Chapter 9
Punctuated Equilibrium Theory

Key themes of this chapter:

- Policymakers can only pay attention to a tiny proportion of their responsibilities. They prioritize some and pay minimal attention to the rest.
- Changes in levels of attention are not proportionate to changes in the size of policy problems or information about them.
- Governments process most issues despite minimal high-level political attention.
- This simple insight helps explain long periods of policymaking stability and policy continuity punctuated by instability and major policy change.
- The early PET literature used decades-long case studies in the US to show how the creation, longevity, and destruction of policy monopolies – or well-insulated policy communities - explained policymaking stability and instability.
- Modern PET focuses on the ways in which institutions process information disproportionately to produce huge amounts of small, and small amounts of huge, policy changes.
- PET began as an explanation of US policymaking. The Comparative Policy Agendas project now finds similar dynamics and distributions of policy change in many political systems.

Punctuated equilibrium theory (PET) tells a story of complex systems that are stable and dynamic. Most policymaking exhibits long periods of stability, but with the ever-present potential for sudden instability. Most policies stay the same for long periods while some change very quickly and dramatically. Policy change in a particular area may be incremental for decades, followed by profound change which sets an entirely new policy direction. We can begin to explain this dynamic with reference to the limits of comprehensive rationality: since policymakers cannot consider all issues at all times, they ignore most and promote relatively few to the top of their agenda (Chapter 4). This lack of attention to most issues helps explain why most policies may not change, while intense periods of attention to some issues may prompt new ways to frame and solve policy problems. Some explanation comes from the power of participants, either to minimize attention and maintain an established framing, or to expand attention in the hope of attracting new audiences more sympathetic to new ways of thinking (True, Jones and Baumgartner, 2007: 157). Further explanation comes from policymaking complexity, in which the scale of conflict is too large to understand, let alone control (Chapter 6).
The initial story of PET applies two approaches to the study of public policy - policy communities and agenda setting – to long-term case studies of US policymaking (Baumgartner and Jones, 1993; 2009). A key focus is the stable and enduring relationships between interest groups and public officials. They endure partly because the participants have built up trust and agreement about the nature of a policy problem, while few other actors are interested in the issue (Jordan and Maloney, 1997; Jordan and Cairney, 2013). In many instances, those most involved are able to protect a policy monopoly by framing the issue in a way that limits wide interest and excludes most actors; the policy problem has largely been solved, with only the implementation to be addressed. Or, it is very dull and technical, requiring a certain level of expertise or stoicism. Such group–government relations take place beyond the public spotlight, since the issues are presented as too technical and unimportant to invite attention, and most actors do not have the resources to engage. As a result, policy is incremental and based on previous agreements between few participants.

However, the study of agenda setting also highlights sudden lurches of attention, policymaking instability, and non-incremental change (Baumgartner and Jones, 1993: 10). Some issues attract high and fluctuating levels of attention. A rise in attention can follow a ‘focusing event’ (Birkland, 1997; 2016). Or, it can be caused by interest groups drawing attention to ‘their’ issues. Baumgartner and Jones (1993: 32–7) connect shifts of attention to venue shift, in which an issue can become the jurisdiction of more than one audience at the same time. Groups excluded from policy monopolies will try to shift the debate from within by, for example, appealing to public officials and questioning the existing approach. If unsuccessful, they have an incentive to venue shop, or seek influential audiences elsewhere. It may involve an appeal to a different level or type of governing organization (such as a legislative committee or court) capable of making decisions on the same policy issue. Or, groups make direct appeals to the public. When an issue reaches the ‘top’ of this wider political agenda it is processed in

| **Policy image** | how an issue is understood and discussed as a policy problem. |
| **Frame** | to define a policy’s image (Box 4.4). |
| **Policy communities** | close relationships between interest groups and public officials, based on the exchange of information for influence (see Box 9.1). |
| **Policy monopoly** | describes institutional arrangements (as in policy community) and a dominant way to understand a policy issue (Chapter 11): ‘Policy monopolies have two important characteristics. First, a definable institutional structure is responsible for policymaking, and that structure limits its access to the policy process. Second, a powerful supporting idea is associated with the institution’ (Baumgartner and Jones, 1993: 7). |
| **Agenda setting** | the study of public, media and government attention to policy issues. |
| **Venues** | arenas in which to make authoritative decisions, such as government departments, US congressional committees, and the courts. |
| **Venue shop** | the attempt to seek favourable audiences in other venues. |
a different way: more participants become involved, and they generate more ways to look at (and seek to solve) the policy problem.

A combination of approaches explains continuity and change. Policies stay the same within policy communities because there is limited external interest and ability to engage. Policies change when there is sufficient external interest to cause the collapse of previously insulated communities. External attention rises and the issues are considered in a broader political environment where power is more evenly spread and new actors can set the agenda. In both cases the key focus is the competition to define a policy image (Baumgartner and Jones, 1993: 31). While the successful definition of policy as technical or humdrum ensures that issues may be monopolized and considered quietly in one venue, the reframing of that issue as crucial to other institutions, or the big political issues of the day, ensures that it will be considered by many audiences and processed in more than one venue (Box 3.2).

The modern PET story is about complex systems (Chapter 6). Its analysis of bounded rationality and information processing (Chapter 4) remains crucial, but note two major expansions, to: much greater quantification of policy change across entire political systems, and the Comparative Agendas Project (CAP) which compares change in many countries (Baumgartner et al, 2018: 55). Still, the conciseness of explanation, and consistency of empirical findings, is remarkable. PET shows how institutions contribute to ‘disproportionate information processing’, in which attention to information fluctuates out of proportion to the size of policy problems and the information on problems available to policymakers. It also shows that the same basic distribution of policy change – ‘hyperincremental’ in most cases, but huge in some – is present in every political system studied by the CAP.

Why ‘punctuated equilibrium’ theory (PET)?
The term ‘punctuated equilibrium’ describes a combination of incremental and dramatic changes in policymaking and policy (Baumgartner and Jones, 1993: 19; compare with Hall, 1993; Hay, 2002: 161 on punctuated equilibrium in new institutionalism). In public policy, equilibrium (balance, or stability) can be the result of: (a) dominance within government, based on a widely accepted framing of a policy problem and/or the enforcement of the status quo; and (b) balance between competing political forces. Punctuation refers to a policy change associated with: (a) framing a policy problem in a different way to mobilize previously uninvolved actors; and (b) new imbalances between competing political forces. The overall appearance of equilibrium masks the ever-present potential for instability. Although PET began with reference to an evolutionary biology metaphor, it is now better understood with reference to complex systems (Chapter 6):

Complexity in political systems implies that destabilizing events, the accumulation of unaddressed grievances, or other political system processes can
change the “normal” process of equilibrium and status quo on the basis of negative feedback (which dampens down activities) into those rare periods when positive feedback (which reinforces activities) leads to explosive change for a short while and the establishment of a new policy equilibrium (Baumgartner et al., 2018: 57).

This language of complexity contributes to two different but complementary ways in which to use a telescope metaphor to imagine the policy process. First, by zooming in to case studies, we can observe the ways in which actors promote stability or instability. Some actors try to foster equilibrium by: creating or maintaining institutions (such as policy communities) to support a policy monopoly; and, defending it by mobilizing against challenges by other groups. Punctuated equilibrium occurs if this strategy is unsuccessful and the policy monopoly is destroyed. Some policy monopolies are created and maintained while others are destroyed.

Second, by zooming out to the whole system, we can observe the aggregate effects of these competitions. In most cases, institutions process information about issues routinely in the absence of any internal or external forces for change. In some cases, new ways of thinking or external events can prompt a long term ‘explosive process’ and we may not return to ‘equilibrium for a very long time’ (Baumgartner and Jones, 2009: 280–1). Only some policy punctuations are associated with ‘big bang’ style single events (Studlar and Cairney, 2014). In complex systems, small internal changes to rules or procedures can also contribute to large changes in outcomes (Chapter 6).

