Punctuations and Turning Points in British Politics: the Policy Agenda of the Queen's Speech, 1940-2005*

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Abstract

This paper explores the politics of attention in Britain from 1940 to 2005. It uses the Speech from the Throne (the Kings or Queen's Speech) at the state opening of each session of parliament as a measure of the government's priorities, which are coded according to topic as categorized by the Policy Agendas framework. The paper aims to advance understanding of a core aspect of the political agenda in the Britain, offering empirical insights on established theories, claims and narratives about post-war British politics and policy-making. The analysis uses both distributional and time series tests that reveal the punctuated character of the political agenda in Britain and its increasing fragmentation over time, with turning points observed in 1964 and 1991.

A critical question for the study of politics is whether particular variables of interest, such as parties, electoral coalitions, institutions, ideologies, public opinion, government policies and expenditures, are locked into a long-run equilibrium or instead are subject to periodic instabilities and disturbances that overturn and realign the existing order. This tension between stability and change, or between order and disorder, is integral to how political systems attend to and prioritise specific issues or problems. Recently there has been growing interest within political science in systematic measurement and analysis of change and stability in political systems, such as in the punctuated equilibrium model of agenda-setting or in the population ecology model of interest mobilization.[1] Yet the concept of equilibrium is implicit to many accounts of the functioning of political systems through frequent use of terms such as gridlock, stasis and incrementalism, on the one hand, whereas notions of change or instability often underlie studies of electoral realignments, institutional reform, democratic responsiveness and international conflict on the other. Often such accounts tend to overstate the degree of either stability or change when the reality lies somewhere between the two, with periods of stability interspersed by occasional dramatic changes.

These systematic approaches to the study of political dynamics provide a new perspective on the classic conundrum: how stable is the policy agenda in Britain? The existing literature presents a divergence of views. One group of studies concludes that the decision-making agenda is relatively stable and incremental.[2] The executive assigns regular attention to particular topics in line with the departmental and budgetary priorities of government. This pattern of policy-making reflects the closed nature of the interest group system, long-entrenched institutional rules and power of the state to insulate itself

from external pressures. For others, the British political system can be unstable, generating policy reversals, discontinuities and disasters,[3] which arise from ministerial entrepreneurialism, adversarial politics,[4] and the absence of constitutional checks and balances. The result is leaps in attention to particular issues, new initiatives and subsequent reversals of policy. This divergence of perspectives appears in accounts of the Conservative governments elected in the period since 1979. Some studies regard these periods of office as a dramatic shift in policy-making while others highlight the more incremental and pragmatic character of policy changes enacted during the same period.[5]

How might it be possible to resolve this stability/instability question? One solution lies in the collection and analysis of reliable time series data about the attention and priorities of British government, which may be inspected to measure the extent of change or stability. To this end, this paper presents findings from a dataset of the content of the King's or Queen's Speech – the Speech from the Throne – as a measure of the executive and legislative priorities of British government from 1940 to 2005, coded for the number of references to particular topics.[6] Using this data, it is possible to consider propositions about the nature of post-war British politics and policy-making, such as whether the distribution of change in political attention is punctuated in Britain as is found in other countries, whether there is fragmentation in the content of the political agenda over time and whether there is a detectable break-point after election of the Thatcher government in 1979.[7]

The study of policy agendas

The political agenda refers to the limited space within which issues receive attention from policy-makers and opinion-formers, such as the media, organized interests and the public: "…the list of subjects or problems to which governmental officials, and people outside of government closely associated with those officials, are paying some serious attention at any given time".[8] While the literature on agenda-setting is diverse,[9] the policy agendas approach has generated an extensive programme of research based upon its systematic categorisation and coding of measures of political attention and the policy outputs of government.[10] This literature also sets out theoretical propositions about the nature of modern policy-making systems, in particular the nature of change over time.

The foundation of this approach is the seminal *Agendas and Instability in American Politics*,[11] which challenges the classic view that institutional gridlock (i.e. the divided partisan control of the legislative and executive branches) in the United States generates a pattern of decision-making that is biased towards incremental adjustments of the status quo.[12] Because the attention of policy-makers is finite and there are numerous issues or problems on the political agenda, decision-making is bounded and incremental strategies provide a means of making policy. However, Baumgartner and Jones also observe that long periods of incrementalism and relative inertia in politics and decision-making are sometimes punctuated by rapid and dramatic realignments.[13] The punctuated equilibrium model attempts to explain why policy-making can move from periods of stability to acute change and then back to stability once again.[14] These punctuations in the political agenda result from tension between subsystem politics, with its institutionalisation of policy-making within particular sectors, and the more responsive macro-politics, where shifts in

attention from legislators or executives at the national level can help mobilize support for an issue and bring about policy change.[15]

Periods of incrementalism or near stasis occur when policy-making is contained within a policy subsystem, consisting of a monopolizing set of institutions and actors that tend to share a common definition of the core issue or policy problem. The subsystem exerts a form of negative feedback that dampens pressure for change.[16] However, issues can be forced onto the macro-political agenda when there is a breakdown of an established policy monopoly or a change in the definition of an issue. Through a process of positive feedback,[17] expansion of the political agenda propels public policies to new equilibria. This process of amplification, as issues are shifted from subsystem politics onto the macro-political level, overcomes the cognitive and institutional friction that is inherent to government.[18] Through this set of arguments, the punctuated equilibrium model seeks to explain the coexistence of incrementalism with disproportionate changes or punctuations in the political agenda.

Following *Agendas and Instability*, Baumgartner and Jones tested their model through systematic and extensive coding of the policy-making agenda in the US, including Congressional budgets and hearings, Congressional Quarterly Almanac stories, Presidential executive orders, *The New York Times*, public opinion and Congressional bills and laws.[19] The Policy Agendas Project compiled a definitive topic codebook for its policy content coding framework,[20] which created codes for the major aspects of public policy, such as macroeconomic issues, education and health, and distinct sub-topics within these categories, which now reach 225 (see Table 1 for the major topic codes).

[insert Table 1 about here]

Comparative scholars use the theory and methods of the Policy Agendas Project to generate and test hypotheses about the nature of policy-making in different institutional and cultural contexts.[21] Most of this research directly applies the coding framework to national politics and policy-making. More often than not, researchers find that the framework works well, although there are certain aspects of the institutional system in the US that have no direct parallel in other countries. The constitutional prominence of its legislature means that some procedures that are classed as legislative are part of executive policy-making elsewhere. Another important difference is that the less developed welfare state in the US requires reclassification of a few sub-topics.

Punctuated equilibrium and policy-making in Britain

Many accounts of post-war British policy-making emphasise the relative stability of its policy-making communities.[22] These communities or sub-governments tend to be isolated from the media and public opinion, often constraining rapid or far-reaching changes to the policy agenda as implied by the punctuated equilibrium model. Other studies of the outputs of British government reach similar conclusions, such as for budgeting.[23] Policy outputs tend to shift in small increments and that the termination of programmes is rare. The traditional Westminster-Whitehall system was sustained by a set of informal restraints and conventions - what has been called club government.[24] Over several centuries the integrated London elite survived through its enactment of pragmatic and effective responses to policy problems.[25] The collegiate traditions and club-like instincts of the British policy-making elite promoted a closed and secretive style of government.

This culture contrasts with the pluralist character of US politics in Washington, which Heclo termed the government of strangers.[26] The practice of accommodating interest groups and the Downsian pressure on political parties to gravitate toward the median voter reinforces this pattern of stable adaptation. Beyond the institutions of government, British politics was supposed to be rooted in a consensual political culture and a moderate public opinion that resisted radical political movements and ideologies.[27]

Such accounts of British policy-making have themselves been subject to criticism. Scholars adopting the policy network approach argue that some policy communities have opened up as a result of increased media coverage and challenges to the political consensus, leaving British policy-making more volatile and diverse than before.[28] Conventions of governing according to Britain's flexible but embedded constitution have weakened, partly as a result of a series of institutional experiments that eroded local government autonomy and integrated decision-making with European institutions.[29] The reform and decentralization of the institutions of the modern British state, with the devolution of power to governments in Scotland, Wales and Northern Ireland, has also created new venues for policy-making and increased diversity in national policy outputs.[30]

Some argue that the agenda of British politics is unstable. The first-past-the-post electoral system is claimed to generate periods of 'elected dictatorship'.[31] Its two-party system produces long-term instabilities in public policy because one centralized party can govern in office free of constitutional checks and balances on the basis of holding a majority of seats in the House of Commons.[32] A newly elected government can reverse the actions of its predecessors and impose its own policies on the section of society that did not vote for

it. The comparative literature tends to regard the Westminster-Whitehall system as non-inclusive in contrast to the consensual characteristics of democracies with proportional representation electoral systems.[33] There are few veto points in British politics,[34] meaning that executives are freer to decide and enact their policies than elsewhere. Some suggest that Britain is the home of policy disasters, such as in local taxation[35] and large information technology projects,[36] which emerge as a result of relative freedom of the executive to make policy choices, often unchecked by much scrutiny in parliament. At the same time, transformation and reinvention of the governing institutions of the modern British state – what Moran calls hyper-innovation – contrasts with an earlier period of stagnation.[37] This dramatic shift resulted from a crisis in the economic policies, loss of confidence in political institutions and the decline of the once stable world of club government. The idea of policy punctuations is more consistent with this account of the British political agenda than incrementalism. Indeed, the distribution of budget changes in Britain is punctuated.[38]

The British electoral system tends to be associated with unified control of government, meaning that changes in the plurality party in parliament are expected to generate policy changes, which studies of party manifestos demonstrate.[39] There is a straightforward chain of cause and effect: shifts in voter preferences translate into party platforms that in turn produce changes in the outputs of government, such as public expenditure.[40] It might therefore be expected that policy pronouncements would reflect partisan shifts, perhaps more than budgets. Earlier research, however, claims that political parties did not make much of a difference to the policies and outputs of British post-war governments.[41]

Regardless of these negative findings, political scientists are inclined to see partisan control of the powerful executive as the cause of breaks or turning points in the political agenda. For example, some argue that the general election of 1979 represented a watershed in British politics, after which the Conservative governments led by Margaret Thatcher enacted right-wing public policies that made fundamental changes in Britain's society and economy.[42] This period of government is associated with prioritisation of economic reform along with a new focus on social issues like crime and the family, which some term authoritarian populism.[43] For others, Thatcher's leadership was more pragmatic and incremental as the government set about a gradual process of reform and realignment.[44] That debate continues.[45] An alternative view is that the rise of New Labour in the 1990s, through its transformation as a centrist party more closely focused on competition for the median voter, represents a turning point in modern British politics. The emergence of a post-Thatcherite consensus between the major political parties over economic policy contributed to agenda expansion as Conservative and Labour governments competed over the issues of health, education and crime in particular. If such a claim is correct, some date during the early or mid-1990s may represent a turning point in the post-war British political agenda.

