# 1 Introduction

## 1.1 Policy Design: Definition and Importance for Governance

Public policies are critical for governance. They are the tools that governments use to solve problems that compromise the well-being of citizens (Weimer and Vining, 2011). They signal the priorities of their designers, and ideally the constituencies these designers represent, simply by declaration or through conferring material and nonmaterial rewards and sanctions (Edelman, 1985). Further, policies compel or enable behavior in goal-oriented ways (Schneider and Ingram, 1990). Indeed, policies are intentional. They are deliberately crafted with sensitivity, albeit with varying levels thereof, to features of the problems to which they are applied, assumptions about how individuals interpret and respond to behavioral directives, and the broader social, physical, and governance contexts in which they are designed and implemented (E. Ostrom, 2005). And, one would of course be remiss to not acknowledge that policies are ultimately outputs of politics through which it is determined "who gets what, when, and how" (Laswell, 1936).

The purposeful, functional, and normative qualities of public policies all prompt consideration of their design. The study of public policy design is principally concerned with the construction of public policies. For some scholars of policy design, the emphasis is on the act of constructing public policies (Linder and Peters, 1989; Howlett et al., 2015). These scholars focus, for example, on decision-making about which instruments to embed within policies to compel behavior toward the attainment of policy goals. Instruments are typically defined as the specific mechanisms through which behavioral response is urged, such as incentives or mandates. These scholars also focus on characteristics of the settings in which decisions about instruments are being made, and the implications of such on instrument choice. Other scholars of policy design focus on policies as constructed outputs and are interested in deciphering their attributes (Schneider and Ingram, 1997; Mondou and Montpetit, 2010; Siddiki et al., 2011). From the perspective of these scholars, policy design is defined as the content of policies and how this content is organized (Schneider and Ingram, 1997). To guide their study of policy design, these scholars seek to identify types of content commonly observed across different kinds of policies, qualities of this content, and how policy design links to governance activities, outputs, and outcomes.

To summarize the distinction between the two definitions of policy design, one can employ the following heuristic: policy design as policy formulation focuses primarily on the choice of policy instruments as well as individual, social, political, and other contextual factors that influence instrument choice.

Policy design as content focuses on the structural, functional, and substantive characteristics of this content, in which selected instruments are embedded. Howlett (2014) offers an even simpler distinction: policy design under the two approaches can be conceived of alternatively as a verb or noun. However, while distinct, these two conceptualizations of policy design are also complementary. This complementarity exists, in part, because there are various characteristics of policy design that are applicable regardless of whether one conceives of it as a process or output. For example, irrespective of how policy design is defined, it is recognized that policy design is animated by people. The effectiveness of policy design as a process or output depends in large part on how people interpret and respond to the discretionary parameters articulated within it (Siddiki, 2014). Further, policy designs place into contexts, and contextual incompatibility can lead to conflict that can ultimately undermine effective governance. Context refers to problem, social, economic, physical, historical, organizational, among other, conditions. Context also refers to the broader policy environment. Emphasized in previous, and reinforced in contemporary, policy design studies is that policies are often bundled or mixed with others of similar function and/or intent. When conceiving of policy design as constructed outputs, this observation prompts the need to consider interactions among the structure and content of related polices (Howlett and Rayner, 2007). It can also be useful to consider how different policies that are bundled together to address an issue in a particular domain have evolved over time, and key contextual features that tempered their present-day designs. As Howlett (2014) points out, individual policies that are applied in concert often originate and evolve somewhat independently, and are bundled opportunistically in relation to a particular problem. The implication of this is that policies that are bundled together may be internally inconsistent, or incompatible in their goals, instruments, incentives, or other design features (Siddiki et al., 2018). A related characteristic of policy design that applies across definitions is that it evolves over time as the contexts in which it situates change. These various characteristics suggest the need to consider within the context of policy design studies the issues of policy design compatibility, interactions, policy change, and policy adaptability.

While recognizing that multiple definitions of policy design exist, in this Element policy design is defined as the content of policies. In part, the choice to adopt this definition is reflective of the author's background. The author was trained in theoretical and analytical perspectives oriented in this conceptual definition. This choice is also motivated by developments in scholarship on policy design, in which the distinction between different conceptualizations of policy design has been further clarified, as has the value added of engaging in research that relies on process versus content-based definitions (Howlett, 2019).

