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Context and Causal Mechanisms in Political Analysis

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Political scientists largely agree that causal mechanisms are crucial to understanding causation. Recent advances in qualitative and quantitative methodology suggest that causal explanations must be contextually bounded. Yet the relationship between context and mechanisms and this relationship's importance for causation are not well understood. This study defines causal mechanisms as portable concepts that explain how and why a hypothesized cause, in a given context, contributes to a particular outcome. In turn, it defines context as the relevant aspects of a setting in which an array of initial conditions leads to an outcome of a defined scope and meaning via causal mechanisms. Drawing from these definitions is the argument that credible causal explanation can occur if and only if researchers are attentive to the interaction between causal mechanisms and context, regardless of whether the methods employed are small-sample, formal, statistical, or interpretive.

Keywords: *causal mechanism; context; critical juncture; process; causation*

Many political scientists are united by a search for plausible causal explanations. As a discipline, political science has historically aimed for explanations that, in the process of reporting how things happen, explain why they happen. A recent surge of interest in mechanistic explanation (see, e.g., Gerring, 2008; McAdam, Tarrow, & Tilly, 2008) and the concomitant increase in the level of sophistication of qualitative positivist

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methodologies (see Brady & Collier, 2004; Hall, 2003), have given political scientists new tools to bring to bear on the search for causal explanations. As Steinberg (2007 p. 185) remarks, “even scholars who are quite comfortable with quantitative approaches often find that small-*N* research methods, with their attention to context, are indispensable for producing credible causal explanations.” But this claim opens a new set of questions. What is it that makes a causal argument credible, and why is it apt to be linked to a rich study of context?

We argue in this article that credible causal social scientific explanation can occur if and only if researchers are attentive to the interaction between causal mechanisms and the context in which they operate. Some recent scholarship has admirably emphasized the need to adapt concepts and measurements of variables to account for the differing contexts in which they are observed (Adcock & Collier, 2001; Goertz, 1994; Locke & Thelen, 1995). We take this line of reasoning one step further, arguing that unless causal mechanisms are appropriately contextualized, we run the risk of making faulty causal inferences.

One way to appreciate the importance of context for causal arguments is to think about context as a problem of unit homogeneity. We cannot expect statistical analysis to produce valid causal inferences based on units of analysis that are not equivalent in ways that are likely to be causally relevant. For example, we would not expect voter turnout to respond to short-term economic growth in the same way in democracies where voting is fully optional and in those where voting is quasi-mandatory; so, we introduce control variables or stratify the analysis to achieve causal comparability. In recent years, an explosion of political science research using multilevel models (e.g., Blekesaune & Quadagno, 2003; Jerit, Barabas, & Bolsen, 2006; Steenbergen & Jones, 2002) has allowed researchers employing statistical analyses to take context into account in a slightly different way: by recognizing that homogeneous units (e.g., individual rational actors) situated in different contexts may behave differently and that valid causal inference relies on adequately specifying the contexts within which different units are situated.

We are interested, though, in how context affects not only correlational arguments (including statistical ones) but also mechanistic ones. In a mechanistic argument, as we shall show, causation resides not solely in the variables or attributes of the units of analysis but in mechanisms. Moreover, causal effects depend on the interaction of specific mechanisms with aspects of the context within which these mechanisms operate. Hence,

unit homogeneity in mechanistic explanations requires that mechanisms, and not just variables, be portable and comparable across contexts. To be analytically equivalent (i.e., homogeneous) for comparative purposes, these contexts must possess similar values of the attributes that are likely to affect the functioning or meaning of the mechanisms that are involved in the causal process. The precise dividing line between input variables (variables that are “inside” the theory) and context (variables that reside “outside” the theory but nevertheless affect the operation of the causal mechanism) is less important to us than the observation that mechanisms must be general enough to be portable across different contexts but may produce different results in analytically nonequivalent contexts.

The remainder of our argument proceeds in two steps to demonstrate why valid causal inference requires contextualizing causal mechanisms. We begin by explaining what we take to be a causal mechanism and why we believe it is crucial to distinguish between causal mechanisms and variables. Political scientists of all stripes routinely use causal mechanisms to open the black box between inputs and outcomes in the social processes under study. Yet despite the importance and ubiquity of causal mechanisms in political scientists’ causal theories, there is surprisingly little agreement on what they are or how they work. In the first section of this article, we define causal mechanisms as relatively abstract concepts or patterns of action that can travel from one specific instance, or “episode” (Tilly, 2001, p. 26), of causation to another and that explain how a hypothesized cause creates a particular outcome in a given context.

In the second part of our argument, we build on this definition of causal mechanisms to show why mechanisms alone cannot cause outcomes. Rather, causation resides in the interaction between the mechanism and the context within which it operates. Context, as we shall see, is defined by a number of potentially relevant attributes. We take as an example the temporal aspects of the context within which a causal process plays out, and we emphasize the difficulties that attend to the task of contextualization when we understand context to be composed of multiple unsynchronized layers of institutions, policies, and background conditions. Other, nontemporal aspects of context raise similar issues; we choose this one as an example because it is of relevance to comparative historical institutionalist analysis, within which discussion of causal mechanisms has been particularly prominent.¹

The final section of the article offers some potential solutions to these problems, centering on the goal of building middle-range theories by making theory-guided choices about contextualization and periodization.

