THE STUDY OF CRITICAL JUNCTURES
Theory, Narrative, and Counterfactuals in Historical Institutionalism

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I. INTRODUCTION

THE concept of "critical junctures" is an essential building block of historical institutionalism. Many causal arguments in the historical institutionalist literature postulate a dual model of institutional development characterized by relatively long periods of path-dependent institutional stability and reproduction that are punctuated occasionally by brief phases of institutional flux—referred to as critical junctures—during which more dramatic change is possible.[1] The causal logic behind such arguments emphasizes the lasting impact of choices made during those critical junctures in history.[2] These choices close off alternative options and lead to the establishment of institutions that generate self-reinforcing path-dependent processes. In Pierson's words,

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[1] Of course, this dual model of institutional development is not the only one used by historical institutionalists: important recent contributions have emphasized alternative causal models such as layering, conversion, and drift. See, for instance, Kathleen Thelen, "How Institutions Evolve," in James Mahoney and Dietrich Rueschemeyer, eds., *Comparative Historical Analysis in the Social Sciences* (Cambridge: Cambridge University Press, 2003); Eric Schickler, *Disjointed Pluralism: Institutional Innovation and the Development of the U.S. Congress* (Princeton: Princeton University Press, 2001); and Jacob Hacker, "Privatizing Risk without Privatizing the Welfare State," *American Political Science Review* 98 (May 2004). See also Kathleen Thelen, *Union of Parts* (Ithaca, N.Y.: Cornell University Press, 1991), 21–24; Kathleen Thelen and Sven Steinmo, "Historical Institutionalism in Comparative Politics," in Sven Steinmo et al., *Structuring Politics: Historical Institutionalism in Comparative Analysis* (Cambridge: Cambridge University Press, 1992), 16–18; Douglass North, "Five Propositions about Institutional Change," in Jack Knight and Itai Sened, eds., *Explaining Social Institutions* (Ann Arbor: University of Michigan Press, 1995), 18.

[2] These moments of fluidity are also referred to in the literature with terms such as "turning point," "crisis," and "unsettled times." We will use the term "critical juncture" throughout our analysis.

"Junctures are 'critical' because they place institutional arrangements on paths or trajectories, which are then very difficult to alter."[3] Path dependence is a crucial causal mechanism for historical institutionalists, and critical junctures constitute the starting points for many path-dependent processes.

Despite the theoretical and practical importance of critical junctures as the genetic moments for institutional equilibria, analyses of path dependence often devote little attention to them, focusing instead on the "reproductive" phase launched after a path-dependent process is initiated. The most notable exceptions are the macrohistorical analyses of the development of entire polities.[4] Authors in this tradition invoke a "branching tree" metaphor to capture the notion that institutional trajectories can diverge during critical junctures; these authors put the moments of institutional formation at the center of their analyses. While such landmark macrohistorical analyses have been vital to the development of the critical junctures framework, these analyses have shortcomings as potential guides to scholars in other subfields who would develop arguments based on critical junctures. Despite their explicit reference to a more general model of institutional development borrowed from institutional economics,[5] macrohistorical analyses have developed a framework suitable for their own subject matter but ill suited to studies of critical junctures in many other fields of institutional analysis. In fact, macrohistorical analyses often explain the divergence that occurs during critical junctures as resulting from structural, antecedent conditions rather than from actions and decisions that occur during the critical juncture itself.[6]

Outside of the work in the macrohistorical tradition, the concept of critical junctures has been invoked rather casually, without a great deal of methodological or conceptual rigor. As we discuss below, dozens of studies drawing inspiration from the path-dependence approach in institutional economics refer, implicitly or explicitly, to the moment of institutional formation as one in which small events, in the sense of

[3] Paul Pierson, *Politics in Time* (Princeton: Princeton University Press, 2004), 135. See also James Mahoney, "Path Dependent Explanations of Regime Change," *Studies in Comparative and International Development* 36, no. 1 (2001), 114.

[4] See, for example, Barrington Moore, *Social Origins of Dictatorship and Democracy* (Boston: Beacon Press, 1966); Seymour M. Lipset and Stein Rokkan, "Cleavage Structures, Party Systems and Voter Alignments: An Introduction," in Lipset and Rokkan, eds., *Party Systems and Voter Alignments* (New York: Free Press, 1967); Ruth Berins Collier and David Collier, *Shaping the Political Arena* (Princeton: Princeton University Press, 1991); James Mahoney, *The Legacies of Liberalism: Path Dependence and Political Regimes in Central America* (Baltimore: Johns Hopkins University Press, 2002).

