\tau - \phi) \cdot \frac{1}{v - \phi} d\tau \right) \\ &= \phi + \frac{v}{2} \\ &= \frac{d}{dv} \left(\phi + \frac{v}{2} \right) = \frac{1}{2} > 0 \end{aligned}$$
(9)

Because of this result, for a fixed number of topics and committee cost, we see that L_C^* is increasing in v for any C, since L_C^* is the sum of functions of the form shown to be increasing above.

Now we show that L_C^* increases more than L_{C+1}^* . Note that for a given ϕ , the interval V can always be divided into two segments, $V_1 \equiv [0, \phi)$ and $V_2 \equiv [\phi, v]$. Given any ϕ , calculations on V_1 are unaffected by v, as any terms $(\phi - \tau)$ and $|c_{\tau} - \tau|$ are unaffected by v. On V_2 , we take first the one-topic case where the Floor chooses between topic self-allocation and one standing committee creation. Then $L_C^* = \lambda_{\tau}(\phi - \tau)$ and $L_{C+1}^* = \lambda_{\tau}(c-\tau)$. In this case, only L_C^* is affected by v, which follows directly from Lemma 6. But by Equation 1, any L_{C+1}^* will always differ from the corresponding L_C^* by the subtraction of a term involving $(\phi-\tau)$ (because the topic in question is no longer allocated to the floor but now allocated to a committee) and the addition of a term involving $|c_{\tau}-\tau|$. Hence by Lemma 6, L_C^* always has one more $|\phi-\tau|$ term than L_{C+1}^* , which we have already shown increases as v increases uniformly.

Therefore increasing v uniformly increases U_C for $C \leq T$.

A.1.7 Proof of Lemma 7

Proof: First, we show that F will never create a new committee unless it intends to allocate a topic to it. Suppose F did create a new committee c at cost k, but did not allocate a topic to it and that before creating the committee F had a loss function of L_C^* . After creating the new committee, but not allocating any topics to it, we have a loss function of $L_C^* + k_c > L_C^*$. Therefore, conditional on creating a new committee, F is always better off by allocating a topic to it. Since by Lemma 6, the number of committees created is weakly increasing in v and since we have just shown that for an additional committee, the Floor F will allocate a topic to the committee, it follows that the set of topics allocated to the floor is decreasing in number as v increases.

A.2 Construction of House Petitions Dataset

In this Appendix Section we describe the procedures and methods we used to create the petitions dataset from the *Journal of the House of Representatives*, as well as the rationale behind these decisions.

The reliability of debates and deliberative registers for the early congresses is open to scrutiny. For one, as with any *Register of Debates* and any journal, these sources are dependent upon the diligence and completeness of the legislative recording system in place. For another, the early Congress did not have a systematic record-keeping process for petitions of the sort that can be exploited for the late nineteenth and early twentieth centuries, when incoming petitions were assigned tracking numbers.

We began with the Annals of Congress and the Register of Debates, tracing petitions and their disposition. When we turned to the House Journals, we found that our quantitative strategies relying upon the Annals and Register systematically undercounted petitions, with Journal aggregates two or three times as high per congress and often more so. We then focused exclusively upon the House Journal. As early as ten days after the House first achieved a quorum, petitions were presented to the House and recorded in its Journal. The corresponding entries in the House Journal (as well as those in the Senate Journal) are the primary source of our data set. Although there exists some variation to the extent of information included with each petition presentation, the journals usually record the member of Congress presenting the petition, descriptions and/or names of the petitioners, the geographic location of the petitioners, the prayer or request contained in the petition, whether the petition was initially tabled or referred, and – in case of a referral – the destination of said referral. Petitions were frequently referred to committees, but also to members of the executive branch such as the Secretary of State or the Postmaster General.