A third motivation for defining policy design as content relates to the second. Despite increasing validation and clarification of the value of thinking about policy design as content, theorizing and research on policy design conceived as such is relatively limited. This Element offers guidance on understanding and analyzing policy design as a constructed output. The reasons offered here for treating policy design as content notwithstanding, the Element incorporates insights from scholarship that treats policy design as formulation into the discussion throughout it. This literature can contribute substantially to an understanding of assumptions and features of policy design.

## 1.2 The Study of Policy Design

The criticality of policy design in the study of governance has inspired a rich body of scholarship on the subject, though this interest has been expressed in bursts over the last several decades. The remainder of this section provides a brief overview of scholarship on policy design, highlighting key shifts in the trajectory of research on this topic. Literature reviews more comprehensive than the one provided in this Element are offered by many other scholars, notably Michael Howlett in his numerous articles, book chapters, and books. Importantly, the literature review that follows provides a description of leading approaches for studying policy design that serves as a basis for the discussion in later sections.

Policy design emerged as a distinct topic of study in the 1960s and 1970s (Howlett, 2017). In scholarship published during this period, policy design was defined both as policy formulation and as policy content. However, the distinction between the two conceptualizations was not always explicitly recognized. As the topic of policy design emerged in prominence, it was broached by scholars with various disciplinary backgrounds, primarily political science, public administration, and economics. The range of policy design–related topics addressed by scholars ostensibly reflected their disciplinary orientations. Scholars of public administration were fundamentally concerned with choices about which instruments to embed in public policies and the role of policymakers and administrators in these decision processes. Political scientists were chiefly concerned with the politics surrounding policy design. Namely, the types of policies that emerge in different political contexts and the ways in which policies, through their designs, empower or disable groups within society (Lowi, 1964; Linder and Peters, 1989; Skocpol, 1992; Pierson, 1993). Economists were concerned with ascertaining the impacts of instruments embedded in policy design (Kirschen, 1964). There were also prominent theories being applied during this period relating to broader governance issues that borrowed concepts from across disciplines and addressed the topic of policy design. An example is public choice theory, which was leveraged to assess the political and policy dimensions of the production and provision of public services. Scholars of public choice intersected economic, political science, and public administration concepts in seeking to understand, within various domains, which policy designs most efficiently, and appropriately, enabled the effective delivery of public goods and services that markets were unable or unsuited to provide (V. Ostrom, 1962).

The discussion that follows provides a brief overview of some of the leading perspectives on policy design that were introduced in this early period of policy design scholarship, specifically focusing on the work of Lowi (1964) and Wilson (1973). Both Lowi and Wilson contributed to the initial study of policy design by introducing policy typologies, or means for classifying policies generally in terms of what they do and discerning how different types of policies are uniquely shaped by, and shape, the political and/or administrative contexts in which they are applied. As Birkland (2011, p. 209) notes, policy typologies like those developed by Lowi and Wilson "[help] explain policy outcomes by explaining and predicting key aspects of the politics underlying these policies" and further, that, "such typologies are useful in understanding how and why some policies are made the way they are, and why some groups do better than others in policy debates and actual enactment."

Lowi, drawing on the work of Cushman (1941), presented a typology that characterizes the politics associated with three different types of policies: distributive, redistributive, and regulatory. Distributive policies allocate resources to distinct recipients (e.g., individuals, firms) based on closed-door decisions typically involving policy elites. Regulatory policies are intended to prohibit behaviors that pose harm to society, including individual actions that compromise the well-being of others as well as actions undertaken by firms that comprise the competitiveness of economic markets. Policies relating to the former example are referred to as protective regulatory policy, and those relating to the latter, competitive regulatory policy. Regulatory policies elicit support or opposition from interest groups that are variably benefitted or burdened by policies. Redistributive policies transfer wealth accumulated from the general constituency to a smaller group of constituents that share demographic attributes. Redistributive policies are typically designed to promote equity among constituencies, and elicit significant conflict owing to the transference of resources away from one group and toward another.

Wilson's (1973) typology, like Lowi's, captures how policy costs and benefits are distributed across groups within society, but uses this as the primary classifying heuristic. Wilson suggested classifying policies within a two-by-two matrix;

where one dimension captures whether policy benefits are concentrated among very few people or distributed widely among many people, and the other dimension captures whether policy costs are concentrated among very few people or distributed widely among many people. He then associated policy types with interest group politics. He suggested that policies with concentrated costs and benefits will elicit conflict among interest groups that stand to win or lose from a policy; policies with concentrated costs and distributed benefits will generate action by groups who wish to convince policymakers to govern in the public interest; policies with distributed costs and concentrated benefits can indicate close relationships between policymakers and winning interests; and policies with distributed costs and benefits are not likely to provoke focused support or opposition.