Policy communities and policy monopolies
In the early 1990s, PET studies of the US resembled closely the study of policy networks in countries like the UK, so it is worth analyzing the dynamics of networks in some depth (compare with network institutionalism in Chapter 4 and the role of networks in MLG in Chapter 8). Marsh and Rhodes (1992a) identify a continuum of group–government relationships based on factors such as the number of participants and frequency and nature of contact. As Table 9.1 suggests, they situate Richardson and Jordan’s (1979) concept of policy community at one end of the continuum, while Heclo’s (1978) issue network represents its polar opposite. For them, policy community suggests a close, stable and often consensual relationship between a small number of groups and government (but see Box 9.1 on the Europe/US usage). In contrast, ‘issue network’ suggests a wide variety of links between the government and many groups, in which there is less agreement and less stability.

<p>| Table 9.1 Typology of policy networks |</p>
<table>
<thead>
<tr>
<th>Policy community</th>
<th>Issue network</th>
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<tbody>
<tr>
<td>Numbers of participants</td>
<td>Small – many are excluded.</td>
</tr>
<tr>
<td>Nature of consultation</td>
<td>Frequent, high quality.</td>
</tr>
<tr>
<td>Levels of consensus</td>
<td>Participants share the same basic understanding of the policy problem and how to solve it. Members accept and support the outcomes.</td>
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Sources: Adapted from Marsh and Rhodes (1992b: 251); see also Jordan (1981: 98).

This spectrum of group–government relations sums up PET’s initial focus. Baumgartner and Jones (1993) seek to explain the success or failure of attempts by certain groups to establish a policy monopoly. Policy monopoly refers to the ‘monopoly on political understandings’, or the ability of certain groups to maintain a dominant image of the policy problem (Baumgartner and Jones, 1993: 6). The maintenance of this monopoly requires a common adherence to the same policy image and an ability to exclude groups who do not sign up to this agenda. In that context, a policy community is the venue or ‘institutional arrangement that reinforces that understanding’ (1993: 6; Jordan, 2005: 320) (although see Box 9.1). When bureaucrats and certain interest groups form relationships, they recognise the benefits – such as policymaking stability – of attempting to insulate their decisions from the wider political process (Richardson and Jordan, 1979). In some accounts, this stability hinges on socialization. Inclusion within the policy community depends on gaining personal trust, through the awareness of, following, and reproduction of ‘rules of the game’. The learning process involves immersion within a ‘common culture’ in which there exists a great deal of agreement on the nature and solutions to policy problems (Wilks and Wright, 1987: 302–3; McPherson and Raab, 1988: 55).

Box 9.1 The changing world of policy networks and group–government relations

The study of group–government relations produced many approaches and names to describe the nature and frequency of contact. They include: competitive pluralism, state corporatism, sub-government, iron triangles, policy whirlpools, subsystems, policy communities, and issue networks (Jordan, 1981; Baumgartner and Jones, 1993: 7; Jordan and Schubert, 1992). While ‘issue networks’ describes relatively loose relationships between public officials and many interest groups, ‘policy community’ began in the UK as a wider description of networks (Richardson and Jordan, 1979; Jordan, 2005) before Marsh and Rhodes (1992b) assigned it to a more specific meaning akin to a policy monopoly. In the US, ‘policy community’ is often understood as something more akin
to an open network (see Kingdon in Chapter 11). In the US, ‘iron triangle’ once described ‘strong and exclusive relationships between congressional committees, federal agencies, and interest groups’ (‘cozy triangle’ describes less extreme insulation), in contrast to ‘velvet triangles’ describing networks of actors who are ‘female in a predominantly male environment’ (Cairney and Rummery, 2018: 545; Woodward, 2004: 84).

‘Policy network’ became the generic umbrella term for group–government relationships in the UK, EU, Australia and Canada. Many use this term metaphorically (Dowding, 1995b). Some try to measure and visualize key aspects of network activity, such as how actors share information (Ingold et al, 2016) and how many (close or distant) connections each actor has with others (Oliver and Faul, 2018). ‘Subsystem’ is the more frequently-used general term in the US, but it often describes a venue in which actors interact rather than the relationship between actors (see Chapter 10).

In Europe, early studies were linked to a focus on the putative differences between pluralism (bargaining with government and competition between large numbers of participants) and corporatism (formal collaboration between the government and a very restricted number of large groups representing, for example, business and labour). In the US, early studies identified relatively insulated and uncompetitive group–government relationships within a political system assumed to be pluralistic (iron or cozy triangles). Now, there is a greater focus on the need to explain instability and policy change. In the US, it may be a response to the identification, since the 1970s, of a more crowded political system – containing a much larger number of groups, experts and other policy participants – which makes it much more difficult for policy issues to be insulated from attention and for groups to restrict debate. In the UK, it may follow the experience of the Thatcher government (from 1979) and the imposition of policy change in the face of widespread opposition, rather than through negotiation and compromise within communities (Marsh and Rhodes, 1992a). In the EU, it may follow the identification of a policy process which is ‘more fluid and unpredictable – and less controllable – than seems to be implied by enthusiasts of the network approach’ (Richardson, 2000: 1008). In each case, the group–government world appears to be changing – and becoming more ‘multi-centric’ (Cairney et al, 2019) - and our aim is to explain the impact of this change.

What explains the ‘insulation’ of these communities from the wider political process? First, policies are broken down - to such a low level of government and high level of niche specialization - that few actors have the time or resources to become involved. Second, one ‘rule of the game’ is that participants resolve issues within the network, rather than seeking change elsewhere. Participants know that, while they may not agree with all decisions taken, it is counterproductive to highlight these grievances in other arenas where more involvement may dilute their influence. Third, actors weaken political interest further by defining issues as humdrum and technical, limiting attention and the motive of other groups to participate. This is particularly true when the policy
problem *appears* to have been solved, with only technical aspects of implementation to deliver. If successful, they maintain a policy community which is characterized by:

- *A limited group membership*, based on the use of a certain policy image to exclude most participants and reduce the visibility of decisions;
- *Good quality relations* between groups and government, based on shared values, a shared understanding of the policy problem, and the trust that comes from regular and rewarding exchange (Chapters 7 and 10);
- *Policy and policy community stability*, based on a lack of external attention and the fruitful exchange of resources between groups and public officials. (Jordan and Maloney, 1997)

If the attempt to maintain a policy monopoly is *unsuccessful*, it suggests that the participants cannot insulate the process from a wider audience and there is effective competition to define the policy’s image (partly as a problem that is urgent, important, and has *not* been solved). More groups become involved, and there is greater competition for access to government and instability caused by group conflict. The breakdown of a policy monopoly is linked strongly to a movement away from policy monopolies towards issue networks.

**‘Issue networks and the executive establishment’**

Heclo’s (1978) study of the US executive challenges the ‘received opinion’ which explains most public policymaking with reference to iron triangles linking ‘executive bureaus, congressional committees and interest groups with a stake in particular programs’ and excluding other political actors: ‘the iron triangle concept is not so much wrong as it is disastrously incomplete … Looking for the closed triangles of control, we tend to miss the fairly open networks of people that increasingly impinge upon government’ (1978: 88). Heclo argues that the huge postwar rise in federal responsibilities and federal budget was not accompanied by a proportionate growth in the executive’s administration. The administration became increasingly stretched as more groups mobilized in response to the growth of government. The simple ‘clubby days of Washington politics’ gave way to ‘complex relationships’ among a huge, politically active population (1978: 94; 97; Baumgartner and Jones, 1993: 177–8; see Jordan, 1981: 98 for similar trends in the UK).