Since our primary source material consists of records and minutiae of thousands of days of Congressional meetings, gathering this data by hand was not feasible; instead we built and implemented an algorithm that identifies and extracts the associated information for petitions read and presented to Congress. We used an aggregation strategy that depends upon supervised learning. Over a two-year period, human readers (undergraduate students, law students and Ph.D. students) coded over two hundred randomly selected legislative days, noting each petition and, for each petition, a battery of numerical, categorical and text fields. A large number of these legislative calendar days were coded by two or three coders so that reliability statistics could be established. From these human codes, we composed a training dataset that instructed an algorithm below.

These data are far from perfect – any petition missed (or elided with others as "sundry") by the chamber clerks is missing from our data – yet permit historical comparison on a more systematic scale than any previous database.¹⁵

The potential uses of these data are vast and we can but touch barely upon them here. They permit a general accounting of petitioning activity for the U.S. House over time. Yet with further refinement of the data, they also permit more searching analyses of petitioning by constituency (district, state and county or township), as has been conducted for Theriault (2003), Carpenter and Moore (2014), and Carpenter and Schneer (2015).

Analysis of committee formation and petitioning requires some account of how the petitions were introduced and disposed of after having been read upon the House Floor. We begin with two descriptive sketches that together suggest the difficulties faced by the early House in managing an immense flow of petitions. The House and Senate often tabled petitions in their early years, not as a form of rejection but often enough as a result of not having clear procedures or ideas for how to deal with the request or grievance raised in the petition.¹⁶ The *House Journal* permits a clear measurement of tabling as the first disposition of the petition on the Floor. Petitions could be tabled at first only to be taken up later and assigned to a select or standing committee. The algorithm at present identifies only the initial tabling of petitions upon their introduction to the Floor.

 $^{^{15}}$ Also, with the algorithm having been constructed and the human codes archived, the *construction* of the data is replicable – unlike trips to the archive in search of petitions.

¹⁶Note the critical difference between these acts of tabling and the kind of tabling that occurred under the gag rule (Miller 1998). Under the Pinckney gag rule, the House declared that all petitions that would henceforth be sent on themes of slavery would be tabled and, furthermore, would not be read upon the House Floor. The conduct of the House under the Pinckney gag, as well as John Quincy Adams' famous attempts to evade its restrictions, demonstrate as much about pre-existing equilibrium institutions for petition receipt, deliberation and disposition as they do about the gag rule controversy itself.

A.3 Classification of House Petitions Dataset

The classification approach described here is covered in detail in Blackhawk et al. (2020). Coders classified roughly 7,000 petitions in total. After training an ensemble classifier on this set of petitions, we then use the resulting model to predict the category of the remaining petitions in the sample. To implement this approach, we use the text of the description of the petition in the *House Journal* as the primary input. For instance, a petition from March 1, 1836 (24th Congress) was recorded in the House Journal as follows: "Mr Ashley presented a memorial of citizens of St Louis, in the State of Missouri, praying that the Cumberland road may be so located as to pass through the city of St Louis." For the text of each petition, we removed the numbers and punctuation, put all characters in lower case, removed stopwords, stemmed the document, and stripped any remaining whitespace. With what remained, we created a document term matrix indicating the word frequencies for each petition. We removed sparse words (i.e., those that appear very rarely in any documents) and then normalized the word frequencies. With the document term matrix in hand, we trained the classifier on the already-classified petitions and used the results to predict the category for unclassified petitions. The ensemble approach that we implemented consists of two different classifiers: a random forest model and a support vector machine model.¹⁷ To make a classification, each classifier yields a predicted probability for a given category. We averaged across the predicted probabilities to combine the results from both classifiers. This yielded a single predicted probability for each petition denoting the probability of being in a given class.