[5] For example, Collier and Collier (fn. 4), 27; Mahoney (fn. 4), 7.

[6] As discussed below, Mahoney (fn. 4) is a significant exception.

highly contingent ones, can have a large impact in terms of selecting a resilient and self-reproducing institutional equilibrium. Yet the literature offers relatively little methodological guidance to those who would employ the concept of critical junctures. The paucity of conceptual instruments available to define, study, and compare critical junctures is striking when compared with the rich conceptual apparatus (for example, increasing returns, lock-in, sequencing) used to analyze path-dependent processes themselves.[7] Critical junctures and their synonyms are too often treated as bookends, or a deus ex machina, on otherwise carefully constructed stories of institutional development. This article seeks to redress this imbalance.

We address two questions—one conceptual and one empirical—concerning the use of critical junctures in historical institutionalist explanations. First, how should one define a critical juncture? While in principle critical junctures can be invoked in order to interpret all sorts of developmental processes—ranging from evolutionary biology, to macrohistory, to organizational decision-making processes, to individual life histories—we focus on *institutional* analysis. In institutional analysis 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, with two main consequences: the range of plausible choices open to powerful political actors expands substantially and the consequences of their decisions for the outcome of interest are potentially much more momentous. Contingency, in other words, becomes paramount. We offer a definition of critical junctures that aims to promote a more rigorous—and, we hope, more fruitful—use of the concept in institutional analysis.

Second, how should one analyze critical junctures? What is the best approach for analyzing those moments when the freedom of political actors and impact of their decisions is heightened? What methods should be used? What kind of reasoning? What are the strengths and weaknesses of these methods? We argue that because heightened contingency is a core characteristic of critical junctures, counterfactual analysis and narrative process tracing are particularly important and must be explicitly employed to study them.[8] In this context, we also

[7] Pierson (fn. 3); Scott Page, "Path Dependence," *Quarterly Journal of Political Science* 1, no. 1 (2006).

[8] Counterfactual reasoning is essential in the construction of causal arguments in general; see Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry* (Princeton: Princeton University Press, 1994), 77–80. However, the role of counterfactual analysis is enhanced in the critical juncture framework. The institutional fluidity during critical junctures expands the range of possible decisions for key actors and increases their potential impact, thus making counterfactual scenarios both more plausible empirically and more important heuristically.

address specific issues relevant to both cross-sectional and longitudinal comparisons of critical junctures. We also provide criteria for adjudicating between rival claims concerning the causal impact of critical junctures.

The article proceeds as follows. In Section II we review prominent applications of the concept of critical junctures and its synonyms in political science and highlight the limitations of the existing literature. Section III presents our definition of critical junctures and highlight its consequences for the application of the concept to empirical analysis. In Section IV we discuss methodological issues connected to the study of critical junctures. Section V discusses further methodological issues specifically relevant to the comparison of critical junctures. In Section VI we provide empirical illustrations of our theoretical points. Finally, Section VII concludes.

II. Critical Junctures and Institutional Formation in the Literature

The dualist conception of political and institutional development, based on an alternation between moments of fluidity and rapid change and longer phases of relative stability and institutional reproduction, has a venerable pedigree in the social sciences and political history. An early example can be found in Polanyi's classic study of the rise of the modern market economy; he writes of "critical periods" and "connecting stretches of time."[9] Lipset and Rokkan, too, were pioneers in this regard, tracing the roots of the origins of West European party systems to "three crucial junctures" in the history of each nation.[10] In the 1960s and 1970s the study of political development highlighted the significance of what Verba called a "branching tree model," in which choices made during critical moments unleash long-term sequences of institutional development.[11]

More recently, political scientists and sociologists building on this tradition have enriched their models and their conceptual vocabulary by importing ideas from institutional economics and evolutionary the-

[9] Karl Polanyi, *The Great Transformation* (Boston: Beacon Press, 1944), 4.