Issue networks comprise many participants with ‘variable degrees of mutual commitment’, and participants ‘move in and out of the networks constantly’ (1978: 102). The boundaries of networks are fluid. The barriers to entry are low, and based more on the ability to contribute to debate than material power or a common adherence to a policy image. The network is relatively unstable and resolutions to debate are conducted ‘rarely in any controlled, well-organized way’ (1978: 104). Issues which were once ‘quietly managed by a small group of insiders’ have now become ‘controversial and
politicized’ as the role of policy activists increase and previously insulated policy communities collide (1978: 105). Baumgartner and Jones (1993: 45) provide a range of examples demonstrating this process. Policy communities ‘relating to tobacco, pesticides, air and water pollution, airlines, trucking, telecommunications, and nuclear power were all destroyed or radically altered’.

However, we should not exaggerate Heclo’s position and assume that group–government relations are pluralistic. This wider political process may mask ‘the real locus of decision’ (Richardson, Gustafsson and Jordan, 1982: 2) and it is possible for a policy community to exist within an issue network (Read, 1996). Heclo’s (1978: 105) qualification is crucial: issue networks ‘complicate calculations’ and ‘decrease predictability’, but it would be ‘foolish’ to argue that they replace ‘the more familiar politics of subgovernments’ (compare with True et al., 2007: 158). The ‘politics of subgovernments’ is still compelling. The sheer size of government means that most policy decisions are effectively beyond the reach (or interest) of government ministers or presidents (Richardson and Jordan, 1979; Heclo, 1978: 88). When policymakers focus on one issue they have to ignore 99 others. The policy process is broken down into more manageable issues involving a smaller number of interested and knowledgeable participants.

Using the language we encountered with complexity theory (Chapter 6; and Simon, 1976: 242–3), PET describes a combination of parallel and serial processing (Jones, 1994). The government processes a huge number of issues simultaneously. Most public policy is conducted primarily through small and specialist policy communities which process ‘technical’ issues at a level of government not particularly visible to the public, and with minimal involvement from senior decision makers. These arrangements exist because there is a logic to devolving decisions and consulting with certain groups (Jordan and Maloney, 1997). Senior decision makers rely on their officials for information and advice. For specialist issues, those officials rely on specialist organizations. Those organizations trade that information/advice (and other resources such as the ability to implement government policy) for influence within government. Further, the logic of this relationship holds regardless of the party of government. Therefore, overall, we are unlikely to witness the types of radical policy shift associated with a change of government, president, or party control in Congress.

In some cases, these relationships break down and policies change. Serial processing at the ‘macropolitical’ (highest, or most senior) level replaces parallel processing at a low level of government (True et al., 2007: 158–9). Thus, any characterization of group–government relationships is a ‘snapshot of a dynamic process’ in which stable relationships can endure or be destroyed (Baumgartner and Jones, 1993: 6; Baumgartner et al, 2018: 58). But what causes this shift? Early PET studies suggest that policy change

**Parallel processing** – When many issues are considered at one time by component parts of a larger organization.

**Serial processing** – When issues are considered one (or a few) at a time.
follows a mutually reinforcing process of increased attention, venue shift, and shifting policy images (True et al., 2007: 160). This dynamic is a key concern of agenda setting studies.

**Agenda setting**

The agenda setting literature focuses on: (a) levels of public, media and government attention to particular issues; and (b) what causes attention to rise or fall (see Zahariadis, 2016). It relates to three main factors. First, the pre-existing prejudices of the audience. Different audiences will be receptive to different policy issues. Or, different issues may occupy the top of the agenda in different arenas. This effect is more marked if we divide the policy agenda into smaller parts and measure issue attention in local, regional, national and supranational governments, the legislature or the courts. Yet, in many cases a range of audiences may be receptive to similar issues simultaneously. Media represent the 'means of communication' between multiple venues which are often 'tightly linked', with 'shifts in attention in one … quickly followed by shifts in others’ (Baumgartner and Jones, 1993: 107). However, such attention does not necessarily prompt rapid and major policy change. The US legislative progress 'slows down as media attention increases' (Wolfe, 2012: 109) and issue expansion can make powerless groups even worse off (Baumgartner et al, 2018: 81).

Second, the significance and immediacy of issues. Some policy problems are more important than others, while some require quick decisions. For example, economic issues (such as unemployment, interest rates, or tax) always remain high on the political agenda, while natural and human disasters often focus attention (Birkland, 2016). Yet, since the attention of audiences is limited, and the number of potential issues is almost infinite, the significance of each issue and event is subject to interpretation, debate and competition. People combine cognition and emotion to process information, and what may seem like an objectively important and urgent problem may be perceived subjectively as too distant or abstract to command concern (Chapter 4).

Third, the ability of actors to exercise power to draw attention to one issue at the expense of another. Agenda setting describes, ‘an ongoing competition among issue proponents to gain the attention of media professionals, the public, and policy elites’ (Dearing and Rogers (1996: 1). As Chapters 4 and 11 suggest, this competition is to draw selective attention to particular: facts to reduce uncertainty, and interpretations to reduce ambiguity (Zahariadis, 2007: 66; Cairney et al, 2016: 399; Cairney, 2019c).

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**Policy issue** – a focus of discussion, debate or conflict in politics.

**Policy problem** – a policy issue to be solved.

**At the top of the policy agenda** – treated as the most important (or most immediate) policy problem to be addressed.

**Media** – forms of mass communication which foster collective attention (such as TV, radio, print, and online news, and social media such as Facebook and Twitter).
Baumgartner and Jones (1993: 11–12, drawing on Kingdon, 1984: 3–4) focus on the effect this attention has on the *governmental agenda* (the problems that decision makers ‘are paying some serious attention at any given time’) and the *decision agenda* (the problems ‘that are up for an active decision’). In this context, agenda setting can be summed up with two key statements:

1. There is an almost unlimited amount of policy problems that *could* reach the top of the policy agenda. Yet, very few issues do, while most others do not.
2. There is huge number of solutions that could be proposed. Yet, few policy solutions will be considered while most others will not (Box 9.2).

### Box 9.2 Participation in American politics: the dynamics of agenda building

Cobb and Elder’s (1972: 10; 24–5; 28) identify numerous biases within the political system that restrict attention to certain problems and limit the consideration of solutions (see Chapter 3 on power). First, the distribution of influence within society is unequal and participation within interest groups is limited (Schattschneider, 1960). Second, dominant interests in the political system promote ‘non-decision making’ or the use of social values and institutions to restrict the scope of debate (Bachrach and Baratz, 1962: 948; Crenson, 1971; Gamble, 2000: 295). Third, the policies given most serious consideration are those which differ incrementally from the status quo, while attention to the consequences of previous decisions dominates the political agenda (Chapter 5; Lindblom, 1968; Hogwood, 1987: 35). Fourth, the problem may not yet be a legitimate area of concern because the state has never been involved (Cobb and Elder, 1972: 86; 93; Baumgartner and Jones, 1993: 46). Finally, the problem may seem too expensive or impossible to solve (Box 9.3). In this light, their question is: how can this bias towards the status quo be overcome?

Cobb and Elder (1972: 105–10) argue that the best chance for an issue to reach the top of the agenda is to maximize the size of its audience. They present the image of four different audiences as circles within larger circles. The smallest circle is the ‘identification group’ which is already sympathetic to an issue proponent’s aims. If an issue expands, it gains the attention of ‘attentive groups’ (who are interested and easily mobilized only on certain issues), the ‘attentive public’ (high income, high educated people with general political interests) and finally the ‘general public’ which is ‘less active, less interested and less informed’ and therefore only becomes aware of an issue if it has a striking symbolic value (1972: 107–8). This symbolism is often far removed from the original dispute because only very broad goals allow different publics to become involved, while any technical or specific discussions would dissuade general public involvement. In many cases, a rise in attention is linked to ‘triggering devices’ or ‘unforeseen events’ such as natural disasters, riots and protests, while novel issues or issues amenable to piggybacking onto existing debates are the most likely to attract wider
attention (1972: 84; 112–18). General public attention makes it likely that an issue will be prominent on the government agenda (1972: 157).