Defining Causal Mechanisms

Despite a growing interest in causal mechanisms in the social sciences—equally expressed by scholars who subscribe to different epistemological and methodological traditions—there is little consensus in the literature about what causal mechanisms are. Mahoney (2001, pp. 579-580) identifies 24 definitions of causal mechanisms, as proposed by sociologists, political scientists, and philosophers of science in the last 35 years. Even more definitions, some of which we discuss below, can be added to that list. Yet causal mechanisms are most often conceptualized as links between inputs (independent variables) and outcomes (dependent variables). They serve to open the black box of lawlike probability statements that simply state the concurrence or correlation of certain phenomena or events. Statements of the type “If *I*, then *O*” ($I \rightarrow O$) become “If *I*, through *M*, then *O*” ($I \rightarrow M \rightarrow O$). But a central disagreement remains whether causal mechanisms deserve an ontological status distinct from variables. We argue that they do and that this has important implications for how we think about the relationship between mechanisms, contexts, and causation.

It is common in political science work that utilizes mechanistic thinking to conflate mechanism with intervening variable. King, Keohane, and Verba (1994) argue that “an emphasis on causal mechanisms makes intuitive sense: any coherent account of causality needs to specify how its effects are exerted” (pp. 85-86). But for these authors, mechanisms are simply a chain of intervening variables that connect the original posited cause and the ultimate effect (p. 87). For example, variables such as minority disaffection and governmental decisiveness are the mechanisms that explain how the political system (presidential or parliamentary) affects democratic stability in a hypothetical large-sample research study (King et al., 1994, p. 86). Kitschelt (2003), in his historically informed qualitative study of regime polarization among postcommunist countries, similarly defines causal mechanisms as intervening variables. He identifies “the presence or absence of ingredients of professional versus patronage bureaucracy” and “the organization of civil society before and under communism” as the mechanisms that explain why some countries move toward full democracy while others slide into authoritarianism (Kitschelt, 1999, pp. 24, 27). Despite the use of different research methods, both King et al. and Kitschelt define causal mechanisms as chains of intervening variables.

In fact, the ontological status of mechanisms, as compared to intervening variables, remains contested. Mahoney (2001) convincingly argues that the notion of mechanisms as intervening variables ultimately falls back on

correlational assumptions: “[A] variable’s status as a ‘mechanism’ as opposed to an ‘independent variable’ is arbitrary. . . . A correlation is ‘explained’ simply by appealing to another correlation of observed variables” (p. 578). We agree with Mahoney that mechanisms cannot simply be attributes of the units of analysis. Whereas variables are observable attributes of the units of analysis—with values (nominal, ordinal, or numerical) and with sample and population distributions—mechanisms are relational concepts. They reside above and outside the units in question, and they explain the link between inputs and outputs. Mechanisms describe the relationships or the actions among the units of analysis or in the cases of study. Mechanisms tell us how things happen: how actors relate, how individuals come to believe what they do or what they draw from past experiences, how policies and institutions endure or change, how outcomes that are inefficient become hard to reverse, and so on (for ontological definitions of causal mechanisms similar to ours see Bowen & McAdam et al., 2001; McAdam et al., 2008; Petersen, 1999).²

Although we agree with Mahoney (2001) that causal mechanisms cannot be reduced to intervening variables without losing their explanatory leverage, we part company with him on another key point: whether mechanisms are deterministic in their operations. In seeking to move away from the notion of mechanisms as variables, Mahoney requires that a causal mechanism be an “entity that—when activated—generates an outcome of interest.” This definition “assumes that . . . if the mechanism actually operates, it will always produce the outcome of interest” (p. 580). Mahoney’s definition implies, importantly, that mechanisms are the bases of deterministic, lawlike statements. We argue that mechanisms, as portable concepts distinct from the variables attached to particular cases, operate in different contexts. And because mechanisms interact with the contexts in which they operate, the outcomes of the process cannot be determined a priori by knowing the type of mechanism that is at work. It is worth examining in greater detail the principles of portability and indeterminacy that derive from our definition of causal mechanisms, given that they drive the search for contextualization that motivates the second half of this article.

Hedström and Swedberg (1998) provide a good example of an individual-level mechanism that serves as an explanatory link connecting individuals’ behavior and social outcomes in three different sociological theories. In the first theory, Merton’s self-fulfilling prophecy (1948/1968), an initially false conception evokes behavior that eventually makes the conception come true. In the second setting, physicians’ positions in various professional networks influence the diffusion of a new drug (Coleman, Katz, & Menzel,

1957). Finally, Granovetter's threshold theory of collective behavior (1978) argues that an individual's decision to participate in collective behavior often depends on how many other actors have already decided to participate. The same individual-level causal mechanism operates in these three diverse contexts:

the core characteristics of these theories . . . the general *belief-formation mechanism* which states that the number of individuals who perform a certain act signals to others the likely value or necessity of the act, and that this signal will influence other individuals' choices of action. . . . On the fundamental level of mechanisms, the run on the bank, the prescription of the drug, and the emergence of the collective movement, all are analogous. (Hedström & Swedberg, 1998, p. 21)