[10] Lipset and Rokkan (fn. 4), 37–38. While Lipset and Rokkan say that the "variety of empirical party systems" can be reduced to a "set of ordered consequences of decisions and developments" at critical junctures, their analysis is couched in a largely structural language, leaving little place for more fine-grained analysis of political decision making and meaningful choices during critical junctures; Lipset and Rokkan, 44.

[11] Sidney Verba, "Sequences and Development," in Leonard Binder, James S. Coleman, Joseph LaPalombara, Lucian W. Pye, Sidney Verba, and Myron Weiner, *Crises and Sequences in Political Development* (Princeton: Princeton University Press, 1971), 308.

ory. In economics, Paul David's seminal work on the development of the QWERTY typewriter keyboard[12] and then subsequent work by others on technological development[13] provided a rich new analytic toolkit for social scientists to analyze how early choices and historical circumstances could generate enduring, path-dependent effects on technological development.[14] Meanwhile, in the study of evolution Gould and Eldredge's model of "punctuated equilibrium" challenged more gradualist models of evolution and suggested a model in which short bursts of change were followed by long periods of equilibrium.[15] Though it arguably provided less directly applicable analytic tools than the path-dependence model from economics, the punctuated equilibrium model nevertheless provided a metaphor that proved attractive to many social scientists.[16]

Models of institutional development built around these borrowed notions of critical junctures, punctuated equilibria, and path dependence have provided the conceptual frameworks for dozens of studies in the subfields of comparative politics, international relations, and American political development. The concept of critical junctures has been applied to a striking variety of topics including, for example, national social welfare policies, U.S. constitutional law, EU law and budgetary policy, labor unions, agenda setting in policy-making, devolution in the U.K., regulation of competition in product markets and banking, regionalism in East Asia, foreign policy, comparative political economy, the modern state, the causes of war, the end of the cold war, and, most prominently, to macrohistorical analyses of the development of regimes or entire regions.[17] However, the emphasis of most of this

[12] See Paul David, "Clio and the Economics of QWERTY," *American Economic Review* 75 (May 1985).

[13] W. Brian Arthur, "Competing Technologies, Increasing Returns, and Lock-in by Historical Events," *Economic Journal* 99 (March 1989); idem, *Increasing Returns and Path Dependence in the Economy* (Ann Arbor: University of Michigan Press, 1994).

[14] Paul Pierson, "Increasing Returns, Path Dependence, and the Study of Politics," *American Political Science Review* 94 (June 2000).

[15] Niels Eldredge and Stephen Jay Gould "Punctuated Equilibria: An Alternative to Phyletic Gradualism," in Thomas J. M. Schopf, ed., *Models in Paleobiology* (San Francisco: Freeman, Cooper, 1972); and Stephen Jay Gould, *The Structure of Evolutionary Theory* (Cambridge, Mass.: Belknap Press, 2002).

[16] Steven Krasner, "Approaches to the State," *Comparative Politics* 16 (January 1984); Carl Gans, "Punctuated Equilibria and Political Science," *Politics and the Life Sciences* 5 (February 1987); Albert Somit and Steven Peterson, *The Dynamics of Evolution: The Punctuated Equilibrium Debate in the Natural and Social Sciences* (Ithaca, N.Y.: Cornell University Press, 1992); Frank Baumgartner and Bryan Jones, *Agendas and Instability in American Politics* (Chicago: University of Chicago Press, 1993); Peter Hall, "Policy Paradigms, Social Learning, and the State," *Comparative Politics* 25 (April 1993).

[17] On national social welfare policy, see John Gal and David Bargal, "Critical Junctures, Labor Movements and the Development of Occupational Welfare in Israel," *Social Problems* 49, no. 3 (2002); Bernard Ebbinghaus, "Can Path Dependence Explain Institutional Change?" Discussion paper no. 2

literature is on the mechanisms of reproduction underpinning path dependence, rather than on the genetic phase of the critical juncture itself.[18] Most scholars invoking critical junctures have been rather casual users, simply referring to the concept as a model of change but not probing its meaning or developing methodologies associated with it.