Therefore, while the idea of a politically active and knowledgeable public may be a ‘myth’, the ‘agenda building perspective serves to broaden the range of recognized influences on the public policy-making process’ (1972: 2; 164). Further, King et al (2017: 776) find that ‘exposure to the news media causes Americans to take public stands on specific issues, join national policy conversations, and express themselves publicly—all key components of democratic politics—more often than they would otherwise’.

Baumgartner and Jones (1993: 36–7) argue that gaining public attention is one of two strategies open to issue proponents. The second is venue shopping, or seeking more sympathetic audiences in institutions such as congressional committees, state governments and the courts. Therefore, while ‘issue expansion’ (the engagement of a wider audience) requires the reframing of policy problems in terms likely to attract new attention, it need not be in the broadest or least technical terms required by the general public.

Problem definition
Problem definition is central to agenda setting. It refers to ‘what we choose to identify as public issues and how we think and talk about these concerns’ (Rochefort and Cobb, 1994: vii). Policy problems do not simply receive the most attention because they are the most important or immediate. There are no objective indicators to determine which ‘real world conditions’ are the most deserving of our attention. Further, the ability of policymakers to receive and act on ‘signals’ or information about the severity of policy problems is imperfect (Jones and Baumgartner, 2005: 8; Chapter 4). Attention is linked more strongly to the ability of actors to convince enough people that ‘their’ issues are the most worthy of discussion (Dearing and Rodgers, 1996). This may not involve a battle over the overall accuracy of ‘facts’, but to direct attention to other facts which support a rival policy image (Baumgartner and Jones, 1993: 107–8; 113). Attention-grabbing strategies depend on the following factors:

Framing. Framing involves the definition of a policy’s image, to portray and categorize issues in specific ways (Box 4.4). Actors can frame policy problems to make them appear technical and relevant only to experts, or link them to wider social values to heighten participation (Rochefort and Cobb, 1994: 5). To attract attention in the US, one may link ideas to widely accepted – albeit open to interpretation - values: ‘progress, participation, patriotism, independence from foreign domination, fairness, economic growth’ (Baumgartner and Jones, 1993: 7). However, core values may vary from country to country and over time (for example, compare post-1945 and present day attitudes of most countries to the welfare state). More generally, issue expansion requires reframing from a focus on self-interest to a problem that the public (or powerful sections within it) can relate to (Hogwood, 1987: 30; Box 9.2). People combine
cognition and emotion to understand the world, and framing is ‘a mixture of empirical information and emotive appeals’ (True et al., 2007: 161; Cairney and Kwiatkowski, 2017).

Most policy issues are multi-faceted and can command a wide range of images. For example, many actors have framed smoking in terms of health, public health, health and safety, health inequalities, nuisance, employment, the economy, trade, customs and excise, the role of multi-national corporations, civil liberties and human rights (Cairney et al, 2012). Yet, while there are many ways to frame the same problem, there is limited time and energy to devote to issues. So, highly complex issues are simplified, with attention to very few aspects coming at the expense of the rest. This selective focus has policy consequences. For example, a focus on smoking as an urgent public health issue prompts governments to restrict tobacco use, while an economic image prompts governments to support the tobacco industry (Mamudu et al, 2015). Baumgartner and Jones (1993: 109) suggest that while certain groups may exploit selective attention to create and protect a policy monopoly based on one image for long periods, the agenda-setting process is too dynamic to expect it to go on forever. For example, the news agenda is based on attempts to seek new angles to maintain the interest of a public audience. This new focus is accompanied by new journalists with different views, providing audiences for people who were previously ignored, and creating interest within venues which were previously uninvolved. Indeed, the basis for creating monopolies – limited time, attention, cognitive abilities – also contributes to radical shifts of attention to different policy images. Policy change can result from a major shift of attention rather than a major change of beliefs, mind, or preferences (Baumgartner et al, 2018: 65; Koski and Workman, 2018: 296; Chapter 4).

Causal stories, responsibility and the availability of a solution. For Kingdon (1984: 115), policy issues only become problems when there is a solution and ‘we come to believe that we should do something about them’ (Chapter 11). This belief may follow new theories on the determinants of problems, who is to blame and who is responsible for solving the problem. For example, poverty became a US public policy issue in the 1960s because of a shift in the issue’s image ‘from that of a private misfortune to a public problem amenable to government solutions’ (Baumgartner and Jones, 1993: 28; Rochefort and Cobb, 1994: 15). Stone (1989: 282–3; 2002: 191) suggests that assigning responsibility is a strategy of organizations seeking to prompt or justify policy intervention. They use ‘causal stories’ which highlight the cause of the problem and who is to blame (compare with studies of ‘blame game’ management – Boin et al., 2010). For example, several studies shifted long-held beliefs about blame in health and safety (from the worker to the employer), environmental damage (from natural phenomenon to human pollution), and road safety (from careless drivers to car manufacturers). In each case, this shift of attention prompted equivalent shifts in public policy (compare with the Narrative Policy Framework in Chapter 4).
In most cases there are likely to be many competing stories of blame. Rochefort and Cobb’s (1994: 1–4) discussion of the LA riots in 1992 highlights multiple causes: a justified reaction to police racism; poor immigration controls; a breakdown in law and order; the failure of Lyndon Johnson’s Great Society measures in inner-cities; the Republican neglect of race relations; and, a ‘poverty of values’ (compare with the UK Government’s ‘troubled families’ explanation of London riots in 2011 – Cairney, 2019d). The same can be said for valence issues. While most agree that child, drug, and alcohol abuses are problems, there is much less agreement on assigning responsibility and producing solutions (Baumgartner and Jones, 1993: 150). Studies of the ‘social construction of target populations’ (Schneider and Ingram, 1993) highlight a competition to assign praise or blame social groups to help decide if they should receive government benefits or sanctions (Chapter 4).

Crisis and triggering or focusing events. In many cases, crises such as environmental disasters act as a ‘triggering event’ or ‘focusing event’, focusing public, media and government attention to an issue previously lower down on the agenda (Birkland, 2016; Dearing and Rogers, 1996: 37–9). They can act as ‘dramatic symbols of problems that are already rising to national attention’ (Baumgartner and Jones, 1993: 130). Events have high potential to focus attention if they appear to arise suddenly, are unusual or uncommon, seem immediately or potentially harmful, can be connected to a specific geographical area or social group, and their effects are known to the public and policymakers at the same time (Birkland, 1997: 22; 2016: 392). Examples include terrorist attacks, major oil spills causing damage to wildlife, and environmental disasters with human consequences, particularly when they are of an unusual scale (2016: 394).

However, the event is only one part of the story: ‘Focusing events are advocacy opportunities that can be used by policy entrepreneurs to advance their preferred problem frames and solutions on the agenda’ (2016: 394; Chapter 11). This propensity to give disproportionate attention to disasters (rather than more ‘mundane’ events which cause more deaths) also allows issue proponents to highlight the potential for dramatic crises, such as a nuclear power plant disaster (Baumgartner and Jones, 1993: 118–21) or the global spread of ‘non-communicable diseases’ (NCDs) caused by factors such as smoking or obesity (Studlar and Cairney, 2019). In other cases, the appearance of crisis depends on a widespread belief that something has gone wrong, is causing catastrophic effects, and needs urgent action to prevent further catastrophe. For example, the global financial crisis from 2007 focused attention on solutions such as financial regulation (Gava, 2016: 433). Or, problems are simply labelled as crises ‘to elevate a concern when facing an environment overloaded with competing claims’, albeit with the potential for diminishing returns (Rochefort and Cobb, 1994: 21; Box 9.3).

