Clustered Policy Attention and Punctuated Equilibrium:

The Case of Energy and Environment Policy

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Analysis of US policy dynamics through the lens of punctuated equilibrium provides a strong rebuttal against methods that presuppose the ability to effectively predict which policies will be the subject of Congressional action, and when. In this paper, I offer an analysis of the interaction between public opinion, attention, Congressional attention, and Congressional action between issue areas, in particular spillover and crowding out effects. The same psychological limits that have a strong bearing on the production of policy outputs in the punctuated equilibrium model also result in heterogeneous levels of attention addressed to public concerns translation of that attention into laws between these issue areas. These psychological factors, in particular cognitive linkages between issues and associated cognitive cost savings, may indicate that Congressional attention on some issues will affect the timing of policy production between issues that are not obviously or relevantly linked.

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**Introduction**

Every year, the US Congress passes new legislation and budget appropriations, which collectively constitute the primary means of public policy formation in the United States. Combined, these actions are intended to address every aspect of US domestic and foreign policy. However, the number of new laws and the reach of legislation intended to address the political issues of the day vary significantly from year to year and decade to decade. Moreover, while significant debate over whether and how legislators enact or refuse to enact legislation (e.g. Mayhew, 1991; Binder, 1999; Binder, 2007; Chiou & Rothenberg, 2007), this and other literature leaves reason to believe that legislation is not enacted in proportion to any clear or direct indicator such as public demand, Congressional members’ collective ideologies, or the President’s legislative agenda (Baumgartner & Jones, 2005). This does not suggest that inputs such as the ones mentioned above are unimportant in researchers’ attempts to understand production of policy outputs. Rather, it means only that there is no linear relationship between these inputs and corresponding policy outputs, and prediction of outputs may not be achievable through the kind of multivariate analysis that dominates social scientific inquiry. Instead, policy change is defined by punctuated equilibrium (Baumgartner & Jones, 2005). Punctuated equilibrium describes a system in which long periods of minimal policy action for a given policy area are occasionally interrupted by periods of brief and intense policy change.

To date, most research on punctuated equilibrium intended to address specific issue areas has focused on confirmation that certain policy areas fit the distribution of policy production as described by the punctuated equilibrium model, or attempts to understand the forces that cause different levels of policy outcomes at different times for a particular policy area (e.g. Wood, 2006; Repetto, 2006). In particular, this research has identified circumstances that lead to the positive feedback processes that result in periods of punctuated policy production during which “change begets change” (Baumgartner & Jones, 2005: 3). Limited work has been done to apply punctuated equilibrium theory in an effort to understand how policy outputs from within designated policy areas interact with one another in the course of policy production.

The punctuated equilibrium model (Baumgartner & Jones, 2005; Baumgartner, Jones, & MacLeod, 2000) use broad categories of policy areas, such as defense, energy, environmental, and economic policy, among numerous others, when identifying the relationship between policy inputs and outputs over time. Categorizing policies into these areas, even if they are generally well established within political science literature, presupposes clustering among those issues that make up each policy area. The punctuated equilibrium model indicates that such clustering across time is not stochastic, and that it is plausible to predict which types of policies will be most likely to be produced given knowledge of production of other, clustered policies. The possibility that policies cluster not just within but across designated issue areas during periods of both equilibrium and punctuation, or that the relationship over time between issues that cluster may be predictable even as policy production itself is not, has yet to be explored in political science literature.

In some regards, the effects of production of one policy on others is central to the punctuated equilibrium model, since this theory’s primary insight is that there are short periods of time when the amount of policy addressing one problem is greater than would be expected by measuring the demand signals for this policy. If one narrows the unit of analysis to individual instances of legislative action, then these punctuations almost always involve multiple cases of policy action of varying degrees of difference, with interaction effects between them likely. In this paper, I will show that policy outputs addressing previously unexplored connections across issues cluster across time. In doing so, I hope to develop a more thorough understanding of the trajectory of policy outputs in relation to other, seemingly unrelated outputs.