If the theoretical basis to the punctuated equilibrium model is correct, dramatic changes in the British political agenda would be expected to occur because of the way in which all political systems dampen pressures for agenda change but are nonetheless subject to brief periods when issues attract an increased amount of attention and policy problems are redefined and addressed. However, there is a disjunction between the predictions of the punctuated equilibrium model and existing accounts of the instability of politics and

policy-making in Britain. The classic account of British government policy-making focuses upon the relative absence of veto points in the political system as a cause of instability; whereas the agenda-setting model of Jones and Baumgartner stresses the presence of friction, with veto points being the cause of instability. It might therefore be argued that the classic Westminster-Whitehall model entails friction without veto points as its oligarchic political and bureaucratic elite proved resistant to change while retaining extensive power over the system of government itself. This informal tradition of club-like government could be a source of policy stability and punctuations that differs from the institutional causes of gridlock observed in the US. The alternative is that the friction model does not provide an adequate explanation and that the relative absence of checks and balances in the British political system provides a more convincing explanation of periods of dramatic policy change and instability.

Hypotheses

The punctuated equilibrium model is able to integrate alternative perspectives about the historical development of British politics and policy-making. In particular, it provides a means for determining the degree of stability and change in the evolving priorities of the British state; with the incrementalism of the collegiate Westminster-Whitehall system punctuated by periods of radical change, innovation, differentiation and reform enabled by the lack of checks and balances governing those same policy communities at the heart of government. The presence of punctuations in the post-war British policy-making agenda might, furthermore, indicate breaks or turning points, such as those associated

with changes in partisan control of government capturing wider shifts in the political mood like, for example, the election of the Conservative government in 1979.

This analysis therefore considers a set of theoretical propositions: first, about whether the distribution of changes in the political agenda is punctuated in Britain; second, if there is change over time in the spread of the content of the political agenda; and, third, whether partisan factors, such as particular elections, governments or prime ministers, represent breaks or turning points over time. Those propositions are represented as hypotheses below:

H_1: The punctuated equilibrium model: the general distribution of shifts in the political agenda is a non-normal, leptokurtic distribution.

H_2: The entropy model: the relative concentration or fragmentation of the political agenda reveals particular trajectories or turning points in policy-making attention in British post-war politics.

H_3: The partisan model: major punctuations in, and/or the entropy of, political attention are influenced by partisan factors, such as general elections, changes in government and the policy style of particular prime ministers.

In the analysis that follows, these propositions, H_1, H_2 and H_3, are each tested against the null hypothesis (H_0) of non-significance using a number of different statistical methods.

Data and Methods

The Queen's Speech and the political agenda

In many political systems the head of state delivers, on behalf of the executive, an annual formal statement of the proposed legislative programme of the government, which helps set out the policy agenda for the forthcoming year. In Britain, such a convention takes the form of the Speech from the Throne (also known as the Gracious Speech) – the King's or the Queen's Speech – which reports the programme of legislative measures that the government intends to enact in the next session of parliament as well as providing more general statements about executive priorities. Researchers have used the speech as a measure of policy-making attention[46] and political-cultural dynamics,[47] just as with the State of the Union address in the US.[48] There is evidence of a close link between manifesto pledges and legislative proposals of governing parties and policy outputs.[49] The speech can also indicate the priorities of policy-makers in domains, such as international affairs, where legislation does not always signal changes in outputs.

Of course, the content of the Queen's Speech does not represent the sum of the executive agenda, such as deliberation in cabinet and its subcommittees, nor the extent to which individual ministers pursue specific policies, nor how departments, agencies and local government implement these measures. The policy agenda advanced in the Queen's Speech can therefore remain stable while there is significant change elsewhere. For instance, it does not tend to address decisions made through statutory instruments. The legislative content of the speech might sometimes not reflect the salience of prominent issues on the national political agenda (e.g. intense public debate over the Iraq War in 2002 to 2003 is not reflected in the degree of attention to international affairs in the

Queen's Speech). Nor does the Policy Agendas coding system measure the exact character of policy tools or instruments, such as whether these were market-based, which often reveal significant distinctions between the policies of governments.

Nevertheless, the Queen's Speech is a robust aggregate-level measure of policy-making attention in Britain. Decision-making about its content represents an important phase of the British political cycle. The speech provides a high-profile signal, at a particular point in time, of the priorities of the core executive to parliament, to governing and opposition parties, to interest groups, to the media and to the public. Because of the limited amount of legislative time available, the executive has to prioritize its agenda for the forthcoming session of parliament, including topics that it considers to be urgent. Some elements of the legislative programme might be included in response to specific crises, media coverage or spikes in the level of public attention, whereas others might entail routine business and gradual implementation of manifesto commitments through the four or five speeches that occur, on average, over the lifetime of a government. The standardized coding of the content enables this analysis to determine which topics the government concentrated on, whether these changed over time, and at what rate.

The project analysed the full text of the Queen's Speech at the quasi-sentence level according to a UK-adapted version of the policy agendas coding framework.[50] The transcripts of the speech were blind-coded by two researchers who compared and reconciled their responses; first to ascertain whether each quasi-sentence contained any policy content and then, using the original codebook from the US, to assign a major topic code and subtopic code to each quasi-sentence. This procedure led to ninety per cent inter-coder reliability for most years. The coders resolved the remaining differences

through discussion and the project leaders made the final decision in the few cases where coders could not agree. Most of the British major topic codes are consistent with the original codebook, with a few minor adjustments of sub-topics.[51]

Trajectories of the political agenda in the United Kingdom, 1940-2005

Figure 1 presents the total number of statements and policy statements contained within each speech. This shows the increasing volume of policy content in the 1940s and 1950s as governments got back into their stride after the Second World War, but no clear upward or downward trend thereafter. The basic constitutional, political and policy-making function of the Queen's Speech does not appear to have changed much over time.

[insert Figure 1 about here]

There are elements of both stability and change in attention to the major topics presented in the area graph in Figure 2. The value for each policy topic is assigned a percentage of attention by the executive at any one time, so as one topic rises on the political agenda, the amount of attention for all other topics falls. The observed trends in the content of the speech tend to reflect the conventional wisdom about the rise and fall of certain issues on the policy-making agenda in Britain. For example, there was a gradual expansion of government's attention to macroeconomic issues, topic one, over the period between 1940 and 1980, with a contraction afterwards. For health, topic three, the low ranking of this topic persisted until the 1980s, but increased from then on. For defence, topic sixteen, the decline of government attention in the period immediately after the Second World War was followed by a relative stabilization after the 1960s. For law and order, topic twelve, escalation of the importance of crime on the political agenda emerged after the

1970s. There is no obvious partisan dimension to trajectories of the British political agenda. Nor is there any evidence of synchronization with the timing of general elections that might suggest a political business cycle at work with respect to the policy-making agenda.

[insert Figure 2 about here]

Results

This paper next presents the results for a series of diagnostic tests that investigate how the properties of the policy agenda change over time. Are there punctuations in policy-making attention in Britain? Does the allocation of attention to particular topics become more or less concentrated over time? This analysis uses measures of agenda distribution (kurtosis, semi-log and log-log plots) and concentration/diffusion (entropy scores), which follows the methods of other studies.[52]

Punctuations in British politics and policy-making

The punctuated equilibrium model implies a leptokurtic distribution of policy change or outputs, which can be measured with a kurtosis statistic.[53] The expected properties of these distributions correspond to the theoretical expectations of H_1, the punctuated equilibrium model. When compared against the normal (Gaussian) distribution, those with positive kurtosis (i.e. leptokurtosis) have a large, slender central peak to correspond to extended periods of incrementalism or near stasis; weak shoulders to reflect the relative lack of moderate change; and fat tails that represent the disproportionate occurrence of extreme infrequent disturbances (i.e. punctuations). Indeed, the distribution

of budget changes is leptokurtic in the US and elsewhere.[54] There is also evidence that the leptokurtosis of output distributions becomes more and more severe as the level of institutional friction increases through subsequent stages of the political system.[55] Measurement of the normality of the political agenda can therefore indicate the extent to which British politics and policy-making might be characterized by either incrementalism or change. It assists inferences about the degree of friction that exists in the institutions of British government.[56]

The base measure of the political agenda is the percentage (at the quasi-sentence level) of the Queen's Speech assigned to a particular topic. This treats the agenda space as constant through time. There is no potential for growth or inflation in the political agenda unlike budgets, because this measure is bounded. Although subject to some fluctuations (see Figure 1), the volume of policy content in the Queen's Speech tends to be stable over time. The distribution of changes in the frequency of mentions of topics is therefore similar to that for the proportion of attention. For this analysis, change scores are equal to the percentage change in the percentage share of the Queen's Speech for each year for each topic in turn. For twenty-one major topics over the period between 1940 and 2005 this generates a total distribution consisting of 1,365 observations of percentage changes. The number of observations reduces to 997 because those cases where policy-making attention remains stable at zero are treated as missing to avoid false acceptance of H_1 due to empirical redundancy of some topic codes.[57]

[insert Figure 3 about here]

An inspection of the distribution of annual percentage change in the executive's attention to particular policy topics in the Queen's Speech, plotted against a hypothetical Gaussian distribution with an identical mean and variance (Figure 3), indicates that changes in the policy-making agenda are not normal but leptokurtic.[58] The test results reported in Tables 2 and 3 also confirm that percentage change distributions are leptokurtic. The kurtosis score (Table 2) is positive and equal to 19.21 In addition, the Kolmogorov-Smirnov test, which considers whether the sample is drawn from a normal distribution,[59] generates a D statistic of 0.143 significant at the 99 per cent confidence level (Table 3). However, this test is sensitive to deviations in the tails of the distribution so is not optimal for the analysis of punctuations. The more powerful Shapiro-Wilk test does not require the mean or variance to be specified in advance.[60] This generates a W statistic of 0.828, again significant at the 99 per cent confidence level (Table 3). These statistics show that British policy-making is sometimes subject to rapid and disproportionate agenda change, similar to other political systems, just as the punctuated equilibrium model (H_1) predicts. Punctuations are acute in magnitude in the Queen's Speech in Britain, though less than in the State of the Union Address in the US.[61] This finding does not reflect the lack of veto points in the Westminster-Whitehall system, because there are punctuations despite the relative absence of institutional friction.