Boundary control is another example of a portable causal mechanism. Rokkan (1983) proposes this concept to analyze the defensive strategies of cultural peripheries against encroachments from the center. Gibson (2005) adapts the same concept to refer to the strategies of subnational authoritarian leaders in maintaining their regional hegemonic power in the context of nationally democratic polities. Finally, despite not labeling the concept, Gambetta (1998) describes the same mechanism of boundary control, as driving the behavior of the "barons" of the Italian academic system, who seek to insulate their domain from the rest of the world (p. 108). In all these examples, the same concept is used to refer to the strategies of either individual or collective actors who operate in different contexts. Despite radical differences among the three contexts (culturally defined regions, subnational political units, and academia), they all constitute subunits of larger entities in which those who exert local domination seek to protect themselves from external influences. Although the specific contexts differ, if a researcher is interested in the process of controlling boundaries, then these three disparate contexts are indeed analytically equivalent.

Of course, defining a mechanism as a portable concept that describes how causation occurs does not mean that it will operate in every context. Some mechanisms seem quite general and are even presumed by some to operate universally—rationality, for example, in the sense of individuals acting to maximize their perceived utility. But many other mechanisms are not nearly so ubiquitous. Some mechanisms apply only to a subset of all possible contexts. Boundary control is one such example; another is the circular flow of power that is hypothesized to operate in Leninist regimes (Daniels, 1988).

Hence, whereas belief formation or boundary control are not mechanisms with applicability in every conceivable social or political setting, they

are nevertheless portable. And because they are relational and processual concepts, they are not reducible to an intervening variable that can be applied to the units of analysis.³ Table 1 provides examples of causal mechanisms found in recent works of political methodology and comparative politics that fit our understanding of causal mechanisms as portable concepts related to the process of causation and not simply to attributes of the units of analysis.

For the sake of arriving at a comprehensive definition, it is worth noting some other important features of causal mechanisms. First, whereas all causal mechanisms are portable, they may be cast at different levels of abstraction. Some mechanisms can be linked to form larger processes (Bowen & Petersen, 1999, p. 4). In Table 1, the mechanisms in parentheses are subtypes of the higher-level mechanisms (or, to be more precise, processes).⁴ Boundary control, for example, is a subtype of a more general mechanism/process, power reproduction; and increasing returns is a more general mechanism/process than positive feedback, which is in turn more general than policy ratchet effect. Similarly, the learning mechanism encompasses different subtypes. At the collective level, it includes *social learning*, the accumulated experience of administrators and experts in a policy area that promotes durability (Hecló, 1974; Rose, 1990), and *political learning*, the lessons drawn from past political experiences that inform political actors' current actions (Przeworski et al., 2000). At the individual level, distinctions can be drawn between *dispositional learning*, which occurs when actors develop a reflective disposition in working with a complex environment (Radinsky et al., 2000, pp. 6, 14), and individual learning that does not presuppose active engagement with the environment, such as *repetitive learning*.

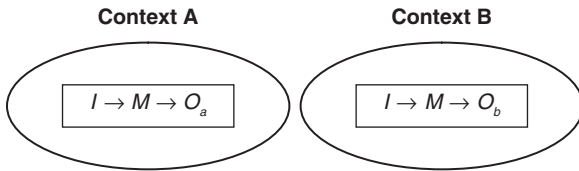
Second, we depart from the methodological individualist tradition that conceives mechanisms as the result of individual beliefs, actions, and attitudes (e.g., Boudon, 1998, p. 199; Elster, 1998, p. 47; Kitschelt, 2003, p. 59). In Table 1, we order mechanisms according to the level of analysis to which they refer. As others have argued before us (e.g., Ekiert & Hanson, 2003, pp. 15-48; George & Bennett, 2005, p. 142; McAdam et al., 2001, pp. 25-26), mechanisms may occur at a variety of levels of analysis and in different types of contexts. And micro-level mechanisms are no more fundamental than macro-level ones (Mahoney, 2003, p. 5; Stinchcombe, 1991). Some are individually based (adaptive expectations, rational choice), whereas others apply to collective actors (policy ratchet effects, layering, conversion), social systems (increasing returns, functional consequences), or both (policy drift).