One point of complication is that any single petition can only be categorized into one of many possible categories. Rather than model all categories simultaneously, we instead simplified the problem by performing separate binary classifications. For example, for the category "JUDICIARY" we placed all coded petitions that fell in this category into the "on-topic" category and all other petitions into the "off-topic" category. We then ran the classifiers on the training set of petitions and recovered predicted probabilities for the full set of petitions in the sample. We repeated this process for each of the seventeen categories. As a result, for each petition we actually estimated the predicted probability that it was on the topic of each of the categories. To make our prediction, we placed the petition into the category with the highest predicted probability. The classification procedure performed well. To test the accuracy of classification using this method, we initially trained the model on ninety percent of the total petitions, and then we made predictions

¹⁷For details on the models, see Friedman, Hastie, and Tibshirani (2001).

on the remaining ten percent of petitions. By comparing our prediction to the actual hand codings, we can assess the performance of the classification procedure implemented.

Across all categories, the classifier placed the petition in the correct category 68% of the time and the approach yielded an F score of 0.71.

A.4 Construction of Newspaper Topic Measure

To construct a measure tracking newspaper coverage of our topics, we scraped the text for over 300,000 digitized newspaper front pages available from the Library of Congress *Chronicling America: Historic American Newspapers* site and used the pre-processing steps described earlier. See http://chroniclingamerica. loc.gov. We then searched for the top 20 keywords associated with each topic and determined the share of articles in each Congress containing one or more keyword. The database was missing data from the 12th to 19th Congresses.

A.5 Commerce and Manufactures: A Case Study

The historical development of individual congressional committees also supports our central hypothesis. Here, we briefly illustrate this point with an examination of the commerce (and manufacturing) committee. In its various incarnations, the commerce committee of the U.S. House has functioned as one of its most important agents in American economic and political history.¹⁸ A range of highly consequential federal programs and agencies was born in legislation produced from this committee, which also oversaw those programs and agencies. These include the Interstate Commerce Act of 1887 (creating the first independent regulatory commission, the Interstate Commerce Commission), the Federal Trade Commission Act of 1913 (creating the FTC), the Food, Drug and Cosmetic Act of 1938, and the Clean Air Act of 1970, among many others.

The House created the Committee on Commerce and Manufactures in 1795 before – in what amounts to the first major splitting of committee jurisdictions in American domestic policy – dividing the two topics between two committees in 1819. Notably, the first call for such a split that we could find came in the form of a petition asking for creation of a standing committee "to watch over the interests of our manufacturing citizens, there not appearing to the memorialists any propriety in the reference of the subjects of Commerce and Manufactures to the same committee" (U.S. 1815, p. 34-35).

What led to this split? A fuller investigation would require a separate paper, but as an initial inquiry into the role of petitions, we examined whether the mix of petitions related to themes of "commerce" and "manufacturing" changed in the early American republic.

We used the petition assignments to committees during the two-committee period (16th - 43rd congress) to train ensemble classifiers to distinguish between commerce-themed and manufacturing-themed petitions.¹⁹ We then used the classifiers to code the petitions referred to the Committee on Commerce and Manufactures (4th - 15th Congress).

The resulting data, illustrated in Figure A.1, reveal a dramatic increase for the manufacturing category immediately before the committee split. The 14th Congress, starting in 1815, marks the first time since the creation of the Committee on Commerce and Manufactures that there were more manufactures than

¹⁸From the Committee on Commerce and Manufactures (created in December 1795), the committee became the Committee on Commerce in 1819, the Committee on Interstate and Foreign Commerce in 1891, and the Committee on Energy and Commerce in 1985.

¹⁹Precision and recall numbers suggest that the models work well. Precision statistics were 0.98 for the Commerce category and 0.96 for the Manufactures category. Recall statistics were 0.99 and 0.85, respectively.

commerce petitions. In terms of our theoretical framework, the pre-1819 committee configuration represented a committee placed between topics of "commerce" and "manufactures" – not an optimal placement based on our theory. Yet with the increase of petitions for the manufacturing topic, the benefits of a two-committee configuration grew clearer. When the ratio of manufactures to commerce petitions crossed the barrier of one, it triggered creation of a new committee.