[insert Table 2 about here]

[insert Table 3 about here]

Estimation of the underlying probability distribution

An alternative approach for assessing the distributional properties of the political agenda is to examine the shape of log-log and semi-log plots,[62] which are drawn from the logged values of the frequencies and the bands of changes. The log-log plot will fit a straight line for a Paretian distribution (that is, for a power-law function), while the semi-log plot will fit a straight line for an exponential distribution.[63] For a normal distribution, either or both of these data transformations will be curved.[64] As a rule, the visual inspection of these scatter plots is sufficient to determine which of the transformations best fits the data. However, these plots can also be checked for goodness-of-fit and against the slope of an ordinary least squares regression. The slope of the line provides an additional indicator of the extent of the punctuations, becoming more flat as the data series becomes more punctuated (i.e. when there are more extreme values in the tails of the distribution).

[insert Figure 4 about here]

[insert Figure 5 about here]

From the estimated plots (see Figures 4 and 5), the distribution of agenda change for the Queen's Speech is best approximated as a double exponential distribution (Figure 4). The fit is less close for a Paretian distribution, although might not be rejected outright (Figure 5). Again this evidence tends to support H_1, the punctuated equilibrium model, since the general distribution of change in the political agenda is punctuated and consistent with disproportionate information processing of the sort highlighted in later versions of the model.[65] The goodness-of-fit measures are superior for the semi-log plots (both R^2 and mean squared error) although the slope of the line of best fit is flatter for the log-log plots. This indicates there are more disturbances in the tails of the Paretian distribution. These findings are further confirmation that changes in policy-making attention in the

Queen's Speech are punctuated (H_1). The priorities at the heart of British government are more often than not stable, but there are also rapid and disproportionate periods of agenda change.

Major punctuations in the British political agenda

The Queen's Speech dataset also enables identification of the largest punctuations in the British political agenda over the period between 1940 and 2005. Table 4 reports all those percentage changes in excess of 250 per cent.[66] This method of presentation illustrates the relative magnitude of change rather than whether a specific topic is high or low on the agenda at a given point in time (which can be observed in Figure 2).[67] Of the twenty-seven punctuations listed in Table 4, just six coincide with changes in party government while nine coincide with the start of a new parliamentary session. However, because there have been just six partisan changeovers between Labour and Conservative governments between 1940 and 2005 (not inclusive of the change of government after the wartime national coalition), 22 per cent of the largest punctuations are drawn from 9 per cent of these years. This finding suggests the importance of H_3, the partisan model, though further data would be needed to provide a more comprehensive test of this hypothesis.

[insert Table 4 about here]

Some Queen's Speeches appear to have been particular watersheds in the political agenda as they contain multiple punctuations. For example, the Queen's Speech of the Churchill Government in 1954 had four punctuations: in social welfare, law and order, education and transport. Other major punctuations are associated with exogenous shocks to the

political agenda. For example, the international oil price crisis of 1973 preceded a 490 per cent increase in the executive's attention to energy, while the electoral success of the Green Party in the 1989 European elections coincided with a 367 per cent increase in attention to the environment in the Queen's Speech of later that year. This pattern is confirmed in Figure 6 where there are noticeable spikes in the kurtosis score of the annual distribution of policy agenda change in 1956, 1966, 1974, 1982 and 1989. Figure 6 illustrates how the degree of kurtosis of the agenda is sensitive to years containing sizeable attention shifts.

[insert Figure 6 about here]

A possible conclusion to draw is that major punctuations in the British policy agenda are a function of exogenous shocks: where changes in the input distribution (i.e. the information that is received and processed by decision-makers) are reflected in the subsequent content of the Queen's Speech (i.e. the output distribution). This means that policy punctuations, as part of the general distribution of agenda change over time, are the product of signals from the external world. This evidence concerning major punctuations in the political agenda might, therefore, contribute to understanding of the effect of exogenous forces or events in British politics and policy-making as well as highlighting the influence of partisan factors, such as elections, governments, and prime ministers in setting the content of the political agenda communicated in the Queen's Speech.

There are a greater number of large-scale punctuations in the political agenda for the Wilson governments (see Table 4) than for the reforming governments led by Attlee and

Thatcher. Moreover, there are a greater number of positive punctuations of the policy-making agenda in the speech of the Churchill government in 1954 compared with that of the Thatcher government elected in 1979. One might argue that these findings serve to reinforce claims of the traditional Westminster-Whitehall model regarding the continuities and stabilities that characterise British politics.[68] Surprisingly, some of the largest positive policy punctuations are observed for some of those governments least associated with dramatic reform or change (e.g. Churchill 1951-1955, Eden 1955-1957, Douglas-Home 1963-1964). This finding also suggests that new data and measures of the priorities of British government might encourage some reconsideration of established narratives about the activism particular governments in the post-war period. Of course, it remains quite possible that consistent levels of attention disguise substantial changes in the left-right orientation of policy or policy-makers' preferences for particular tools of government. For example, similar levels of attention to macroeconomic issues for the Callaghan and the Thatcher governments are associated with quite different approaches to economic management. Nonetheless, the results reveal that shifts in political attention are not always discovered where they might be expected.

The entropy of political attention

Our next step in measurement of political attention in Britain focuses upon the character of the agenda as a whole. While punctuations are significant as break points in the degree of attention to specific topics, it is also important to consider whether the general composition of the political agenda changes over time. This analysis can provide an indication of the broader nature of government attention to the spectrum of issue topics

covered under the Policy Agendas framework. To measure the degree of concentration or fragmentation of political attention, entropy scores are calculated for the content of the Queen's Speech across the major topic codes. This measure of the relative concentration or dispersion of data is similar to Herfindahl indices used in other studies of policy agendas and interest group mobilization.[69] However, entropy is a more powerful measure for data with low levels of concentration.[70] An entropy score of zero indicates that attention is concentrated in a single topic whereas a score of 3.04 indicates that attention is spread across all twenty-one major topics.[71] Entropy provides a measure of the relative concentration or diversity of policy-making attention across the topics. If government were to concentrate its attention on only a few topics, the entropy score would be low. If attention were instead spread across more of them, the entropy score would be high. When plotted over time, entropy indicates variation in government's attention to the range of different topics on the political agenda.

[insert Figure 7 about here]

From visual inspection of Figure 7, it is possible to identify three distinct periods in the entropy of the British policy agenda between 1940 and 2005: the first is wartime and post-war (welfare state creation); the second is post-1960s (hyper-innovation); and the third is post-Thatcher (economic policy consensus and post-Cold War). There was an expansion of the political agenda throughout the Second World War and post-war period right up to the 1960s as defence ceased to monopolise the attention of governments. This differentiation of the policy agenda also might reflect the process of welfare state creation and diversification of the policy toolkit of modern British government.

By fitting a third order polynomial regression to the entropy time series, it is possible to confirm that the first turning point in the entropy of the post-war British political agenda is identifiable in the mid-1960s, with the first peak of the polynomial is in 1964 (2.565).[72] The first Wilson government appears to have taken power at the height of the fragmentation of the post-war political agenda. After this the agenda experienced a period of relative concentration. From the mid-1960s onwards there was an extended period of decline in diversity of the political agenda in Britain. The principal cause appears to have been the increasing attention of the executive to macroeconomic issues, labour and employment, and international affairs; with inflation, unemployment, strikes and the Cold War (along with international terrorism in the 1970s) becoming the focus of political and public concern. The British political agenda therefore appears to have contracted, rather than expanded, during this period of hyper-innovation and reform.

While it might be expected that the political agenda would tend to become increasingly differentiated over time, the socio-economic conditions of this period (e.g. industrial disputes, oil price shocks) prompted a relative concentration of government attention at the expense of other issues. The tendency for economic issues to push other items off the agenda when economic conditions worsen is a cross-national phenomenon.[73] Thus the gradual disintegration of post-war economic growth and transition to the 'ungovernable' 1970s can be associated with agenda contraction.[74] This contraction of political attention continued throughout the 1970s and 1980s as successive Labour and Conservative governments were similarly preoccupied with national economic problems and finding solutions to them.

The second turning point occurred in the early 1990s, after which the agenda started to expand once again. The low point in the polynomial regression is in 1991 (2.274).[75] This suggests the demise of Thatcher as leader of the Conservative government coincided with an expansion of the political agenda. With a relative decline in attention to economic issues, as well as to defence and international affairs, the political agenda once again became more differentiated and diverse. The agenda space, which had been dominated by economic concerns and the Cold War since the 1960s, diversified with increased attention to education, law and order, health, public services and immigration and asylum. This post-Thatcher period signalled a return to a broader focus of government as the main political parties sought to compete on issues other than the economy, defence and international affairs. The agenda continued to expand throughout the 1990s because governments become preoccupied with more policy topics, even during the economic recession during the Major government. From 1997 onwards, New Labour continued this trend of diversification in attention of policy-makers to topics in a more diverse and wide-ranging legislative agenda – either creating or benefiting from it.

In heralding this new era, the end of the Thatcher premiership appears to have been far more significant than the 1979 election as a watershed of the political agenda in Britain. According to this measure of entropy, there is no support for H_3. Only after the overthrow of Thatcher and convergence of the Conservatives and Labour on economic policy, with the Exchange Rate Mechanism crisis of November 1992 ending the perceived advantage of the Conservative Party on economic management,[76] did governments turn their attention to other parts of the policy agenda. The fall of prime minister Thatcher and rise of New Labour appear to represent a turning point in the modern British political era.

From 1991 onwards the policy agenda diversified, as government spread its attention across a wide range of topics.

The entropy of the policy agenda of the Queen's Speech reveals distinct eras of post-war British policy-making: from welfare state creation to hyper-innovation to post-Thatcherism. This periodisation suggests trends in the entropy of the political agenda are a function of long-term structural social and economic changes as well as being sensitive to factors in the international environment, such as war or migration. This is a different interpretation of agenda change than the dichotomies that are often favoured in political analysis.

