



Stability and change in the public's policy agenda: a punctuated equilibrium approach

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Abstract

Much research within the punctuated equilibrium framework demonstrated that policy agendas are invariably punctuated, due in part to cognitive and institutional frictions that constitute barriers to change in attention. While the bulk of past scholarship explored the extent to which institutional friction varies by organizational design, little scholarly attention has been devoted to the empirical examination of the cognitive aspect of disproportionate information processing. In an attempt to close this gap, I utilize a newly available dataset that codes nearly a million Americans' responses to the 'most important problem' question from 1939 to 2015 to analyze the distribution of annual changes in the policy priorities of the American public. Drawing on the punctuated equilibrium theory literature, I argue and show that punctuations in the public's policy priorities are more severe and frequent than those in institutional agendas. These results emphasize the need for a more subtle treatment of disproportionate information processing within the public, calling for relaxing the implicit assumption that cognitive friction is constant within organizations and across issues.

Keywords Punctuated equilibrium theory · Most important problem · Public opinion · The US · Disproportionate information processing

Introduction

One of the received wisdoms in the policy processes literature is that policy agendas are invariably punctuated as a direct consequence of failure to address environmental cues in an efficient manner. In two decades of subsequent research following the introduction of the punctuated equilibrium theory (Jones and Baumgartner 2012), scholars examined the stability and change in attention shifts in a wide range of organizational settings including public budgets in democratic and non-democratic regimes (Jones 2003; Breunig 2006; Baumgartner et al. 2015; Lam and Chan 2015; Epp and Baumgartner 2017; Fagan et al. 2017; Bulut and Yildirim 2019), local governments and supranational organizations

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(Mortensen 2005; Breunig 2006; Alexandrova et al. 2012; Park and Sapotichne 2019), international organizations (Lundgren et al. 2018), legislative activities (Jones et al. 2009), the private sector and market systems (Epp 2015; Epp and Baumgartner 2017), party manifestos (Walgrave and Nuytemans 2009), and mass media (Walgrave and Vliegenthart 2010), lending strong empirical support to the contention that the distribution of changes in any policy agendas involving human decision-making is typically characterized by long periods of stasis (i.e., modest changes in attention) and short periods of dramatic spikes in attention (Jones and Baumgartner 2004).

Much of the past scholarship in the study of policy change takes as a point of departure institutional and cognitive mechanisms that prevent efficient information processing, what came to be known as ‘friction’ (Jones and Baumgartner 2005; Baumgartner et al. 2009; Walgrave and Vliegenthart 2010). Following the framework that seeks to explain “how the cognitive limits of decision makers and formal and informal arrangements of groups of decision makers affect the dynamic of processing of information” (Jones and Baumgartner 2005, 5), a plethora of research has explored the conditions under which ‘disproportionate information processing’ exacerbates (Baumgartner et al. 2009, 2014), utilizing the variation in institutional arrangements as the key explanatory variable. Although limitations in information processing capacity constitute the core of this body of research, surprisingly little scholarly attention has been devoted within the punctuated equilibrium framework to the empirical examination of punctuations in the public’s policy agenda.¹ The present study seeks to close this empirical gap by analyzing the scope of shifts in the public’s policy priorities across a wide range of policy areas over the past 75 years in the USA.

Following prior research, I argue that the public policy agenda, compared with institutional agendas (i.e., media, legislative agendas, public budgets), should exhibit much larger punctuations and that the severity of disproportionate information processing should vary considerably across policy categories. Specifically, drawing on the oft-cited contention that organizations expand human capacities by alleviating various deficiencies of the human cognitive architecture (Simon 1957; Jones 1994a, 2003), I posit that the punctuated pattern predicted by Jones and Baumgartner (2005) will be more pronounced in the distribution of changes in the public policy agenda, compared with that in institutional agendas. In what follows I first review the literature on policy processes and present my theoretical expectations. I then describe my empirical approach, present the results from a stochastic process method and conclude by discussing the implications of my findings.

