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article

Conceptualising policy design in the policy process

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The study of policy design has been of long-standing interest to policy scholars. Recent surveys of policy design scholarship acknowledge two main pathways along which it has developed; one in which the process of policy designing is emphasised and one in which the output of this policy designing process – for example, policy content – is emphasised. As part of a survey of extant research, this article discusses how scholars guided by different orientations to studying policy design are addressing and measuring common policy design concepts and themes, and offers future research opportunities. The article also provides a platform for considering how insights stemming from different orientations of policy design research can be integrated and mapped within the broader public policy process. Finally, the article raises the question of whether a framework that links different conceptualisations of policy design within the policy process might help to advance the field.

Key words policy design • conceptual framework • policy analysis • policy content • public policy process • policy formulation • policy tools • policy language

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Introduction

Policy design scholars have investigated a wide range of questions, lending insights into how design situates within and affects the broader policymaking process. These questions include but are not limited to how the process of policy designing works and what shapes it (Mosher, 1980; Salamon, 1981; Linder and Peters, 1984; Bobrow and Dryzek, 1987; May, 1991), as well as how we can better understand the content of policy (Crawford and Ostrom, 1995; Siddiki et al, 2011). The specific foci of these questions correspond to unique pathways along which policy design scholarship has developed. These pathways are distinguished based on an orientation toward policy designing (verb) or policy design (noun) (Howlett and Lejano, 2013; Siddiki, 2020). Despite the distinctiveness of research rooted in different orientations, there remains an opportunity to explore interactions among the decision-making that occurs during the designing phase and the language that emerges in the content of policy

and subsequent downstream effects on the policy process. More pointedly, the study of policy designing offers us an opportunity to examine political, economic, equity and efficacy rationales for policy choice, while the study of policy design as a noun provides the ability to better understand the unique distinctions present within the language resulting from the designing process.

In this article, we survey extant scholarship drawing on different conceptualisations of policy design. We review research that explores the process of policy designing (for example, the selection of policy tools to embed within public policies) and that which treats policy design as policy content (for example, the substance of policy captured within policy language). We offer three observations that can help the field to take stock of where policy design research is and potential pathways along which it can develop moving forward. We end the article by positioning policy design research within the broader study of the public policy process to clarify how the former can advance understanding of the latter as well as to help convey the broader relevance of policy design.

Conceptualising policy design

Policy design research orients on two distinctive conceptualisations of policy design; the process of policy designing and policy design as policy content. This distinction noted by May (2003), and expanded by Howlett and Rayner (2018), is aptly characterised in the following comment: 'Design is thus both a "verb" – in the sense of a process of creating a policy configuration sensitive to the constraints of time and place – and a "noun" – in the sense of being an actual product or artifact that can be compared' to known principles of good design (Howlett and Rayner 2018: 390). Recognising the referenced conceptual distinction is important; both to make sense of the foci of different strands of policy design research and to fully understand and contextualise contributions stemming therefrom.

The process of designing policy is concerned with the selection of policy elements, including but not limited to tools (for example, regulation, taxation) through which policy goals are pursued (Schneider and Ingram, 1997). The process involves individuals making decisions, independently and/or collectively, within the presence of cognitive, procedural, organisational, institutional, and broader systemic constraints in accordance with their policy preferences (Linder and Peters, 1984). Within the broader policy process, policy designing is situated within the realm of policy formulation,[1] in which policy stakeholders propose, vet, and deliberate on different policy options to address problems eliciting public attention and resources (DeLeon, 1999). Central to this deliberation is deciding who will be the targets of public policy, how exactly their behaviour will be compelled (for example, through mandates or taxation), and how policy roles and responsibilities (power, more broadly) will be allocated to different policy actors through public policies (Schneider and Ingram, 1997).

Policy design as policy content refers to the substance of policy, which is essentially the output of the designing process described earlier and is represented by the language of the policy. Under this conception, policy design can be understood as that which has been designed through activities occurring within the policy process (Howlett and Lejano, 2013). The decisions undertaken during policy formulation are presumably reflected in the content of the policy. For example, policy tool choices are embodied in actual public policy text, and through the latter, policy tools are defined and

operationalised. Policy design, defined in terms of policy content, can be understood as materialising within the policy enactment realm of the policy process – it is the policy content that decision-makers select. Policy content is interpreted, applied and responded to in practice, which, in turn, is the subject of policy evaluation from which altered ways of viewing the very problems that policies were designed to address may or may not be generated.