Table 1
Sample Causal Mechanisms by Scope of Application

Causal Mechanism	Brief Definition	Causal Agent	Exemplary Citations
Belief formation (adaptive expectations)	People act in accordance with signals from others about the likely value or necessity of an act.	Individual	Hedström and Swedberg (1998, p. 21)
Rational choice	Individuals act to maximize their perceived utilities.	Individual	Olson (1965)
Brokerage	A mediating unit (group or individual) links two or more previously unconnected social sites.	Individual or collective	McAdam et al. (2001)
Coordination	Benefits from a particular activity increase as others adopt it, encouraging further adoption.	Individual or collective	Pierson (2000, pp. 76-77)
Framing	Elites shape behavior via subjective orientations and beliefs about appropriate or desirable political actions.	Individual or collective	Huber and Stephens (2001, p. 11)
Power reproduction (boundary control; circular flow of power)	Elites preserve power by securing successors of the same persuasion, promoting institutional changes to enhance power, defending from encroachment by outsiders.	Individual or collective	Gibson (2005, pp. 108-112), Daniels (1988, p. 88)
Learning (social learning; political learning)	Actors act in accordance with lessons drawn from relevant, often past, political experience.	Individual or collective	Hecló (1974, p. 340); Rose (1990, p. 275)
Positive feedback (organizational inertia; policy ratchet effect)	Policies endure by creating their own constituencies, shifting center of gravity of the policy agenda.	Collective	Huber and Stephens (2001, p. 22)
Replacement	Change in a collectivity occurs as old members die off and new ones replace them.	Collective	Pierson (2003, p. 190)
Layering	Progressive amendments, revisions, and additions slowly change existing institutions.	Collective	Streeck and Thelen (2005, pp. 22-23)
Conversion	New goals, functions, and purposes redirect existing institutions.	Collective	Streeck and Thelen (2005, p. 26)
Policy drift	Outcomes of policies change when policies are not adapted to new circumstances.	Collective or social system	Streeck and Thelen (2005, pp. 24-26)
Increasing returns	Systems persist or grow via decreasing costs because of positive network externalities.	Social system	David (1985, p. 335)
Functional consequence	Systems come into being or persist because of the function they perform in a larger system.	Social system	Mahoney (2000, p. 517)

Note: Mechanisms in parentheses are subtypes of more abstract mechanisms or processes.

Figure 1
 $I \rightarrow M \rightarrow O$ Model in Different Contexts



Note: I = inputs; M = mechanisms; O = outputs.

Furthermore, as indicated above, we depart from one widespread view holding that mechanisms lead to deterministic outcomes (Bunge, 1997; Mahoney, 2001). Although we are interested in mechanisms as portable concepts and what is constant in them, we agree with Elster (1998) in that they are “triggered under generally unknown conditions or with indeterminate consequences” (p. 45). In fact, to us, the interaction between mechanism and context is what determines the outcome. Given an initial set of conditions, the same mechanism operating in different contexts may lead to different outcomes, as represented in Figure 1.

In other words, the indeterminacy of the outcome resides not in the mechanism but in the context. As Goertz (1994) puts it in his description of context as meaning, “the basic X causes Y model is now embedded in some context. Context plays a radically different role than that played by cause and effect; context does not cause X or Y but affects how they interact” (p. 28).⁵ Pawson (2001) takes a similar approach when he states that “whether [a] mechanism is triggered depends on context” (p. 5) and so warns policy makers about the risk of mechanically transferring successful policy programs to contexts in which the underlying mechanism may not lead to the same outcome. Mackie (1965), too, highlights that factors that are often relegated to the background—namely, contextual conditions—are often essential parts of causation; that is, it is only in interaction with these factors that the cause can have its effect (with *factors* lying outside the theory and *cause* inside). Because the outcome of a causal mechanism depends on its context, we need to distinguish between mechanisms and their contexts and so define both the mechanism at work and the context in which it operates. In the next section, we consider the central issue of how we can formulate valid causal arguments when the measurement of variables and the identification of causal mechanisms may be affected by context.

Contextualizing Causal Mechanisms

What Is Context?

Pawson's middle-range realism (2000) posits context as causal mechanism's "partner concept" (p. 296). Outcomes of causal mechanisms are not fixed but dependent on the contexts within which they occur. Pawson illustrates with the example of gunpowder. Gunpowder has a chemical makeup that gives it the potential to explode in the presence of a spark, owing to a combustion mechanism, but it does so only when contextual conditions are conducive to the operation of the mechanism (e.g., the right amount of humidity in the air, the right amount of gunpowder; p. 296). But what are the elements of context that are likely to affect social mechanisms? If theorizing about social life requires attention to context, then what, precisely, are we supposed to pay attention to?

Bunge's notion of systemness (1997) provides some clues. According to Bunge, mechanisms operate within systems, which are defined by their composition (the set of parts that make up the system), their environment (which Bunge does not define), and their structure (how the constituent parts are connected to one another and to "things in the environment that influence or are influenced by" the constituent parts; p. 416). Aspects of Bunge's notion of systemness—particularly, environment and structure—contribute to our definition of context. We are reminded that elements that are not directly on the $I \rightarrow M \rightarrow O$ path (inside the theory) but reside in some other aspects of the system (outside the theory) may nevertheless affect the functioning of a mechanism—hence, the nature of O .

Drawing on Pawson (2000) and Bunge (1997), we define context broadly, as the relevant aspects of a setting (analytical, temporal, spatial, or institutional) in which a set of initial conditions leads (probabilistically) to an outcome of a defined scope and meaning via a specified causal mechanism or set of causal mechanisms. From this definition, it follows that a causal explanation requires the analyst to specify the operative causal mechanism and to delineate the relevant aspects of the surroundings—that is, those that allow the mechanism to produce the outcome. Herein, of course, lies the challenge. How can we know what aspects of the context are relevant to the outcome until we have an explanation for the outcome? Our view of causation depends on a definition of context that is tied to the process and outcome of interest. Does this not simply give researchers license to "explain" something by selecting, in an ad hoc way, the contextual factors that contribute to its occurrence? If it were not for the fact that researchers routinely make these kinds of decisions (albeit in an often

less than fully conscious way), we might worry. But theory-guided research routinely sets scope conditions, and we believe that theory can and should be used to specify, before the fact, what aspects of a context are likely to be relevant to the process and outcome under study, above and beyond the input variables directly included on the $I \rightarrow M \rightarrow O$ path.