Cognitive friction and changes in the public’s policy priorities

Background

A large literature has established that policy agendas are invariably punctuated on the ground that human beings and the decision-making bodies they inhabit are disproportionate information processors (Jones and Baumgartner 2005). In his 1994 book *Reconceiving Decision-Making in Democratic Politics*, Bryan Jones provides perhaps the most detailed treatment of the cognitive elements of disproportionate information

¹ The stability and change in public opinion have received considerable scholarly attention outside PET studies. See Soroka and Wlezien’s (2010) book-length work, for example.

processing. Building on the bounded rationality framework developed by Simon (1957), Jones lays out several important contentions that shaped subsequent research. His model of decision-making rests on the idea that individual decision-makers are serial processors of information who operate in a world where incoming information typically has multiple attributes or dimensions. In Jones' (1994a, 226) words, decision-makers "tend to fall prey to cognitive polarization, viewing a stimulus in terms of one dimension of evaluation, then shifting rapidly to a second when cues dictate. The lack of integration of domains may not be so evident at one point in time. But in temporal choice, inconsistencies are glaring." Accordingly, Jones concludes, preferences are often in conflict, and major attention shifts and choice reversals are fairly common.

Building on these insights, subsequent research characterized the patterns of change in policy attention by 'stick-slip dynamics' (Jones and Baumgartner 2005). Baumgartner and Jones borrowed this analogy from natural scientists to describe the interaction of two forces in shaping the dynamics of attention in policy processes: retarding forces that prevent decision-making organizations from keeping up with changing societal cues and over-response to built-up pressures (Jones and Baumgartner 2005; Baumgartner et al. 2009; Jones et al. 2009). This 'stick-slip' dynamic results in disjointed allocation of attention in the form of leptokurtic distribution of changes (Jones and Baumgartner 2005; Breunig and Jones 2011), where strong central peaks represent stasis (i.e., a large number of incremental changes) and fat tails punctuations (a few but unusually large changes). Put another way, information and cognitive costs associated with organizational decision-making limit decision makers' capacity to process and act on incoming information (Jones 2003), rendering distributions of changes that deviate greatly from the Gaussian (Normal) distribution. Any deviations from normality point to disproportionate information processing, Baumgartner et al. (2009, 606) argued, as the changes in social processes in an information-rich world are expected to be normally distributed because of the Central Limit Theorem. This contention constitutes the core of empirical applications of punctuated equilibrium, though recent scholarship called for relaxing some of the assumptions regarding the normal distribution of change in policy inputs (Desmarais 2019).

Using the variation in institutional settings in a variety of contexts, numerous studies have tested this idea and found strong empirical evidence supporting it. Jones et al.'s (2003) distribution analysis of agenda change in American political institutions demonstrates that institutions operating with higher decision-making and transaction costs generate larger punctuations. Jones et al. (2009) and Baumgartner et al. (2009) were the first large-scale studies to show that punctuated patterns in attention shifts can be generalizable across countries and institutions. In an attempt to extend this research, Fagan et al. (2017) have examined budget data from 24 countries and found that more federalized systems (i.e., higher institutional friction) produce more severe budget punctuations. Moreover, as the most recent applications of PET have documented, punctuated patterns resulting from decision-making costs are not unique to democratic countries (Lam and Chan 2015; Chan and Zhao 2016; Baumgartner et al. 2017).

In a study of the policy agendas of non-state actors, Epp (2015) has compared organizations and markets and found that market systems are less prone to disproportionate information processing. Similar patterns of attention shifts have been documented in the European Council Agenda (Alexandrova et al. 2012), international organizations (Lundgren et al. 2018), party manifestos (Walgrave and Nuytemans 2009), news media (Baumgartner et al. 2009; Walgrave and Vliegthart 2010; Boydstun 2013), and the Supreme Court (Robinson 2013). In short, although the magnitude and frequency of attention shifts

vary across time and space, the literature has shown that organizational policy agendas are typically punctuated.