Measurement. Although the measurement of a problem may seem like a straightforward and technical matter, it can be subject to as much interpretation and
debate as issue framing (Chapter 10). Policy problems may be so complex or ambiguous that there is room to interpret the measures we should use. For example, the lens through which we understand and measure inequality can relate to factors such as income and wealth, gender, race and ethnicity, sexuality, disability, and mental ill-health (Cairney and St Denny, 2019). The measurement of poverty can relate to: a household or individual; mean or median incomes; absolute or relative poverty; income; wealth; and, inequalities in public service access. It may also have a different definition in domestic and international settings, and change according to technical factors relating to measurement. For example, the UK government defines the ‘absolute poverty line’ in relation to an individual ‘if their household income is less than 60% of real median income’: 60% of approximately £64 (£38, or $60) per day in 2011 (Office for National Statistics, 2013: 5). The World Bank used $2 per person per day to define absolute poverty and $1 to define extreme absolute poverty, before raising the latter to $1.90 in 2014 (Hood and Waters, 2017: 27; Ferreira, 2015; World Bank, 2008; Jones and Baumgartner, 2005: 31).

Measurement debates have policy consequences. For example, the treatment of civil rights issues in the US changed significantly when the measure of racism shifted, from the need to prove a person’s intent to discriminate, to statistical evidence proving that an overall selection process could not have happened by chance (Stone, 1989: 291). Governments can also change the scope of their measurements (and policy responses) over time. For example, in the UK, unemployment means the number of people out of work and claiming unemployment benefit. However, from the 1980s the government introduced policies to restrict the number of people who qualified for this benefit. Initially, it contributes to a relatively high number of economically inactive people who claimed sickness rather than unemployment benefits (Webster, 2002; Machin, 2004). Subsequently, it contributed to far more controversial efforts to exclude people from receiving disability-related benefits and distinguish between people who can and cannot work (Carter and Whitworth, 2015).

**Box 9.3 Up and down with ecology: the ‘issue attention cycle’**

Do peaks in attention cause policy change? Downs’ (1972) famous thesis is that public attention is fleeting, even when this involves ‘a continuing problem of crucial importance to society’. A rise in interest does not mean a worsening of the problem, while falling interest does not suggest that the problem has been solved. This point is a key tenet of the literature: ‘ Virtually every study of agenda-setting has found … that issues emerge and recede from the public agenda without important changes in the nature of the issues themselves’ (Baumgartner and Jones, 1993: 47). The issue attention cycle has five stages:

1. Pre-problem – a problem alarms experts but doesn’t yet capture public attention.
2. Alarmed discovery and euphoric enthusiasm – concentrated public attention is accompanied by a widespread hope that the problem can be solved quickly.
3. Realizing the cost of significant progress – when the public realizes that the solution involves major costs or a significant change in behaviour.
4. Gradual decline of intense public interest – people feel discouraged at the prospect of change and shift their attention to the next issue at stage two.
5. Post-problem– public attention is minimal or spasmodic and the problem has been replaced by another issue.

Downs posits a weak link between public attention and policy change, since the public is rarely engaged long enough to see matters through. However, in many cases there is a policy response which creates new institutions that operate long after public interest has waned (Downs, 1972). Peters and Hogwood (1985: 251; see also Hogwood, 1992b) find a positive relationship between public attention and government reorganizations. As Baumgartner and Jones (1993: 87) argue, peak periods of organization change ‘generally coincided with Gallup Poll data showing public concern with the same problems’. Therefore, ‘the public is seriously involved in the agenda setting process, not an ignored bystander’ (Jones and Baumgartner, 2005: 269). The policy responses from public attention may have long-term effects. A realization of the costs of policy change may occur only after legislation has passed and policy is being implemented (Peters and Hogwood, 1985: 239). New government organizations are created but ‘do not simply “fade away” like public interest or media attention’ (Baumgartner and Jones, 1993: 84–7; 191; see Baumgartner and Mahoney 2005 on examples like Medicare, Medicaid, the Environmental Protection Agency and civil rights policies).

**Problem definition, policy monopolies, and venue shopping**

Venue shopping relates to Schattschneider’s (1960) suggestion that power involves the competition to draw more or less attention to conflict: the winners try to ‘privatize’ and the losers ‘socialize’ conflict (Box 3.2). Baumgartner and Jones (1993) highlight the role of government as a source for socialization and privatization (compare with Genieys and Smyrl, 2008a; 2008b; Jobert and Muller, 1987; Cairney, 2012a: 231). For example, if actors organize issues out of politics by creating a policy monopoly, their opponents ‘will have the incentive to look for allies elsewhere’ (1993: 35–7).

Policy monopolies are common, but so too is the ability to challenge monopolies and make authoritative decisions in other venues. The main options for issue proponents are two-fold. First, they can challenge the dominance of a monopoly within this venue. The attitudes of policymakers are susceptible to change according to the political circumstances in which they operate. As Jones (1994: 5) argues, ‘decision-makers value or weight preferences differently depending on the context in which they are evoked’. Decision makers have many (often contradictory) objectives, most issues are
multi-faceted and there are many ways to solve policy problems. Therefore, it may be possible to shift the opinions of decision makers by ‘shifting the focus of their attention from one set of implications to another’ (Baumgartner and Jones, 1993: 30). As Box 4.4 on ‘heresthetic’ suggests, a group of people with the same beliefs can draw different conclusions according to the context and order in which they consider issues and make choices.

Second, if unsuccessful, actors can venue shop to seek more sympathetic audiences elsewhere, often learning from trial-and-error strategies (Baumgartner and Jones, 2009: 276). The consequence of a multiplicity of venues, across government and at different ‘stages’ of the policy process, is that an issue may be framed differently in different arenas at different times. Each venue may be relatively receptive to a different policy image. The ability to venue shop has increased since the post-1945 period. An increasingly crowded political system makes it more difficult for policy issues to be insulated from the wider political process (Baumgartner and Jones, 1993: 43). In most cases there is no natural jurisdiction for policy problems and no ‘iron clad logic’ for an issue to be considered at, say, the national rather than international or local level. It is also common for policymaking responsibility to shift over time (1993: 32–3; Cairney et al, 2019).

This premise allows us to explain why policy change follows a mutually reinforcing process of increased attention, venue shift and shifting policy images. The key strategy is to involve the previously uninvolved. If issues ‘break out’ of these policy communities and are considered in one or more alternative venues, then the scope for new ways to examine and solve policy problems increases. As people come to understand the nature of a policy problem in a different way (and this new understanding of the problem is more closely linked to their priorities), more people become interested and involved (1993: 8). The more ‘outside’ involvement there is, then the greater likelihood of a shift of the policy image, as new actors propose new ways to define and solve a policy problem.

**Case studies of punctuated equilibrium: ‘some issues catch fire’**

Baumgartner and Jones (1993) compare case studies over several decades to demonstrate the creation and destruction of policy monopolies. *Environmental policy* demonstrates the use of venue shopping to change a policy’s image, with the new involvement of one venue producing a snowball effect. Environmental groups, unhappy at losing out on regulatory decisions made by a branch of the federal government, appealed to previously uninvolved members of Congress. Congress became more sympathetic to a new image of environmental policy and passed legislation (the National Environmental Protection Act, NEPA, 1969) to regulate business, allow groups greater access to the courts, and pave the way for a federal response (the creation of the Environmental Protection Agency) in line with the new policy image (1993: 38).
In nuclear power, Baumgartner and Jones (1993: 59–82), describe the effect of a ‘Downsian mobilization’ (Box 9.3). The government-inspired enthusiasm for nuclear produced a positive policy image – stressing the safe use of nuclear materials, reduced energy bills, independence from imported oil, employment, reduced air pollution, and the economic benefits of new technology – which supported the formation of a post-war policy monopoly. As the process moved from policy formulation to implementation, public, media and government attention fell and the details of policy were left to the (mainly private sector) experts, federal agencies (e.g. Atomic Energy Commission, AEC) and certain congressional committees.