We turn our attention now to one aspect of context: the temporal context within which causal processes play out. By paying close attention to how the causally relevant aspects of a temporal context are defined and selected, we hope to illustrate more generally how context may be specified to aid in constructing valid causal explanations.

Causation in Time

Social processes are rarely instantaneous (or even as close to instantaneous as the ignition of gunpowder). This being the case, periodization—that is, specifying the beginning and ending of the temporal context within which causal process plays out—is essential for a great many of the political processes that we study. Historically oriented political science research in particular is notable for its theoretically based expectation that various aspects of the temporal context matter for explaining outcomes. If comparative historical research is insufficiently attentive to the methodological importance of completely specifying the temporal context within which causal mechanisms work, then we can be sure that fault plagues other modes of political analysis as well. In the remainder of this section, we consider some of the pitfalls inherent to the standard periodization techniques utilized by those researchers most sensitive to temporal context.

As Pierson (2004) notes, a variety of time-related aspects may be relevant to political explanation—not least because of the way that they affect the functioning of causal mechanisms. *Sequencing* refers to when things happen—whether in world historical time, in relation to signal events within politics (e.g., the development of working-class parties), or in relation to more contingent events or to processes closer at hand (e.g., the availability of certain policy models). As such, sequencing may affect how and whether a specific mechanism works (see for example, Falleti, 2005). Tempo and duration—that is, how long things take—may also suggest a likely set of plausible mechanisms. Outcomes that come about slowly, gradually, or after a long lag (e.g., policy drift, increasing returns) are likely to be produced by mechanisms different from those that produce outcomes that occur swiftly or suddenly (e.g., tipping points, rational choice; see Pierson, 2004, chap. 3).

Our focus here is on a third aspect of temporality: when things start. Starting points have had relevance for historical institutionalist analysis because the notion of path dependence, which is at the center of many such analyses, relies on a well-specified starting point. Historical institutionalist scholars typically use starting points and critical junctures to delineate one context from a second context—namely, before (in which a mechanism does not function) and after (in which it does function). We argue, however, that the act of periodizing as a way of marking shifts in context is often insufficiently theorized in historically oriented research, and so runs into difficulties when confronted with causal mechanisms that operate at the aggregate or structural level rather than the individual level.

Context and Periodization

If causal mechanisms are portable but context-dependent, then to develop causal theories, we must be able to identify analytically equivalent contexts (as we have defined them above) as well as specify where one context ends and another begins. For historical researchers, the passage of time is the most obvious indication that a context has changed. As such, in historically informed analyses, periodization plays an important role in the development of causal theories.

Several recent methodological works stand out for their careful examination of periodization in causal analysis. Büthe (2002) identifies a tension between formal models, which provide “an explicit, deductively sound statement of the theoretical argument, separate from a particular empirical context” (p. 482), and the analysis of complex causal processes over time, which often involve feedback loops or other forms of endogeneity. Büthe sees the analysis of historical narrative as a solution to the problem of decontextualized, sequence-less formal models, but he also recognizes the difficulty of knowing where to start and end a narrative. Ultimately, he advises that “the specification of the *explanandum* . . . provides the criteria for choosing the beginning and end of the narrative” (p. 488)—advice that we echo below. Yet Büthe notes that this advice will prove inadequate when the process to be explained does not have a “clear starting point (e.g. an exogenous shock)” and has not “run its course” (p. 487).

In response to this problem, Büthe advocates delineating the beginning of a new context with reference to the onset of the causal mechanism that produced the outcome. Analyses that use critical junctures to delineate the beginning of a period are one example of this strategy—an example that, we think, can under certain circumstances be a siren call to ignore crucial

aspects of context in an attempt to achieve causal comparability among analytically nonequivalent temporal contexts.

A critical juncture is often defined *ex post* as the starting point of a path-dependent causal process that leads to the outcome of interest. Many analyses situate the critical juncture at the point of some exogenous shock (war, depression, shift in commodity prices, etc.). Despite this, the most widely read, classic examples of critical junctures analysis (e.g., Collier & Collier, 1991; Lipset & Rokkan, 1967; Moore, 1966), as well as some newer works (see, e.g., Hacker, 2002), embed critical junctures in a richly detailed context; they make it clear that the outcome of the causal process, which begins with the critical juncture, may be influenced by a variety of other environmental features.

