



CRITICAL PAPER

Punctuated Equilibrium and the Comparative Study of Policy Agendas

Tracing Digitalization Policy in Germany

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Abstract Agenda-setting theory has a long tradition within policy studies but took a major leap forward with the work of Baumgartner and Jones and their formulation of punctuated equilibrium theory (PET). Since then, an extensive literature has developed, both evaluating the notion of punctuated equilibria from a comparative perspective and providing ideas for a broader theoretical development on political processes. The original formulation of the theory was based on the US political system, whose institutional elements make it a likely case to observe the type of political processes that PET highlights. Subsequent comparative studies have demonstrated that the theory's idea is of general relevance in two regards. First, factors, such as issue characteristics, operate similarly across political systems. Second, political institutions shape agenda-setting processes. This paper expands on the political institutional features that are particularly important when applying PET to a West European context. We illustrate the interplay of these institutional characteristics with the political process regarding the German debate on digitalization.

Keywords Punctuated equilibrium theory · Comparative politics · Digitalization · Political institutions · Germany

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Punctuated Equilibrium und die vergleichende Studie politischer Agenden

Die Entwicklung von Digitalisierungspolitik in Deutschland

Zusammenfassung Die Agenda-Setting-Theorie hat eine lange Tradition in der Politikwissenschaft, gewann aber mit der Arbeit von Baumgartner und Jones und ihrer Formulierung der Punctuated Equilibrium Theorie (PET) an Bedeutung. Seitdem hat sich eine umfangreiche Literatur entwickelt, die sowohl die Idee des punktuierten Gleichgewichts aus einer vergleichenden Perspektive bewertet als auch weitergehende theoretische Entwicklungen bezüglich politischer Prozesse ermöglicht. Die ursprüngliche Formulierung der Theorie basierte auf dem politischen System der USA, dessen institutionelle Elemente es wahrscheinlich machen, die Art von politischen Prozessen zu beobachten, die PET hervorhebt. Spätere vergleichende Studien haben allerdings gezeigt, dass die Kernidee der Theorie auch über die Grenzen der USA hinaus von Bedeutung ist. Vergleichende Literatur hat Faktoren wie zum Beispiel Themenmerkmale identifiziert, die in allen politischen Systemen ähnlich wirken. Gleichzeitig wird die wichtige Rolle politischer Institutionen für politisches Agenda-Setting hervorgehoben. In diesem Beitrag werden die politisch-institutionellen Merkmale erläutert, die bei der Anwendung von PET auf einen westeuropäischen Kontext besonders wichtig sind. Wir veranschaulichen das Zusammenspiel dieser institutionellen Merkmale mit dem politischen Prozess in der deutschen Debatte zur Digitalisierung.

Schlüsselwörter Punctuated Equilibrium Theory · Vergleichende Politikwissenschaft · Digitalisierung · Politische Institutionen · Deutschland

1 Introduction

Agenda-setting theory has a long tradition within policy studies but took a major leap forward with the work of Baumgartner and Jones and their formulation of punctuated equilibrium theory (PET) (Baumgartner and Jones 1993). Since then, an extensive literature has developed, both evaluating the notion of punctuated equilibria from a comparative perspective and developing the theoretical ideas behind the notion into a broader perspective on political processes. This second development brings the policy agenda-setting approach closer to comparative studies of political systems (Baumgartner et al. 2019; Green-Pedersen and Walgrave 2014). The original formulation of the theory was based on the US political system, whose institutional elements make it a most likely case to observe the type of political processes that PET highlights. Yet, subsequent comparative studies have demonstrated that the theory's idea is of general relevance and applicable beyond the US context. The demonstration that punctuated equilibrium is a common feature of decision-making processes has thus been a stepping-stone for developing policy agenda-setting theory into a general framework about how political systems work and how their institutional setup shapes policy processes.



In this article, we showcase this potential of policy agenda-setting theory by focusing on Germany. The paper aims at showing how an analysis of the German political system based on policy agenda-setting theory provides a new perspective on its political system, especially on how policy change comes about. The German case is well suited for this purpose. On the one hand, it resembles other West European political systems, with the domination of party-based parliamentary politics. On the other hand, the German political system with its federal structure, two chambers, and the role of the constitutional court shares some central features with the US system, which served as a major inspiration after the end of the Second World War. From a policy agenda setting perspective, such a structure with multiple policy venues opens up possibilities for policy issues spilling over from one venue to another (Baumgartner and Jones 1993, pp. 31–35), as well as more deliberate venue shopping (Pralle 2003, 2006). The increasing Europeanization of politics in all member countries, including Germany, also opens up important questions about agenda-setting dynamics between the EU and its members states.

Empirically, we focus on digitalization policy as a relatively unobserved topic with high societal relevance and timeliness. Focusing issue attention on one policy allows us to "trace" the issue throughout the whole system, institutions, and time (Green-Pedersen and Walgrave 2014, p. 221). By doing so, we highlight the broad conceptual scope of policy agenda-setting theory and, at the same time, explore how particular features of the German political systems shape the processing of political issues. The purposes of the study is thus not to test whether the political processes around digitalization have been punctuated but to show the potential of analyzing the function of the German political system from a policy agenda-setting perspective. For the study, we can draw on data from German policy agendas project (Breunig and Schnatterer 2020).