The significant exceptions, in which critical junctures have received the most sustained attention, are found in the literature on macrohistorical analysis of the development of entire regimes or regions. The concept of critical junctures is central in Collier and Collier's study

(Max-Planck-Institut, Cologne, March 2005); Jacob Hacker, "The Historical Logic of National Health Insurance: Structure and Sequence in the Development of British, Canadian and US Medical Policy," *Studies in American Political Development* 12, no. 2 (1998); and Julia Lynch, *Age in the Welfare State* (Cambridge: Cambridge University Press, 2006). On U.S. constitutional law, see Bruce Ackerman, *We the People*, vol. 1, *Foundations* (Cambridge: Harvard University Press, 1991); idem, *We the People*, vol. 2, *Transformations* (Cambridge: Harvard University Press, 1998); Walter Dean Burnham "Constitutional Moments and Punctuated Equilibria," *Yale Law Journal* 108, no. 8 (1999); Jack Balkin and Sanford Levinson, "Understanding the Constitutional Revolution," *Virginia Law Review* 87, no. 6 (2001). On EU law, see Francesca Bignami, "Creating European Rights: National Rights and Supranational Interests," *Columbia Journal of European Law* 11 (Spring 2005); and on budgetary policy, see Brigid Laffan, "The Big Budgetary Bargains," *Journal of European Public Policy* 7, no. 5 (2000). On labor unions, see Kathleen Thelen and Ikuo Kume, "The Rise of Non-market Training Regimes: Germany and Japan Compared," *Journal of Japanese Studies* 25, no. 1 (1999); John Hogan, "Testing for a Critical Juncture: Change in the ICTU's Influence Over Public Policy in 1959," *Irish Political Studies* 20, no. 3 (2005); Jan Erk, "Sub-state Nationalism and the Left-Right Divide: Critical Junctures and the Formation of Nationalist Labour Movements in Belgium," *Nations and Nationalism* 11, no. 4 (2005), 551. On agenda setting in policy-making, see John Kingdon, *Agendas, Alternatives, and Public Policies* (Boston: Little, Brown, 1985); Baumgartner and Jones (fn. 16); James True, Bryan Jones, and Frank Baumgartner, "Punctuated Equilibrium Theory," in Paul Sabatier, ed., *Theories of the Policy Process* (Boulder, Colo.: Westview Press, 1999), 175–202. On devolution in the U.K., see Simon Bulmer and Martin Burch, "Organising for Europe: Whitehall, the British State and the European Union," *Public Administration* 76, no. 4 (2000). On regulation of competition in product markets and banking, see Marie-Laure Djelic and Sigrid Quack, "Re-thinking Path Dependency: The Crooked Path of Institutional Change in Post-war Germany," in Glenn Morgan, Richard Whitley, and Eli Moen, eds., *Changing Capitalism?* (Oxford: Oxford University Press, 2004), 137–66. On regionalism in East Asia, see Kent Calder and Min Ye, "Regionalism and Critical Junctures: Explaining the 'Organization Gap' in Northeast Asia," *Journal of East Asian Studies* 4, no. 2 (2004). On foreign policy, see John Ikenberry, "Conclusion," in John Ikenberry, David A. Lake, and Michael Mastanduno, eds., *The State and American Foreign Economic Policy* (Ithaca, N.Y.: Cornell University Press, 1989), 219–43. On comparative political economy, see Peter Gourevitch, *Politics in Hard Times* (Ithaca, N.Y.: Cornell University Press, 1986), 239; and T. J. Pempel, *Regime Shift: Comparative Dynamics of the Japanese Political Economy* (Ithaca, N.Y.: Cornell University Press, 1998), 1–3. On the modern state, see Krasner (fn. 16); and Thomas Ertman, *The Birth of the Leviathan* (Cambridge: Cambridge University Press, 1997). On the causes of war, see Jack Levy and Gary Goertz, eds., "Causal Explanations, Necessary Conditions, and Case Studies: World War I and the End of the Cold War" (Manuscript, 2005), 26–27. On the end of the cold war, see Richard Herrmann and Richard Ned Lebow, eds., *Ending the Cold War* (New York: Palgrave McMillan, 2004), 10. For macrohistorical analyses of the development of regimes or entire regions, see Collier and Collier (fn. 4); Gregory Luebbert, *Liberalism, Fascism, or Social Democracy* (Oxford: Oxford University Press, 1991); Mahoney (fn. 4); Robert Putnam, *Making Democracy Work* (Princeton: Princeton University Press, 1993), 179–81; Terry Karl, *The Paradox of Plenty* (Berkeley: University of California Press, 1997); Pauline Jones-Luong, *Institutional Change and Political Continuity in Post-Soviet Central Asia* (Cambridge: Cambridge University Press, 2002), 257ff.; and Ertman, *Birth of the Leviathan,* 320–21.