However, a new strain of theorizing about critical junctures highlights their status as distinctive break points with the previous context. Mahoney (2000) demands that the start of a path-dependent process be contingent, by which he means that “its explanation appears to fall outside of existing scientific theory” (p. 514). Examples of these unpredictable events that may constitute critical junctures include exogenous shocks or decisions made by political actors, often with proper names. Similarly, Capoccia and Keleman (2007) emphasize the delinking from context that occurs at a critical juncture: “Critical junctures are characterized by a situation in which the ‘structural’ (that is, economic, cultural, ideological, organizational) influences on political action are significantly relaxed for a relatively short period” (p. 343).

One implication of this newer mode of critical junctures analysis, taken together with Büthe’s work (2002), is that the starting point of the temporal context surrounding the $I \rightarrow M \rightarrow O$ pathway is marked precisely by the critical juncture, which identifies the beginning of the process of interest. This conceptualization of a starting point is a useful tool for identifying the beginning of a path-dependent process. It may not be a good guide, however, to illuminating continuity and change in other important aspects of the context that may have an important effect on the outcome of interest.

Lieberman (2001) wisely goes beyond critical junctures in his search for periodization strategies in historical institutionalist analysis. Lieberman identifies four types of starting points: a change in the outcome (the origination of a new institution of interest or important changes in such institutions); an exogenous shock that changes the conditions in which the institution operates; and a change in some “rival independent variable” present in the “background” (p. 1019, Table 1). These varied points, potentially marking the beginning of a new context, need not all coincide with the onset of the mechanism presumed to be responsible for the outcome of interest. In Lieberman’s framework, periodization may be based on activity, in numerous

layers of the context within which a causal process plays out, be they proximate institutions, background conditions, or truly exogenous events.

This reconceptualization of starting points opens the door for a consideration of causal processes that are generated by interaction or friction between the different aspects of the context. As Orren and Skowronek (1994) note, the multiple layers, or “orders,” of institutions that constitute the polity or context at any given time are not “synchronized in their operations”; rather, these orders “abrade against each other and, in the process, drive further change” (p. 321). In the next section, we consider how to approach the causal explanation of social processes that take place in contexts characterized by overlapping layers governing the relationships between inputs and outcomes.

Causation in Multilayered Contexts

In historical analysis, we are likely to be concerned with a variety of contextual layers: those that are quite proximate to the input (e.g., in a study of the emergence of radical right-wing parties, one such layer might be the electoral system); exogenous shocks quite distant from the input that might nevertheless effect the functioning of the mechanism and, hence, the outcome (e.g., a rise in the price of oil that slows the economy and makes voters more sensitive to higher taxes); and the middle-range context that is neither completely exogenous nor tightly coupled to the input and so may include other relevant institutions and structures (the tax system, social solidarity) as well as more atmospheric conditions, such as rates of economic growth, flows of immigrants, trends in partisan identification, and the like. Lieberman (2001) conceives of this background context as the locus of rival causes. However, we believe that recent research (e.g., Hacker, 2002; Lynch, 2006; Streeck and Thelen, 2005) bears out Orren and Skowronek’s contention (1994) that the interaction of different layers of context may be the site of important causal mechanisms.

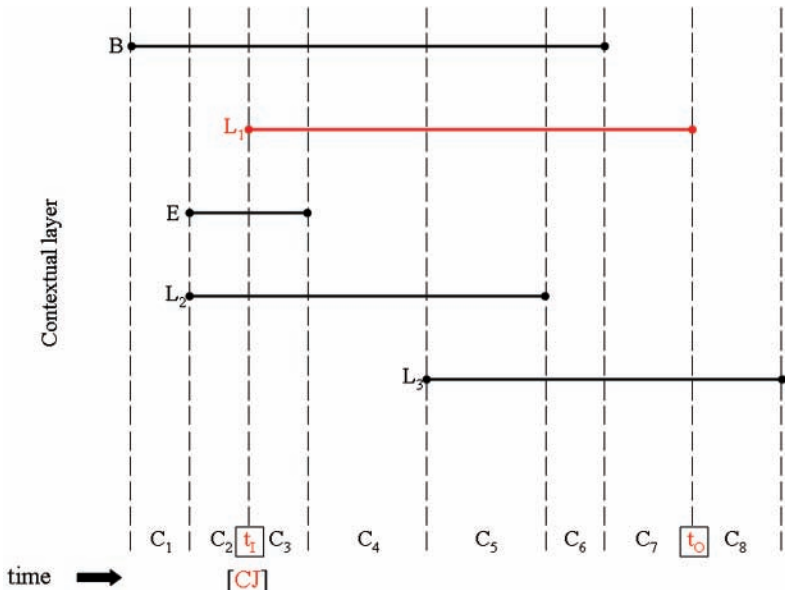
In her 2006 book *Age in the Welfare State*, Lynch illustrates how the multiple layers of context within which a causal mechanism operates can play an essential role in generating the outcome of interest—in this case, the extent to which social policies in different countries privilege the elderly over working-aged adults and children. In Lynch’s argument, two critical junctures mark choice points in the development of welfare state institutions, and path-dependent mechanisms tend to reinforce the choices made during these moments. But the age orientation of social policies in different countries cannot be satisfactorily explained within a framework that specifies critical junctures as moments of radical discontinuity. Rather,

Lynch argues that processes occurring in three layers of context interact to produce the age orientations observed circa 1990. The first layer is the political arena, where the policy preferences of parties and unions take shape; the second is the institutional arena of social policy programs; and the third is a layer composed of slow-moving background processes: population aging, the gradual closure of many Continental European labor markets to younger job seekers, and the development of public and private markets for old-age insurance. Much of the important action in Lynch's analysis is caused by policy drift (Hacker, 2004, 2005), a mechanism that links policy outcomes to the interaction between the first two layers (political and institutional) and the third (demographic and labor market). Note that policy drift is a mechanism that can operate only in a system characterized by multiple layers of relevant context.