The 1980s through the early 2000s saw a theoretical and conceptual concentration in scholarship on policy design around a limited number of theories or orientations, with much of the scholarship falling within one of two tracts. One tract of policy design scholarship focused on identifying and theoretically leveraging generalizable features of policy design. The other tract focused on moving from general classifications of policies, according with Lowi's and Wilson's typological approaches, to characterizing policies in accordance with the instruments embedded within them. Scholars working in both tracts sustained interest in connecting policy design and context (i.e., the social antecedents and consequences of policy design), but it was during this time that the distinction between policy design as formulation and policy design as content was further clarified. In part, this sharpened delineation reflected the distinct foci of policy design scholarship being pursued at that time, which are briefly elaborated as follows.

In 1993, Ann Schneider and Helen Ingram published "Social Construction of Target Populations: Implications for Politics and Policy," in which they presented an analytical framework for evaluating the democratic implications of how policy benefits and burdens are allocated to variably constructed target groups in society through policy designs.[1] Their framework also incorporated a schema for organizing policy design – which they defined in terms of the substance or content of policy – around generalizable elements. These generalizable elements are features of design that are commonly observed across policies applied, for example, at different jurisdictional scales (e.g., local, state, federal) and in different substantive domains (e.g., education, environment, health). In identifying generalizable

[1] Anne Schneider and Helen Ingram presented an elaborated description of the framework in 1997 in *Policy Design for Democracy.*

elements, Schneider and Ingram, 1988 enabled systematic comparisons of policy design.

According to Schneider and Ingram (1997), policy designs are commonly constituted of policy goals, targets, tools or instruments, implementation instructions, specific rules of conduct, and an implied causal logic that connects goals, targets, and instruments. Policy goals are the desired outcomes (i.e., broader consequences on social and physical conditions) that a policy is intended to induce. Policy targets are the individuals or groups at whom a policy is directed. Policy tools or instruments are the specific mechanisms that compel behavior. A key premise of Schneider and Ingram's work is that policies, though with varying degrees of coercive pressure, are intended to compel some type of behavior change. This change can be reflected in altered behavior or in the performance of some type of behavior that was previously intended but not actualized. The purpose of policy with respect to the latter is to enable behavior. Given this premise, Schneider and Ingram presented, in connection with their framework, a detailed description of behavioral assumptions relating to different types of policy instruments or tools; that is, expectations about how policy targets are expected to react to different types of policy instruments (Schneider and Ingram, 1990). Implementation instructions direct administrative structure and actions consistent with policy goals. Finally, the embedded causal logic references the soundness of the implied linkage between goals and instruments: in other words, the validity of the reasoning that links the performance of some behavior compelled through the policy instrument by a particular target to the desired policy goal.

In addition to offering a way to characterize common features of policy designs, Schneider and Ingram's framework also offered a policy typology that, like those presented earlier, classified whole policies in terms of general objectives and how policies are intended to compel behavior. According to Schneider and Ingram, policies can be characterized as representing different types of "tools," which they describe as follows (Schneider and Ingram, 1997, pp. 93–95): (i) authority tools, which rely exclusively on deference to authority, without the explicit or even implicit threat of other sanctions; (ii) inducements and sanctions, which encourage "quasi-voluntary" or "quasi-coerced" actions based on tangible payoffs; (iii) capacity-building tools, which provide training, technical assistance, education, and information needed to take policy-relevant actions; (iv) hortatory tools, which consist mainly of proclamations, speeches, or public relations campaigns through which government exhorts people to take the actions needed by the policy; and (v) learning tools, which encourage targets to solve problems. Schneider and Ingram's policy typology is an expanded form offered by Richard Elmore (1987), who distinguishes between the following types of policies, in instrumental terms (an approach which we will discuss in more detail): mandates, inducements, capacity-building, and system-changing. Distinctive about Schneider and Ingram's typology, relative to Lowi's and Wilson's, is that the authors focus less on politics associated with different types of policies and more on behavioral assumptions relating to each (Schneider and Ingram, 1990).