This analysis hinges on an understanding of the costs of decision-making by policy actors. The project does not attempt to predict policy outputs; rather, I will use punctuated equilibrium theory as a starting point from which to demonstrate that past production of policy outcomes for certain issues have shown a tendency to cluster over time to differing degrees. Central to this idea are the concepts of spillover and crowding out. Spillover effects describe situations in which positive feedback is observed; taking one action will increase the probability of additional actions within the same issue space. Crowding out describes situations of negative feedback, in which taking action to address an issue will lead to decreased probability of additional action in the same issue space. Both are commonly observed in American politics and both are central to punctuated equilibrium. Whether there will be interactions between issue areas, and whether they will be subject to spillovers or crowding out, is contingent on two main factors. First, the effect on cognitive costs associated with engaging with one policy subsequent to engaging with another that shares cognitive linkages. Second, the amount of time and resources that are already in place to pursue the second policy in a more cost-effective way than new, unrelated policies.

The energy and environmental issue areas are useful examples to test these hypotheses for several reasons. First, people commonly associate environmental issues with energy issues (e.g. Langhelle, 2000). The degree to which this makes sense or not is not entirely relevant for this paper. Certainly there are many instances in which public policy decisions regarding how to address the nation’s energy and environmental concerns are interrelated. It also seems likely that the relationship between public policies to address these issues will become increasingly more closely linked as climate change, which is inherently an issue that crosses both policy areas, becomes the dominant public policy concern in this sphere. But there are also reasons that policies addressing environmental issues should be and are distinct from those addressing energy issues, and vice versa. Federal agencies tasked with addressing policy in these areas are largely distinct from one another. Moreover, the social values and other possible factors that motivate policy action on each may be unique, requiring unique policy solutions.

The rest of this paper will be organized as follows. The next section reviews theoretical foundations for punctuated equilibrium for given policy areas, with a particular focus on the psychological and, to a lesser extent, structural causes of both punctuated equilibrium generally and policy clustering more specifically. The second section presents an overview of the data and analytic method that I use to evaluate the existence of policy clusters, followed by a discussion of results. The final section offers a concluding thoughts and possible future directions for research.

**Theoretical Foundation: Punctuated Equilibrium and Cognitive Links**

The basic model of the policy process that underlies punctuated equilibrium is one in which a very large number of signals are constantly being directed at policymakers. These signals, which constitute policy inputs into the system, are of varying sizes and are for the most part independent of one another. They act as information provided to policymakers regarding demand from the system as a whole – including the public, interest groups, other politicians, or from elsewhere – for action in any number of policy areas. Because of the tremendous number and diversity of these demand signals, the punctuated equilibrium model treats these signals as stochastic (Baumgartner & Jones, 2005). As a result, the ability to predict policy outputs by analyzing inputs tells the researcher more about the process by which the machine churns out those outputs than about what policy signals mean in terms of policy production, in the form of new legislation or changing budget allocations.

The kind of disjointed (or “lumpy”) policy change that is the essential insight of the punctuated equilibrium model is contingent on humans and human institutions that process these signals disproportionately. Because humans have very limited and selective attentions, are boundedly rational, and favor the status quo, policymakers are not inclined to act on demands for policy actions unless signals calling for such change are extremely loud, or the ideas carried by such signals have been bouncing around Congress for an extended period of time, ultimately gaining internal momentum. As mentioned above, these signals may come from a number of sources, such as mass publics, interest groups, large external shocks, a Congressional echo chamber, and other sources. And of course, the source of signals that legislators choose to hear, the ways they are interpreted, and ultimately the decision of whether or not to afford them precious attention is influenced by legislators’ ideology, party affiliation, and their own cognition.

There are highly heterogeneous connections between signals from the public regarding which issues they care about, and the amount of attention that Congress focuses on those issues (Baumgartner & Jones, 2005). Table 1 shows that while many issues indicate positive and significant correlations between the public’s response to Gallup’s Most Important Problem (MIP) survey question and the proportion of Congressional hearings for that topic, many issues do not show a strong or significant correlation between the two.