Figure A.1 – Changes in Composition of Petitions and the Split of Commerce and Manufactures

Discussion reported in the Annals of Congress further supports this interpretation. Originally submitted by Peter Little (DR-MD), a four-term Congressman by the 16th Congress, the consideration to split the committee was opposed by Thomas Newton, Jr. (DR-VA), who had been the chairman of the combined committee since the 10th Congress. Declaring that, in his opinion, the "two subjects had heretofore [...] been properly blended," Newton inquired why they should now be split. In defense of his proposition Little responded that "the subject of manufactures was one of leading importance, and which engrossed much of the attention of the country; that it was not necessarily connected with commerce, their interests being, indeed, frequently at variance; and that the subject was certainly of sufficient magnitude to occupy, of itself, the undivided attention of one committee." After some back-and-forth a third member, James Smith (DR-NC), chimed in that "it was too obvious to be denied, that the separation of two great subjects, and assigning them to different committees, would give to the consideration of both more precision and maturity, as well as greater despatch [sic]." The controversial motion then came to a vote and was affirmed 88-60. Perhaps unsurprisingly, one of the first members named to the newly created Committee of Manufactures was Peter Little of Maryland.²⁰

A.6 Supplementary Tables

Table A.1 – Legislative Enactment Deriving from Petitions, Virginia House of Burgesses, 1690s–1790s (Bailey 1979, p. 64)

	1696	1710	1730	1752	1769-70	1790
Laws originating from petitions	9	5	17	24	49	56
Total number of laws passed	14	17	29	53	89	99
% of laws from petitions	64%	29%	59%	45%	55%	56%

Table A.2 – Petition-Based Standing Committees in Colonial Legislatures, circa 1770 (Squire 2012, Table 2.3, p. 41)

Committees Devoted to Petitions	Total Committees
None	0
Aggrievances	2
Grievances	2
Grievances and Courts of Justice	3
Petitions as may be Brought In,	1
praying for Liberty to Make Sale of Lands	
None	0
None	0
None	2
Propositions and Grievances;	4
Public Claims	
Aggrievances	4
None	0
Grievances	4
Propositions and Grievances;	6
Public Claims	
	Committees Devoted to Petitions None Aggrievances Grievances and Courts of Justice Petitions as may be Brought In, praying for Liberty to Make Sale of Lands None None None Propositions and Grievances; Public Claims Aggrievances Propositions and Grievances; Public Claims

²⁰More traditional accounts of the Commerce-Manufactures split point to tariff concerns, but as Peart (2013) has established, the large uptick in tariff-related petitions comes after the 1819 split, not before.

Congress	Petitions	Bills Introduced
5th (1797–1799)	374	178 (155 roll calls)
10th (1807–1809)	538	173(237)
15th (1817–1819)	$1,\!473$	331 (106)
20th (1827–1829)	2,701	462(233)
25th (1837–1839)	9,400	1176(475)

Table A.3-Petitions and Bill Introductions in the Early U.S. House

Subject	Average Entropy (Entropy / Total Petitions)
Tobacco	0.076
Vestry	0.072
Religion	0.059
Ferry	0.059
Relief	0.039
Allowance	0.016
Committee	Average Entropy (Entropy / Total Petitions)
Elections	0.092
Religion	0.065
Propositions and Grievances	0.035
Whole	0.027
Claims	0.014

Table A.4 – Average Entropy of Petitions by Committee of Referral, 1766-1769

 ${\bf Table} ~ {\bf A.5} - {\rm Creation} ~ {\rm of} ~ {\rm Standing} ~ {\rm Committees} ~ {\rm by} ~ {\rm Congress}$

First Cong.	Last Cong.	Committee
1	53	Elections
3	79	Claims
4	15	Commerce and Manufactures
4	40	Revisal and Unfinished Business
4	79	Ways and Means
8	79	Accounts
9	79	Public Lands
10	79	District of Columbia
10	79	Post Offices and Post Roads
13	79	Judiciary
13	19	Pensions and Revolutionary Claims
13	47	Public Expenditures
14	69	Expend., Navy
14	69	Expend., P.O.
14	69	Expend., State
14	69	Expend., Treasury
14	69	Expend., War
14	69	Expend., Public Buildings
14	61	Private Land Claims
16	79	Agriculture
16	51	Commerce
16	61	Manufactures
17	79	Foreign Affairs
17	79	Indian Affairs
17	79	Military Affairs
17	79	Naval Affairs
19	21	Military Pensions
19	42	Revolutionary Claims
19	79	Territories

Continued...