Our analysis indicates that, across agendas, digitalization has become an increasingly important issue that has entered all political agendas. In party manifestos, the CDU's program of 2013 displayed the biggest increase. The opposition started to raise the issue of accessibility and security. While Chancellor Schröder essentially ignored digitalization in his speeches, his successor, Angela Merkel, addressed these issues directly. Starting in 2013, legislative outputs in forms of bills and legislation increased substantively and correspond to a similar exposure at the European level. This trend was reinforced by organizational changes within the ministerial bureaucracy. In short, digitalization received little attention in the 1990s but received substantial space on the agenda by 2020.

The article starts out with a brief outline of the theoretical core of policy agendasetting theory as laid out by Baumgartner and Jones, with a focus on the concept of punctuated equilibrium and the functioning of political systems, especially the notion of venues. Next, major comparative findings from the extensive cross-country literature emerging within the last decade are drawn together under the concept of policy agenda setting theory. To further show the potential of the policy agenda setting approach, a research agenda for the German political system is presented in combination with research that already employs policy agenda setting in Germany. An important part of this outlook is to contrast the research agenda based on policy agenda-setting with existing research on German institutions based on the idea of



veto players. The aim is to stress the potential of the policy agenda-setting approach as a supplement to the widespread examination of German political institutions.

2 Punctuated Equilibrium: From a Theory of the Policy Process to a Theory of Comparative Politics

The literature on agenda setting and public policy change took a major leap forward when Baumgartner and Jones published their book "Agendas and Instabilities in American Politics" in 1993. The core idea of the book is the concept of "punctuated equilibrium". Political processes around policy issues are characterized by long periods of stability interrupted by short intervals of rapid and significant change – punctuations. This idea implies that change in attention and public policy is not gradual or incremental, but substantial when it happens. The mechanism behind this idea in the original formulation from 1993 is based on the ideas of "subsystems" and "policy monopoly". Policy questions like nuclear power or smoking regulation are characterized by the existence of a "policy monopoly", i.e., a relatively limited group of political actors paying attention to the question on a regular basis. These actors also share a common understanding of the policy problem involved - what Baumgartner and Jones call a "policy image". Challenges to policy image like news evidence is dismissed or downplayed in the existing subsystem – which Baumgartner and Jones label negative feedback. A subsystem thus finds itself in equilibrium, which generates stability in outcomes.

The world around a subsystem is never in equilibrium, and at some point, outside forces overcome the established policy monopoly, implying a short period of rapid change – a punctuation. There are several dynamics that may generate such a punctuation. One is what Baumgartner and Jones refer to as a "Schattschneider mobilization" where a subsystem suddenly gets substantial outside attention (Schattschneider 1960). Besides the stable subsystems is "macro politics" where presidents, party leaders, front pages of newspapers, etc., operate. Here, attention is not fixed on particular policy questions but changes constantly. If a policy question gets macropolitical attention, implying macropolitical actors engaging in the policy question, the established subsystem is likely to be overturned and a new one put in place involving substantial policy change. A policy monopoly may also be overturned without a wave of macropolitical attention but because political forces outside the established policy monopoly, interest groups, policy experts, etc., are able to generate political attention to the policy question in a different political venue.

The idea of a political venue refers to an institutional context where policy decisions can be made and is clearly inspired by the US political system with its multiple political venues: the President, the two chambers of Congress, the Supreme Court, the US states with their own version of the federal political system, and sometimes even referenda. The system thus offers political actors dissatisfied with the current equilibrium plenty of opportunities for what Pralle (2003) has coined "venue shopping". PET is clearly inspired by the previous work on agenda-setting and public policy, but at the same time strongly reoriented this literature. One significant element in this development was a more direct focus on attention dynamics rather



than policy change directly, although, of course, the central reason for studying attention dynamics is the policy consequences. Thus, the theory behind punctuated equilibrium is more a theory of attention dynamics than a direct theory of the policy process. One other new and crucial element here was Baumgartner and Jones's focus on actually measuring agendas in the form of political attention to policy questions. In the original work, this was done through content coding of, for example, congressional hearings and front pages of the New York Times. In order to assess changes, these data covered long time periods – i.e., decades. It is these long time series where the patterns of "punctuated equilibrium" can be found.

This broader focus on long-time attention dynamics rather than specific cases of policy change also connect the theory more clearly with debates about the importance of different features of the US political system, such as the committee structure in Congress (Baumgartner et al. 2000). The idea of punctuated equilibrium and the underlying political dynamics as presented above has generated numerous publications (for an overview see Baumgartner et al. 2017). Three lines of research are worth highlighting here.

The first one is direct testing of the idea of "punctuated equilibrium" in a non-US context. After all, the theory as presented above was developed based on studies of agenda-setting in a US context, which called for an international research agenda. A series of studies have confirmed that across political systems, changes take the form suggested by the idea of punctuated equilibrium (e.g., Baumgartner et al. 2009; Jones et al. 2009). Either there is stability or significant change, but gradual or incremental change hardly occurs. Importantly, the degree to which this pattern is found depends on the level of "institutional friction". The more actors and institutions are involved, the more friction and the more pronounced the punctuated equilibrium pattern becomes. The extensive literature on testing the generality of the notion of punctuated equilibrium also involves increasing discussion on measuring punctuated equilibrium (Fernández-i Marín et al. 2020; Kaplaner and Steinebach 2021; Breunig and Jones 2011).