Scholars approaching the study of policy design from different orientations have naturally explored distinctive dynamics, though the particular concepts they have explored have at times been overlapping. In the following sections, we review these different orientations toward policy design research.

Policy designing

The 'policy designing' conceptualisation of policy design refers primarily to policy actors making choices about policy alternatives, defining the content of policy, and writing policy (see Sidney, 2007: 79). Scholarship orienting on this conceptualisation burgeoned in the 1980s with scholars such as Mosher (1980), Salamon (1981), Dryzek (1983) and Linder and Peters (1984) identifying factors that influenced policy choices during the process of policy designing. Embedded in this early research was the idea that policy alternatives are designed intentionally. Central to this orientation of policy design research is the exploration of how problems defined by different actors engaged in the process of designing policy influence the adoption of certain policies and their associated elements. More recent scholarship has moved to better understand the relationship between designing and the evaluation of policy goals, as well as the linkages between tool choice and targets.

A guiding assumption of scholarship on policy designing is that improving the structure of policy design will improve the outcomes that result from the selected policy. This intentional, and rational choice-inspired, approach to designing has led to increasing attention toward frameworks for decision-making that can inform scholarly understanding of why designs are chosen. Weimer (1993) argues that there is no best solution to policy design; but, rather, in each instance of policy designing policymakers must consider an array of factors, such as institutions, that interact with contextual factors (for example, political, social, cultural, organisational) to select the most appropriate design for the situation. Within this line of research it is also argued that beyond these contextual factors, politics and political feasibility also influence decisions about what kinds of policies are selected by policy decision-makers (Bobrow and Dryzek, 1987; May, 1991). More specifically, these political dynamics shape the context of the policy design process (Linder and Peters, 1989), hold consequences for tool choice (McDonnell and Elmore, 1987), and influence the selection of policy elements (Bobrow and Dryzek, 1987). This work has reemerged through the lens of the political market framework (see Feiock and Kim, 2021). This research centralises political feasibility as a value in tool selection, thus highlighting the relevance of matching the political feasibility of policy choices to the decision-making of policy actors.

Policy tools are a key element of policy design (Schneider and Ingram, 1997). The emphasis in designing policy is on the rationales of tool selection. This includes understanding the characteristics of tools (Hood, 1983) that associate with tool choice (Salamon, 2002), and the expectations of how tools will alter target behaviour (Capano and Howlett, 2020). More recently, the study of tool characteristics has involved the

assessment of when governments seek to involve non-governmental actors in public service provisions; for example, through contracting (Maurya, 2018) or collaboration (Scott, 2015; Van Slyke, 2009). This recent research also investigates choices regarding actor inclusion in collaborative efforts that influence policy choices (Curley et al, 2020).

The emphasis on stakeholder inclusion has also been echoed by calls to improve our understanding of the relationship between 'policymakers' and 'policy takers' (that is, policy targets) (Howlett et al, 2020; Capano and Howlett, 2020; Olejniczak et al, 2020), as well as the match between targets and tools (Curley et al, 2020; Howlett, 2020) in policy choices. This body of research argues for the inclusion of policy taker reactions to potential tools to be explicitly included in the process of tool selection. Curley et al (2020) argue that different types of tools may be utilised by policymakers to target different takers, advancing different policy goals. This approach to, and interpretation of the study of behavioural policy tools opens the door to intentionally designing a policy that incorporates expectations about tool performance in an effort to shape selection.

Another recent trend in scholarship on policy designing is a shift toward understanding the selection of policy mixes or bundles of policies that may be more or less topically or otherwise linked (Capano and Howlett, 2021). Research on policy mixes has sought to understand the interactivity (Justen et al, 2013a and 2013b), complementarity (Rogge and Reichardt, 2016) and tensions that arise between policy tools (Howlett and Mukherjee, 2017). While recent research on policy tools has addressed the need to incorporate behavioural assumptions into policy design (Olejniczak et al, 2020), it fails to address implications of interactivity among tools on behaviour. Strains, rather than complementarity, between policy tools in policy mixes may provide mixed signals to a tools' target. This strain can lead to subpar policy outcomes. However, little is known about whether policy mixes are intentionally designed (Bouma et al, 2019). An emerging focus on policy designing will address whether these policy mixes are designed intentionally to be complementary or conflicting. This leads to a long-standing question in the area of designing – which is how do pre-existing policies (institutional contexts) shape the path for future policy design choices?