[18] Pierson (fn. 14).

of the political development of eight Latin American countries. According to their definition, a critical juncture is "a period of significant change, which typically occurs in distinct ways in different countries (or other units of analysis) and which is hypothesized to produce distinct legacies."[19] In his comparative study of the political development of Central America, Mahoney uses a similar approach and defines critical junctures as "choice point[s] when a particular option is adopted among two or more alternatives," defined by antecedent historical conditions.[20] Mahoney emphasizes the connection between critical junctures and path-dependent processes, explaining that "once a particular option is selected [in a critical juncture], it becomes progressively more difficult to return to the initial point when multiple alternatives were still available."[21] More explicitly than Collier and Collier, Mahoney emphasizes the importance of agency and meaningful choice: "In many cases, critical junctures are moments of relative structural indeterminism when willful actors shape outcomes in a more voluntaristic fashion than normal circumstances permit . . . these choices demonstrate the power of agency by revealing how long-term development patterns can hinge on distant actor decisions of the past."[22]

Collier and Collier's landmark work did much to focus scholars' attention on critical junctures, and Mahoney's recent contributions have done much to clarify the concept and emphasize the power of agency during critical junctures. Nonetheless, even these important contributions do not address several key issues. Taken as a whole, the scholarship in which the concept is used or referred to lacks conceptual consistency and fails to provide adequate methodological guidance to those who would invoke the critical junctures framework. Attempts to clarify and operationalize the concept have not succeeded in eliminating conceptual confusion.[23]

Conceptual shortcomings stand out, in particular, in four crucial areas: power asymmetries, time horizons, units of analysis, and near

[19] Collier and Collier (fn. 4), 29. See also Dan Slater and Erica Simmons, "Informative Regress: Critical Antecedents and Historical Causation" (Paper prepared for presentation at the annual meeting of the American Political Science Association, Chicago, August 2007).

[20] Mahoney (fn. 4).

[21] James Mahoney, "Path Dependence in Historical Sociology," *Theory and Society* 29 (August 2000), 513; and Mahoney (fn. 3), 113.

[22] Mahoney (fn. 4), 7. For an analysis that emphasizes the heightened significance of individual actors and their decisions during moments of crisis when "system creating choices are made," see also Gourevitch (fn. 17), 239. See also Ira Katznelson, "Periodization and Preferences," in James Mahoney and Dietrich Rueschemeyer, eds., *Comparative Historical Analysis in the Social Sciences* (Cambridge: Cambridge University Press, 2003), 270–303.

[23] Ebbinghaus (fn. 17); and Hogan (fn. 17); idem, "Remoulding the Critical Junctures Approach," *Canadian Journal of Political Science* 39, no. 3 (2006).

misses. First, some arguments invoking critical junctures fail to specify the unit of analysis with respect to which the juncture is argued to be critical. Second, the literature provides very little guidance on how to deal with time horizons in historical institutionalist arguments that involve critical junctures.[24] Third, critical junctures are too often equated with moments of change.[25] However, as counterintuitive as it may seem, change is not a necessary element of a critical juncture. Finally, much of the existing literature draws on analogies from institutional economics that obscure the role of power asymmetries during critical junctures.

III. Theory

Definition

In the context of the study of path-dependent phenomena, we define critical junctures as *relatively* short periods of time during which there is a *substantially* heightened probability that agents' choices will affect the outcome of interest. By "*relatively* short periods of time," we mean that the duration of the juncture must be brief relative to the duration of the path-dependent process it instigates (which leads eventually to the outcome of interest). By "*substantially* heightened probability," we mean that the probability that agents' choices will affect the outcome of interest must be high relative to that probability before and after the juncture. This definition captures both the notion that, for a brief phase, agents face a broader than typical range of feasible options and the notion that their choices from among these options are likely to have a significant impact on subsequent outcomes. Further, by emphasizing that the probability that actors' choices will affect outcomes decreases after the critical juncture, this definition suggests that their choices during the critical juncture trigger a path-dependent process that constrains future choices. As such, the critical juncture constitutes a situation that is qualitatively different from the "normal" historical development of the institutional setting of interest. Finally, our definition sets the stage for addressing the four shortcomings in the literature identified above concerning units of analysis, time horizons, near misses, and power asymmetries.