At the same time that Schneider and Ingram introduced and were working to empirically test the validity of their theory of policy design, Elinor Ostrom and others associated with the Bloomington School of Political Economy were pursuing complementary advancements in the study of governing rules as part of their work applying the institutional analysis and development (IAD) framework.[2] The IAD framework, like Schneider and Ingram's social construction framework, offered several approaches for systematically characterizing the rules used to govern behavior according to generalizable features (Ostrom, 2005). Many of the early studies using the IAD framework to study governing rules were focused on tacit or informal rules reflected in social norms and habits. Only in the last ten years has scholarship that uses the IAD framework to study the design of formal rules – such as public policies – flourished (Basurto et al., 2010; Siddiki et al., 2011; 2012; Siddiki, 2014; Carter et al., 2016). Nevertheless, the approaches for analyzing governing rules affiliated with the IAD framework are conceptually and operationally appropriate for studying the design of both formal and informal rules.

The IAD-affiliated approaches characterize the substance of formal and informal rules with varying degrees of granularity. Under one classification approach, rules (which can be constituted of a single directive or a grouping of directives) are characterized as one of three types: (i) operational; (ii) collective choice; or (iii) constitutional. Operational rules identify what specific activities rule targets are required, permitted, or forbidden to perform under certain temporal, spatial, and procedural conditions. Collective choice rules establish processes for making and changing operational rules. Constitutional rules define who is eligible to engage in the design of collective choice rules. Another approach affiliated with the framework classifies individual directives

[2] The IAD framework uses the term "institutions" to refer to governing rules. The framework distinguishes between institutions-in-form and institutions-in-use. In the paragraph in which this footnote is placed, institutions-in-form are referenced as formal institutions and institutions-in-use as informal institutions. Another way the framework distinguishes institutions is in terms of strategies, norms, and rules. Strategies, norms, and rules are all types of institutional statements (i.e., statements that assign, with varying degrees of prescriptive force, activities to actors). Strategies are the least prescriptive, assigning activities to actors within conditional parameters. Norms indicate whether these activities are permitted, required, or forbidden. Rules, in addition to assigning prescriptive force to activities connected to different actors, also specify sanctions for noncompliance. This level of institutional distinction was considered necessary in the context of the general discussion of the IAD framework presented in this section of the Element.

according to their functional properties. Under this schema, directives (termed "rules" in the framework) are characterized as (i) position; (ii) boundary; (iii) choice; (iv) aggregation; (v) information; (vi) payoff; or (vii) scope. Position rules identify the absolute number of individuals that can occupy a given position in a decision situation; boundary rules identify the prerequisites or eligibility criteria for occupying positions; aggregation rules relate to joint actions or decisions; information rules indicate channels of communication; payoff rules assign external rewards or sanctions for distinct actions; choice rules articulate specific actions (i.e., what an actor must, must not, or may do) in different decision situations; and scope rules identify required, desired, or prohibited outcomes (Carter et al., 2016). Finally, a third approach for dissecting the content of formal and informal rules, referred to as the institutional grammar, first divides rules (e.g., a public policy) into individual directives and then further parses the content of these directives according to (i) targets; (ii) actions assigned to targets; (iii) the prescriptive operator indicating whether actions are required, permissible, or forbidden; (iv) receivers of action; (v) spatial, temporal, and procedural conditions under which actions are applicable; and (vi) payoffs associated with compliance/noncompliance.

Schneider and Ingram's and Elinor Ostrom's work offered two notable contributions toward the study of policy design. First, it enabled a more precise depiction of the functional and substantive qualities of public policies. Many of the policy design studies published in the 1960s and 1970s characterized whole policies in relation to the broader contexts in which they were developed and applied. This second wave of policy design research offered a platform for thinking about the link between context and *particular* features of policy design. The work of Elinor Ostrom, in particular, highlighted the empirical observation that governing rules are comprised of numerous statements that have varying functional and substantive qualities, but that configure to influence behavior within certain conditions. A second notable contribution of this scholarship was that it opened the door for comparative assessments of policy designs. Having a generalizable set of policy design features meant that analysts had theoretically and empirically informed bases upon which to compare policy designs (Hood, 2007). This ability is particularly important when it comes to studies of policy outputs, outcomes, and effectiveness more broadly.