Theoretical expectations

Empirical evidence supporting the patterns predicted by PET is abundant. However, no attempt has been made to date in the policy process literature to explore some potential consequences of cognitive friction for the public's agenda. This lack of attention comes as a sizable surprise, as deficiencies in the human cognitive architecture constitute the core of the concept of disproportionate information processing (Jones 1994a, b, 2001, 2003; Jones and Baumgartner 2004, 2005). After all, if human beings are disproportionate information processors, then the institutions they inhabit will share fairly similar characteristics regardless of their organizational design. Indeed, Baumgartner et al. (2009) have shown that although the degree of punctuations varies considerably with institutional design (i.e., the progressive friction hypothesis), getting larger as one moves from social inputs (lowest friction), to policy process to output series (highest friction), each one of the agendas examined in the study exhibited non-Gaussian distribution.²

Following the insights produced by scholars of policy process, I argue that the punctuated patterns found in institutional agendas should be observed also in the public's policy agenda. Like institutional agendas, the public policy agenda has limited space where societal problems facing the country compete to enter the agenda. However, compared with the institutions they inhabit, human beings rely more heavily on heuristics in interpreting and acting on incoming information and have more severe limitations in decision-making (March and Simon 1958; Kahneman and Tversky 1972; Sniderman et al. 1993; Jones 1994a, 2001; Barabasi 2005). In support of this view, Jones (2003, 401) notes that "organizations expand human capacities by providing people with the ability to process information in a parallel fashion. By decentralizing and delegating, organizations can process multiple streams of input simultaneously."

Not only do human beings lack the cognitive mechanisms that allow for efficient information processing (Jones 1994a), they also suffer from the fact that their assessments of changes in the severity of problems are a function of a series of mediators such as political elites and the media (Zaller 1991; Jones and Baumgartner 2005; Jerit and Barabas 2012), which interact with individuals' values and dispositions to shape their perceived policy priorities and preferences. With policy problems being complex and information streams diverse and often conflicting (Baumgartner and Jones 2014), individuals often have no choice but to rely on various heuristics such as 'satisficing' in their decisions (Shannon et al. 2019). As Zaller (1992) argued in *The Nature and Origins of Mass Opinion*, one of the consequences of such cognitive limitations and informational complexities is that individuals often end up having multiple and conflicting attitudes about public policies and they average across the considerations that are most immediately salient to them, an explanation Zaller put forward for inconsistencies in policy attitudes of "the majority of persons on the majority of issues" (p. 55, also see Tourangeau and Rasinski 1988). This inability to

² As a result of disproportionate information processing, the public tends to pay excessive attention to a small number of issues while ignoring other important issues for an extended period of time. An oft-cited example is climate change. Informational cues about the issue of climate change will arguably continue to be underrepresented in the public's policy agenda until the threat it poses to the world becomes hard to ignore for the majority of people.

sustain attention to the most pressing problems facing the society should result in punctuated patterns in the public policy agenda, which will be described as a non-Gaussian distribution. In other words, compared with the change distributions of institutional agendas, the distribution of aggregate-level changes in the public's policy agenda will deviate more from Normality.

Empirical approach

Following Padgett's (1980) classic work, a considerably large literature in the study of policy processes relied on a stochastic process approach in exploring the implications of incrementalism and PET (Jones 2003; Baumgartner et al. 2009; Jones et al. 2009; Breunig and Jones 2011). Although the bulk of the stochastic process studies focused on distributional changes in public budgeting, this empirical approach has been utilized by numerous studies examining distributions of attention change in the agendas of various other actors including the European Council (Alexandrova et al. 2012), the Supreme Court (Robinson 2013), K-12 school budgets (Robinson 2004), the use of incarceration (Schneider 2006), the speeches from the throne in the UK (John and Jennings 2010), party platforms, legislative activities and media outlets (Baumgartner et al. 2009; Walgrave and Vliegenthart 2010), and party manifestos (Walgrave and Nuytemans 2009). Stochastic process studies typically utilized the kurtosis statistics, the fourth moment of a sample distribution, on the grounds that the decision-making process that involves a large number of inputs should yield normally distributed outputs (Robinson 2013, 31); therefore, any deviation from this normality (indicated by excess peakedness, i.e., leptokurtic distribution) is a sign of disproportionate information processing (Baumgartner et al. 2009; Jones et al. 2009).