Second, the development of datasets with measures of attention over a long time in the US has inspired similar projects in many other countries, known as the Comparative Agendas Project (CAP) (cf., Baumgartner et al. 2019, see also http:// www.comparativeagendas.net). These projects measure attention on many agendas, such as government agendas (government speeches, the European Council agendas), parliamentary agendas (bills, questions to the minister, interpellations), local government agendas (council and committee meetings), party agendas (party manifestos, press releases) news media agendas (newspaper, radio news), and Supreme Courts (rulings). These datasets are based on a common coding scheme (Bevan 2019), allowing detailed comparisons across time, countries, and institutions. Developing these datasets allowed for a broad testing of the notion of punctuated equilibrium presented above. The idea of punctuated equilibrium refers to the pattern of change that will be found when examining numerous cases. Thus, testing the broader relevance of the idea requires sufficient data for exploring distributions of changes. Testing the notion on specific cases made little sense in this context, given that the theory predicted not change itself, but how distributions of change should look like. Yet, the ability of testing PET was only the very first use-case of the data. The



following research then explored many classical questions of comparative politics and is not necessarily tied to the punctuated equilibrium idea (cf. Green-Pedersen and Walgrave 2014).

Third, scholars have used the PET framework to address a host of traditional "institutional questions" from a new perspective. The existence and structure of political venues shape the process that directs political attention to novel issues. Multivenue countries, such as the US, are comparatively receptive to the pluralistic competition of ideas and demands and, hence, can quickly shift their attention onto previously ignored issues (Green-Pedersen and Wolfe 2009). Yet, responsiveness comes at a premium, as interest for issues wanes as quickly as it surges. In contrast, political attention in single-venue polities – e.g., Denmark, Sweden, or Norway – tends to remain on the same set of issues. Such countries often adapt their public administration according to changing political priorities and, hence, institutionalize political attention (Mortensen and Green-Pedersen 2015; Klüser 2020; Sieberer et al. 2021). These organizational changes – be it the creation of bureaucratic capabilities, their reduction, or their distribution across different agencies - influence governments' policymaking capacity. Increasing institutionalized attention to policy issues renders governments more productive in terms of designing legislation; however, institutionalization can also stifle their productivity, if it unduly motivates cooperation among involved agencies (Klüser 2022).

It is important to notice that behind these studies there is a different understanding of the consequence of political institution for political process. A very common perspective is to conceptualize such institutions as "veto points" (Tsebelis 1995). Thus, political systems like the US one which is designed as a "checks and balances" system leads to stability and makes change difficult. From the punctuated equilibrium perspective, this is only half the truth. Baumgartner and Jones (1993, p. 240) see those institutions as opportunities for policy change and argue that "the many venues of politics work against conservatism". Different institutions - or venues - offer policy proponents who are on the losing side of the political struggle an opportunity to bypass the common decision-making procedures. Instead of engaging in a futile struggle with political actors that intend to conserve the status quo, agents of change can attempt to move the conflict to a venue where they can challenge their opponents on more equal terms. If successful, such shifts in venue often result in sweeping policy change (Pralle 2003). In sum, the idea of punctuated equilibrium and the theoretical concepts attached to it have generated an extensive literature that today constitutes a research program on comparative attention dynamics.

The potential of this research can be applied to the German case, which is the main purpose of this article. The German case is well suited for this purpose, as it, on the one hand, resembles other West European political systems with the domination of party-based parliamentary politics. On the other hand, the German political system with its federal structure, two chambers, and the role of the constitutional court has many features that could be seen a "veto points". However, from the perspective of policy agenda-setting theory, they are also political venues that may enable policy change. The German case thus allows us to show where the policy agenda-setting approach towards political institutions is fundamentally different from a pure veto logic.



3 Policy Agenda-Setting and the German Political System

The above section provided a broad summary of the core features of PET and its extension to a comparative model of agenda-setting and policy change. As a next step, we place expectations derived from PET within a common understanding of German politics and institutions. Because majoritarian and consensual components characterize the German political system, political actors, in particular political parties, have to compete and cooperate with each other. We use a veto player framework for identifying the loci of competition, such as federalism and the judiciary. Once identified, we adduce that the institutional features of the German political system contribute not only to stymieing policy change, but also permit access and venue shopping.

3.1 Germany Shackled by Veto Players

The classical perspective on German politics is that of a "semi-sovereign state" (Katzenstein 1987) whose room for decisive reform is severely curtailed by a plethora of political actors wielding veto power. Generally, "veto points" describe a wide array of institutional constraints on governmental autonomy, ranging from presidentialism over central banks to referenda (Immergut 1992). In Germany, institutional limits to political maneuver are conventionally identified along two axes. Horizontally, i.e., between federal institutions, Germany's strong constitutional court features prominently, whereas vertically, meaning between the national government and the subnational levels, research zooms in on German federalism. Depending on the partisan constellations in the Bundestag, as well as the 16 federal states, both institutions are argued to transform into powerful veto players that can halt political reform efforts (Bräuninger and König 1999; Brouard and Hönnige 2017).