Table 1 also indicates spillover and crowding out between these issues. For example, the significant correlation of .49 between the proportion of respondents answering that energy was the MIP and the proportion of hearings on economic issues indicates a positive spillover between the two, with Congressional policymakers responding to public concern over energy by holding hearings on economic issues. The causes for spillover and crowding out are difficult or impossible to predict without in-depth qualitative case studies, as the authors indicate. What is clear is that these interactive effects are occurring, suggesting that how issues gain Congressional attention not only varies dramatically by issue, but is contingent on external signals that are not clearly intended to address the issue that is ultimately provided attention. So as not to overstate this, I will acknowledge that since this is simply a correlation matrix, no causal claims can be made. Looking at the proportional MIP responses for environment, we see that they are positively correlated with hearings in health, the environment itself, welfare, and science, and negatively correlated with hearings on energy and defense. Clearly, the signal of public opinion on the environment does not cause policymakers to hold these hearings; but they do tell us something about when policymakers happen to be responding to certain signals, and suggest that further inquiry regarding the relationships between some of these issue areas is warranted.

In the next several sections, I make the theoretical jump to how Congressional attention, once allocated, influences Congressional outputs, creation of public laws and allocation of budget authority. I show that the same issues that demonstrate spillover and crowding out effects between measures of public and Congressional attention are not necessarily the same that exhibit those effects between Congressional attention and action. I present arguments that the reason for this difference has to do with costs of Congressional attention allocation and Congressional action. For clarity, I have broken down this argument into two categories, addressing cognitive costs and institutional costs.

*Cognitive Costs*

The same mechanisms that cause punctuated equilibrium in production of policy outcomes by the US government and others[[1]](#footnote-1) are responsible for causing some of those policy outcomes to cluster across time. Punctuated equilibrium theory is largely contingent on the bounded rationality of policymaking actors. Policymakers are not Bayesian updaters. Instead, they rely on their own “cognitive and emotional architectures” to determine how to allocate attention to specific issues, with this attention allocation finite (Baumgartner & Jones, 2005: 3). The limited nature of policymaker attention may make thinking of certain multiple issues simultaneously more common or even more cost effective than thinking about them separately.

Insofar as policymakers face information costs, they must acquire, synthesize, and ultimately use information to identify their policy goals related to a specific problem and determine the best ways to address those goals. All of this diagnosis and proposed treatment is information intensive and thus costly. Not only do policymakers need to know which information to gather, they must become momentary experts in the policy area at hand. Given the intensity of this effort and high cognitive costs involved, it is not surprising that individuals frequently use heuristics and rely on emotion in interpretation of information and determining where to focus attention (Nisbet et al., 2012; Baumgartner & Jones, 2005). Moreover, policymakers may tend to “satisfice” when making difficult decisions, as individuals have been shown to do in other areas of research (Simon, 1976).

Policymakers may also conflate information and subsequent action addressing one problem with action that in reality addresses a separate aspect of American public policy. The relationships and knowledge necessary to accumulate and process information specific to a certain policy well enough to make coherent policy recommendations for one issue may also reduce the costs associated with making the same recommendations for certain other policies. For example, if a policymaker has sufficient knowledge to write air pollution legislation, she will likely also have the knowledge resources – both in the form of accumulated information and expertise – to help write legislation dealing with water pollution. Even given this example of the conscious use of existing knowledge to overcome other knowledge-intensive tasks, legislators may not need to consciously calculate the costs associated with such actions in order to do so. Rather, decreased cost of considering one issue because of existing knowledge of another issue or attention focused on that other issue may go entirely unnoticed by the policymaker.

Cognitive cost savings can lead to spillover effects, a phenomenon that can lead focus on one policy problem to positively influence focus and thus policy outcomes on another that shares cognitive linkages (Kingdon, 2002). Positive spillovers have been found to occur as a result of a number of psychological and behavioral factors. Spillovers may occur when performing one behavior activates a general disposition held by the actor, which can in turn make it more likely that the actor behaves similarly in the future (Scott, 1977). Self-perception theory (Bem, 1972) suggests that an individual may form attitudes by observing his own behaviors and concluding what kind of person he are based on their previous behaviors. In this way, individuals use their own behavior as information to infer underlying attitudes. In addition, humans have a general need to believe that we are consistent in our attitudes (Greenwald, 1980; Ross, 1989), which may motivate future behavior consistent with earlier behavior and inferred attitudes. These theories may be especially helpful in thinking about how past behaviors motivate future behaviors when the individual’s initial attitude or analysis of an issue involves ambiguity or imperfect information. Attitudes towards the environment and global climate change are one such area, in which information about the best solutions is difficult to acquire, and information about one’s own attitudes toward environment issues is subject to significant uncertainty or variability.