I capitalize on a newly available dataset that codes nearly a million Americans' open-ended responses to the "most important problem" question from 670 public opinion surveys conducted over the past 75 years (Heffington et al. 2019). Although one needs to proceed with caution in utilizing MIP responses as indicators of issue importance (Wlezien 2005), MIP provides unique opportunities to empirically examine the stability and change in public opinion in a fashion similar to PET studies working with change distributions. First of all, because the present study's primary purpose is to compare attention shifts in public opinion to that in organizational outputs (i.e., public budgets, legislative activities), our measure of attention should reflect the public's concerns with policy outcomes. Relative to generic research questions designed to measure respondents' policy preferences about specific issues, MIP responses better reflect respondents' attention to conditions or outcomes (Jennings and Wlezien 2015). The distinction between policy attention and policy preferences is an important one in the context of this research because, as Jones once noted (1994a, b, 226), "attentiveness may shift quite rapidly in comparison to preferences, which tend to be more stable. Contexts of decisions almost always change more rapidly than do basic values and preferences." Secondly, our measure of attention should be based on some form of rank ordering, given that decision makers (both individuals and organizations) can prioritize only a handful of issues at a time and that policy prioritization is typically a zero-sum game (McCombs and Zhu 1995). Open-ended MIP questions accomplish exactly this. In Jennings and Wlezien's (2015, 677) words, "MIP has clear utility in tracing the issues that the public is attending to at any moment in time. Specifically, MIP provides

a measure of priorities, indicating the issue that is at the top of the mind of both individuals' and the public in the aggregate.”

The Most Important Problem Dataset (MIPD) collected all available surveys from the Roper Center for Public Opinion Research and the American National Election Study (ANES) that were conducted on a nationally representative sample (excluding surveys limited to specific states) that asked some variation of the MIP question, and that provide open-ended responses (i.e., surveys that do not ask the respondent to identify the MIP from a list of salient problems). A large portion of respondents come from surveys conducted by Gallup (47%), CBS News/NYT (16%), CBS News (8%), Princeton Survey Research Associates (7%), Los Angeles Times (7%), and ANES (4%). The surveys in the MIP dataset are highly representative of the broad population in the USA. As an example, a comparison with the US census data shows that women constituted 51.2% (52.2% in the MIPD), Whites 83% (86.4% in the MIPD) and those who went beyond high school 24.3% (26.8% in the MIPD) of the sample.

By categorizing open-ended MIP responses into topic codes based on three widely used coding schemes, the Comparative Agendas Project (CAP), Singer and MARPOR, the MIPD permits us to track the policy priorities of the public over the past 75 years. For the purpose of this study, I first collapsed the Singer-coded MIP responses (i.e., Singer topic codes) by year, creating annual percentage calculations for 42 Singer-coded policy topics, and then estimated percentage change values for each ‘Singer topic category’.³ Because the MIPD dataset treats the Singer topics as subcategories within the CAP coding scheme, I then pooled the Singer-coded topics (such as ‘tax’, ‘inflation’, ‘unemployment’, ‘budget deficit’) that correspond to broad CAP topic codes (such as ‘macroeconomy’) to measure L-kurtosis scores⁴ for each policy area. The description of policy categories, as well as information about the samples, are reported in Table 1.