In 1991, May argued that there is little known about what it means to have a well-designed policy. The emphasis in this era of work was primarily on contextual factors and how they contributed to selecting certain tools. During this period, there was much interest in understanding the range of tools at the disposal of governments (Hood 1983; Salamon, 2002). However, the body of research is still hamstrung by the (in)ability to attribute specific design processes and features to better outcomes. This limitation is, in part, an outcome of the fact that this design process often occurs behind closed doors (Sidney, 2007), and the range of available alternatives for a given government are not often included in our assessments of tool selection. One approach to address this weakness is to incorporate design thinking into policy design research.

The incorporation of design thinking, first used by Rowe (1987), has been one of the primary innovations in policy design research in recent years. Design thinking accounts for human-centred systems, which, rather than require the achievement of a specific result, seek to achieve a value. This orientation allows for the articulation of co-existing policy values that will require designing to balance those varied policy goals and desires of collaborating policy actors. Design thinking suggests that designing policy occurs across two premises: first, we know how to achieve the value, but it

is uncertain what (object, service, system) needs to be created to achieve the value; second, that the what (object, service, system) and the how (working principle) are both missing, but we know the value that we seek to achieve (Dorst, 2011). Therefore, there is a need for the 'parallel creation of a thing (object, service, system) and its way of working' (Dorst, 2011: 525) to achieve the desired value.

Policy designing emphasises the complexity of the contextualised design process by exploring factors that motivated different design decisions, while design-thinking shifts this research to emphasising the act of designing or rather developing 'ideal types' of designed policy to address policy issues – in the absence of the contextualised environment (Howlett, 2020). Mintrom and Luetjens (2016) argue that design thinking can help address the lack of understanding of policymaking as a design activity. Specifically, they argue that too little is understood about 'how policy designers identify problems and design criteria, about the methods they employed in the design process and whether "design thinking" is translated into policy action' (Mintrom and Luetjens, 2016: 391). In other words, by identifying ideal types of designs to address policy problems, in the absence of these contextualised conditions, more can be understood about the design process itself and how decisions are made. One critique of design thinking is that it does not adequately account for the role of political feasibility, implementation barriers and decision constraints (Clarke and Craft, 2019). Earlier research in designing policy faced tensions between the rational argument for intentionally efficient policy design and the impetus and presence of politics (Linder and Peters, 1989; May, 1991); with the introduction of design thinking, this tension has reemerged (Howlett, 2020). The solution proposed by Howlett (2020) is to integrate traditional elements of policy design research to recognise that design thinking must be framed based on situational contexts (for example, capacity, politics, institutions).

There have been efforts to identify different ways that design thinking might be utilised for designing policy and policymaking: 'design as optimization, design as exploration, and design as co-creation' (van Buuren et al, 2020). This orientation of including design thinking into designing policy is mirrored by the growth of private sector policy laboratories that emphasise innovative and collaborative approaches to developing policy alternatives (Peters, 2020). Design thinking has been viewed as empowering designers but potentially disempowering those served by the policy itself (Iskander, 2018). This is in part due to the lack of attention given to politics in this process; however, this may not be the case if collaborative or co-creation orientations to designing policy become the norm.

Research on policy designing traditionally incorporated consideration of stakeholders by attempting to understand the reasons for, and patterns in, allocation of policy benefits and burdens among different target groups (Schneider and Ingram, 2005). This approach emphasised that certain targets might be assigned benefits or burdens based on their social construction and the political consequences of decision-making. However, there is increasing attention to the role of stakeholders as participants in the rulemaking process (Edelenbos, 1999; Newig and Fritsch, 2009). Yet there remains a question in this research about how the role of stakeholders in the design process may alter the outcomes of tool selection (Bressers and O'Toole, 1998). Recent research explores the role of design coalitions in their ability to identify specific elements of design that are the focus of advocacy (Haelg, Sewerin, and Schmidt, 2019). Additional research has explored the specific implications of stakeholders on tool selection through collaborative governance focus (Curley et al, 2021b); however,

this work is limited in its ability to speak explicitly to the process of that design. This is consistent with previous scholarship that traditionally explores the process of policy design through tool choice, with an emphasis on descriptive (McDonnell and Elmore, 1987) and conceptual work that develops characteristics of tools that may make them more or less likely to be chosen under different circumstances (Vedung, 1998; Salamon, 2002). This work has been updated to empirically explore the drivers of tool choice (Krause et al, 2019). The emphasis of this body of research has been to explore the range of independent variables that might influence tool selection or inclusion. Its focus is on comparing tool choice by state and local governments to identify what factors might lead to policy adoption. However, while focused on explaining drivers of tool choice, this research does not explicitly identify the range of choices available to these governing bodies.