[24] A notable exception to this rule is Pierson (fn. 3), whose work we discuss below.

[25] For example, Collier and Collier (fn. 4); and Andrew Abbott, *Time Matters* (Chicago: University of Chicago Press, 2001).

Identification of a Unit of Analysis

When confronted with the question of whether an event or a series of events constitutes a critical juncture, one must anchor the inquiry in a unit of analysis. The dual model of development—with alternations between critical junctures and phases of stability and reproduction—has been used in a variety of settings, ranging from an individual's life course,[26] to the analyses of biological evolution based on the "punctuated equilibrium" model,[27] to a variety of subfields of physics,[28] to the wide variety of units of analysis in political science discussed above. In historical institutionalism in particular, however, the unit of analysis is typically some institutional setting in which actors' decisions are constrained during phases of equilibrium and are freer during phases of change. Such institutions may range from a single organization (for example, a political party, a union, or a corporation), to the structured interaction between organizations (for example, a party system or relationships between branches of government), to public policies, to a political regime as a whole.[29]

The key point here is that a historical moment that constitutes a critical juncture with respect to one institution may not constitute a critical juncture with respect to another. At times, scholars identify relatively brief periods of momentous political, social, or economic upheaval and assert that these are critical junctures in a general sense.[30] However, even when political systems as a whole face "unsettled times,"[31] many institutions may remain unaffected. As Thelen and Streeck note, "There often is considerable continuity through and in spite of historical break points."[32] Likewise, during "settled times" particular institutions may face critical junctures. Even where various institutions are interconnected, the occurrence of a critical juncture for one institution need not constitute a critical juncture with respect to all of its counterparts. For example, a period identified as a critical juncture with respect to a country's party system may not be a critical juncture with respect to its overall regime type or system of interest intermediation.

[26] Abbott (fn. 25).

[27] For example, see Gould (fn. 15).

[28] Philip Ball, *Critical Mass* (London: Arrow, 2004).

[29] See, for example, Avner Greif and David Laitin, "A Theory of Endogenous Institutional Change," *American Political Science Review* 98 (November 2004), 640.

[30] Ebbinghaus (fn. 17), 16.

[31] Ann Swidler, "Culture in Action: Symbols and Strategies," *American Sociological Review* 51, no. 2 (1986); and Katznelson (fn. 22).

[32] Wolfgang Streeck and Kathleen Thelen, "Introduction: Institutional Change in Advanced Political Economies," in Streeck and Thelen, eds., *Beyond Continuity* (Oxford: Oxford University Press, 2005), 8–9.

Indeed, at a more general level, if one concurs with Skowronek's view that "in a historical/institutional view, politics is structured by persistent incongruities and frictions among institutional orderings,"[33] this should not come as surprise. As Cortell and Peterson[34] emphasize in discussing institutional change, different kinds of external shocks may affect some decision-making arenas and leave others unaffected .While relevant events happening at one of these levels of analysis may influence the others, analytically it is important to keep them separate and to identify the critical juncture clearly with respect to the development of a specific unit of analysis.[35]

Time Horizons and Alternative Models of Institutional Change

Most historical institutionalists treat critical junctures not as instantaneous events but rather as short phases that may actually last for a number of years.[36] If a critical juncture is not a discrete event but is instead an accumulation of related events during a relatively compressed period, at what point does it become more accurate to speak of gradual evolution than of rapid change? A gradualist view of institutional evolution, which discounts the role of critical junctures and punctuated equilibrium, suggests that choice points come with great regularity and that the accumulation of choices generates outcomes.[37]

We submit, first, that the duration of the critical juncture must be brief relative to the duration of the path-dependent process that it initiates. Treating an entire decade as a critical juncture with respect to an outcome observed a century later might be sensible. But it would clearly not be sensible to consider a decade-long period a critical juncture with respect to an outcome observed only one year later. Second, the absolute duration of a critical juncture has an impact on the possibility for

[33] Stephen Skowronek, "Order and Change," *Polity* 28, no. 1 (1995), 95; see also Karen Orren and Stephen Skowronek, "Beyond the Iconography of Order," in Lawrence C. Dodd and Calvin Jillson, eds., *The Dynamics of American Politics* (Boulder, Colo.: Westview, 1994), 321; Julia Lynch and Tulia Falleti, "Context and Causal Homogeneity in Historical Research" (Paper presented at the annual meeting of the American Political Science Association, Philadelphia, September 2006).