In comparative perspective, Germany's constitutional court is exceptionally powerful and essentially subjects any political decision to (the threat of) constitutional review. Be it ordinary legislation, subordinate legislation, or administrative acts, once an issue has been taken to court, the judges can adapt, reverse, or outright nullify both legislative and executive decisions (Vanberg 2004). Still, there is debate about the degree to which the constitutional courts as such indeed wield veto power. The skepticism roots in the justices' election process, which shares responsibility between both chambers of parliament and requires a two-thirds majority in the electing body. Given that this process is designed to foster compromise between rivaling parties, the constitutional court and its justices have been assumed to be absorbed by other political actors in the system (Tsebelis 2002, p. 81). This caveat appears excessively blunt and only partly applicable to the German political system. While it is true that both federal and state legislators elect judges serving on the constitutional court, the degree to which they are absorbed by them hinges on the political majorities. Since these majorities can change frequently on either the federal or the national level in Germany over the course of a justice's 12-year tenure, absorption appears to be the exception to the rule (Brouard and Hönnige 2017).



Vertically, politics in Germany is argued to be stifled by its federalist structure (cf. Tsebelis and Money 1997). The 16 federal states participate in the national legislative process via the Bundesrat. This second chamber can amend, stall, or reject many legislative initiatives. Yet, the extent to which its veto potential materializes depends on the configuration of political majorities in both chambers. When they align, meaning that the national government enjoys partisan support in both the Bundestag and the Bundesrat on policy matters, the immobilizing role of federalism is limited. In contrast, whenever the central government is confronted with an opposition in the Bundesrat, federalism subjects the national government to additional veto points (Bräuninger and König 1999). Coined as a "joint decision trap" (Scharpf 1985), this setup frequently forces German governments into a de facto grand coalition of parties across the entire political spectrum. These conciliatory requirements essentially condense the scope for political action to the smallest common denominator (Lehmbruch 2000, pp. 10-11). In this context, German governments enjoy little room for maneuver, which, for instance, is epitomized in the widely lamented "Reformstau" at the end of the Kohl era in the late 1990s (Bräuninger and König 1999).

At least since the Maastricht Treaty in 1992, an additional level of vertical institutional anchoring has to be increasingly recognized. Being part of the European Union, German policymakers need to take European directives into account and are obliged to transform them into national policy. Indirectly, they also anticipate European Court of Justice rulings (Wasserfallen 2010). As such, the EU can be perceived as an additional veto point. Another perspective as to how the EU influences national agenda-setting and decision-making moves into the realm of the remaining sovereign policies. It argues along the PET assumption of limited attention spans that fewer topics on the sovereign agenda lead to fewer punctuations. The directly EU-influenced proportion acting as a comparison category evolves contrarily as its agenda space starts to grow (Beyer 2018). As such, agenda-setting in the remaining uninfluenced policies also changes because this simply leaves more attention space and, thus, room to maneuver. Two conclusions emerge from this perspective: First, following PET assumptions, European integration has a far bigger influence on national policymaking than just adding another veto point and giving out an increasing number of directives to be transposed into national law. Secondly, PET can even be applied to the process of European integration in the member states and policymaking on the European level (Princen 2013).

3.2 Punctuating "Reformstau"

Institutional gridlock is not an inescapable fate. Quite in contrast, Germany went through many swift and comprehensive policy reforms in the last decades, which suggest that "Reformstau" can be disrupted (Breunig 2008, 2014). Among the most popular of those policy punctuations are the rapid introduction of feed-in tariffs that kick-started renewable energy production in the early 1990s (Stefes 2010), the comprehensive social policy reforms known as "Hartz IV" at the onset of the new millennium (Fleckenstein 2008), as well as the swift reinstatement of the nuclear



energy phaseout after the nuclear meltdown in Fukushima (Breunig and Schnatterer 2020).

These sweeping policy changes are fundamentally at odds with a perspective on German political institutions that exclusively concentrate on veto players and consensual politics. In contrast, the PET acknowledges institutions such as federalism or the constitutional court as loci of stability but critically adds that multiple institutions simultaneously present themselves as avenues for policy change. Hence, PET offers a dynamic angle on German institutions that integrates both Germany's potential for gridlock and its capacity for radical policy change in one theoretical framework.

Along the lines of the conventional institutionalist reasoning, punctuated equilibrium scholars acknowledge that the numerous German veto players induce friction into the political system, which stifles policy reforms and, hence, keeps the system from adapting to changing contexts (Jones and Baumgartner 2005). Yet, the crucial difference is that prolonged stability interacts with changing social context, which over time results in a mismatch between policy targets and performances. As time passes, the pressure for policy change piles up, until it eventually becomes unsustainable and Germany's political system engages in sweeping reforms. Thus, the potential for gridlock built into the German political system simultaneously bears the potential for radical policy change (Breunig 2011, 2014). Notably, this description of German policymaking as short-term immobility contrasted by long-term effectiveness dovetails with conventional deliberative depictions of the German political system (Schmidt 1995, p. 17). As Breunig (2014, p. 144) concludes: "Instead of policymaking of the 'middle way,' the German legislative agenda rather can be described as 'policy of the many ways'."