Turning to the second dominant tract of policy design scholarship developing during the 1980s through the early 2000s, provided here is a brief overview of policy design approaches that reclassified policies in relation to salient design elements. More specifically, this research oriented the study of policy design around instruments, or tools. In this scholarship, policies and the primary instruments embedded within them were used coterminously, and the study of policy design was oriented particularly around understanding the types of instruments governments use in governance, as well as why governments select one type of instrument over another to govern in a particular domain. The descriptive pursuit was enabled by the introduction of new typologies that both reflected and accommodated the growth in types of instruments employed by governments in the 1970s coinciding with increasing privatization and decentralization efforts (Mosher, 1980; Howlett, 2017). Hood (1986), for example, started with a basic delineation among instruments, classifying tools based on their reliance on nodality (i.e., information), authority, treasure (i.e., inducements), or organizational resources. Doern and Phidd (1983) place instruments on a spectrum, ranging from self-regulation to public ownership.

Salamon (1989) and Linder and Peters (1989) were particularly influential in advancing this tract of policy design scholarship. Salamon offered an approach for organizing an expanding array of instruments (e.g., various forms of grants, loans, subsidies, contracting arrangements, etc.) along the dimensions of directness, visibility, coerciveness, and automaticity, though it was not specifically in connection to the study of policy design (Salamon, 1989). Even more generally, Hood (2007) suggests that Salamon was also subsuming organizations and the variable configurations they take in various governance domains under the instrument label. This contrasts with other approaches that only consider policies in their assessment of instruments. Nonetheless, Salamon offered a valuable intellectual basis for understanding the political dynamics associated with instrument choice. Salamon's (2002) *Tools of Government* offered a useful expansion on his previous work.

Linder and Peters (1989) more explicitly connected the characterization of policy in terms of instruments with the study of policy design. They were explicit in their characterization of policy design as policy formulation, and the study of policy design as essentially the assessment of instrument choice. Linder and Peters, like others before them, offered a way to analyze how policy design is influenced by contextual factors. Distinctive about their work, however, was attention to the role of cognition – alongside various features of policy context – in shaping instrument choice. Effectively, Linder and Peters argued that the relationship between context and policy design is mediated by cognitive biases of those engaged in policy design regarding, for example, perceptions of instrument coerciveness and political risk. They presented their approach as enabling multilevel analyses of policy design; specifically, analyses that jointly account for macro- and micro-level factors. As Linder and Peters explain, "micro" pertains to individual decisions and associated calculus about instrument choice, whereas "macro" refers to broader features of the policy process. The following statement conveys their multilevel perspective on viewing policy design studies:

> Characteristics of the political system, such as national policy style, the organizational setting of the decisionmaker, and the problem situation are all likely to have some influence over the choice of instruments. The relative impact of these variables, however, is likely to be mediated by subjective factors linked to cognition. Perceptions of the proper "tool to do the job" intervenes between context and choice in a complex way. Efforts to account for variation in instrument choice, then, must focus not only on macro level variables but on micro ones as well. Linders and Peters (1989, p. 35)

Contemporary research on policy design has branched from the scholarship reviewed hitherto in various ways. In scholarship that defines policy design as policy substance or content, there has been an enduring interest in applying and developing the social construction and institutional analysis frameworks introduced, respectively, by Schneider and Ingram and Elinor Ostrom. Those working with Schneider and Ingram's framework have applied it in a variety of cases to empirically verify the relationship between target group construction and policy design; namely, that differently constructed target groups experience variable allocations of policy benefits and burdens through policy design. However, while there has been substantial effort in clarifying contextual factors that stimulate changes in social construction and policy design, there have been few attempts to understand either the antecedents or the consequences of features of policy design on policy-relevant outputs or outcomes. There has been a much more robust effort on this front by scholars applying Ostrom's institutional analysis and development framework to study public policy. Teams of scholars working with specific analytical methods affiliated with the framework have provided operational guidance for systematically and reliably identifying features of policy design (Basurto et al., 2010; Siddiki et al., 2011); have linked the presence of certain features, and combinations of features, of policy design to important governance concepts (Hanlon et al., Forthcoming); and investigated factors that influence how individuals interpret and respond to different features of policy design (Siddiki, 2014). One of these analytical methods that will be addressed in detail later in this Element is the Grammar of Institutions (Crawford and Ostrom, 1995), also referred to as the Institutional Grammar Tool (Siddiki et al., 2011) and the Institutional Grammar.

Michael Howlett has inspired the study of policy design from various perspectives in recent years. Howlett acknowledges the multiple definitions of policy design, though most of his work focuses on policy design as formulation. Nonetheless, he addresses a variety of practically and theoretically important concepts that one can explore using either of the policy design definitions offered earlier in this section. Among them is the concept of policy mixes (Howlett et al., 2015). Building on instrumentally oriented characterizations