One of the weaknesses of this body of research is the operationalisation of a selected policy design. Previous research treats tool choice as binary (for example, adoption/non-adoption of a particular tool); however, this does not account for policy mixes. Measuring policy mixes has been a recent area of attention in this body of research (Schmidt and Sewerin, 2019). Traditional measures used to operationalise selected policies have focused on additive indices (Krause et al, 2019; Curley et al, 2021b). This operationalisation captures the range of policies selected against the possible policies. However, these additive indices have weaknesses; first, variation in design features is often limited to specific characteristics or treated as identical (Curley et al, 2021a); second, policies are given the same mathematical weight even though they are not necessarily equal in resources or scope (Schaffrin, Sewerin and Seubert, 2015; Deslatte and Swann, 2016). Several alternatives have been suggested, such as latent variable analysis (Deslatte and Swann, 2016) and the inclusion of intensity or the content of the tools (Schaffrin, Sewerin and Seubert, 2015).

In sum, recent foci in the study of policy designing include design thinking, behavioural policy tools, policy mixes and the relationship between policy takers and policymakers. Howlett (2020) proposes a new research agenda for this orientation toward policy design research that integrates the more traditional contextual and political approaches toward policy design with the newer design thinking orientation. This research agenda focuses on embedding design thinking into policy design research keeping in mind the following questions: 'Who are the designers? Why do they design what they do? How do they design?' (Howlett, 2020: 192–199). These questions and those related to existing limitations in measurement discussed throughout this section open the door to considering new paths forward for research in policy design.

Policy design as policy content

Whereas research on policy designing focuses on the process and determinants of the selection of tools, targets and other elements to embed within policies research on policy design as policy content focuses on the development of approaches for characterising the information that actually ends up being conveyed within public policies. Essentially, central to the study of policy design as policy content is an investigation of what information is actually conveyed within public policy. This begs inquiry into how policies convey specific guidance on behaviour within particular settings, identification of generalisable features of policy design (that is, types of information common to policies across domains), and development of approaches

for valid and reliable measurement of policy design that can be used as a basis for drawing conceptual insights regarding information conveyed through policy language. The former lends understanding of particular policies, whereas the latter two aim to support systematic comparative assessments of policy design (Schneider and Ingram, 1988). Such comparative assessments are considered valuable for theory-building insofar as they facilitate the ability to ascertain whether common patterns observed in policy text are consistently associated with particular political and policy dynamics. In light of observed foci of research focused on policy content, the discussion in this section covers both concepts and methods engaged in this study of policy design conceived of as policy content.

One of the earliest efforts to capture kinds of information commonly conveyed within public policies was undertaken by Schneider and Ingram (1997). Schneider and Ingram refer to categories of policy information in terms of 'policy elements'. According to Schneider and Ingram, policy design elements capture theoretically salient and generalizable features of policy design. Some of the elements they identify as common among policies, as reflected in the actual content (that is, text) of policies, include: (i) goals or problems to be solved; (ii) policy targets, or those whose actions are affected through the implementation of policies; and (iii) tools through which target and target behaviour is compelled. Differentiating the discussion in this section from that in the preceding discussion, 'policy tools' in the context of policy content is considered to be an aspect (that is, element) of policy design that is described in the content of policy, while decisions regarding these tools are assumed to occur in the policy designing process leading up to the adoption of policy bearing particular content.

Another approach that policy scholars have engaged extensively in order to characterise the content of public policy is Ostrom's rule typology (Ostrom, 2005). Ostrom's rule typology, applied to the public policy case,[2] supports categorising provisions embodied in public policies according to their functional properties (that is, kinds of information they convey). The rule type categories accord with a logic that governing rules (for example, public policies) are agglomerations of some mix of rules, each of which conveys distinctive kinds of information and configure to govern particular domains. Some of these rules include: (i) position rules, which specify positions that actors can occupy within a specific situation; (ii) choice rules, which describe operational actions linked to actors occupying certain positions; (iii) information rules, that indicate channels of information flow; and (iv) payoff rules, which specify incentives tied to particular actions. Over the last decade, there has been an increase in policy design studies that leverage Ostrom's rule typology, in which scholars describe the arrays of different types of rules that are embedded within policies to govern policy relevant actions (Weible and Carter, 2015; Feiock et al, 2016; Schlager et al, 2021). These studies typically involve the classification of provisions contained within policy along the described rule types, based on which scholars discern patterns in the kinds of information conveyed in policy content. An advantage of Ostrom's approach in the context of policy design studies is its rich theoretical grounding and empirical testing across a variety of rule-governed domains, both of which lend credence to its validity.