A recent case adjudicated by the German constitutional court showcases how a change of venue led to substantial political reform. After the Paris Agreement on climate change in 2015, German politics sought to implement stricter carbon emission restrictions in national law. While a solution had already been mapped out in the coalition agreement drafted by the CDU/CSU and the SPD at the onset of Angela Merkel's last government, intracoalition skirmishes first stymied and later scaled down the bill, which was eventually adopted in 2019. A group of predominantly young climate protection advocates, who had unsuccessfully tried to commit the Merkel IV government to stricter carbon emission standards during those years, subsequently took this matter to the constitutional court and sued the German government for insufficient climate protection efforts. Much to the surprise of most pundits, the judges largely sided with the plaintiff. They criticized that the attacked regulation unduly imposed potential restraints to reduce carbon emissions on future generations and, thus, obliged the German government to define goals for the reduction of carbon emissions for the post-2030 period (Strack 2021).

In a similar vein, one can argue – and some scholars of federalism have been doing that for a considerable time ("laboratories of democracy" – U.S. Supreme Court Justice Louis Brandeis) – that the vertical division of power does not block policy change but allows for introducing and dealing with new political problems across multiple venues. Indeed, the German basic law distinguishes responsibilities between state and federal governments based on *political issues*. While some topics



are exclusively national (Art. 73), several others are shared or in the realm of state supremacy. It is, therefore, of little surprise that Breunig (2014, p. 140) finds that gridlock varies across policy domains. For example, environmental and law-and-order issues are less prone to be affected by veto points than some other domains, such as welfare.

A recent, illustrative example of the dual nature of institutions might be the debate on freezing increases in rental prices of housing. In 2013 and 2015, the federal government provided some broad guidelines on rent regulation. These pieces of legislation did not abate the public discourse, especially in large university cities, about stark increases in rental fees. Despite some political activities at the national level, the state of Berlin passed a quite restrictive rental freeze in January 2020. This law was eventually struck down by the federal constitutional court in March 2021. This brief description illuminates that political institutions do not just serve as veto points; instead, they also enable political actors invested in policy change to introduce their issue and position into the political system.

4 Punctuating the Digital Equilibrium

Digitalization serves as a valuable case for illustrating how PET explains political decision-making in Germany. First, it is a recent, and so far relatively obscure, topic with high societal relevance. Second, it took some time for the topic to make it on the agenda. Yet, it has now reached a similar level of attention in party manifestos such as established policy issues, such as Europeanization and welfare (Siewert and König 2021, pp. 16–17). These features enable us to trace digitalization as an issue on the political agenda of Germany.

Digitalization in Germany needs to catch up. Both public debate and technological advancements seem to lag behind neighboring and competing countries (BDI 2018; European Commission 2020). In June 2013, Chancellor Angela Merkel famously stated in a press conference with Barack Obama on the NSA's monitoring program Prism that the "Internet ist für uns alle Neuland" (the internet is new ground for all of us). Ironically, the statement was disseminated widely via the World Wide Web, with #Neuland ranging among the top used hashtags within hours. Many people laughed about the seemingly inappropriate comment at a time when German society had, of course, already been using the internet to a wide extent.

A study from 2017 on the state of digitalization in 35 advanced national economies ranked Germany 17th, despite traditionally ranking among the most innovative countries in the world and taking 4th place in the accompanying overall innovation indicator (BDI 2018). No matter whether it concerns the digital economy (12th rank), education (17th rank), or digital research/technologies (16th rank), Germany never appeared among the most digitally developed countries. Digital infrastructure only scored 19th. All the while, the study confirmed that German society indeed extensively uses digital technologies.

Several indicators provide a fairly negative assessment on the degree of digitalization in Germany. The 2020 DESI – The Digital Economy and Society Index – of the European Commission reports similar results, with Germany ranking 12th (Eu-



ropean Commission 2020). In 2021, a study conducted for the Federal Ministry of Economics and Technology (BMWI) concludes that "with respect to both infrastructure and the use of digital technologies and services, Germany has fallen behind many other OECD countries" (Bundesministerium für Wirtschaft und Energie 2021, p. 3). Germany becoming a latecomer in digitalization is partly attributed to classical market failure, partly to lagging legal and political framework conditions and organizational failure (Bundesministerium für Wirtschaft und Energie 2021). Yet, digitalization today is seen as a driver for tackling the major challenges facing society (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen 2019), showing the importance that the topic has gained in recent years.

4.1 Observing Digitalization in German Politics

Digitalization as a political topic received scant attention in the German political science literature in the past (Jacob and Thiel 2017) – both the general debate and the policy issue itself is rarely touched upon. The notable exception is the work by Pascal König and coauthors on party manifestos (König and Wenzelburger 2019; Siewert and König 2021). Policy agendas offer a possible remedy. The German Policy Agendas project (Breunig and Schnatterer 2020; Breunig et al. 2021) – the German branch of the international Comparative Agendas Project – provides an unparalleled source of data to observe attention paid to all issues on the political agenda, including digitalization. Importantly, the project does not confine itself to an individual phase of policymaking but collected data along the entire policy cycle. This includes very early inputs into the political system in the form of answers to the classical *most important problem* survey question, intermediary transmission belts such as party responses to such stimuli – party manifestos and questions in parliament – governmental priorities, and eventually legislative policy outputs.