First Cong.	Last Cong.	Committee
22	79	Invalid Pensions
22	46	Revolutionary Pensions
22	41	Roads and Canals
24	61	Militia
25	69	Mileage
25	79	Patents
25	79	Public Buildings and Grounds
28	36	Engraving
31	79	Rules
36	79	Enrolled Bills
36	79	Library
36	61	Pacific Railroad
36	79	Printing
37	69	Exp., Interior
38	79	Coinage, Weights, and Measures
39	79	Appropriations
39	79	Banking and Currency
39	79	Civil Service
39	79	Mines and Mining
40	47	Education and Labor
40	43	Freedman's Bureau
40	79	Revisal of the Laws
41	69	Railways and Canals
41	68	Reform in the Civil Service
42	45	Mississippi Levees (renamed # 132)
43	69	Expends., Justice
43	79	War Claims

Topic	Committee	Topic	Committee
Agriculture	Agriculture; Mississippi Levees; Private Land Claims; Public Lands	Narcotics	Commerce; Judiciary
Alien and Sedition Laws	Foreign Affairs; Judiciary	National Bank	Banking and Currency; Coinage, Weights, and Measures; Engraving; Printing; Ways and Means
Arms Control	Foreign Affairs; Military Affairs; Militia; Naval Affairs	National Endowment for the Arts	Education and Labor; Library
Banking and Finance Bankruptcy and Pensions	Accounts; Banking and Currency; Coinage, Weights, and Measures; Commerce; Commerce and Manufactures; Ways and Means Invalid Pensions; Military Pensions; Pensions and Revolutionary Claims: Revolutionary Pensions	Nullification/Secession/ Reconstruction	Judiciary; Revisal of the Laws Commerce; Foreign Affairs; Naval Affairs; Roads and Canals: Territories
Bridges	Public Lands: Bailways and Canals: Boads and Canals	Parks and Conservation	Public Lands: Territories
Budget Resolution	Appropriations; Expend., Navy; Expend., P.O.; Expend., Public Buildings; Expend., State; Ways and Means; Expend., Treasury; Expend., War; Public Expenditures	Peace Movements/ Pacifism/Anti-Military	Foreign Affairs; Military Affairs
Campaign Contributions/House Ethics/Lobbying/Campaign Laws	Election of President and Vice President; Elections; Judiciary	Pollution and Environmental Protection	Agriculture; Indian Affairs; Public Lands
Canals	Commerce; Mississippi Levees; Public Lands; Railways and Canals; Roads and Canals	Post Offices/Post Roads	Post Offices and Post Roads; Reform in the Civil Service; Roads and Canals
Charters/Incorporations	Commerce; Commerce and Manufactures; Manufactures	Presidential Impeachment	Judiciary; Rules
Civil Rights/Desegregation/ Busing/Affirmative Action	Freedman's Bureau; Judiciary	Price Controls	Banking and Currency; Commerce; Commerce and Manufactures
Civil Service and Patronage	Civil Service; Post Offices and Post Roads; Reform in the Civil Service	Private Relief/Compensation	Claims; Invalid Pensions; Private Land Claims
Coal Mining Regulation/ Strip Mining/Black Lung	Invalid Pensions; Mines and Mining	Public Health	Commerce and Manufactures; Invalid Pensions
Communists/Communism/ Unamerican Activities	Foreign Affairs; Judiciary	Public Lands	Public Lands; Territories
Congressional Pay and Benefits	Accounts; Mileage; Ways and Means	Public Safety	Judiciary
Constitutional Amendments	Judiciary; Revisal of the Laws	Radio/TV/Motion Pictures/ Telecommunications	Post Offices and Post Roads
Death Penalty	Judiciary	Railroads	Pacific Railroad; Public Lands; Railways and Canals; Roads and Canals
Debt Ceilings	Appropriations; Ways and Means	Religion	Judiciary; Post Offices and Post Roads; Reform in the Civil Service
Disputed Elections to Congress	Election of President and Vice President; Elections; Judiciary	Roads/Turnpike Companies	Appropriations; Post Offices and Post Roads; Public Lands; Roads and Canals
District of Columbia	Public Lands	Schools/Universities	Education and Labor; Public Lands