Recognising that policy content is fundamentally captured in language, there has been a growing interest over the last ten years in developing linguistically-oriented approaches for the study of policy design. These approaches centre on capturing information conveyed in policy by analysing structural features (for example, units

of language such as statements, syntactic components, prepositions) of policy text (Katz and Bonmarito, 2014;VanSickle-Ward, 2014), which are then interpreted by the policy analyst as conveying conceptually relevant meaning. In effect, these approaches premise on the idea that conceptual understanding follows from measurement of policy content, and in the case of these particular approaches, measurement of policy language. Furthermore, while the approaches leveraged to date focus on different kinds of structural features, the general interest among policy scholars is to discern patterns among these features and link these to policy concepts and outcomes of interest (Huber and Shipan, 2002). Language-based assessments of policy design are featured prominently in scholarship on policy complexity (Shaffer, Forthcoming) and studies of policy delegation, wherein scholars aim to understand how policy authority is delegated through the actual language of policies. Seminal research in this area is Huber and Shipan's work that evaluates policy language as a basis for understanding how lawmaking authority is delegated to the administrative state (Huber and Shipan, 2002).

Some of this work, including Huber and Shipan's, seeks to understand policy language as more or less explicitly corresponding to the syntactic components of which language is comprised (Dunlop et al, 2019; Siddiki et al, 2019; Frantz and Siddiki, 2021). Syntactic components, akin to parts of speech to which specific words are assigned, convey unique types of meaning and configure to form other units of language. For example, in the English language, the syntactic components of nouns, verbs, direct objects and so on, to which particular words are assigned, configure based on specific grammatical rules, to form sentences. In applying linguistically-oriented approaches to the study of policy, scholars have sought to identify syntactic components that capture policy relevant meaning and how these syntactic components configure to form individual 'policy statements', or units of language found in public policies that regulate behaviours or constitute particular features of a policy domain. Further, they seek to identify patterns in features observed in policy language toward a broader understanding of policy function and policy outcomes (Schlager et al, 2021).

Of the most prominent approaches used by policy scholars in recent decades to engage in this kind of assessment of policy design is the Institutional Grammar (Crawford and Ostrom, 1995). The Institutional Grammar identifies generalisable syntactic components of units of language comprising institutions[3] (for example, hereafter 'policies' as relevant for this discussion) that govern behaviour. The Institutional Grammar is well suited to assess behavioural outcomes as it is rooted in game theory and associated behavioural theory (Crawford and Ostrom, 1995). Each syntactic component of the Institutional Grammar conveys distinctive meaning particularly relevant for public policies. The focal unit of analysis in the Institutional Grammar is that of 'statements', akin to policy directives or provisions that assign activities to actors within contexts, which can be parsed and analysed along syntactic components and corresponding information. Analysis of syntactic information extracted through the application of the Institutional Grammar yields insights on central targets of public policies, the activities assigned to these actors, the amount of discretion afforded to actors in performing these activities, the contexts in which actors are required, forbidden, and allowed to perform activities, and sanctions for not performing activities as described.

As conveyed in the discussion presented to this point, noteworthy about research on policy content is the implicit or explicit treatment of policy measurement.

Schneider and Ingram and Ostrom's approaches offer ways to understand and organise information conveyed in policy content. Schneider and Ingram (1997) do not offer guidance for empirical measurement of policy design to support the application of their classification schema. Perhaps stemming from this lack of analytical guidance, the policy element typology has not been extensively engaged empirically, though scholars continue to recognise its conceptual value. Some work has aimed to address this gap. For example, Koski and Siddiki (2021) illustrate in their analysis of American states' electricity policies how policy text can be systematically coded along Schneider and Ingram's policy design elements to derive a broader understanding of patterns reflected in policy text. Mondou and Montpetit (2010) use Propositional Analysis to analyse the content of poverty reduction action plans through which they identify policy tools, issuers of those tools, policy targets and problems that policies aim to resolve. Mondou and Montpetit's analysis of policy content using this method involves identifying propositions contained in policy text (for example, issuers, verbs, connecting objects, receiver) that correspond to policy elements and ascertaining patterns in policy content. Thus, in their analysis, propositions resulting from the decomposition of policy text are the basic units upon which their analysis is based.