For these theories, borrowed from literature in social psychology, to bear on the question of how attention paid to some issues influences policy production in other areas, those multiple issues must share cognitive space, which I will refer to as cognitive linkages. Given the existence of such linkages, the psychological connections between past and future behaviors described above may mean the cognitive costs of future behaviors will be reduced. Baumgartner & Jones (2005) suggest that spillover effects may influence punctuated equilibrium theory by either encouraging policymakers to focus on one issue and thus crowd others out of that space, or remind policymakers of issues that they cognitively link to the first and thus allow the linked issues additional attention. This is part of the story told by correlations from Table 1. It is also told by the overall consistency between attention allocation and policy production for each issue, shown in Table 2.



There is no existing psychological research that I have identified that addresses the cognitive connection between energy and environmental policy issues. However, psychologists, policy analysts, and the media frequently include attitudes toward environmental and energy issues, and associated behavior, in the same sentence and the same general category. In perhaps the best-known work on psychological motivations for pro-environmental behavior, Stern (2000) lists energy conservation directly alongside other behaviors that address issues of environmental concern, like recycling or buying organic foods. Many news sources focus specifically on both energy and environment issues, or have sections that cover these two issues together. However, as evidenced from Table 1, there is no significant interaction between public focus on environmental issues and Congressional attention to energy issues; correspondingly, there is no connection between public concern over energy issues and Congressional attention to environmental issues. However, the suggested decrease in cognitive costs associated with engaging with different issues that are linked in our cognitive and emotional architectures, and the belief that this link is present between energy and environmental policy, leads to my first two hypotheses:

*H1: Periods of Congressional attention to environmental issues will tend to lead to legislation addressing both environmental and energy issues.*

*H2: Periods of Congressional attention to energy issues will tend to lead to legislation addressing both environmental and environmental issues.*

From these two hypotheses comes a third:

*H3: Periods of low levels of environmental policy production will correspond with low levels of energy policy production, and high levels of environmental policy production will correspond with high levels of energy policy production.*

Wood and Vedlitz’s (2007) studies of individuals’ evaluations of global warming indicate that the filter through which individuals process information based on values, experience, ideology, and other forces significantly influences their identification and evaluation of an issue. This leaves open the possibility that cognitive and emotional connections made between issues by policymakers may occupy the same attention space, in contrast to the view of policymakers as purely rational actors. This representation of individuals’ cognitive and emotional architecture has several possible implications. First, issues for which legislators strongly associate values or experiences may also be evaluated similarly; second, it suggests that new issues, for which less information is available or for which individuals have less clear cultural context, will be more likely to be confused with other issues. These possibilities of course extend well beyond energy and environment issues.

Similarly, Denzau & North (1994) find that even when ideas and the language used to convey those ideas can be precise, the meaning of ideas changes and those changes necessitate taking ideas from one mental model – defined as the way that individuals interpret signals from their environment – and applying it to new mental models for either new ideas or ideas that are being reinterpreted. Individuals relate information received to our broader conception of the world, placing that information within our own mental map (Hogwood & Gunn, 1984). If that map suggests links between two distinct policy areas (like clean water and clean air, or even clean water and renewable energy programs) then the costs of focusing on the second may be significantly reduced as a result of attention focused on the first. This process dictates how individuals make decisions. One implication is that the process of borrowing from one mental model for comprehension and definition of an idea or policy issue may increase the likelihood of conflating or confusing intended policy outputs. This again leads to a conclusion that supports other arguments that cognitive and emotional connections made between issues by policymakers may occupy the same attention space.