If political contexts tend to be layered, with processes occurring at different speeds in different layers, and if some mechanisms are characterized by the interaction of separate layers, then periodization in historical analysis should be attuned to the start and end points (as well as to the tempo and duration) of multiple processes in multiple layers. Consider a causal process that begins at time t_1 (for *input*), with a change in the main institution of interest, as found in contextual layer L_1 (see Figure 2). A critical junctures analysis would start the clock at time t_p , tracing the outcome occurring at time t_o (for *output*) back to the change in the institution in L_1 . In this case, the change in this institution follows closely (but not instantaneously) upon an exogenous shock E (which spans considerably less time than that of most other elements in the diagram but does have some measurable duration). Preceding the exogenous shock and lasting well past the critical juncture at time t_p , background condition B exerts a continuous influence on the unfolding of the causal process and so can be causally connected to the outcome of interest, t_o . A second causal process, linked to a change in contextual layer L_2 , also predates and persists through the critical juncture, although its start and end points do not coincide neatly with B either. Another process of potential relevance to O occurs in L_3 but continues beyond the occurrence of t_o . Which context is the relevant one in this diagram to explain t_o ? Only the temporal context starting at C_5 captures all the major contextual layers, but it excludes the exogenous shock and the resulting critical juncture.

Based on this schematic representation of unfolding causal processes in a layered context, a perfect periodization scheme may prove elusive; as such, one must take care when making decisions about periodization—especially in specifying which layers of context are relevant and in what ways, as Lynch (2006) does. Because the multiple layers of context that

Figure 2
Periodization in Multilayered Contexts



Note: *B* = background; *L* = layer; *E* = exogenous shock; *C* = context; *t* = time; *I* = input; *CJ* = critical juncture; *O* = output.

affect the outcomes of causal processes cannot all be expected to change at the same moment, dividing a historical narrative into periods based on the starting or ending point of a single causal process risks hiding from view precisely those interactions among layers moving at different speeds that can generate change over time. There are three crucial implications. First, critical junctures and other starting points that hone in on the initiation of a single $I \rightarrow M \rightarrow O$ pathway may miss the causal impact of things that do not change at all, or do not change at the same time as the critical juncture. Second, interactions between layers may be as important in producing outcomes of interest as any single causal mechanism. Finally, comparison across cases may call for different periodization strategies to ensure analytical equivalence of contexts.

Practical Implications for Research

If the context within which a social mechanism operates has many institutional layers (or cognitive layers, ideational, etc.), layers that may be relevant to the functioning of the mechanism, then periodizing as a method for generating contextually, and hence causally, homogeneous subunits of a narrative (Büthe, 2002) becomes fraught with difficulties. We argue that causal mechanisms are relatively abstract portable concepts whose causal force is given by the contours of the environment in which they operate. These contours change over time; thus, to observe the causal mechanisms at work, we must divide time into pieces within which the relevant context is constant.

We advocate periodizing based on important moments in those layers of the contextual environment that are likely to be most relevant to the process and outcome of interest, from an explanatory point of view. Within the mass of all possible aspects of the environment that could be interconnected with the outcome, we must use theory to identify those that are most salient to the research question and hypotheses to be tested. Our research question, hypotheses, and the nature of the outcome of interest will determine which institutions, events, or background conditions are likely to be the most crucial. Consider Figure 2, for example, and the eight contexts and their possible combinations. In deciding what to focus on, we depend upon our theories to tell us which one is the most likely to yield an efficient and plausible explanation for the outcome of interest.

An important corollary of this proposition is that no one type of starting point is ontologically superior to any other. Critical junctures and exogenous shocks are not inherently more interesting or more causally important than endogenously determined moments of institutional creation, or the slow-moving changes that sometimes occur in the background. The context that we choose may start with any one of these elements; it may contain some or all of them; or it may cut across the linear temporalities initiated with events, institutions, and background conditions. Moreover, analytically equivalent contexts may not be temporally bracketed in the same way across different cases. The study of analytically equivalent democratization processes, for example, may call for the selection of a critical juncture—say, losing in a war—as the starting point of the causal narrative in one country; yet changes in background conditions (e.g., changes in level of economic development) and other events that are temporally closer to the theory's inputs (e.g., the signing of a transition pact) may be more relevant temporal markers of contexts in other cases.

A second strategy for specifying the appropriate context for a causal explanation consists of relating the context to our definition of the object of study. For example, how we define important concepts related to our dependent variable (industrial relations, social revolution, party system) will have implications for how we select the key elements of the environment—that is, those elements that are so closely related to the definition of our object that, once those elements change, we can confidently declare that we are in a different context. If we see a party system, for example, as a fundamental reflection of the rules governing the access of politicians to legislative seats, we are likely to highlight a different set of contextual layers than if we view party systems as reflecting the development of class identities in the electorate.