While there are gradual shifts in the entropy of political attention, agenda-setting is also subject to shorter-term partisan influences, H_3, as well as the effect of prime ministerial styles and the electoral cycle. Using time series intervention analysis,[77] it is possible to estimate the effect of general election years, party control of government and the terms of individual prime ministers on the entropy of the Queen's Speech. This represents a tough test of H_3 since it controls for the inherent dynamics of the entropy measure, which does not appear to undergo dramatic shifts or fluctuations between years (Figure 7). The noise structure of the entropy series is determined to be an ARIMA (1,0,0) process with autocorrelation and partial autocorrelation plots and augmented Dickey-Fuller and KPSS tests for stationarity. This analysis first tests the effect of election years as pulse inputs – interventions with a temporary but instantaneous effect on the entropy score.[78] It considers whether there is a brief expansion of content of the political agenda in the Queen's Speech after a general election. These inputs are found to be insignificant at the 95 per cent confidence level. Second, the partisan control of government is tested as a

pulse input equivalent to a switch that turns on when the Conservative party is in power and turns off when Labour is in power. This input is also found to be insignificant, suggesting that there is no systematic difference in the level of agenda entropy for periods of Conservative government compared against periods of when Labour is in office. Third, the influence of prime ministers on the entropy of the Queen's Speech is also insignificant at the 95 per cent level when tested as a pulse input for the duration of their term of office. This suggests no single political leader is associated with a more fragmented or concentrated agenda than others. While it is evident that some prime ministers preside over periods of agenda expansion or contraction (see Figure 7), it is possible that these are a function of macro-political trends making it difficult to resolve whether entropy is a function of prime ministerial agenda setting or not.

Overall, the findings do not provide support for H_3, the partisan model. Controlling for stochastic fluctuations and the autoregressive character of political attention, there are no detectable differences in the level of entropy for Labour and Conservative governments; nor are there spikes during election years or significant differences between the level of entropy for one prime minister compared against another. The evidence leads to the rejection of H_3, the partisan model, since there is no obvious partisan impact on the relative concentration or fragmentation of the political agenda in Britain as might be translated directly through general elections, party control of government or political leaders. There are no significant changes at the time of the 1979 or 1997 elections. This finding appears to dispel claims that the balance of priorities of British government changed irrevocably, either with Thatcher or Blair, when they took up office.

[insert Table 5 about here]

Conclusions: British politics and future directions of policy agendas research

British politics is not an island apart from other political systems in the character of its policy-making agenda. The policy agenda of the Queen's Speech reveals punctuations, confirming there are dramatic and disproportionate changes in political attention in Britain just as in other political systems. Long periods of stability and incrementalism are interrupted by sudden increases or decreases in attention of the executive to particular topics, giving rise to agenda change. Of interest for debate about the impact of institutional friction on changes in policy agendas and outputs[79] are the results that suggest that British politics is punctuated similar to other political systems rather than less, as the friction model proposes. That finding requires further investigation, though, for venues of politics and policy-making other than the Queen's Speech.[80]

These results also generate insights on some of the classic conundrums of British politics as they apply to the political agenda, such as whether party control of government makes a difference, which is does for punctuations, but not for entropy. Perhaps of greatest significance, the analysis is able to determine the date, direction and magnitude of watersheds or break points in the British political agenda according to the share of attention that the executive assigned to particular topics and the spread of attention across them. The political agenda contains turning points that are driven by the relative dominance of certain issues over the priorities of the executive. For a period after the Second World War the political agenda diversified, but as the Cold War and economic crises of the 1970s and 1980s deepened successive governments struggled to attend to

issues other than these critical problems. This crowded out the agenda space available for other issues. The critical turning point in post-war British political attention was the post-Thatcher transition, in particular the end of the Cold War and emergence of economic policy consensus among the major political parties, after which the executive enacted a more diverse and fragmented agenda. The long-term decline in importance of international affairs and economic issues opened up space for other topics of public concern. At the same time, the modernisation of the Labour Party in the 1990s contributed to this process of agenda expansion with its platform of policies on health, education and law and order. The rise of New Labour was, therefore, interdependent with fragmentation of the political agenda in Britain as it either helped create it or benefited from it. As far as fragmentation of the policy-making agenda is concerned, 1991 appears to have been a more significant turning point in British politics than 1979 ever was.

Having challenged some established accounts of modern British politics, what might the policy agendas framework add to its study? First, it provides a measure of the complex and fragmented character of the political agenda and how this changes over time in response to external events and changes in the wider political environment. The policy-making system is not insulated and is influenced by pressures from public opinion, events such as war, and by long-term structural changes, such as a failing economy in the 1970s and disintegration of the British Empire. Within this environment, there are opportunities for political actors, such as political parties or prime ministers, to compete for control over the political agenda and shift it onto other issues. However, as the policy agendas approach has demonstrated, this pattern of shifting attention is subject both to periods of extended incrementalism as well as to rapid and dramatic realignments of the status quo.

Given the unique character of British political institutions and the longstanding use of the Westminster-Whitehall model in political analysis, future research into the policy-making agenda in Britain might consider the specific mechanisms that are associated with punctuations of the agenda, the impact of specific institutional features (e.g. the electoral system), and the causal mechanisms that link different parts of the political agenda, such as between the media, parliament, departments and agencies, regulators and other policy outputs. More data on other venues in the British political system can address these questions, in particular in comparison with similar data from other countries.

TABLES AND FIGURES

Table 1. Major topic codes from the Policy Agendas Project

1. Macroeconomics	**14. Housing and Urban Development**
2. Civil Rights, Minority Issues, and Civil Liberties	**15. Banking, Finance, and Domestic Commerce**
3. Health	**16. Defense**
4. Agriculture	**17. Space, Science, Technology and Communications**
5. Labour, Employment and Immigration	**18. Foreign Trade**
6. Education	**19. International Affairs and Foreign Aid**
7. Environment	**20. Government Operations**
8. Energy	**21. Public Lands and Water Management (Territorial Issues)**
10. Transportation	**24. Regional and Local Government Administration**
12. Law, Crime, and Family Issues	**28. Arts and Entertainment**
13. Social Welfare	

Table 2. Descriptive statistics for percentage change in the Queen's Speech 1940-2005

Mean	7.80
Median	-11.80
Variance	9726.91
Standard Deviation	98.63
Inter Quartile Range	90.7
Skewness	2.71
Kurtosis	19.21
Min	-100
Max	1060
N	997

Table 3. Tests of normality for the percentage change in percentage attention based on raw data

Kolmogorov-Smirnov D Statistic	0.1431***
Shapiro-Wilk W Statistic	0.8284***
N	997

Table 4. Major policy punctuations in the Queen's Speech, 1940-2005.

Percentage change (values, positive tail, in excess of 250%)	Topic	From/To	Party	Prime Minister	Election Year	Year of change of Government (Lab/Con)
257%	Commerce and Banking	1963/1964	Labour	Wilson	Yes	Yes
259%	Government Operations	1987/1988	Conservative	Thatcher	No	No
262%	Labour, Employment and Immigration	2004/2005	Labour	Blair	Yes	No
264%	Science and Technology	1978/1979	Conservative	Thatcher	Yes	Yes
264%	Education	1978/1979	Conservative	Thatcher	Yes	Yes
264%	Law & Order	1956/1957	Conservative	Macmillan	No	No
267%	Health	1968/1969	Labour	Wilson	No	No
276%	Labour, Employment and Immigration	1960/1961	Conservative	Macmillan	No	No
281%	Civil Rights	1998/1999	Labour	Blair	No	No
307%	Social Welfare	1953/1954	Conservative	Churchill	No	No
312%	Economy	1948/1949	Labour	Atlee	No	No
341%	Education	1969/1970	Conservative	Heath	Yes	Yes
360%	Civil Rights	1977/1978	Labour	Callaghan	No	No
367%	Environment	1988/1989	Conservative	Thatcher	No	No
389%	Law & Order	1953/1954	Conservative	Churchill	No	No
389%	Education	1953/1954	Conservative	Churchill	No	No
389%	Transport	1953/1954	Conservative	Churchill	No	No
390%	Foreign Trade	1968/1969	Labour	Wilson	No	No
407%	Housing	1962/1963	Conservative	Douglas-Home	No	No
415%	Education	1986/1987	Conservative	Thatcher	Yes	No
429%	Housing	1969/1970	Conservative	Heath	Yes	Yes
440%	Social Welfare	1965/1966	Labour	Wilson	Yes	No
458%	Housing	1999/2000	Labour	Blair	No	No
458%	Health	1999/2000	Labour	Blair	No	No
490%	Energy	1973/1974	Labour	Wilson	Yes	Yes
512%	Energy	1968/1969	Labour	Wilson	No	No
1060%	Government Operations	1955/1956	Conservative	Eden	No	No

Table 5. Box-Tiao time series intervention model of effects of elections, party control of government and prime ministers on agenda entropy

	Year(s) tested (t_j) as separate interventions	Transfer function	Effect on agenda entropy
Party control of government			
Conservative	1951-1964; 1970-1974; 1979-1997	Pulse	No
Labour	1945-1951; 1964-1970; 1974-1979; 1997-2005	Pulse	No
General Elections			
	1945; 1950; 1951; 1955; 1959; 1964; 1966; 1970; 1974; 1979; 1983; 1987; 1992; 1997; 2001; 2005	Pulse	No
Prime Ministers			
Winston Churchill II	1940-1945	Pulse	No
Clement Atlee	1945-1951	Pulse	No
Winston Churchill II	1951-1955	Pulse	No
Anthony Eden	1955-1957	Pulse	No
Harold Macmillan	1957-1963	Pulse	No
Alec Douglas-Home	1963-1964	Pulse	No
Harold Wilson I	1964-1970	Pulse	No
Edward Heath	1970-1974	Pulse	No
Harold Wilson II	1974-1976	Pulse	No
Jim Callaghan	1976-1979	Pulse	No
Margaret Thatcher	1979-1990	Pulse	No
John Major	1990-1997	Pulse	No
Tony Blair	1997-2005	Pulse	No
Noise Components and Diagnostics			
ARIMA			(1,0,0)
Autoregressive (ϕ)			0.941***
			(0.038)
Moving Average (θ)			-
Mean (μ)			2.180***
			(0.243)

White Noise Disturbances (a_t)	0.152***
	(0.016)
Diagnostics	
Durbin-Watson d-statistic	1.804
Ljung-Box Q-statistic	14.529
Skewness/Kurtosis joint test statistic	39.80***
R^2	0.602
Adjusted R^2	0.596
Root MSE	0.188

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests) with standard errors in parentheses.