As mentioned previously, policymakers may use comparable heuristics to understand how to solve two distinct problems. In doing so they link policy action in these areas even without intending to. Voters use heuristics to reduce the cognitive costs of choosing a candidate to vote for by focusing on candidates’ positions on certain issues as indicators of their overall competence (Lupia 1994; Popkin 1991; Sniderman, Brody, and Tetlock 1991). Policymakers may comparably make connections between policy areas out of convenience, and the opportunities to reduce cognitive costs may lead to policy clustering, even in cases in which the practical implications of two policies are very different. Zaller’s (1992) key insight regarding easily modified positions on issues for which individuals are not highly knowledgeable about the issue is intended to describe voters’ candidate choices and willingness to accept policy proposals, and would not seem to describe highly knowledgeable policymakers themselves. Moreover, there is strong reason to believe that the public and policymakers have very different perspectives on public policy, including energy and environment policy. Part of this is because of lack of strongly held beliefs about policy issues generally, but also relates to the complexity of energy and environment issues in particular (Smith, 2000). Though this is largely a story of the way the public perceives policy issues, the root of the confusion is relevant for the discussion of how policymakers choose to allocate limited attention.

The possibility that policymakers may provide the same attention “space” for multiple issues at the same time can be expanded to allow consideration of the attention of not just individual policymakers but also Congressional committees and entire policy subsystems. Committees consisting of boundedly rational policymakers may collectively allocate attention to two issues that are emotionally linked, perceiving the issues as the same even as they clearly constitute two different forms of government action. This is particularly true if exogenous events act to focus policymakers’ attention. For example, in the wake of the Sandy Hook Elementary shooting, Congress debated both gun control policy changes and policy action associated with mental health (Calmes & Pear, 2013). These are two distinct government activities, but it is plausible that given an exogenous shock like the one mentioned punctuation of policy outputs for both could cluster.

While this example suggests policy action in multiple areas simultaneously because of a cognitively related policy input, is also important to recognize that clustering of policy outcomes does not require cognitive connection between the intended consequences of the policies. If we reject the notion of comprehensively rational actors, this frees us from only considering how individuals think of and value outcomes in choosing how to act (Jones, 2000). Instead, these actors may acknowledge uncertainty in decision outcomes and may fixate on the process – the “means” – rather than the ultimate outcome of that process. The result is that policymakers may allow the same attention space for two different issues because they share means to achieve policy ends, without actually sharing outcome goals.

*Institutional Costs*

In addition to disproportionate information processing, the US political system is subject to punctuated equilibrium because of high and sometimes heterogeneous institutional costs. The result of these additional institutional costs is “drag” in the policy process (Baumgartner & Jones, 2005). Examples of institutions that impose these costs include supermajority requirements in the Senate to override filibusters, presidential vetoes, the need for collaboration among institutions within Congress (Larocca, 2009), and collaboration between Congress and other branches of government. Political scientists have frequently cited these institutional costs as the sources of either complete policy gridlock (Brady & Volden, 1998) or policy incrementalism (Lindblom, 1959; Wildavsky, 1964). The result of individual and collective decision-making processes and the friction caused by institutional barriers to efficient action, however, is not gridlock but amplification of the kurtosis that represents long periods of incremental policy change followed by punctuated change.

Traditional theories of strong Congressional committees suggest that jurisdictional influence of committees tends to be narrow, with only minimal overlap. In this construct, committees take action based on calculations of the ideological positioning of the committee itself relative to the ideological position of the entire house of Congress and the policy subsystem for the issue being addressed (see e.g. Ferejohn & Shipan, 1990). Mortorano (2006) finds evidence that the autonomy afforded various committees in the production of legislation rests mainly in their role as informational experts. This strongly suggests that to the extent information regarding separate issues may be conflated or interpreted as the same, Congress itself will follow the committees’ lead and act on those issues similarly.