Table A.6 – Petition Topics and Related Committees

D.htim		Crimer and Train dama	Commerce; Education and Labor;
Education	Education and Labor	Science and Technology	Mines and Mining; Patents
Election of House Officers	Rules	Shipping/Maritime	Commerce; Naval Affairs; Railways and Canals
Electoral Votes	Election of President and Vice President; Elections; Judiciary	Slavery	District of Columbia; Freedman's Bureau; Judiciary; Territories
Energy	Mines and Mining; Public Lands	States Rights vs. Federal Government	Commerce; Judiciary
Firearms	Judiciary	Supreme Court	Judiciary
Fish & Wildlife	Agriculture; Commerce; Public Lands	Tariffs and Trade Regulation	Commerce; Commerce and Manufactures; Foreign Affairs; Manufactures; Naval Affairs; Roads and Canals; Ways and Means
Free Negroes	Freedman's Bureau	Tax rates	Commerce; Ways and Means
Housing/Housing Programs /Rent Control	Commerce; Private Land Claims	Temperance and Liquor	Indian Affairs; Judiciary; Ways and Means
Human Rights	Foreign Affairs; Freedman's Bureau	Territories	Foreign Affairs; Private Land Claims; Public Expenditures; Public Lands; Territories
Humanitarian Assistance	Foreign Affairs	Tobacco	Commerce; Ways and Means
Immigration/Naturalization	Foreign Affairs; Judiciary	Treaties	Foreign Affairs
Impeachment of Officials Other than the President	Judiciary; Rules	U.S. Currency	Banking and Currency; Coinage, Weights, and Measures; Engraving; Printing; Ways and Means
Indians	Indian Affairs; Private Land Claims; Public Lands	Union Regulation/ Davis-Bacon/Situs Picketing	Education and Labor
Intellectual Property	Patents	Voting Rights	Election of President and Vice President; Elections; Freedman's Bureau; Judiciary
Interstate Commerce/Antitrust/ Restraint of Commerce	Commerce; Commerce and Manufactures; Judiciary	Investigations	Judiciary
Judiciary	Judiciary	Welfare and Medicaid	Claims
Manufacturers/ Manufacturing Companies	Commerce and Manufactures; Manufactures	Workplace conditions/8 hour day	Education and Labor
Mediterranean Pirates	Expend., Navy; Naval Affairs	World's Fair	Expend., Public Buildings; Public Buildings and Grounds; Public Expenditures
Military Pensions/ Veterans Benefits	Claims; Invalid Pensions; Military Pensions; Pensions and Revolutionary Claims; Revolutionary Claims; Revolutionary Pensions; War Claims	Public Works	Commerce; District of Columbia; Expend., Public Buildings; Mississippi Levees; Public Buildings and Grounds; Public Expenditures; Public Lands; Railways and Canals; Roads and Canals
Unemployment/Jobs	Education and Labor	Women's Equality	Elections; Judiciary
Militia/Public Guard	Expend., War; Military Affairs; Militia; Naval Affairs		