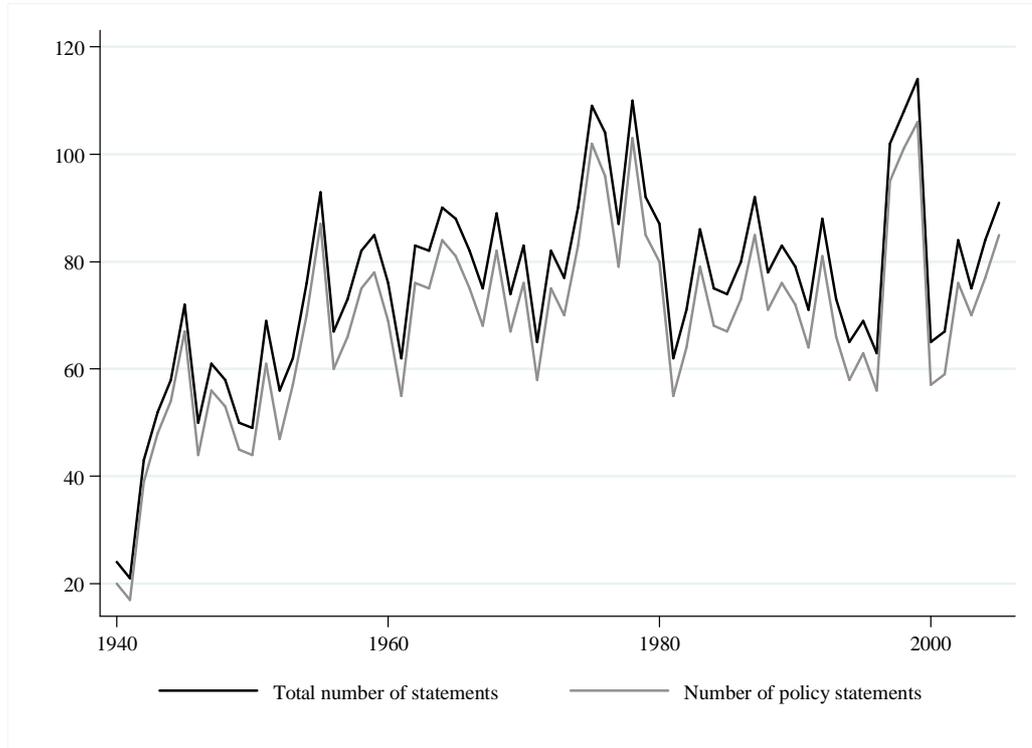**Figure 1.** Number of policy statements in the Queen's Speech 1940-2005

Figure 2. The policy content of the Queen's Speech 1940-2005

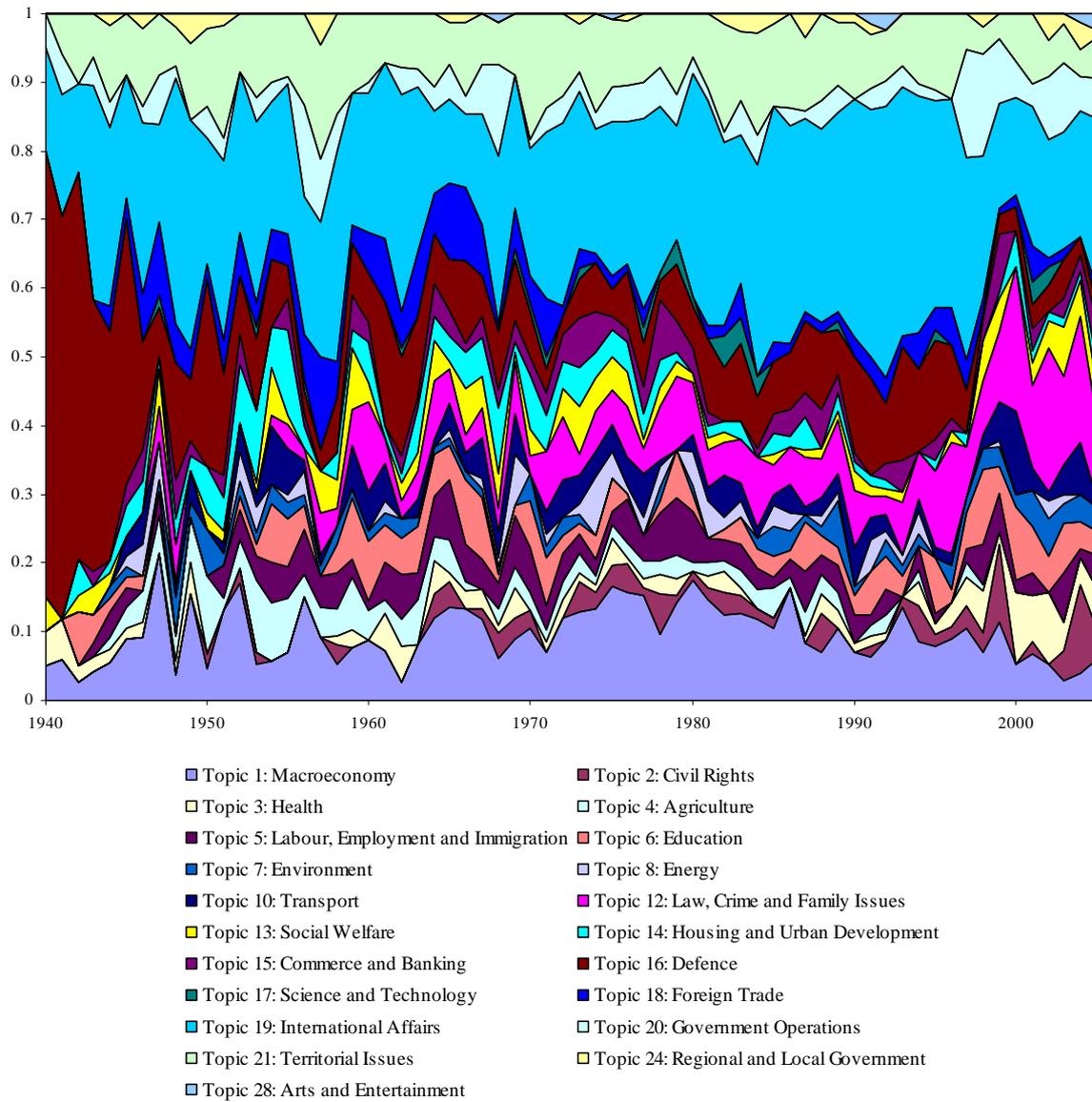|	
☐ Topic 1: Macroeconomy	■ Topic 2: Civil Rights
☐ Topic 3: Health	☐ Topic 4: Agriculture
■ Topic 5: Labour, Employment and Immigration	■ Topic 6: Education
■ Topic 7: Environment	☐ Topic 8: Energy
■ Topic 10: Transport	■ Topic 12: Law, Crime and Family Issues
☐ Topic 13: Social Welfare	☐ Topic 14: Housing and Urban Development
■ Topic 15: Commerce and Banking	■ Topic 16: Defence
■ Topic 17: Science and Technology	■ Topic 18: Foreign Trade
■ Topic 19: International Affairs	☐ Topic 20: Government Operations
☐ Topic 21: Territorial Issues	☐ Topic 24: Regional and Local Government
☐ Topic 28: Arts and Entertainment	