Another example of how to specify the appropriate context in relation to the object of study comes from the work of Falleti (2005). She defines decentralization as a process of state reforms composed by a set of public policies that transfer responsibilities, resources, and authority from higher to lower levels of government (p. 328). Thus, the type of state in which these policies take place is crucial for the identification and contextualization of the policies of interest. Because decentralization is a process of state reform, a transition to a different type of state (e.g., oligarchic, developmentalist, neoliberal) implies that the contents, goals, and meanings of the decentralization policies—and their interactions with the broader political and economic systems—will also change. For example, in the context of oligarchic states, decentralization measures mainly sought to balance power between national and subnational elites as a prerequisite for nation-state building. In the context of developmentalist states, decentralization measures aided regional economic development, deemed necessary for private investment. Meanwhile, in the context of neoliberal states, decentralization policies sought to shrink the size of the national bureaucracy, seen as a requisite for macro-economic stability. These are not simply different periods of the same underlying process. They are, instead, different processes (in this case, of decentralization and state reform) that are taking place in analytically nonequivalent contexts, where the same causal mechanism may lead to different results.

A corollary of this second strategy for selecting the relevant context is that scholars must be acutely attuned to the analytical equivalence of the contexts they study. Whether the researcher decides to focus on micro- or macro-level causal mechanisms and whether she or he prioritizes short- or longue-durée explanations, contextualizing is always necessary for drawing valid conclusions. Formally similar inputs, mediated by the same mechanisms, can lead to different outcomes if the contexts are not analytically equivalent. For this

reason, we concur with Adcock and Collier (2001, p. 535) in recommending that researchers engage in careful reasoning to establish equivalence across context-specific domains of observation.

The strategies that we have proposed here suggest that by allowing theory to guide our decisions about what aspects of context are likely to be relevant to causal explanation, scholars can not only meaningfully define and operationalize the contexts that make their explanations valid and relevant but also compare across contexts. Properly contextualized explanation allows us to identify causal mechanisms that are portable and generalizable yet not so universal or abstract that they deprive the analysis of any real social meaning.

Conclusion

In this article we argue that causal mechanisms by themselves do not cause outcomes to occur; rather, the interaction between causal mechanisms and context does. We see causal mechanisms as being ontologically different from intervening variables. Whereas variables measure attributes of specific cases, causal mechanisms uncover the underlying social processes that connect inputs and outcomes. As such, causal mechanisms are distinct from both inputs and outputs; they are portable and so may operate in different contexts. But depending on the nature and attributes of those contexts, the same causal mechanism could result in different outcomes.

The role of context in producing the outcomes that interest us poses challenges to all scholars, not least those who employ comparative historical methods. Small-N comparative historical research is singularly well-suited to uncovering causal mechanisms (Bowen and Petersen 1999; Hall 2003), especially when we recognize that most social contexts comprise multiple, potentially unsynchronized, potentially causally important layers. Under such circumstances, how we define context is crucial for the validity of comparative historical causal explanations. An important implication of our understanding of causal mechanisms is that one commonly used tool for periodizing, namely using a critical juncture in one or two layers of context to signal the right start- or end-point for the analytical job at hand, may thwart attempts to arrive at good causal explanations.

More generally, we argue that specifying the analytically relevant aspects of the context within which a causal mechanism plays out is an integral yet widely ignored part of building valid causal explanations. It is as at least as important, we think, as making sure that our measures of key

variables are properly calibrated for the context in which *they* occur. In this article we have offered a rationale, linked to a particular understanding of mechanistic causation, for why this needs to be done, and have laid out some practical strategies that we hope will help researchers accomplish the crucial task of specifying the analytically relevant and equivalent contexts.

Notes

1. Although the examples in this article are drawn mainly from the field of comparative politics (and, within that, historical institutionalism), scholars of international relations, American political development, and political behavior are likely to confront similar issues when constructing causal explanations that are appropriately contextualized. See Adcock and Collier (2001).

2. The presence (or absence) of a mechanism in a case could be measured with a dummy variable, thus becoming an attribute (or variable) of the case. But this is a second-order measurement of the mechanism, useful when comparing across cases. In the first order of measurement—that is, in its relation to the units of analysis—the mechanism describes a relational pattern of action that is not reducible to a variable or a set of attributes of the units.

3. Of course, causal mechanisms are not the only type of portable concepts. Dahl's concept of polyarchy (1971, p. 8), for example, can be applied to describe a large number of political regimes, across time and space. However, unlike concepts and ideal types that define the characteristics of objects, mechanisms describe the action taking place in the process of causation. In other words, what must be portable is the conceptualization or description of how inputs and outputs are connected.

4. For further conceptual disaggregation of processes and mechanisms, see Falleti and Lynch (2008).

5. Goertz (1994) identifies two other modes: context as cause and context as barrier. In our view, the latter can be subsumed under context as meaning, whereas the former conflates variables with mechanisms.

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