However, from the late 1960s, there was increased opposition from environmentalists, local activists and nuclear scientists expressing concerns about safety. It suggests a ‘Schattschneider mobilization’ (Box 3.2), or an expansion of the scope of conflict to challenge a monopoly. This strategy is most effective when internal scientific divisions and negative media attention are apparent. The safety agenda was pursued through public hearings on nuclear licensing and, by the 1970s, public and media attention rose to reflect new concerns (the number of negative news articles began to outnumber the positive). Many venues became involved. The focus of Congress (and an increasing number of committees) became increasingly negative and NEPA reinforced the need for more stringent regulation. It was followed by a series of decisions in the courts, including the retrospective application of NEPA to previous AEC licensing decisions, and supplementary action by state and local governments (including planning laws to delay the building of new plants). The new policy image was cemented in the public’s mind by the accident at the Three Mile Island nuclear plant. The private sector lost confidence in the industry and over three decades passed before a new nuclear plant commission. Overall, the combination of interest-group opposition and venue shopping shifted the policy image of nuclear power from highly positive to overwhelmingly negative. The policy monopoly endured for over 20 years before being destroyed (although the existing nuclear plants remained profitable, and nuclear still accounts for 20% of us electricity supply – Abdulla, 2018). Increased regulation replaced a post-1945 policy of power plant expansion.

Baumgartner and Jones (2009: 260–4) suggest that a new policy image has emerged recently in the context of climate change, prompting some national governments to reinforce support for nuclear as a source of low carbon electricity. However, disasters such as Fukushima in 2011 also keep safety on the agenda (prompting plans to end nuclear capacity in Germany, and reform regulation in India – Fuchs, 2015: 208; Rabbi and Sabharwal, 2018) and, without continuous long-term US government support, nuclear power has struggled to compete economically and politically with other sources of electrical energy (Abdulla, 2018).

In early twentieth century tobacco policy, actors built a policy monopoly on a positive policy image (economic benefits) and deferral to the experts in agriculture. Tobacco consumption was high, media coverage was low and generally positive (smoking was
normal, and had a glamorous image), and tobacco companies had a reputation for patriotism after ensuring a supply of cigarettes during the Second World War (Cairney et al, 2012: 48). However, from the 1950s there was significant issue expansion, with anti-tobacco groups increasingly setting the media agenda with a negative policy image. Tobacco consumption fell dramatically from the 1950s and in 1964 the US Surgeon General’s report cemented a new image based on ill-health. Congressional attention followed in the mid-1970s, with health committee hearings outnumbering agriculture and a range of public health groups increasingly involved and able to reframe the debate in negative terms (Baumgartner and Jones, 1993: 114; 210). By the 1980s, this new image was pursued through a series of high-profile court cases and by innovative states such as New York and California providing best practice and the scope for policy diffusion (Studlar, 2002). By the 2000s, tobacco control became restrictive and the old pro-tobacco monopoly was ‘destroyed’ (Baumgartner and Jones, 2009: 280).

In the post-war period, actors built a pesticides policy monopoly on a positive policy image: eradicating harmful insects, boosting agricultural exports, and ending world hunger by boosting food production. There was public and media ‘enthusiasm for progress through chemistry’ and deferral to experts in agriculture and the chemical industry, who enjoyed a close relationship with the Department of Agriculture, USDA, and the congressional agriculture committee (Baumgartner and Jones, 1993: 95). Environmental concerns were marginalized, consumer interests generally ignored, and the Food and Drug Administration (within the USDA) had no jurisdiction over pesticides. This ‘golden age’ of pesticides was punctured in 1957 following the devastating failure of two large insect eradication campaigns and in 1959 following the FDA’s decision to ban the sale of a crop tainted with pesticide residue. It shifted media and Congressional attention from the economic benefits of pesticides to their ineffectiveness, adverse health effects, and environmental damage. By the late 1960s, environmental groups had found support within multiple venues (Congress, the courts, executive and state agencies) and the regulation of pesticides rocketed.

**From case studies to the ‘general punctuation hypothesis’**

Jones and Baumgartner (2005: 278) show that punctuated equilibrium is a system-wide effect, rather than specific to the case studies that they selected (see also Baumgartner et al, 2018 for a large list of case studies by other authors). Their focus has shifted to general explanations of agenda setting and policy change, based on non-linear dynamics in complex systems (Chapter 6). Systems, and the actors within them, provide ‘feedback’ to actions: dampening some (negative feedback) and amplifying others (positive feedback). While the former acts as a counterbalance to political forces, the latter reinforces those forces to produce radical change (Baumgartner and Jones, 2002: 8–16). As a result, small actions can have large effects and large actions can
have small effects. In particular, a key dynamic is ‘disproportionate information processing’: policymaker responses are not in proportion with the ‘signals’ that they receive from the outside world (Jones et al., 2009). Instead, they pay attention to some and ignore the rest: ‘most members of the system are not paying attention to most issues most of the time’ (Baumgartner, 2017: 72; Shaffer, 2017).

Baumgartner and Jones’ (1993) case studies already describe key aspects of disproportionate information processing: when policy monopolies are maintained, policymakers appear unresponsive to new information. During periods of punctuation, they appear to become hypersensitive to new information (Jones and Baumgartner, 2005: 8; 2018). However, the ‘general punctuation hypothesis’ goes further to identify the system-wide effect of policymaking organisations receiving ‘feedback’ on their policies (for example, from interest groups, the media or public opinion) without responding proportionately. The ‘selective attention’ of policymakers and organisations explains why issues can be relatively high on certain agendas, but not acted upon, and why powerful signals are often ignored:

- Policymakers are unwilling to focus on certain issues, either because ideology precludes action in some areas, there is an established view within government about how to address the issue, or the process of acting ‘rationally’ (making explicit trade-offs between choices) is often unpopular.
- They are unable to give issues significant attention. Boundedly rational policymakers set simple goals but struggle to generate enough information of complex systems to understand how to achieve them (Jones and Thomas, 2017: 49; Chapter 4). Further, their focus on one issue means ignoring 99 others.

Policymaking organizations are more able to gather information routinely, but are subject to the same maxim on a larger scale: environmental ‘signals’ on available information are almost infinite, while information processing capabilities are always finite (and often low). Low information capacity helps explain why, even when governments pay high attention to some issues, their searches for information miss key elements and they fail to respond to changing circumstances proportionately (Workman et al., 2017; Koski and Workman, 2018; Epp, 2017). Indeed, the idea of ‘institutional friction’ or ‘stickiness’ is that political systems make it more or less difficult to turn new
information and other ‘inputs’ into policy ‘outputs’ (Baumgartner et al, 2018). For example:

- Policymaking organizations establish rules and standard operating procedures to gather information.
- These rules skew information searches, missing or rejecting some information, and ruling out certain ways of thinking or acting.

A major change in policymaking and policy involves costs that policymakers are often unwilling or unable to bear: the ‘cognitive costs’ to understand a problem, and ‘institutional costs’ to change well-established rules (Baumgartner et al, 2018: 69). It may require a critical mass of attention and pressure to overcome the conservatism of policymakers – and friction and shift their attention to new problems or ways of interpreting them (Jones and Baumgartner, 2005: 19–20; 48–51). Partisan ideology may be one obstacle, but dramatic party changes are only one of many sources of ‘policy disruptions’ (Baumgartner and Jones, 2009: 287).

Generally speaking, if levels of external pressure reach a tipping point, they cause major and infrequent punctuations rather than smaller and more regular policy changes: the burst in attention and communication becomes self-reinforcing; new approaches are considered; different ‘weights’ are applied to the same categories of information; policy is driven ideologically by new actors; and/or the ‘new’ issue sparks off new conflicts between political actors (2005: 52; 69). The effect is often like a dam that contains the flow of water, until there is so much pressure that it breaks down and a huge amount of water flows quickly (indeed, Koski and Workman, 2018: 305 describe the ‘flow of information’). Information processing is characterized by ‘stasis interrupted by bursts of innovation’ and policy responses are unpredictable and episodic rather than continuous (2005: 20). Indeed, the more ‘friction’ we find, the more we expect high stability combined with occasional dramatic change. The system ‘often works to reinforce conservatism, but it sometimes works to wash away existing policy subsystems’ (Baumgartner et al, 2018: 58).