The main rationale behind using this particular coding method is as follows: While PET studies using l-kurtosis measures relied heavily on the CAP coding scheme, it is not feasible to use it with public opinion data as this coding scheme leaves us with too small samples to measure reliable kurtosis statistics per topic category (i.e., 75 years of annual changes for each main topic category). This is because the MIP dataset utilizes the main topics, but not subtopics, used in the CAP, which leaves us with a relatively small number of topic categories. Pooling Singer categories at the CAP level substantially increases the sample size used to create l-kurtosis values. Following this, I plot the change distributions and L-kurtosis scores for both the entire sample (pooled CAP topics) and individual CAP-coded policy categories (pooled Singer-coded policy categories). The change distribution based on the entire sample permits us to compare the degree of non-normality in the

³ It is important to note here that I restrict my analysis to ‘the’ most important problem. Although it would be ideal to examine all three MIP responses, the great majority of opinion polls (569 out of 686) did not ask for second and third MIPs, which requires the use of ‘the’ most important problem in my empirical analysis.

⁴ L-kurtosis is a standardized measure of kurtosis that is robust against outlying values in a sample, and it is commonly used utilized by PET studies (see Baumgartner et al. 2009, 2017; Epp and Baumgartner 2017). Disproportionate information processing theory suggests that individual decision makers tend to be highly selective when processing informational cues, which leads to extreme stability and occasional punctuations in attention (Jones and Baumgartner 2005). The resulting distribution of outputs, namely annual changes in issue attention in the context of this research, displays high peaks, thinner shoulders, and fat tails (i.e., leptokurtic distribution). Greater l-kurtosis values indicate greater deviation from normality in the distribution of outputs.

Table 1 Description of policy categories

Main topic (CAP topic)	Subtopic (singer topics)	# of Mentions (thousand)	Sample size for L-kurtosis measures ^a
Macroeconomics	Economy (general response), Unemployment, Taxes, Inflation, Growth, Class, Budget Deficit	297.3	444
Civil Rights	Civil Liberties, Abortion, Domestic Ethnic Tensions	34	222
Health	Health Policy	32.3	74
Agriculture	Farming	4.2	74
Labor	Industrial Policy, Wages	8.4	148
Education	Education, Education Policy	19.3	148
Environment	Pollution, General Mentions of the Environment	9.2	148
Energy	Energy Sources	6.4	74
Immigration	Immigration Policy	8.9	74
Law and Crime	Youth, Riots and Protests, Crime (any mention), Family, Children	71.1	296
Social Welfare	Poverty/Inequality, Social Policy, Welfare, Old Age/Pensions	36.5	296
Housing	Housing	5.6	74
Defense	Defense Spending, War in General	98.4	148
International Affairs	Terrorism, Aid, Foreign Policy, Other Country Issues	128.8	296
Government Operations	Corruption, Trustworthy Politicians Democratic Reforms, Partisan Conflict	38.7	296
Culture	National Values/Culture, Religion	33.2	148

^aSample size indicates the number of years (of annual change) used to create L-kurtosis values. For instance, the 'Macroeconomics' CAP category corresponds to six Singer categories, from which we obtain a total of over 450 years of annual change (76 years for six policy categories)