Figure 3. Annual percentage change in percentage attention in the Queen's Speech
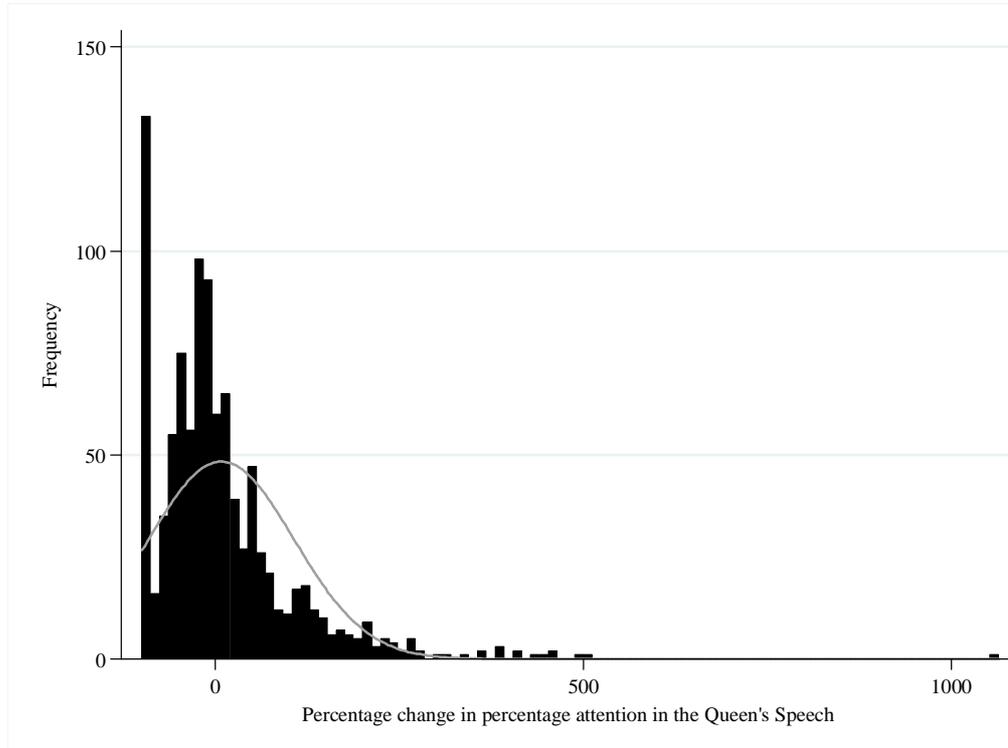
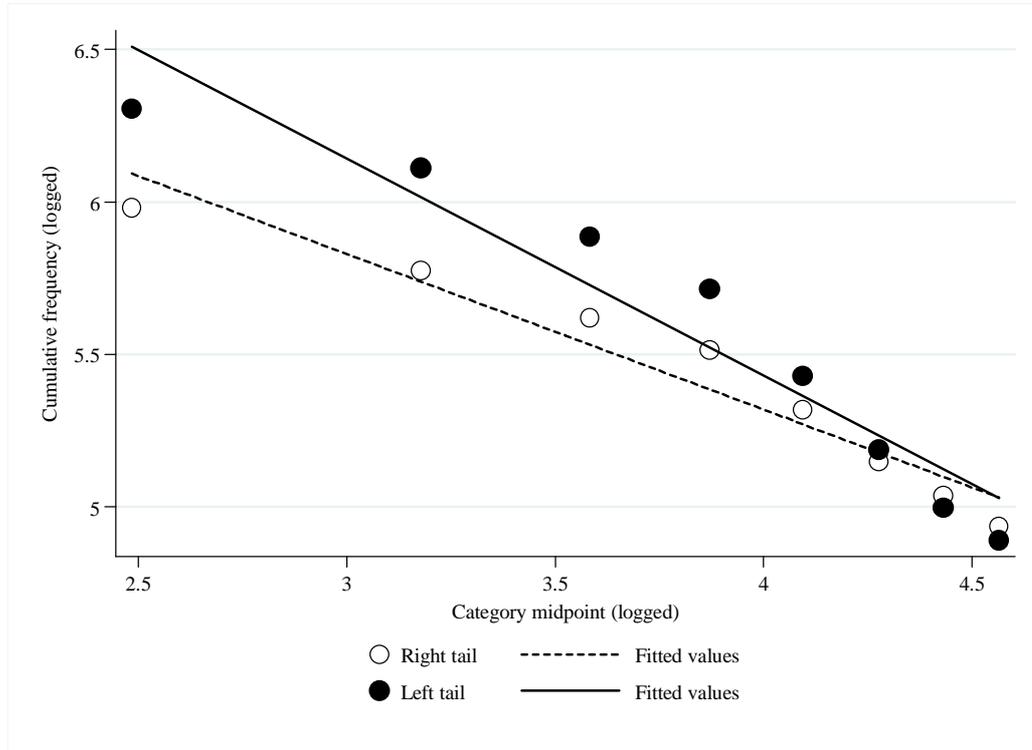**Figure 4.** Semi-log plot with a superimposed line of best fit.
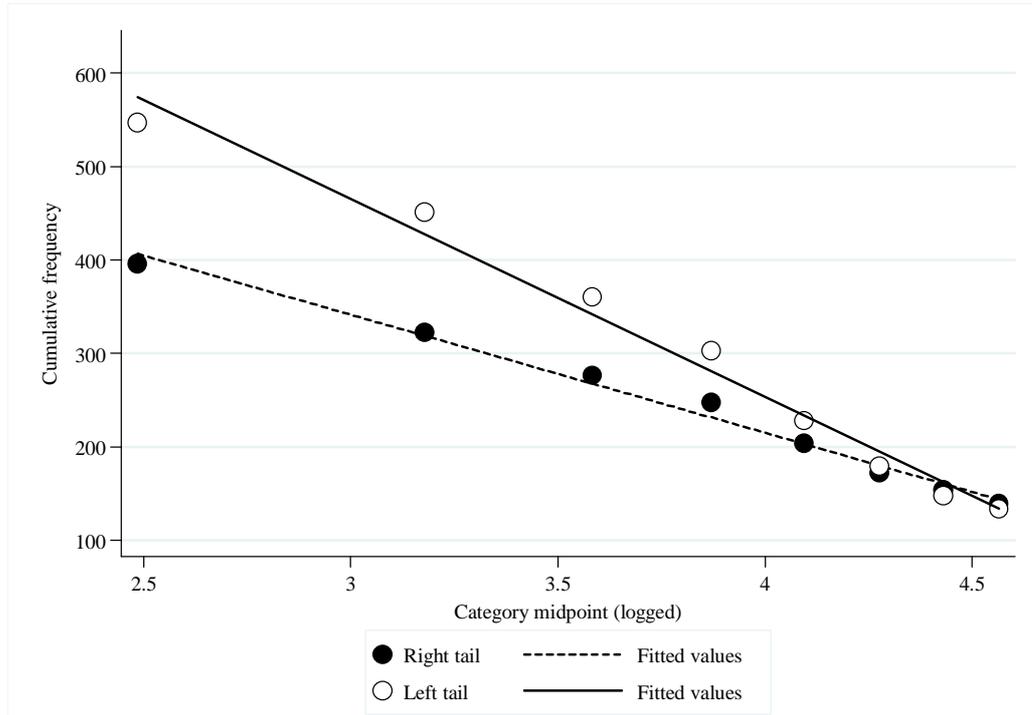
Right Tail: y = -126.39x + 720.49 R^2 = 0.9893   Root MSE = 9.9944
Left Tail: y = -211.76x + 1100.5 R^2 = 0.9834   Root MSE = 20.874

Figure 5. Log-log plot with a superimposed line of best line.

Right tail: y = -0.5104x + 7.3609 $R^2 = 0.9432$ Root MSE = .09519
Left tail: y = -0.7117x + 8.2771 $R^2 = 0.919$ Root MSE = .16059

Figure 6. Kurtosis score of the annual distribution of change in attention in the Queen's Speech 1940-2005

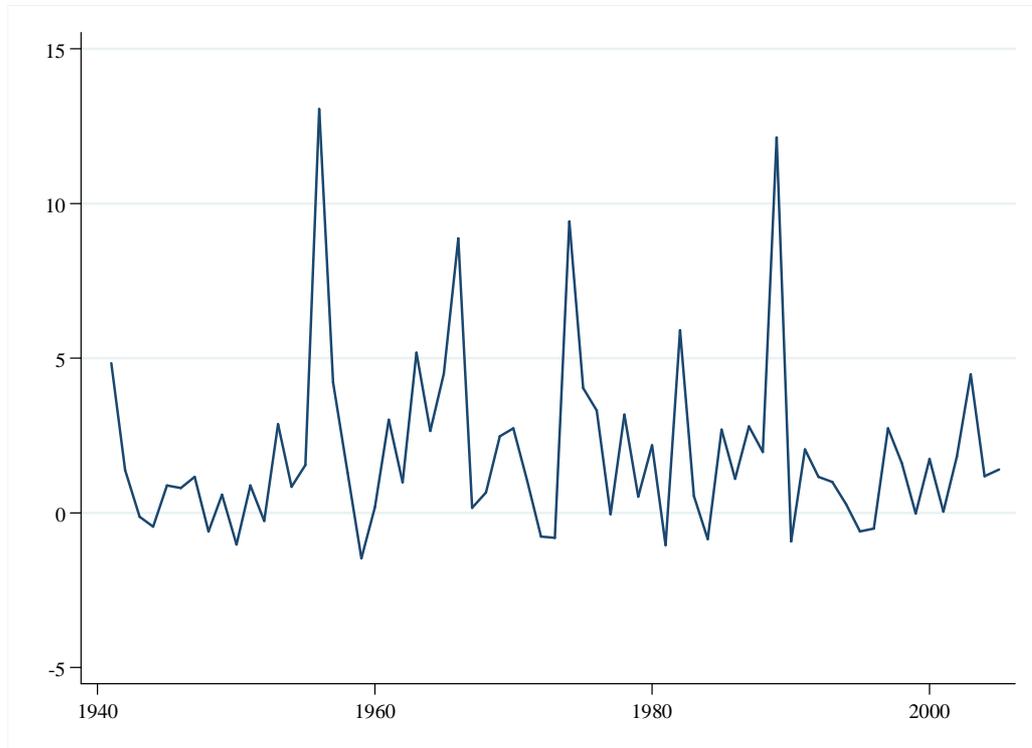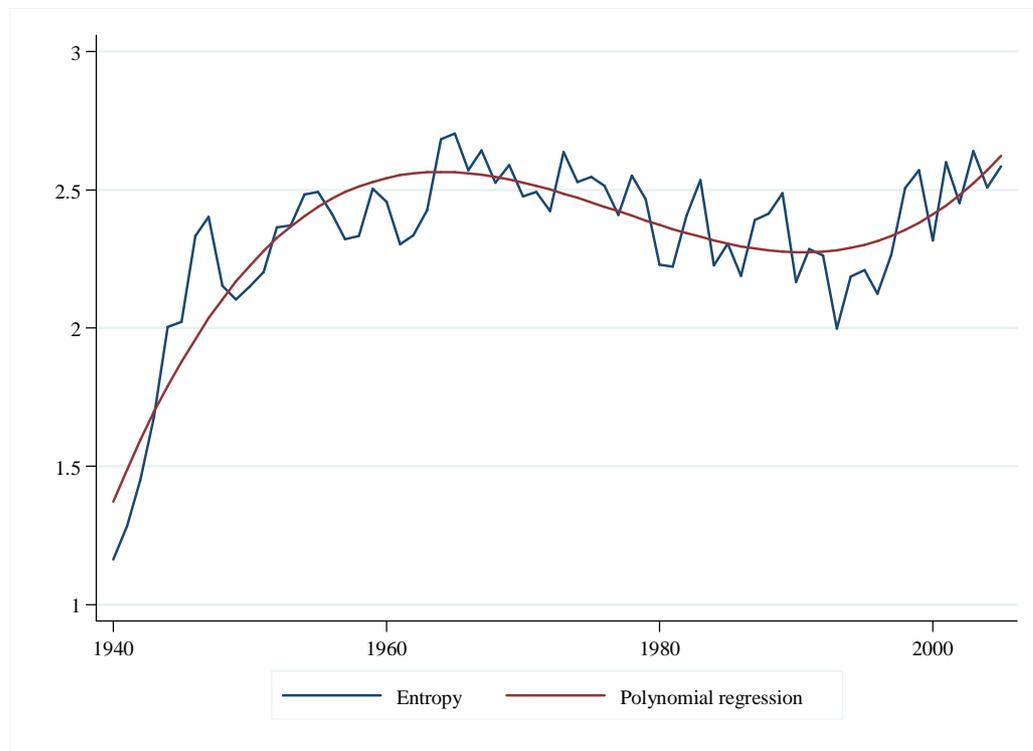**Figure 7.** Entropy score for the Queen's Speech 1940-2005

$Y= -3.80e+09x^3 - 165973.3x^2 + 4918.047x + 2.494$ $R^2=0.783$ Root MSE=0.141

NOTES

[1]. E.g. Frank R. Baumgartner and Bryan D. Jones, *Agendas and Instability in American Politics* (Chicago: University of Chicago Press, 1993); Frank R. Baumgartner, Bryan D. Jones and Michael MacLeod, 'The Evolution of Legislative Jurisdictions', *Journal of Politics* 62 (2000), 221-249; Virginia Gray and David Lowery, 'State Interest Group System Diversity', *Political Research Quarterly* 46 (1993), 81-97; Virginia Gray and David Lowery, *The Population Ecology of Interest Representation: Lobbying Communities in the American States* (Ann Arbor, Michigan: University of Michigan Press, 1996); Virginia Gray and David Lowery, 'To Lobby Alone or in a Flock: Foraging Behavior Among Organized Interests', *American Politics Quarterly* 26 (1998), 5-34; Bryan D. Jones, Tracey Sulkin and Heather Larsen, 'Policy Punctuations in American Political Institutions', *American Political Science Review* 97 (2003), 151-169; Bryan D. Jones and Frank R. Baumgartner, *The Politics of Attention: How Government Prioritizes Problems*. Chicago: University of Chicago Press, 2005).