	(1)	(2)	(3)
$\ln(Petitions)$	0.038***		
	(0.005)		
Entropy		0.054***	
		(0.009)	
Complexity			-0.064
			(0.039)
Democrat	-0.102	-0.096	0.070
	(0.095)	(0.095)	(0.138)
Democratic-Republican	0.074	0.077	0.309**
	(0.068)	(0.068)	(0.128)
Federalist	0.025	0.025	0.193*
	(0.056)	(0.056)	(0.107)
National Republican	0.015	0.019	0.219*
	(0.088)	(0.088)	(0.131)
Pro-Admin	0.075*	0.076*	0.185 **
	(0.040)	(0.040)	(0.076)
Republican	-0.767***	-0.759***	-0.709***
	(0.157)	(0.157)	(0.210)
Whig	-0.488***	-0.477***	-0.349*
	(0.132)	(0.132)	(0.180)
Frederick A.C. Muhlenber g	0.049	0.051	0.243***
	(0.039)	(0.039)	(0.071)
Galusha A. Grow	-0.064	-0.063	-0.081*
II CI	(0.039)	(0.039)	(0.041)
Henry Clay	-0.059	-0.058	-0.099
и пон	(0.066)	(0.066)	(0.107)
Howell Cobb	-0.432****	-0.425	-0.483
Laura C. Disina	(0.053)	(0.054)	(0.064)
James G. Diame	-0.220	-0.218	-0.271
James K. Polk	(0.042) 0.120***	(0.042) 0.122***	(0.046)
James K. Folk	(0.028)	(0.028)	-0.111
James L. Orr	-0.630***	-0.620***	-0 733***
Sames E. Off	(0.069)	(0.069)	(0.085)
John W. Davis	-0.340***	-0.332***	-0.354***
John W. David	(0.046)	(0.046)	(0.055)
John W. Jones	-0.293***	-0.288***	-0.298***
	(0.043)	(0.043)	(0.050)
John White	0.131***	0.137***	0.163***
	(0.041)	(0.041)	(0.045)
Jonathan Dayton	0.052	0.051	0.026
5	(0.039)	(0.039)	(0.075)
Joseph B. Varnum	-0.099*	-0.101*	-0.109
1	(0.057)	(0.058)	(0.100)
Linn Boyd	-0.513***	-0.508***	-0.580***
·	(0.056)	(0.056)	(0.068)
Nathaniel Macon	-0.110**	-0.113**	-0.172*
	(0.052)	(0.052)	(0.095)
Nathaniel P. Banks	0.082**	0.083**	0.104**
	(0.040)	(0.040)	(0.042)
Philip Barbour	0.024	0.023	0.002
	(0.078)	(0.078)	(0.119)
Robert M.T. Hunter	-0.191***	-0.185***	-0.185***
	(0.037)	(0.037)	(0.042)
Schuyler Colfax	-0.125***	-0.123***	-0.159***
-	(0.035)	(0.035)	(0.038)
Constant	-0.154***	-0.149***	-0.377***
	(0.051)	(0.051)	(0.097)
Congress Trend	Yes	Yes	Yes
Topic FEs	Yes	Yes	Yes
N	3483	3483	1415

Table A.7 – Log-log regressions of standing committees upon petitions, House Majority Party and Speaker, by topic and congress, 1st through 43rd Congresses

Standard errors in parenthesesExcludes Anti-Admin Party; Excludes Speakers Entirely Collinear w/ Party
* p < 0.10, *** p < 0.05, **** p < 0.01