As part of the bigger data collection project, the German team codes the data according to a joint codebook that also allows cross-country comparisons. The entire coding scheme comprises the content of approximately 250 different policy topics. The topic categories are mutually exclusive and exhaustive, as well as backward compatible. Multiple coders used the title, summary, and whole content of the text for assigning a bill into one particular policy category. In the countries analyzed, the intercoder reliability is well above 90% at the major topic level. Details about coder training and classifying policy content are found in the respective country chapters in Baumgartner et al. (2019).

In order to ensure that we capture a largely uniform definition of digitalization, our data series starts in 1990. For the purpose of this study, we focus on the policy codes that are relevant for digitalization. These are 17-06 (telecommunication) and 17-09 (computers). By focusing on these two categories, we potentially miss out on a few incidences where privacy concerns ("Datenschutz") were the main substantive focus, as this issue is coded under civil rights (2-08). Therefore, it would be possible to assess how privacy and individual rights constitute an important aspect of the debate on digitalization in Germany and to what extent this was a dominant policy

See CAP codebook: https://www.comparativeagendas.net/pages/master-codebook.



image hindering innovative policymaking. We focus on the description of the policy dynamics and broader institutional context related to digitalization in Germany presented below.

4.2 Agendas and Instabilities in German Digitalization Policy

A common precondition for sustained legislative engagement on an issue is that political parties recognize societal demands and articulate potential solutions in their party programs. Compared to their peers in countries such as France or the United Kingdom, German parties have started to pay considerably more attention to digital policies and, thus, fueled the public debate around digitalization in Germany (König and Wenzelburger 2019; Siewert and König 2021). This development is visible in the manifestos that German parties drafted in advance of the national elections. Drawing on party manifestos coded according to the CAP codebook, Fig. 1 plots the share of those documents devoted to issues of digitalization, such as improvements of digital infrastructures, cybersecurity, or digitalization of administrative processes.

There has been a sizable rise in attention to digitalization across German parties, particularly since the onset of the new millennium. This surge is most visible in the CDU, which, in the run-up to the 2013 national election, devoted about 2% of its manifesto to topics related to digitalization. The FDP contrasts this development. Instead of sharpening their profile in the area of digitalization over the years, they have continuously addressed this topic in about 1% of their manifestos. Although our data does not extend beyond 2013, the upward motion has continued over the last two election cycles, having led to a "convergence in the party profiles on digital policies" (Siewert and König 2021, pp. 16–17). Overall, digital policies as an emerging topic have gained attention on the supply-side of party politics – similar to environmental policies in the 1980s (Siewert and König 2021, p. 3) and "has thus

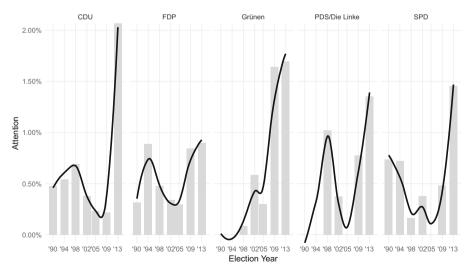


Fig. 1 Attention devoted by German parties to digitalization by election according to party manifestos. Each party shown individually



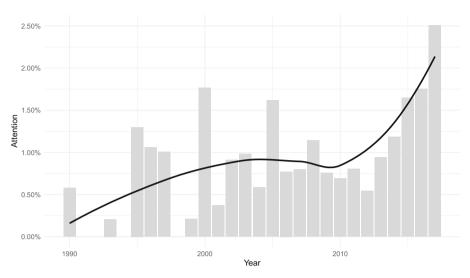


Fig. 2 Attention to digitalization, as expressed in parliamentary questions asked by political parties in the Bundestag

moved on the political agenda in Germany in recent years and has a clear potential to become influential in the future" (König and Wenzelburger 2019, p. 1679). The coalition agreement from November 2021 attests to that trend. Digitalization featured prominently and early on in the joint document of the SPD, Greens, and FDP.

A similar pattern holds if we look at parliamentary questions (PQ) asked in the German Bundestag. PQ are mostly asked by opposition parties to extract information from the government (Russo and Wiberg 2010) and initiate debates about a topic. If successful, these debates can shape the party-system agenda and force governments to attend to previously ignored topics (Green-Pedersen and Mortensen 2010). Therefore, PQ are a useful vehicle for the opposition to place digitalization onto the government's agenda. Figure 2 plots the annual number of PQ addressing digitalization issues asked in the German Bundestag. In the 1990s, there was generally little interest in this topic, as party factions and MP only posed none to a few PQ about digitalization to the government. This trend changed somewhat during the two Schröder cabinets from 1998 to 2005, which is when progress or failures in the area of digitalization became a more recurring issue. In these years, most questions were about private internet subscriptions with the main German internet provider at that time (Deutsche Telekom), auctions of the first mobile internet frequencies, but also about potential health risks of mobile communication. With the start of the era of Merkel in 2005, PQ about digitalization really picked up speed and quadrupled to about 20 PQ per year in 2017. In these more recent years, MP particularly asked about the lagging internet broadband improvements in more rural German areas and, still under the impression of the NSA spying scandal, were eager to learn more about the government's precautions in the area of cybersecurity. This clear upward trend in questions placed additional pressure on parliament and government for political action.