PET scholars do not really try to identify and measure precisely a just-right level of attention or reaction to a problem (akin to the story of Goldilocks). However, a reference to ‘disproportionate’ suggests too little or too much attention and the potential for major policy consequences. Further, the concept of ‘policy bubbles’ describes ‘underreaction and overreaction’ to policy problems, including a ‘severe’ and long term ‘overinvestment’ of government resources in ‘a single policy instrument beyond its instrumental value in achieving a policy goal’ (Jones et al, 2014: 146-9; compare with Maor, 2014). For example, governments may over-invest in an instrument because it has ‘symbolic or ideological’ value, ‘solving’ an ill-defined problem politically rather than substantively (Jones et al, 2014: 149; compare with ‘good politics, bad policy’ – McConnell, 2010: 78). This way of thinking is difficult to shift with reference to
‘evidence based’ or ‘rational’ arguments, particularly if (a) policy promises escalate following a ‘bidding war’ between political parties, as in their case study of crime reduction or (b) the policy supports a fundamental belief to which actors are attached, such as their faith in a government or market solution (2014: 150-2; compare with Chapter 10, and Baekgaard et al, 2017). Or, a solution appears to work at first, and achieves ‘lock in’ before its limited benefits are known (akin to path dependence, inertia, or incrementalism in Chapters 4 and 5). Similarly, most PET studies do not focus on improving system design, but the practical effect of diagnosing a potentially overwhelming amount of information, inefficient information searches, ‘sticky’ institutions, and the misallocation of budgets could be profound (Koski and Workman, 2018; Baumgartner et al, 2018: 68).

**Government budgets: hyperincremental and dramatic policy change**

To demonstrate the applicability of this theory to policy change, the Policy Agendas Project extends the analysis from particular case studies to the dynamics of government budgets, elections and policymaker attention. Most notably, it produces a long term and comprehensive analysis of post-1945 US public expenditure (Jones and Baumgartner, 2005: 111; True et al., 2007) and longer term budgets (Jones et al., 2009).

**Figure 9.1** A broad picture of the general punctuation hypothesis in action
Public expenditure changes are key indicators in public policy because: (a) they allow us to measure policy changes in a systematic way; and (b) spending commitments are more concrete than more vague policy intentions (Chapter 2). The results are displayed in Figure 9.1 which highlights an aggregate of the annual percentage change of US budgets in each policy area (such as health, social security, and education).

But what does the figure tell us and how should the results be interpreted? Jones and Baumgartner (2005) argue that if the overall nature of budgeting changes was incremental (and not punctuated), then the figure should display a normal distribution. This is a statistical term which refers to: (a) the mean; and (b) the standard deviation from the mean. A normal distribution suggests that most (68 per cent) of all the values are slightly different from the mean, while almost all (95 per cent) are no more than moderately different. In other words, while there will be a small handful of instances in which the values differ markedly from the mean, most values are bunched closely together, while some are further away from the mean, but not remarkably so (Box 9.4).

Box 9.4 Key terms for statistical analysis

Mean – the average, calculated by adding all values together and dividing by the number of values.

Mode – the average, calculated by identifying the most frequent value.

Standard deviation – a measure of statistical dispersion which generally denotes deviation from the mean (Figure 9.1 uses the mode). If all values are the same, then the SD is zero (e.g. the numbers 100, 100 and 100). The greater the dispersion (e.g. 0, 100, 200), then the greater the SD.

Normal distribution – denotes the level of SD from the mean. It suggests that 68 per cent of all values fall within a range of plus or minus one standard deviation from the mean, while 95 per cent fall within a range of plus or minus two standard deviations.

Leptokurtic – a distribution which is not normal because it has a higher central peak (representing many small changes), few moderate changes, and more outliers (large changes). More than 68 per cent fall within ±1 standard deviation but less than 95 per cent fall within a range of ±2.

Outlier – a value which is further away from the mean than the normal distribution suggests.

Real increase – an increase in spending which takes inflation into account.
We may expect no more than a normal distribution because incrementalism suggests a common type of change in most policy areas: a non-radical change from previous years in most cases, combined with moderate change overall (2005: 120–3). Since there is some doubt about the size of an increment (Chapter 5), the normal curve accounts for a degree of variety of annual budget changes (up to ±80 per cent in the post-war period; up to approximately ±50 per cent in Figure 9.1). Yet, Figure 9.1 demonstrates that the distribution of values is leptokurtic. It has two main features. First, a higher central peak (note how much higher the bar reaches above the peak of the normal curve) and lower level of dispersion (note the space between the bars and the dotted line within the normal curve) than we would expect. In the vast majority of cases the real increase or decrease in annual spending is very low and the size of the increment is very small. Jones and Baumgartner (2005: 112) call it ‘hyperincrementalism’. Second, there are many more outliers than we would expect under a normal distribution. For example, in their post-war data set with approximately 3,300 values we may expect approximately 15–20 outliers. Yet, the number of cases of annual change greater than +160 per cent is 75 (2005: 110). The analysis suggests that in a small but very important number of cases, ‘programs received huge boosts, propelling them to double or triple their original sizes or more’ (2005: 112). Overall, budget change is characterized – much like the distribution of natural seismic events like earthquakes - by a huge number of small changes in each policy category, combined with a small number of huge changes (True et al., 2007: 166; Baumgartner et al, 2018: 71).

This outcome relates strongly to optimal information processing as ideal-type: ‘a perfect pattern of adjustment, to a complex multifaceted environment in which multiple informational input flows are processed by a political system will yield a normal distribution of output changes’ (Baumgartner et al, 2018: 66). Instead, policymaking systems exhibit ‘disproportionate information processing’: there is no shortage of information, but most issues are ignored or receive little attention, while some receive an intense level of attention which produces major policy consequences (Baumgartner and Jones, 2005: 112). This outcome also represented the most important initial confirmation of the general punctuation hypothesis: ‘400,000 observations collected as part of the Policy Agendas Project’ demonstrate that the hypothesis ‘is a fundamental characteristic of the American political system (2005: 278). Further, the absence of a normal distribution is a feature demonstrated by data on events such as US elections and congressional legislation and hearings (although the effect is most marked in budget data) (Baumgartner et al., 2009: 611).

The Comparative Policy Agendas Project
The Comparative Policy Agendas Project (CAP) took PET to another level. Initially, Baumgartner and Jones (1993) described good reasons to think that PET applies mostly to the US. They used it to explain why the US political system ‘conservatively designed to resist many efforts at change’ also helped produce ‘bursts of change’ (True et al.,
Punctuated equilibrium suggests that the key features that explain policymaking stability also help explain major punctuations. They include the separation of powers (executive, legislative and judicial), overlapping jurisdictions (between institutions or between federal, state and local government) and the pluralistic interaction between groups (in which the ‘mobilization of one group will lead to the countermobilization of another’ – Baumgartner and Jones, 1993: 4–5). These checks and balances combine with the ability of organized interests to ‘counter-mobilize’ to block radical policy change. However, in a small number of cases, mobilizations are accompanied by renewed interest among one or more venues. In such cases, ‘the newcomers are proponents of changes … and they often overwhelm the previously controlling powers’ (True et al., 2007: 157). Therefore, the diffusion of power across US government increases the scope for venue shift and helps groups form new alliances with decision makers capable of challenging monopolies.