[2]. E.g. Jeremy Richardson and Grant Jordan, *Governing Under Pressure: the Policy Process in a Post-parliamentary Democracy* (Oxford: Martin Robertson, 1979); Richard Rose and Phillip Davies, *Inheritance in Public Policy* (New Haven, CT, Yale University Press, 1994).

[3]. Patrick Dunleavy, 'Policy Disasters: Explaining the UK's Record', *Public Policy and Administration*, 10 (1995): 52-70; Christopher Hood, *Explaining Economic Policy Reversals* (Buckingham: Open University Press 1994).

[4]. Samuel E. Finer, 'Introduction: Adversary Politics and Electoral Reform', in Samuel E. Finer (ed.). *Adversary Politics and Electoral Reform*. London: Anthony Wigram, 1975), pp. 3-32.

[5]. For a recent review see Colin Hay, 'Whatever happened to Thatcherism?', *Political Studies Review*, 5 (2007), 183-201.

[6]. For simplicity the remainder of this analysis refers to the Speech from the Throne as the Queen's Speech.

[7]. See www.policyagendas.org.uk for details of the UK Policy Agendas Project and datasets for replication purposes. This paper refers to Queen's Speech dataset v1.0.

[8]. John Kingdon, *Agendas, Alternatives and Public Policies*. (New York: HarperCollins, 1984), p. 3.

[9]. Stuart Soroka, *Agenda-Setting Dynamics in Canada* (Vancouver: University of British Columbia Press, 2002); David L. Swanson, 'Feeling the elephant: Some observations on agenda-setting research', in James Anderson (ed.), *Communication Yearbook 11* (Newbury Park, CA: Sage Publications, 1988), pp. 603-619.

[10]. See Peter John, 'The Policy Agendas Project: a Review', *Journal of European Public Policy*, 13 (2006), 975-986.

[11]. Baumgartner and Jones, *Agendas and Instability*.

[12]. Charles Lindblom, 'The "Science" of Muddling Through', *Public Administration Review* 19 (1959), 79-88; Charles Lindblom, 'Still Muddling, Not Yet Through', *Public Administration Review* 39 (1979), 517-526; Aaron Wildavsky, *The Politics of the Budgetary Process* (Boston: Little, Brown, 1964).

[13]. Baumgartner and Jones, *Agendas and Instability*.

[14]. Frank R. Baumgartner and Bryan D. Jones, 'Agenda Dynamics and Policy Subsystems', *The Journal of Politics* 53 (1991), 1044-1074; Baumgartner and Jones, *Agendas and Instability*; Frank R. Baumgartner and Bryan D. Jones, 'Positive and Negative Feedback in Politics', in Frank R. Baumgartner and Bryan D. Jones (eds.), *Policy Dynamics* (Chicago: University of Chicago Press, 2002); Frank R. Baumgartner and Bryan D. Jones, *Policy Dynamics* (Chicago: University of Chicago Press, 2002); Bryan D. Jones, *Reconceiving Decision-making in Democratic Politics: Attention, Choice, and Public Policy* (Chicago: University of Chicago Press, 1994); Bryan D. Jones, James True and Frank R. Baumgartner, 'Does Incrementalism Stem from Political Consensus or from Institutional Gridlock?', *American Journal of Political Science* 41 (1997), 1319-1339; Bryan D. Jones, Frank R. Baumgartner and James True, 'Policy Punctuations: U.S. Budget Authority, 1947-1995', *The Journal of Politics* 60 (1998), 1-33; Bryan D. Jones and Frank R. Baumgartner, 'A Model of Choice for Public Policy', *Journal of Public Administration Research and Theory* 15 (2005), 325-351; Jones and Baumgartner, *The Politics of Attention.*

[15]. Jones, *Reconceiving Decision-making in Democratic Politics*, p. 185.

[16]. James True, Bryan D. Jones and Frank R. Baumgartner, 'Punctuated-Equilibrium Theory: Explaining Stability and Change in American Policy-making', in Paul Sabatier (ed.) *Theories of the Policy Process* (Second edition, Boulder: Westview Press, 2007).

[17]. True, Jones and Baumgartner, 'Punctuated-Equilibrium Theory', p. 160.

[18]. Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions'; Jones and Baumgartner, *The Politics of Attention*, p. 88.

[19]. See John, 'The Policy Agendas Project' for a review of the original US Policy Agendas Project and the programme of research that it generated.

[20]. See http://www.policyagendas.org/codebooks/topicindex.html. For technical details about the origins of the US categories and its coding procedures see Frank R. Baumgartner, Bryan D. Jones and Michael C. MacLeod, 'Lessons from the Trenches: Quality, Reliability, and Usability in a New Data Source', *The Political Methodologist*, 8 (1998), 1-11.

[21]. Frank R. Baumgartner, Christoffer Green-Pedersen and Bryan D. Jones, 'Comparative Studies of Policy Agendas', *Journal of European Public Policy* 13 (2006), 959-974; John, 'The Policy Agendas Project'.

[22]. Hugh Heclo and Aaron Wildavsky, *The Private Government of Public Money* (London: Macmillan, 1974); Richardson and Jordan, *Governing Under Pressure*.

[23]. Rose and Davies, *Inheritance in Public Policy*.

[24]. David Marquand, 'Club government: the Crisis of the Labour Party in National Perspective', *Government & Opposition* 16 (1981), 19-36; David Marquand, *The Unprincipled Society* (London: Cape, 1988); Michael Moran, 'Understanding the Regulatory State', *British Journal of Political Science* 32 (2002), 391-413; Michael Moran, *The British Regulatory State: High Modernism and Hyper Innovation* (Oxford: Oxford University Press, 2003).

[25]. Jim Bulpitt, *Territory and Power in the United Kingdom* (Manchester: Manchester University Press, 1983).

[26]. Hugh Heclo, *A Government of Strangers* (Washington, DC: The Brookings Institution, 1977).

[27]. Gabriel Almond and Sydney Verba, *The Civic Culture: Political Attitudes and Democracy in Five Nations.* (Princeton, NJ: Princeton University Press, 1963).

[28]. R. A. W. Rhodes, *Beyond Westminster and Whitehall.* (London: Routledge, 1988); David Marsh and R. A. W. Rhodes, *Policy Networks in British Government*, Oxford: Oxford University Press, 1992).

[29]. Anthony King, *The British Constitution* (Oxford: Oxford University Press, 2007).

[30]. E.g. a ban on smoking in public and work places was enacted in Scotland in March 2006, prompting the UK Parliament to enact similar legislation, which became active in July 2007.

[31]. Quintin Hogg, 'Elective dictatorship', *The Listener,* 21 October 1976, 496-500.

[32]. Finer, *Adversary Politics and Electoral Reform.*

[33]. Arendt Lijphart, *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries* (New Haven: Yale University Press, 1999).

[34]. George Tsebelis, *Veto Players: How Political Institutions Work* (Princeton: Princeton University Press, 2002).

[35]. David Butler, Andrew Adonis and Tony Travers, *Failure in British Government: The Politics of the Poll Tax* (Oxford: Oxford University Press, 1994).

[36]. Dunleavy, 'Policy Disasters'.

[37]. Moran, *The British Regulatory State*.

[38]. Peter John and Helen Margetts, 'Policy punctuations in the UK: fluctuations and equilibria in central government expenditure since 1951', *Public Administration*, 81 (2003), 411-432.

[39]. Ian Budge, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara, Eric Tannenbaum, Richard Fording, Derek Hearl, Hee Min Kim, Michael McDonald and Silvia Mendes, *Mapping Policy Preferences: Parties, Electors and Governments: 1945-1998: Estimates for Parties, Electors and Governments 1945-1998.* (Oxford: Oxford University Press, 2001); Ian Budge, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara and Michael McDonald, *Mapping Policy Preferences II: Estimates for Parties, Electors and Governments in Central and Eastern Europe, European Union and OECD 1990-2003*. Oxford: Oxford University Press, 2006); Michael MacDonald and Ian Budge, *Elections, Parties, Democracy* (Oxford: Oxford University Press, 2005).

[40]. Francis G. Castles (ed.), *The Impact of Parties: Politics and Policies in Democratic Capitalist States* (London: Sage, 1982).

[41]. Richard Rose, *Do Parties Make a Difference?* (London: Macmillan, 1980).

[42]. Andrew Gamble, *The Free Economy and the Strong State: The Politics of Thatcherism* (Basingstoke: Macmillan, 1988); Richard Heffernan, *New Labour and Thatcherism: Political Change in Britain* Basingston: Macmillan, 2001).

[43]. Stuart Hall, 'Popular Democratic vs. Authoritarian Populism' in Alan Hunt (ed.), *Marxism and Democracy* (London: Lawrence and Wishart, 1980).

[44]. Jim Bulpitt, 'The discipline of the New Democracy: Mrs. Thatcher's Domestic Statecraft', *Political Studies* 34 (1985), 19-39; David Marsh, 'Explaining 'Thatcherite' Policies: Beyond Uni-dimensional Explanation', *Political Studies,* 43 (1995): 595-613; Peter Kerr, *Modern British Politics: From Consensus to Conflict* (London: Routledge, 2001).

[45]. See the review of this debate in Hay, 'Whatever happened to Thatcherism?'