Recent research offers numerous examples of Ostrom's rule typology being used to study policy design (for example, Garcia et al, 2019; Heikkila et al, 2021; Schlager et al, 2021). Much of this research pairs application of this typology with an application of the Institutional Grammar. This pairing often entails parsing policy text into individual statements, along with syntactic components, and then classifying statements according to rule type. The advantage of first parsing policy text according to the Institutional Grammar, before engaging a rule type coding, is that information corresponding to individual syntactic components can be used to signal the function of statements (Crawford and Ostrom, 2005a; 2005b; Carter et al, 2016). For example, one can infer the function of a statement based on the action indicated in the statement. Another advantage of using the Institutional Grammar as a basis for rule type coding is that it clarifies the policy unit of observation upon which classification is based. In other words, it lends clarity on what exactly is being classified and, in doing so, offers guidance on how to measure policy content (Siddiki, 2020).

In other research that engages the Institutional Grammar, a conventional approach has been to identify and draw insights from patterns resulting from syntactic and statement level parsing of policy text, for example, summarising information corresponding to one or more syntactic components across statements of which policies are comprised. Such summaries elucidate, for example, the key policy actors/targets, how much decision-making discretion a policy affords, how strongly behaviour is compelled, and which features of a policy domain a policy is establishing to enable relevant activities in the first place. Scholars have used statement level parsing to glean insights about ordering, configurations and overall numbers of statements embodied within public policies and to support rule type coding as described earlier. This latter application suggests the value of pairing approaches that rely on analysing structural features of the language captured in policy design with approaches for capturing generalisable types of information conveyed in policy design. In essence, both approaches have the same objective – systematic classification of different forms of information conveyed in policy content.

As briefly captured in the preceding discussion, scholars who focus on evaluating features of policy language leverage various approaches in doing so. However, reflecting

more broadly on commonalities in this research, one tends to use structural features of policy text to operationalise policy concepts. For example, the presence of prescriptive language in policy text (for example, must, must not) is used to operationalise the concept of 'discretion' that is afforded to policy actors within policy design (Huber and Shipan, 2002). This same feature, alongside the presence of sanctioning language, has been used to operationalise the concept of 'stringency' (Siddiki, 2014). This observed tendency signals a kind of versatility of linguistically oriented approaches for studying policy design. First, it conveys the possibility of using structural features of language to study a wide array of policy concepts. Second, the generalisability of these features suggests the possibility of measuring policy concepts consistently along them across policies to enable concept and theory building.

Having recognised the prevailing convention in conceptualisation and measurement in the study of policy design as policy content, it is also essential to highlight critiques and limitations associated with existing approaches in this research. One significant methodological limitation faced by scholars analysing structural features of policy text is the onerous task of extracting and classifying parts (for example, syntactic components, statements) of policy text at the word or phrase level. Manually performing this task constrains the amount of policy information scholars can analyse in each study, resulting in policy case studies from which it is difficult to draw generalisable insights. When this task is distributed among multiple people, concerns about inter-coder reliability may arise. Recently, there have been efforts to overcome these limitations by relying on computational methods that support the automated classification of policy text (Heikkila and Weible, 2018; Rice et al, 2021; Shaffer, Forthcoming). These methods, forms of computational text analysis and natural language processing, automatically extract linguistic features from text documents, which can then be mapped and interpreted according to conceptual and/or theoretical aims. Rice et al (2021) have developed an automated approach specifically designed to classify texts according to Institutional Grammar components to make this translation easier. It is then left to the policy analyst to decipher, aggregate, and/or interpret automatically extracted syntactic information in conceptually relevant terms.

Though presented here as an opportunity, however, this latter suggestion links to another limitation noted by scholars engaging linguistically oriented approaches for studying policy design. This is the challenge of aggregating the granular data that results from parsing policy text along structural features (Siddiki et al, 2019). The output resulting from applications of the Institutional Grammar and/or Propositional Analysis are words and phrases that correspond to units of language (that is, syntactic components or propositions, respectively). Analysts draw inferences about policy content based on observed patterns in these words and phrases and their features. Doing so can be challenging when this information is voluminous and taken out of context (for example, when a frequency count summarises particular words or phrases without reference to content surrounding them in the policy). In effect, this latter approach does not account for the inherently configural nature of language and can thus preclude the policy analyst's ability to capture important policy meaning.