				All				1st-36th C	ongresses
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)
$\ln(Committees_{t-1})$	0.887^{***} (0.008)	0.888^{***} (0.008)	0.855^{***} (0.013)	0.875^{***} (0.008)	0.835^{***} (0.014)	0.879^{***} (0.008)	0.835^{***} (0.014)	0.875^{***} (0.009)	0.824^{***} (0.018)
$\ln(Petitions)$	0.005^{*} (0.003)			0.005 (0.003)	0.005 (0.004)	0.004 (0.005)	0.005 (0.006)	0.006 (0.004)	0.007 (0.007)
Entropy		0.007^{*} (0.004)				0.003 (0.007)	-0.001 (0.008)		-0.003 (0.010)
Complexity			0.014 (0.024)		0.015 (0.025)		0.015 (0.025)		0.032 (0.033)
$\ln(PresMessage)$					-0.000 (0.001)	-0.000 (0000)	-0.000 (0.001)		-0.000 (0.001)
$\ln(Petitions_{t-1})$				0.006 (0.004)	0.007^{*} (0.004)	0.003 (0.004)	0.007^{*} (0.004)	0.001 (0.005)	0.005 (0.006)
$\ln(Petitions_{t-2})$				-0.003 (0.004)	-0.000 (0.004)	-0.005 (0.003)	-0.000 (0.004)	-0.004 (0.004)	0.001 (0.005)
$\ln(Petitions_{t-3})$				-0.004 (0.004)					
$\ln(Petitions_{t-4})$				-0.003 (0.004)					
$\ln(Petitions_{t-5})$				0.000 (0.003)					
Constant	0.066^{***} (0.005)	0.066^{***} (0.005)	0.097^{***} (0.020)	0.082^{***} (0.005)	0.098^{***} (0.023)	(0.005)	0.098^{***} (0.023)	0.072^{***} (0.006)	0.080^{***} (0.030)
Congress Trend	Yes	Yes	Yes	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	Yes	Yes	Yes	Yes
Topic FEs	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	\mathbf{Yes}	Yes	\mathbf{Yes}	Yes
N	3402	3402	1400	3078	1386	3321	1386	2673	060
Standard errors in parer	itheses								

Table A.8 – Log-log regressions of standing committees upon lagged committees and petitions, by topic and congress, 1st through 43rd Congresses.

Standard Errors clustered at topic level. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)	(3)
$\ln(Committee)$,
1 (D : U)	0.007*	0.005	0.000**
$\ln(Petitions)$	0.007*	0.005	0.008^{++}
	(0.004)	(0.004)	(0.004)
$\ln(Petitions_{t-1})$	0.006*	0.004	0.008**
(, , , , , , , , , , , , , , , , , , ,	(0.004)	(0.004)	(0.004)
	0.000	0.000	0.000
$\ln(Petitions_{t-2})$	-0.000	-0.002	0.002
	(0.004)	(0.004)	(0.004)
$\ln(Committees_{t-1})$	0.679***	0.766***	0.600***
	(0.070)	(0.123)	(0.166)
$\ln(Committees, a)$	0 135**	0 1 2 2	0.063
$m(COmmutees_{t-2})$	(0.005)	(0.103)	(0.159)
	(0.065)	(0.124)	(0.158)
Constant	0.155***	0.098*	0.261***
	(0.021)	(0.052)	(0.083)
Observations	3321	3321	3321
R^2			
Sargan	185.577	62.129	33.309
Lags	10	20	30

Table A.9 – Arellano-Bond Estimation of Effect of petitions upon standing committees, by topic and congress,1st through 43rd Congresses.

Standard errors in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

To the extent that committee formation was a dynamic process, where past formation of committees and past petitioning mattered for future decisions about committee formation, we want our empirical model to account for such dynamics without severely biasing the estimates. Including a lagged dependent variable violates strict exogeneity, since it includes a right hand side variable that correlates with lags of the error term. One alternative approach, the Arellano-Bond estimator, differences the data and then uses historical lags of the dependent variable as instruments for the differenced dependent variable from the current time period. Using this approach, we estimate the effects for varying numbers of lags (10, 20, 30) used as instruments, and again the results are in line with the findings above, though the effect sizes are somewhat diminished. Table A.9 in the Appendix presents the full results from this procedure.

A.7 Supplementary Figures



Figure A.2 – Correlation Matrix (by districts) for VA Burgesses Petition Topics

Figure A.3 – Committee Formation and Geographic Spread (Entropy) of Petitions