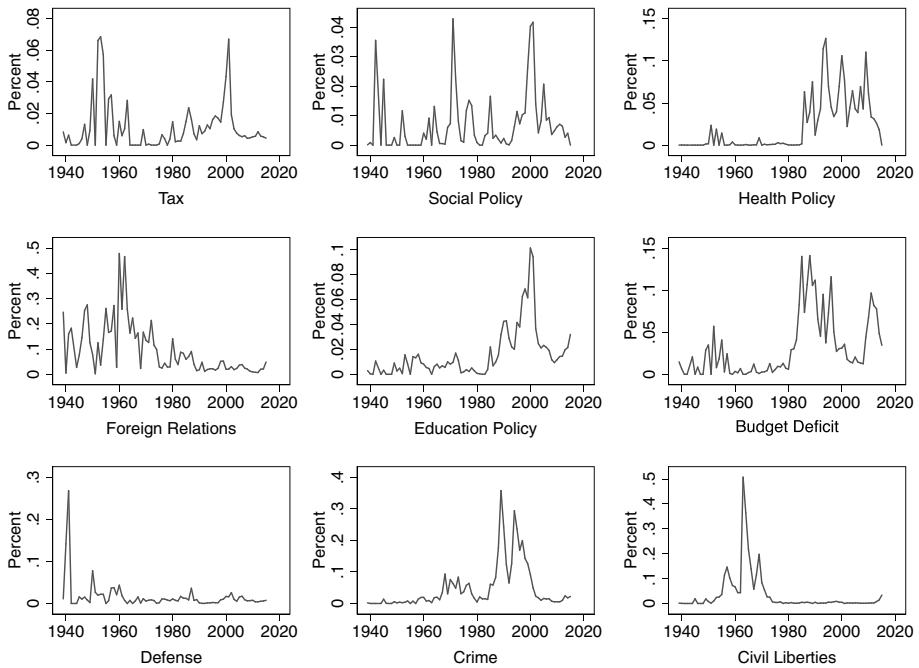


Fig. 1 Public's attention to selected policy categories, 1939–2015

aggregate-level attention changes in the public to change distributions of various organizations documented by past scholarship.

Results

I begin by depicting the American public's attention to tax, social policy, health policy, foreign relations, education policy, budget deficit, defense, crime and civil liberties over the past seven decades. Figure 1 clearly shows that major attention shifts in all nine policy categories were fairly common during the period under investigation in this study. While the public's increased attention to such issues as crime, education policy, and budget deficit was persistent at times, the great majority of attention spikes in the public's policy agenda did not last long. This is greatly in line with the decision-making models laid out by proponents of the bounded rationality paradigm (Simon 1957; Jones 1994a).

Before turning to the results of empirical analyses, I provide l-kurtosis scores for various organizational distributions of attention change reported by past scholarship. Table 2, adapted from Epp and Baumgartner (2017) and Cross and Greene (2019), reports leptokurtosis in distributions of organizational outputs including budgets, legislative activities, media coverage, executive orders, among others. The average l-kurtosis values reported in Table 2 for the public budget and other organizational series are 0.475 and 0.290, respectively. Although faced with various institutional arrangements that constitute obstacle to change (i.e., institutional friction), organizations overcome individuals' inability to process information in a parallel fashion and therefore alleviate the severity of disproportional

Table 2 Leptokurtosis in distributions of organizational outputs

Distribution	Source	L-kurtosis
<i>Budgets</i>		
USA	Jones et al. (2009)	0.512
France	Jones et al. (2009)	0.505
Germany	Jones et al. (2009)	0.456
Great Britain	Jones et al. (2009)	0.319
Belgium	Jones et al. (2009)	0.611
Denmark	Jones et al. (2009)	0.421
Canada	Jones et al. (2009)	0.379
Hong Kong	Lam and Chan (2014)	0.695
Turkey	Baumgartner et al. (2017)	0.673–0.721
Russia	Baumgartner et al. (2017)	0.449–0.514
Malta	Baumgartner et al. (2017)	0.499–0.652
Brazil	Baumgartner et al. (2017)	0.321–0.324
European Union	Citi (2015)	0.280
US States (pooled)	Breunig (2006)	0.402
<i>Other distributional changes</i>		
European Union (Council Directives)	Lundgren et al. (2018)	0.260
African Union (Decisions and Resolutions)	Lundgren et al. (2018)	0.300
Organization of American States (Resolutions)	Lundgren et al. (2018)	0.260
Organization of Islamic Cooperation (Resolutions)	Lundgren et al. (2018)	0.310
United Nations, Resolutions	Lundgren et al. (2018)	0.280
Global health commitments	Martin and Streams (2015)	0.360
European Council agenda	Alexandrova et al. (2012)	0.331
New York Times stories	Boydston (2013)	0.383
Bill introductions, US House	Baumgartner et al. (2009)	0.210
Bill introductions, US Senate	Baumgartner et al. (2009)	0.230
Hearings, US House	Baumgartner et al. (2009)	0.330
Hearings, US Senate	Baumgartner et al. (2009)	0.270
US executive orders	Baumgartner et al. (2009)	0.250
Belgian TV coverage	Baumgartner et al. (2009)	0.310
Danish bill introduction	Baumgartner et al. (2009)	0.260