Despite the noted limitations, scholarship on policy design as policy content has offered several approaches for robust and reliable characterisation of generalisable kinds of information conveyed in public policies. Insofar as policy content can be understood as an output of the policy designing process, these developments open

the door to an expanded understanding of how decisions made during this process are embodied in policy text.

Observations of the field: taking stock and looking ahead

In this section, we identify observations of extant policy design scholarship, based on which we posit recommendations for future research.

Observation 1: operationalisation of outputs of policy designing can be improved by drawing on approaches for classifying policy content

The survey of policy designing research presented in this article highlights several recent trends, including enhanced interest in behavioural dimensions of policy tools, policy mix foci, design thinking and attention to policymakers and takers. Among these trends is the renewed attention given to the measurement of policies, particularly as dependent variables. This is in part motivated by the policy mix foci in designing policy. These mixes have multiple instruments with interactive effects that can enhance and diminish the effectiveness of individual policy tools; these interactive effects may be intentional or unintentional, but certainly have implications for tool selection. Empirical measurement of tools and their respective mixes have been lacklustre; binary and additive indices have been primary mechanisms for operationalising these tools. These approaches to measurement cannot capture tool qualities that are shaped by contextual factors.

Future research will need to explicitly incorporate the qualities of policy tools rather than the mere existence of a policy tool. This research can learn from the classification strategies developed in scholarship focusing on policy design as policy content to extract variation in qualities of the tools chosen. An approach to more thoroughly understanding the features of policy exists through the policy context literature. By incorporating insights from this literature, we can learn more about the contextual factors that shape not only the existence of a tool but its inherent features as well. Curley et al (2021a) do this by exploring the contextual features that lead policymakers to decide on the presence of enforcement language within COVID-19 executive orders. They identify that while the existence of the policy may be universal and apolitical, its features that determine the outcomes derived from the policy are still political. This approach will help us to understand better how the influences of politics and context more generally shape the actual characteristics of what is adopted, rather than simply the instrument.

Observation 2: research that treats policy design as policy content should focus more on outcomes

Central to research treating policy design as policy content is capturing, through typologies, common kinds of information in policy content that convey policy relevant meaning, and rigorous measurement of policy content leveraging techniques for text analysis. Typologies, such as Schneider and Ingram's (1997) policy element typology and Ostrom's (2005) rule typology, are particularly useful for the former.

Linguistically oriented approaches, such as the Institutional Grammar and Propositional Analysis, are beneficial for the latter. Recent research links typology and language based approaches, drawing on the strengths of both and highlighting for future research how the methodological rigour associated with the latter augments understanding of concepts embedded in typologies.

The classification and measurement approaches developed and relied on in this line of research have demonstrated promise in supporting nuanced understanding of policy design while at the same time being generally applicable. Where this research is currently lacking is in the evaluation of how policy design features discerned through these approaches link to policy outcomes. Much opportunity remains to investigate types of behavioural, organisational and/or broader policy outcomes that result from policies exhibiting particular patterns in policy design features. Fundamentally, nuanced and reliable responses to this general question that build on the various approaches reviewed in this article are needed for validating the value of research conceiving of policy design as policy content.

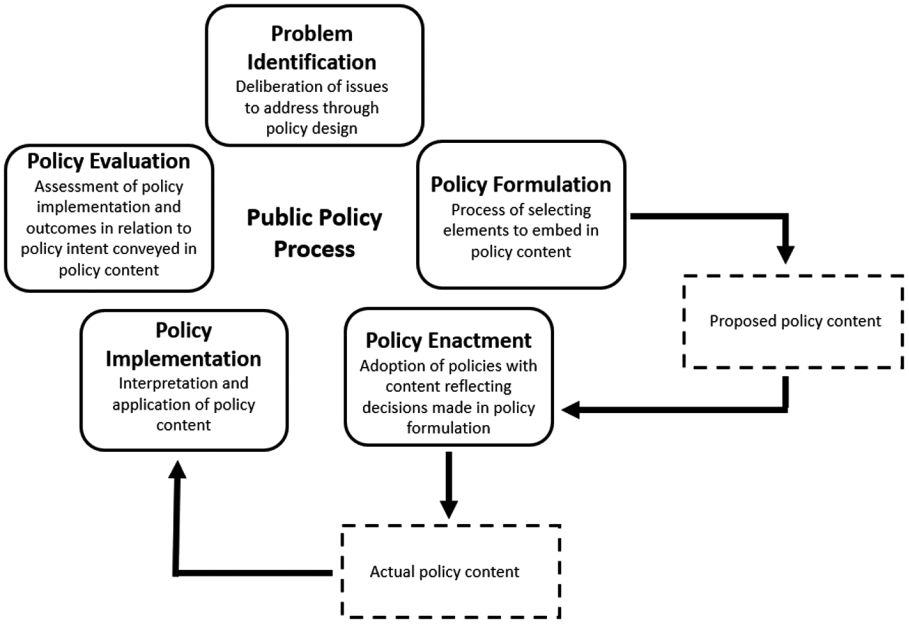
Observation 3: research that contextualizes policy design in the policy process can support theory building