One possible result of the institutional structures governing Congressional committees is the existence of committees with varying degrees of jurisdictional clarity. Not only is jurisdictional clarity heterogeneous, overall jurisdictional clarity is declining over time. Decreases in jurisdictional clarity result from increased issue complexity and additional committee resources able to handle this complexity within a specific committee (Baumgartner & Jones, 2005). Clarity consists of two different measures: jurisdictional overlap describes the extent to which multiple committees share responsibility for a single issue. Jurisdictional span defines the extent to which one committee has responsibility for multiple issues. Jurisdictional clarity is important in this study for two reasons. First, informational biases associated with jurisdictional structure, formal or not, play a significant role in determining which issues will be addressed and when. Second, individual legislators have competing interests as regards their jurisdictional influence (Baumgartner et al., 2000).

Legislators seek clearly defined committee jurisdictions collectively, because it makes managing information and making decisions easier. However, for political reasons legislators prefer to access as many of the issues they care about as possible, regardless of committee assignments. The result may be systematic differences in the relative clarity or complexity of certain committees, which could result in relative cost advantages associated with addressing multiple issues simultaneously. If there is evidence for this differential decision cost structure we should also expect clustering of policy outcomes for certain issues and not for others depending on the cost thresholds faced. This leads to my fourth hypothesis:

*H4: Committees that are subject to greater jurisdictional span and thus deal with not only more issues but issues of greater complexity will also tend to exhibit greater clustering among the issues dealt with by those committees than by committees with narrower foci.*

Sheingate (2006) introduces the idea of Congressional opportunity structures as one useful way to consider the importance of committee jurisdictions for policymaking. In this model, the institutional structure of Congress may do two main things to influence attention allocation and policy production. First, committees may attempt to erect barriers to prevent other committees from encroaching on their jurisdiction. To the extent that they are successful in doing so, on its face this would appear to coincide with a decrease in policy clustering. However, the result of such barriers is to decrease jurisdictional overlap without an obvious influence on span, and thus may not effect clustering. Second, complex jurisdictions provide opportunities for introduction of new ways of considering policies that expand committee authority. This expansion of authority will likely lead to increases in issue complexity, or “issue density” (Baumgartner et al., 2000). When they are successful at expanding their jurisdictional authority, we should expect increased policy clustering. There seems to be significant room for additional research connecting committee jurisdictions and punctuated equilibrium, particularly identifying how committees affect the way that issues are interpreted and therefore how attention translates to action.

**Data and Results**

To address the hypotheses presented above, I use data on Congressional activities collected from the Policy Agendas Project and the Congressional Bills Project. I am especially interested in the case of US energy and environmental policy, which I have used as a motivating example thus far. However, I present data on other issue areas as well, and the theories and analysis presented are generalizable to all policy issues in the United States. The data used is part of a time series that I have compiled from the sources mentioned above and which tracks Congressional action including committee hearings, public laws enacted, federal budgets, as well as interest group and media activity.

Table 3 is a correlation matrix indicating the correlation between the number of total laws passed over time as a proportion of total laws passed for the given year (top variables), and the number of committee hearings held over time, also measured as a proportion of the total committee hearings for the given year.



The diagonal indicates the correlation between hearings on issues and laws passed on those issues over time. As would be expected, all show positive correlations and nearly all (every one but labor and science) are significant. As predicted in hypothesis two, committee hearings on energy issues significantly and positively correlate with environmental legislation. However, contrary to hypothesis one, hearings on environmental issues do not show any significant correlation with energy legislation. There are several other relationships worth noting. For example, hearings in several other issue areas strongly and significantly correlate with passage of environmental legislation. These include hearings on economic issues, health issues, environment issues themselves, welfare issues, and science and technology. Hearings on agriculture and on defense negatively predict environmental legislation. A similar relationship appears between many of the issues that I chose for the table. Hearings on agriculture issues either negatively correlate or have no significant relationship with all legislative action other than defense and agriculture itself. The same is true of defense, and the reverse is true of nearly all other issues listed. This suggests the possibility that agriculture and defense occupy unique space in terms of the relationship between Congressional attention and Congressional action, while the other issues listed may closely cluster in terms of this relationship.