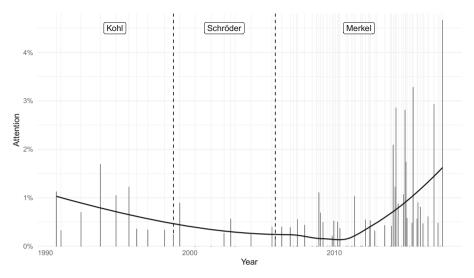


Fig. 3 Attention German chancellors devoted to digitalization in their speeches in the Bundestag. Each *gray vertical line* represents a speech delivered to the Bundestag by a German chancellor. Dark spokes on those gray lines represent attention devoted to digitalization within a particular speech

Government speeches present an easy and direct form of addressing an issue and displaying government activity. Government speeches typically describe the planned legislative agenda. The surge of attention to digitalization moved from parliamentary questions to the government's agenda. This is manifested in the Chancellors' speeches, which are regularly delivered to the Bundestag. Each gray vertical bar in Fig. 3 represents a speech that a German chancellor delivered to the Bundestag between 1990 and 2020. Black spokes on those gray lines denote speeches containing a reference to digitalization, with the height of the spokes being relative to the attention paid to digitalization within each speech. When addressing digitalization in the early 1990s, Helmut Kohl tended to focus on breaking the German telecommunication monopoly and modernizing the German network infrastructure. Thereafter, the topic went unaddressed for many years – in fact, Gerhard Schröder only mentioned it in two speeches delivered early on in his career as German chancellor. Government attention to digitalization fell dormant for the remainder of the Schröder government. In 2007, the topic gained traction again. Angela Merkel promised to improve the digital and telecommunications infrastructure in Germany, as well as to harmonize fees across Europe. Another seven years later, in 2014, the government broadened its focus on digitalization and substantively incorporated it in their agenda. The topic was no longer seen as a narrow issue about infrastructure improvements but more generally as a prerequisite for a thriving German economy. During this time, it became increasingly clear that the profound social and economic effects of digitalization require careful government regulation. Chancellor Angela Merkel, therefore, directed attention to the creation of a digital European domestic market.



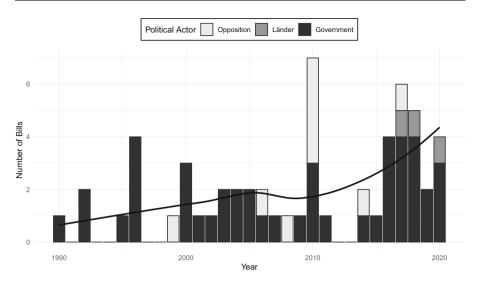


Fig. 4 Number of bills dealing with digitalization, broken down by initiating political actor

The rising attention paid to digitalization by parties, opposition, and government has increasingly left its mark on legislative outputs. Figure 4 plots the number of parliamentary bills addressing the digitalization issue from 1990 to 2020, broken down by the political actor having initiated it. In the German political system, a legislative process can be triggered either by the government, by a party faction in the Bundestag, or by state representatives in the Bundesrat, Germany's second chamber of parliament. For time-sensitive initiatives, it is common practice for the government to ask the parties on whose support it draws to initiate legislation, as this removes one deliberative loop between the government and the Länder from the process. Thus, Fig. 4 ascribes bills introduced by incumbent parties to the government.

In line with the previous discussion on earlier stages of the policy cycle, legislative activity was rather limited in the 1990s and only gradually picked up speed around 2010. During the Kohl era, the Bundestag debated about one legislative proposal per year, which quadrupled over the ensuing governments until 2020. Less surprising, given that designing legislation is costly and time consuming, the government clearly outnumbers the opposition and the Länder in terms of introduced bills addressing digitalization. 2010 constitutes a notable exception to this trend. In this year, each of the three opposition parties designed at least one bill demanding the revocation of digital censorship by public authorities, which had been put in place the same year by the government to combat child pornography in digital communication channels.

When looking more closely into the origin of the laws, 20 out of the 42 laws on digitalization address either a European directive/regulation or mention jurisdiction by the Court of Justice of the European Union. The share of laws with European influence increases over time. Except for 1996 and the passing of the telecommunications law, the years before the turn of the century show very little EU influence on digitalization in Germany. The influence starts to increase in the early 2000s and becomes more constant and obvious after 2014. In 2017, the telecommunications



law was adapted, and a 2016 directive concerning "measures for a high common level of security of network and information systems across the Union" as well as a 2014 regulation on "electronic identification and trust services for electronic transactions in the internal market" were implemented. The example of 2017 indicates that it takes time for European influences to be transferred to national law, and that willingness to deal with the issue of digitalization has risen in Germany.