Adapted from Epp and Baumgartner (2017) and Cross and Greene (2019)

information processing (Jones 1994a, 2003; Shannon et al. 2019). Accordingly, to the extent that this argument is valid, I expect the degree of non-Normality in the aggregate-level changes in the public's policy priorities to be much more severe, relative to organizational outputs.

Figure 2 plots the change distribution of the aggregate-level policy priorities of the American public across all policy areas in the past 75 years (based on nearly 3000 years of annual change). Note that a normal distribution has an L-kurtosis of 0.123, and any deviation from it would mean disproportionate information processing (Baumgartner et al. 2009; Jones et al. 2009; Breunig and Jones 2011). As the figure shows, large punctuations in the public agenda are fairly frequent, rendering a pattern of changes observed by PET studies. Specifically, the distribution yields an L-kurtosis of 0.647, which is a clear indication

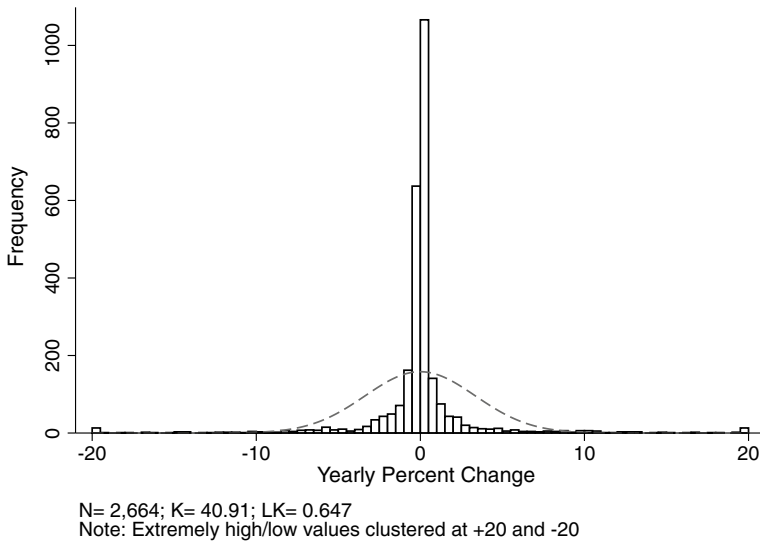


Fig. 2 The distribution of annual changes in the aggregate-level attention, 1939–2015

of a punctuated pattern. To delve further into the nature of attention shifts over the past seven decades, I replicate the same procedure based on decade-only samples. Although there is considerable variation in L-kurtosis across decades, with the lowest being 0.566 (2000–2010) and highest being 0.726 (1960–1970)⁵, no sample yields a distribution that approaches to Normality. This clearly shows that compared with organizational agendas, the distribution of attention changes in the public agenda departs much more from Normality. Stated differently, the severity of punctuations in the public agenda exceeds that in institutional agendas. This finding lends strong support to the argument that organizations mitigate individuals' disproportionate information processing that results from limited agenda capacity and short attention spans (Simon 1957; Jones 2003). It is also noteworthy that there is considerable variation in non-Normality across policy areas, with the categories of the 'macroeconomy', 'education', and 'social welfare' in the CAP coding scheme having some of the lowest l-kurtosis values. In contrast, the issues of 'civil rights', 'agriculture', and 'international affairs', compared with other issue areas, exhibit relatively more deviation from Normality.