The discussion presented throughout this article has been organised around distinctive conceptualisations of policy design (Howlett and Lejano, 2013; Siddiki, 2020). One of these conceptualisations emphasises the process of creating policy, while the other emphasises the content of the policy that has been created. Research that orients on these conceptualisations is not mutually exclusive, insofar as it covers similar concepts but from different perspectives. As a consequence, the relevance of scholarship pursued from one orientation has not always been readily apparent for research pursued according to the other. We posit that a more explicit connection between differently oriented policy design scholarship within the broader public policy process can encourage conceptual and methodological development.

Figure 1 offers a visual depiction of the activities associated with designing policy and the resulting policy content as linked to different policy process stages. This figure explicates the link between the act of designing policy and policy content described throughout the article. Furthermore, it shows the implications of this linkage for activities that occur throughout the policy process. Policy content, which results from deliberation among policy stakeholders, is interpreted, applied and responded to in policy implementation. It is that against which policy performance is gauged. It is that which undergoes revision based on policy evaluation results and as definitions and interpretations of policy problems change. In this light, policy design, conceived of in terms of policy content, is of central relevance in the study of the policy process, but it cannot be adequately understood absent attention to dynamics of the process through which it is created.

The pathway of integration we present will help scholars to ask and answer questions that have long plagued the field that move beyond 'why did policymakers make this choice' and 'what is the content of this policy' and towards complicated questions such as 'what determines levels of discretion granted to implementing agencies'. By utilising research on antecedents of policy design and the conceptual rigour afforded by policy content research these types of questions can be answered. The ability to

Figure 1: Policy design throughout the public policy process



determine discretion resulting from the design process then enables us to explore other questions downstream, such as 'what are the implications of discretion for achieving policy goals'. We may also be able to better understand the designing of specific policy goals – such as equity. It has been a long-standing struggle in policy research to study equity, which is deemed as a vague, complex concept and superficially treated through pareto optimality. This means that it has historically been 'minimised' in policy research (Pitts, 2011; Diem and Boske, 2012). Utilising an integrated policy design approach to operationalise equity can enable more intentional evaluation of how equity is envisioned in the policy designing process and how it materialises in the content of policy, as well as the downstream policy implications of both. More pointedly, as scholars and practitioners have struggled with operationalising equity in the downstream stages of the policy process, an integrated approach has the ability to create a more robust equity operationalisation beyond questions of 'who gets what'.

Conclusion

Considering renewed attention to policy design in the last decade, it is an opportune time to forge new pathways for developing this critical line of research. This article offers a survey of existing research on policy design. It starts by distinguishing among different orientations of policy design research that draw on distinctive conceptualisations of policy design. It then offers three observations related to how research drawing on different orientations can be individually developed and also integrated to advance scholarship. The observations and integrated approach discussed in this article raise the question as to whether the development of a framework that embeds and links different conceptualisations of policy design within the policy process is in the near future.

Notes

[1] We draw on a stages depiction of the policy process to organise our discussion of policy design. However, we recognise that the stages heuristic conveys a simplification and linearity which does not fully capture the complexities and dynamic nature of activities observed in the actual policy process (Dunn, 2018).

[2] Ostrom's rule typology is a classification schema that enables categorisation of provisions embodied in 'institutions'. Institutions govern social systems by constituting features of social systems or regulating the behaviour of actors within social systems, and can be formal or informal. Examples of formal institutions are laws, regulations and treaties. Examples of informal institutions are spoken or tacitly understood social conventions (Ostrom, 2005).The rule typology is increasingly being used to classify formal institutions to understand patterns in the kinds of information conveyed in public policies (for example, Feiock et al, 2016; Garcia et al, 2019).

[3] See note 2 for a discussion of 'institutions' as relevant to this article.

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Conflict of interest

The authors declare that there is no conflict of interest.

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