Next, I look to hypothesis three, regarding whether energy legislation and environmental legislation will cluster over time. This is predicted by the past two hypotheses, that Congressional attention on each predicts legislation addressing the other. However, given support for only hypothesis two, this prediction is less certain. Table 4 is another simple correlation matrix, this time showing the relationship between legislation in different issue areas.



The data here indicates that there is a positive and significant (at the *p<.10*) relationship between energy and environmental legislation over time. This provides support for hypothesis three. Energy and environmental legislation appear to cluster over time. However, the relationship is not as strong as some other spillover effects shown in Table 4. For example, there is a strong negative correlation between environmental legislation and defense and international relations legislation – the strongest relationship exhibited in Table 4. There is also, as might expected for the same reasons that energy and environmental legislation would exhibit clustering, an even stronger indication of clustering between environmental legislation and science policy legislation. Other relationships, like that between environmental legislation and welfare legislation, require additional analysis.

Next I turn to hypothesis four, regarding the amount of jurisdictional span that various committees have undergone and the potential effect of that span on policy clustering. In Table 5, I present data regarding committees that address issues that I have focused on throughout the rest of this paper, and presented in Tables 1-3 (Baumgartner et al, 2000). For clarification, in Table 5 the index for jurisdictional span is such that higher numbers along the index is indicative of lower amounts of span. So the House Energy and Commerce and Science, Space, and Technology committees exhibit the most jurisdictional span, while the House Armed Services and Foreign Affairs committees exhibit the least.



Comparing this information to measures in Tables 3 and 4, several things stick out. First, given the insight that agriculture and defense appeared as though they may have existed in unique policy space over time, it may make sense that these two exhibit some of the lowest amount of jurisdictional span. At the same time, the domestic policy issues that showed significant positive correlations in Table 4, including energy, science, health, and labor. The only anomaly in this regard is the Natural Resources Committee, which addresses energy and environment issues. Based on these observations, there appears to be tentative support for hypothesis four, though much more analysis needs to be done to thoroughly explore the relationship between jurisdictional span and policy clustering.

**Limitations and Future Research**

This research attempts to provide initial support for the idea that the cognitive processes of policymakers may lead to measurable effects with regard to whether instances of major policy change correspond over time. Clearly, there are significant limitations to reliance on simple correlation to analyze the intensely complex nature of policy dynamics in the US Congress. This complexity, coupled with the seemingly stochastic nature of inputs into the system, are what lead Baumgartner & Jones (2005) to conclude that the only reliable method for analyzing individuals instances of punctuation is via case study. But the analysis demonstrates that not only do different policies undergo different degrees of “friction” at various points in the policymaking process, but also that the interactions between policies differ significantly on the path to policy production. I have presented one theory regarding why this might occur, relying on the potential cognitive and institutional cost savings associated with addressing different issues that share space in policymakers’ cognitive architectures, specifically focusing on the step between Congressional attention and policy production. More work needs to be done on this topic, both to deepen the analysis of how individuals process policy information, which may be most appropriate in a laboratory setting, and in terms of further analysis of the data already part of the Policy Agenda Project.

*Future Research*

The degree of policy clustering may be influenced by the prevalence of policy subsystems that generally act to maintain status quo policy. I expect that strong policy subsystems are likely to reduce the possibility of clustering through their efforts to maintain or increase funding for a narrowly considered policy area (Busenberg, 2004). However, subsystems could lead to clustering if actors in the subsystem believe that two distinct policy outputs contribute to further expansion of the subsystem or if a single subsystem engages multiple issues. The punctuated equilibrium model describes situations in which policy subsystem are forced to restructure due to “competing policy images,” which may lead to positive feedback and sequential policy processes such that punctuation occurs (Wood, 2006). This may influence policy clustering if, in the course of this restructuring, actors reach outside of traditionally addressed policy problems and so connect with or co-opt other issues or entire other subsystems. The subsystem will then have expanded to addressing more issues with more actors, and could lead to linkages between policies.

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1. For a discussion of punctuated equilibrium in comparative perspective, see Baumgartner et al., 2009. I will focus strictly on the US case here. [↑](#footnote-ref-1)