⁵ The degree of non-Normality decreases by decade, as indicated by dropping l-kurtosis values over time. Specifically, starting with the 1960s, the l-kurtosis dropped steadily from 0.726 to 0.577. However, it is important to proceed with caution in interpreting these findings because, even though the samples utilized to calculate l-kurtosis by decade are large enough (10 years of annual percentage changes for 35 categories in each decade), the very short time-series make it difficult to draw valid inferences about overall trends in policy attention.

Discussion

One of the received wisdoms in the policy processes literature is that policy agendas are punctuated due mainly to cognitive and institutional checks that cause misalignment between incoming information and the decision makers' response to it (Jones and Baumgartner 2005; Baumgartner et al. 2009). Although limitations in the cognitive structures have been at the core of the large literature on policy change, little scholarly attention has been devoted to exploring the extent to which the public agenda follows the patterns described by the punctuated equilibrium theory. Drawing on a recently constructed dataset that codes the policy priorities of the American public over the past 75 years, this article has made a first step toward exploring the consequences of disproportionate information processing for the public agenda.

Past scholarship has posited that organizations mitigate individual-level limitations in cognitive capacity (Simon 1957). As Jones (1994b, 228) argues, shifts in the decision-maker's attentiveness are often rapid and inconsistent due in part to the multidimensional nature of preferences and that organizations help fix attention on a limited number of number of dimensions of evaluations. One of the implications that flows from this widely accepted argument is that organizational agendas should exhibit significantly less disproportionate information processing than the public's agenda (therefore fewer punctuations). In this article, I reported the first empirical evidence supporting this previously unexplored view. Specifically, I showed that the degree of non-Normality in the aggregate-level change distributions of policy priorities is much larger than that in organizational agendas.

It is also important to note that there is considerable variation in non-Normality across issue categories. While the question of what explains this variation goes beyond the scope of this study, it is worth discussing some potential explanations. Empirical evidence that speaks to the idea that the factors exacerbating disproportionate information processing may vary considerably across issues is abundant. In a recent study, Epp and Baumgartner (2017) argued and showed that the level of friction is conditioned by the complexity of a policy area, for complex issues generate more intense streams of information to consider. Jennings et al. (2011) convincingly showed that increased attention to what the authors called the 'core functions of government', namely, issues related to national defense, international affairs, the economy, government operations and the rule of law, pushes other issues off the agenda, and this results in declining attention in various issues. It may well be the case that L-kurtosis scores are systematically higher or lower for issues that receive consistently more attention (e.g., the economy) or limited attention (e.g., housing). In particular, issues that preoccupy large segments of the society for extended periods of time may be less likely to undergo dramatic shifts, especially declines, in attention. Similarly, issues that traditionally receive little to no attention in the media and in national politics are likely to remain low profile for a long period of time, in which case 'error accumulation' might lead to dramatic changes in the long-run (Baumgartner and Jones 2005). Especially in rare policy areas, 'corrective policy reactions' where positive and negative shifts are paired may be more common (Flink and Robinson 2020). Due to the very small sample size at the aggregate-level (i.e., 16 data points of l-kurtosis), I am unfortunately unable to explore these possibilities with an explanatory statistical model. Thus, a fuller picture of the conditions under which disproportionate information processing within the public exacerbates awaits future research.

Another area of potential interest for future research is related to individual-level differences. Information-processing patterns will likely vary considerably across social and

political identities at the group-level. As an example, since strong partisans tend to follow elite cues more closely, patterns of stability and change in their priorities will be heavily influenced by patterns of policy prioritization among political elites. In an era of growing polarization in politics, this would mean that the policy agenda of strong partisans, compared to that of non-partisans, might undergo more dramatic shifts following sudden changes in elite cues. To the extent that this logic is correct, one can argue that stability and change in the policy agendas of organizations might vary across time and space, depending on the political composition of the bureaucrats inhabiting those organizations. While the present study is unable to delve further into some potential implications of the findings, it calls for a more subtle treatment of the consequences of disproportionate information processing for the public's agenda.

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