Yet, the causal factors identified by punctuated equilibrium apply to a wide range of political systems (Baumgartner et al., 2018: 55). First, the separation of powers and/or existence of overlapping jurisdictions is not limited to the US. Indeed, the entanglement of policy issues (when decision-making power is vested in more than level of government) is common to unitary, quasi-federal, and federal systems (Keating 2005: 18; Cairney, 2006). Second, the multilevel governance literature demonstrates the increasing significance of multiple decision-making venues (and issue network rather than policy community relationships – Richardson, 2008: 25) in the EU and countries such as the UK (Chapter 8; Cairney et al, 2019). Third, the component parts of punctuated equilibrium – bounded rationality, information processing, complex systems, agenda setting and group–government relations – are central to the policy literature as a whole. Processes such as ‘disproportionate information processing’ are universal, since what we are really talking about is the effect of bounded rationality and friction in complex policymaking environments. The difference in each country relates to the specific ways in which people combine cognition and emotion to make choices, and the specific institutions that make routine and efficient policy change more or less possible (Baumgartner et al., 2018: 66).

By 2009, punctuated equilibrium had been applied extensively to policy change in Canada, the EU and many European countries (True et al., 2007: 175; John, 2006; Baumgartner and Jones, 2009: 255; Baumgartner et al., 2006). Jones et al. (2009: 855) identify the same basic distribution of budget changes in the US (and some US states), Canada, UK, France, Germany, Spain, Belgium, Denmark and South Africa: ‘budgets are highly incremental, yet occasionally are punctuated by large changes’. Further, Baumgartner et al. (2009) suggest that variations in the data may relate as much to the stage of the policy development as the political system (in other words, note internal as well as comparative sources of variation). Much depends on the levels of friction, producing the transactions costs related to policy coordination, which seem to be higher at the beginning of policy development and lower during policy delivery. For
example, it is easier for legislative committees to come together to focus on new issues than for large governments to shift their budgets to reflect new priorities. Consequently, the former will display lower levels of kurtosis (change is more ‘normal’) than the latter (which displays relatively high levels of both minimal and dramatic changes) (2009: 609). Koski and Workman (2018: 301-3) also identify trade-offs between different ways to try to improve information processing: centralization may produce ‘bottlenecks’ and ignore too much relevant information, while the maintenance of multiple venues makes it difficult to coordinate information searches.

By 2016, Baumgartner et al (2018: 82-5) report ‘fifteen country projects’ as part of the Comparative Agendas Project, and 393 PET publications (of which 336 are empirical and 317 are journal articles), including major growth and a shift in country focus: US studies accounted for 65% applications before 2006 and 36% after. Almost all non-US studies are of democratic systems, particularly in Western Europe (for example, Engeli et al, 2012; Green-Pederson and Walgrave, 2014). The latter have prompted some shift of focus towards the role of political parties, but usually to find that the timing of shifting agendas ‘is not closely related to elections or shifts of governments’ (2018: 87).

In theory, PET’s abstract logic should also hold in authoritarian systems. Authoritarianism is perhaps the ultimate source of institutional friction, which we would expect to contribute to a more extreme combination of policymaking stability and relatively rare ‘system-destabilizing policy punctuations’ (Baumgartner et al, 2018: 68). While there few studies on which to draw, they seem to support this expectation, albeit in relation to very different dynamics. In Hong Kong, Lam and Chan (2015: 549) find greater punctuations during centralized rather than democratized eras. In China, Chan and Zhao (2016: 137-8) associate ‘extreme stability’ and ‘drastic adjustment’ with highly centralized information processing, including a tendency for (a) ‘lower level administrators to manipulate information as it travels up the bureaucratic hierarchy’ and produce policymaker reliance on poor quality information, and (b) highly infrequent and dramatic adjustments to policy only when policy problems ‘become serious enough to threaten regime survival’. Further, this effect is less pronounced in regions in which policymakers have greater exposure to policy relevant information (they use proxies such as ‘labor disputes’ – 2016: 145). In Hungary, Sebők and Berki (2018: 604) confirm PET’s ‘general empirical law of public budgets’ and find ‘higher levels of punctuation … in autocratic or semi-autocratic regimes’. These studies suggest that PET continues to grow in importance as a truly comparative policy theory, even if it describes remarkably different ways of thinking, institutional design, and levels of punctuation.

**Conclusion**

PET explains long periods of policymaking stability punctuated by intense periods of instability. A combination of bounded rationality and agenda setting explains how policy monopolies can be created and destroyed. While there are many ways to interpret policy problems, there is only so much time and energy to devote to issues. So, highly
complex issues are simplified, with very few aspects considered at any one time. Problem definition is crucial because the allocation of resources follows the image of the policy problem. Policymaking stability depends on the ability of actors to maintain a policy monopoly. A policy monopoly involves the successful definition of a policy problem in a certain way, to limit the number of participants who can claim a legitimate role in the process. As the examples of pesticides and nuclear power suggest, it often follows an initial burst of public and governmental enthusiasm for policy change. Such enthusiasm produces a supportive policy image, based on the idea that economic progress and technological advance has solved the policy problem, allowing policy monopolies to operate for long periods with very little external attention. After the main policy decision is made, the details are left to policy experts and specialists in government. This allows the participants to frame the process as ‘technical’ to reduce public interest or ‘specialist’ to exclude those groups considered to have no expertise. The lack of attention or external involvement allows communities to build up a policy-delivering infrastructure that is difficult to dismantle, even during periods of negative attention.

Policy change is explained by a successful challenge to policy monopolies. Those excluded from monopolies have an interest in challenging or reshaping the dominant way of defining policy problems. This may come from within, by ensuring that new ideas or evidence force a shift in government attention to a new policy image. Or, if this new image is stifled, then groups venue shop to expand the scope of conflict and promote it to a more sympathetic audience. As the examples of pesticides and nuclear power suggest, the new policy image based on safety concerns produced a snowball effect. It began with rising dissent among experts within a policy community, followed by increased media coverage critical of the status quo. Previously excluded interest groups exploited this shift of focus to attract the attention of decision makers in other venues. The adoption of the safety agenda in one venue had a knock-on effect, providing more legitimacy for the new image and creating an incentive for decision makers in other venues to become involved. The result was profound policy change following a burst of new regulations by Congress, the courts and multiple levels of government. Policy change therefore follows a mutually reinforcing process of increased attention, venue shift and shifting policy images. As people come to understand the nature of a policy problem in a different way, then more people become interested and involved. The more ‘outside’ involvement there is, then the greater likelihood of a further shift of the policy image, as new ideas are discussed and new policy solutions are proposed by new participants.

The ‘general punctuation hypothesis’ suggests that this effect is not limited to policy communities. Rather, the case studies highlight a wider process of ‘disproportionate information processing’. Most government responses are not in proportion with the ‘signals’ that they receive from the outside world. They are either insensitive or hypersensitive to policy relevant information. As a result, most policies stay the same.
for long periods because decision makers are unwilling or unable to pay them sufficient attention. However, in a small number of cases, policy changes radically as decision makers respond to a critical mass of external attention. The burst of governmental attention is accompanied by a sense of policy malaise and a need to play ‘catch up’. New ideas are considered, different ‘weights’ are applied to the same kinds of information, and the ‘new’ issue sparks off new conflicts between political actors. These bursts of attention produce short bursts of radical policy change. The best demonstration of this picture of stability and change can be found in budgeting. Budget change is characterized by a huge number of small changes combined with a small number of huge changes to budgets.

Overall, the picture is more dynamic than incrementalism suggests, even if most policymaking appears to be incremental (Chapter 4). Although most policy issues display continuity, and there are many sources of ‘institutional friction’, dominant rules and ways of thinking are constantly being created and destroyed. Therefore, any snapshot of the political system will be misleading since it shows an overall picture of stability, but not the process of profound change in many cases, or over a longer period. Instead, think of PET as a way to explain complex system dynamics (Chapter 6). A complex system can appear to produce stability, but with the ever-present potential for sudden instability and change, as it amplifies some signals and dampens others, and policies seem to ‘emerge’ in the absence of anyone’s control.