[46]. E.g. Sara B. Hobolt, and Robert Klemmensen, 'Responsive Government? Public Opinion and Policy Preferences in Britain and Denmark', *Political Studies* 53 (2005), 379-402; Sara B. Hobolt and Robert Klemmensen, 'Government Responsiveness and Political Competition in Comparative Perspective', *Comparative Political Studies* 41 (2008), 309-337.

[47]. Indeed, Namenwirth and Weber's phase-shifting and cyclical model of political-cultural attention, see J. Zvi Namenwirth and Robert P. Weber, *Dynamics of Culture* (London: Allen & Unwin, 1987), resembles the attention-shifting associated with the punctuated equilibrium model of Baumgartner and Jones.

[48]. Jeffrey Cohen, 'Presidential Rhetoric and the Public Agenda', *American Journal of Political Science* 39 (1995), 87-107; Jeffrey Cohen, *Presidential Responsiveness and Public Policy-Making: The Publics and the Policies that Presidents Choose* (Ann Arbor: University of Michigan Press, 1997).

[49]. Judith Bara, 'A Question of Trust: Implementing Party Manifestos' *Parliamentary Affairs* 58 (2005), 585-599; Michael D. MacDonald and Ian Budge, *Elections, Parties, Democracy* (Oxford: Oxford University Press, 2005), p. 164.

[50]. A quasi-sentence (or policy statement) constitutes an expression of a single policy idea or issue. See Andrea Volkens, *Manifesto Coding Instructions. Discussion Paper FS III 02-201.* Berlin: WZB, 2002. Often this unit of analysis is identifiable from the use of punctuation, though it is possible for sentences to include multiple references to policy content (in particular those which address a series of major policy issues).

[51]. The UK Policy Agendas Project codebook retains the US categories but uses UK-specific examples to aid the user. See UK Policy Agendas Codebook v.1.0, www.policyagendas.org.uk.

[52]. E.g. Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions'; Jones and Baumgartner, *The Politics of Attention*; Jones and Baumgartner, 'A Model of Choice for Public Policy'.

[53]. Kurtosis is the fourth moment around the mean (where variance and skew are the second and third moments). This is a measure of the relative 'peakedness' of a given distribution.

[54]. E.g. Frank Baumgartner, Martial Foucault and Abel François, 'Punctuated Equilibrium in French Budgeting Processes', *Journal of European Public Policy* 13 (2006), 1082-99; Christian Breunig, 'The More Things Change, the More Things Stay the Same: A Comparative Analysis of Budget Punctuations', *Journal of European Public Policy* 13 (2006), 1069-85; John and Margetts, 'Policy punctuations in the UK'; Jones, Baumgartner and True, 'Policy Punctuations'; Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions'.

[55]. Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions', p. 166.

[56]. These stochastic process methods examine the overall distribution of agenda change, and as a result are concerned with the general pattern of stability and change.

[57]. I.e. the introduction of a major topic code with no empirical relevance to national policy-making, either because policy change is rare or policy decisions are taken at a subnational or supranational level (e.g. refuse collection), would otherwise create a cluster of change scores equal to zero as the level of attention remained constant at zero over time.

[58]. However, truncation of the distribution on its left tail, with a spike at -100 per cent, is quite unlike other distributions of political attention. These distribution properties are mathematical in origin, but empirical in magnitude. By mathematical construction, decreases in percentage share cannot exceed 100 per cent while any decrease from x to 0 is equal to -100 per cent. As a result, the skewness of the distribution is positive and equal to 2.71, with the mean equal to 7.80 whereas the median is equal to -11.80. Thus, while the policy agenda seems to be punctuated in the United Kingdom, constraints on the available agenda space (i.e. percentage share of the Queen's Speech) mean that the active agenda does not appear to cumulate in the way that budgets or even Congressional hearings are found to in other studies (e.g. Jones, Baumgartner and True, 'Policy Punctuations'; Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions'; Baumgartner, Foucault and François, 'Punctuated Equilibrium in French Budgeting Processes'; Breunig, 'The More Things Change, the More Things Stay the Same'). For those cases, the distribution of change scores tends to tail off before it reaches the -100 per cent bound. At the same time, a comparative lack of 'true zeroes' in budget data means that there are few decreases of -100 per cent,

whereas attention to topics in the Queen's Speech can, in an instant, drop off the political agenda (going from hero to zero).

[59]. Indra M. Chakravarti, Radha G. Laha and J. Roy, *Handbook of Methods of Applied Statistics, Volume I* (New York: John Wiley and Sons, 1967), pp. 392-394.

[60]. Samuel S. Shapiro and Martin B. Wilk, 'An analysis of variance test for normality (complete samples)', *Biometrika* 52 (1965), 591-611.

[61]. The kurtosis score for Britain (19.21) is less than that estimated for percentage change in the policy content of State of the Union Address in the US (40.10) for the period between 1946 and 2005 (see www.policyagendas.org for the US dataset), although both are punctuated.

[62]. The theory is to consider the relationship between the sample distribution and the theoretical class of probability distribution with the greatest likelihood of generating the same empirical data. As such it is possible to recognise the Paretian or exponential distributions. For semi-log plots the midpoint values are presented on a logged scale, but the frequencies are not. For log-log plots, both midpoint values and frequencies are logged. Figures 4 and 5 present both the negative and positive tails on the same scale (with negative midpoints multiplied by -1 in order to present them on the same scale as positive midpoints). The frequencies are each cumulated from their extreme tail to the centre of the distribution in order to stabilize 'chatter' in the tails of the distribution. Note that there are a large amount of observations for the zero midpoint, which here cannot be approximated with a power law function because of its singularity at $x = 0$.

[63]. For the Paretian distribution, $y = aX^b \Rightarrow \ln(y) = \ln(a) + b\ln(X)$; for the exponential distribution, $y = ae^{bx} \Rightarrow \ln(y) = \ln(a) + b(X)$; where X is the category midpoint and y represents the frequencies associated with the midpoints.

[64]. See Jones and Baumgartner, *The Politics of Attention*, p. 184.

[65]. Jones and Baumgartner, 'A Model of Choice for Public Policy'.

[66]. This concentrates upon positive changes (i.e. increases in political attention), because of the mathematical limit of -100 per cent for negative changes (which prevents differentiation between 133 observations of -100 per cent).

[67] It is also possible to identify the significance of punctuations in the political agenda through estimation of their effect as step or pulse inputs for Box-Tiao intervention models. However, these would tend to be significant in most instances because of the nature of model construction and would not assist inferences about the underlying cause of change.

[68] The results of additional tests confirm that there are significant differences in the kurtosis of the distribution of attention change for the 1940-1978 and 1979-2005 periods. For the earlier period (of stagnation and club government), the kurtosis score is positive and equal to 23.214, whereas for the latter period it is positive and equal to 7.442. This suggests that the political agenda was far more punctuated in the earlier period (of the traditional Westminster/Whitehall model) than the latter modern evolution of British government. Also, to confirm these results the Kolmogorov-Smirnov test generates a D-statistic of 0.146 for 1940-1978 and 0.141 for 1979-2005, significant at the 99 per cent confidence level for each, rejecting the null that the sample is drawn from a normal distribution. Likewise, the more powerful Shapiro-Wilk test generates a W statistic of 0.792 for 1940-1978 and 0.884 for 1979-2005, significant at the 99 per cent confidence level, again rejecting the null that this is a random sample drawn from a normal distribution.

[69] E.g. Gray and Lowery, 'State Interest Group System Diversity'; Gray and Lowery, *The Population Ecology of Interest Representation*; Gray and Lowery, 'To Lobby Alone or in a Flock'; Baumgartner, Jones and MacLeod, 'The Evolution of Legislative Jurisdictions'.

[70] This probabilistic measure of the spread of objects/observations across a given number of (discrete) nominal categories has been adapted from information theory for estimating the diversity or concentration of government attention (see Jones and Baumgartner, *The Politics of Attention*). It can be expressed in the form

$$H = -\sum_{i=1}^{n} p(x_i)\ln(p(x_i)) \tag{1}$$

That is where the entropy score is estimated as the sum for all topics of the likelihood, $p(x)$, that an object x (in this instance a policy statement in the monarch's speech) falls within a particular topic i, multiplied by the natural log of that likelihood, multiplied by minus one.

[71]. Since logs of zero cannot be calculated, it is assumed that 0 x ln(0) = 0 for those topics where there was no attention in a given year. The maximum possible entropy score for the twenty one major topic codes (here inclusive of the regional/local government and arts, culture and entertainment topics) is equal to the natural log of 21 (i.e. 3.04).

[72]. The first peak in the polynomial regression is a year before the peak in the actual entropy series in 1965 (2.704).

[73]. Christopher Wlezien, 'On the Salience of Political Issues: The Problem with 'Most Important Problem', *Electoral Studies* 24 (2005), 555-79.

[74] This can be tested through estimation of time series regression models of the proportion of attention to each issue i against entropy, $ENTROPY_t = \alpha_0^* + \alpha_1^* ATTENTION_t^i + \varepsilon_t$. This reveals that for the period between 1979 and 2005, the relationship between attention and entropy is negative and significant at the 95 per cent level for macroeconomics (-1.809), defence (-2.723) and international affairs (-1.700), though with varying degrees of fit for each regression. As attention to each of these topics increased the level of entropy decreased, while as attention to the topics decreased the level of entropy increased.

[75]. This low point in the polynomial regression is two years before the low point in the actual entropy series in 1993 (1.999).

[76]. David Sanders, 'Conservative Incompetence, Labour Responsibility and the Feelgood Factor: why the Economy Failed to Save the Conservatives in 1997' *Electoral Studies*, 18 (1999), 251-27.

[77]. George E.P. Box and George C. Tiao, 'Intervention Analysis with Applications to Economic and Environmental Problems'. *Journal of the American Statistical Association* 70 (1975), 70-79.

[78]. This indicates that an intervention is temporary at time t_j, such that $X_j = \begin{cases} 0 \text{ if } t \neq t_j \\ 1 \text{ if } t = t_j \end{cases}$.

[79]. E.g. Jones, Sulkin and Larsen, 'Policy Punctuations in American Political Institutions'.

[80]. Other venues feature as part of the research project, *Legislative Policy Agendas in the UK*, funded by the Economic and Social Research Council (ESRC Reference RES-062-23-0872) as part of a European Science Foundation (ESF) EUROCORES European Collaborative Research Project, *'The Politics of Attention: West European Politics and Agenda-setting in Times of Change'*.