Legislative activities, especially those initiated by government, generally picked up pace since the 18th Bundestag in 2012. The increased productivity coincides with the creation of the Ministry of Transportation and Digital Infrastructure. Digitalization became even more institutionalized in 2018, when Dorothee Bär became the first Federal Government Commissioner for digitalization. Her role was based in the Federal Chancellery and was appointed with the rank of Minister of State. She was often also referred to as the Minister of State for Digitalization or Digital State Minister. After the 2021 election, the Scholz government created the Federal Ministry for Digital and Transport. In sum, German government has given digitalization an increasingly large space on their agenda and reinforced this prominence by building a new institutional structure around it. An obvious and open question is, therefore: out of which ministries did these legislative changes originate? Does a change in the overall attention to the topic also lead to a reassignment of ministerial responsibilities?

Zooming in on bills designed by the government, the CAP data allows adding information about the ministry that is responsible for designing the legislative proposal. This additional layer of information is particularly important in parliamentary systems, where policymaking is generally carried out by the executive. The original CAP data furnishes a unique identifier for each bill, which can be used to locate it in the official German parliamentary repository of legislative activities. The repository defines ministerial sponsorship, which is assigned to the ministry that supplies the first legislative draft.

Figure 5 relies on this information in order to trace the location of ministerial responsibilities. In the early 1990s, digitalization was largely seen as an infrastructure issue, which is why the Ministry for Post and Telecommunications was in charge of the bulk of relevant legislation. This dominant perspective changed at the beginning of the new millennium, when political actors increasingly framed digitalization as a requirement for Germany's future economic prosperity. Accordingly, the administrative responsibility of designing legislation moved to the Ministry of Economic Affairs. Placing digitalization into an economic ministry also meant that the negative social ramifications of digitalization remained largely unaddressed during those years. This glorified perception changed around 2010. It became increasingly apparent that digital communication and social media both provided new venues for crime, raised pressing questions about individual rights to privacy, and potentially vulgarized the public discourse. In response to these social ills, a growing number of bills confront these challenges, and the Ministry of Domestic Affairs or the Ministry of Justice were tasked to draft the corresponding legislation. A recent example of the latter ministry's activity in this domain ("Gesetz zur Bekämpfung des Rechtsextremismus und der Hasskriminalität") is a law dealing with right-wing extremism and hate speech in social media.



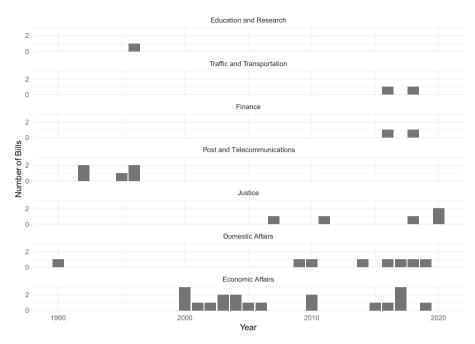


Fig. 5 Number of bills dealing with digitalization, broken down by initiating ministry

5 Conclusions

The research program emerging out of the work of Baumgartner & Jones and their idea of punctuated equilibrium is known as the "Comparative Agendas Project (CAP)". In practice, this idea is more a research network than a project as such. The core of the network is the datasets built in most Western countries as well as other countries measuring attention to policy issues across a large variety of different sources coded according to a common codebook (Bevan 2019). These datasets, which include parliamentary data, party manifestos, executive speeches bills, coalition agreement, and media data as the most widespread data sources, provide many opportunities for exploring a wide range of research questions related to public policymaking and also the more general working of political institutions. Research designs for these explorations might follow comparative statics based on general quantitative measures (Breunig and Jones 2011; Kaplaner and Steinebach 2021; Fernández-i Marín et al. 2020) and/or qualitative approaches (Shpaizman 2019).

The aim of this paper has been to provide an introduction to the central ideas in this research program, with a particular focus on the potential for analyzing the policy processes related to the German political system. Compared to analyses based on the "veto player" concept, which has been a common way of analyzing German policy processes, the framework presented in this article offers a more dynamic perspective on how the institutional setup of the German political system structures policy processes. This article provided examples of some research conducted so far on Germany, drawing on the German version of the CAP data (Breunig et al. 2021).



These illustrations also included work on the interaction between the European Union and the German political system, which in itself constitutes an institutional question that can be analyzed from a policy agenda-setting perspective (Beyer 2018). Based on the idea of "political venues", this article further used the case of "digitalization" to show a dynamic analysis of the German political system and of what the policy processes may look like. The tracing of the issue across several agendas shows that, despite its many veto points, the issue of digitalization emerged on all of them. In a relatively short period of time, digitalization occupied a substantive share of the agenda space.

In many ways, what is provided here is an invitation for further work on the German political system from a policy agenda perspective. Such further work could, for instance, focus on two questions. One is the role of the German constitutional court. Research on this court so far has been based on the idea of the court as a veto player (Brouard and Hönnige 2017). However, the example provided above on the reduction of carbon emissions shows that the constitutional court may also be a very attractive venue for political actors who want to challenge policy equilibrium dominating other political venues. Thus, the court is also a source of change and disruption of equilibrium found in other venues. Second, as the case of digitalization showed, the interaction between party competition at the level of the German Länder and party competition found at the federal level, structured by both German coalition politics and the two chambers of the German Bundestag, is not only a source of inertia, but also provides important dynamics for change. The exact dynamics still remain to be understood.

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Conflict of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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