[34] Andrew Cortell and Susan Peterson, "Altered States: Explaining Domestic Institutional Change," *British Journal of Political Science* 29 (January 1999), 187.

[35] Thelen (fn. 1), 213; see also Michael Shermer, "Exorcising Laplace's Demon," *History and Theory* 34, no. 1 (1995), 71.

[36] Some scholars employ the expression "moments," which, even when used in a metaphorical sense, may be misleading.

[37] In the literature on evolution, from which much of the social science literature on institutional evolution draws inspiration, scholars who reject the notion of punctuated equilibrium emphasize precisely this point; see, for example, Richard Dawkins, *The Blind Watchmaker* (New York: Norton, 1996).

actors to act more freely and for the consequences of their actions to have a larger impact than in normal times: the longer the juncture, the higher the probability that political decisions will be constrained by some reemerging structural constraint. Pierson's[38] categorization of social science accounts in terms of their time horizons is helpful to clarify when it is appropriate and when it is not to use explanations that invoke critical junctures. As Pierson explains, social science accounts may involve causes that have either short-term or long-term time horizons, and they may be designed to explain outcomes that have either short-term or long-term time horizons.[39]

As discussed in more detail below, a critical juncture should have a duration that is short relative to the path-dependent process it initiates. Thus, if an explanation relies on a cause that has a relatively long-term time horizon, then it is highly unlikely that a critical juncture framework will be applicable. In accounts that involve long-term, cumulative causes, there may be a tipping point—a point at which the cumulative cause finally passes a threshold and leads to a rapid change in the outcome—but a tipping point is not a critical juncture. It may be the case that actions taken on the verge of the tipping point might have forestalled it. However, causal accounts that involve cumulative causes suggest that the probability of a particular outcome increases steadily over time and thus would not present compressed moments in which an agent's decisions are particularly likely to affect outcomes. By contrast, causal accounts that involve a short-term cause are far stronger candidates for the application of the critical juncture framework. In cases where critical junctures launch path-dependent processes, we would observe a short-term cause (during the critical juncture) followed by what Pierson terms a "temporal separation" between this cause and the eventual outcome.[40]

[38] Pierson (fn. 3), 92ff.

[39] For encompassing typologies of models of institutional change, see Streeck and Thelen (fn. 32); Pierson (fn. 3), 134–66; Kathleen Thelen, "Historical Institutionalism in Comparative Politics," *Annual Review of Political Science* 2 (1999); idem (fn. 1); idem, *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan* (Cambridge: Cambridge University Press, 2004); Hacker (fn. 1); and B. Guy Peters, Jon Pierre, and Desmond S. King, "The Politics of Path Dependency: Political Conflict in Historical Institutionalism," *Journal of Politics* 67, no. 4 (2005).

[40] Though Pierson also categorizes causal processes in terms of the time horizon of their outcome, he recognizes that this is problematic in cases where there is a temporal separation between the cause (which takes place in the critical juncture) and the effect (which takes place at the end of the path-dependent process); see Pierson (fn. 3), 95. The distinction between the effect (outcome) to be explained and the path-dependent process that generates it is a matter of conceptualization of the effect itself and depends on the specific research question.

Change and Negative Cases (Near Misses)

Many scholars define critical junctures on the basis of their outcome, namely, change.[41] Tempting as it may be to equate critical junctures and change, this view is not commensurable with the emphasis on structural fluidity and heightened contingency that are the defining traits of critical junctures. Contingency implies that wide-ranging change is possible and even likely but also that re-equilibration is not excluded. If an institution enters a critical juncture, in which several options are possible, the outcome may involve the restoration of the pre–critical juncture status quo. Hence, change is not a necessary element of a critical juncture. If change was possible and plausible, considered, and ultimately rejected in a situation of high uncertainty, then there is no reason to discard these cases as "non–critical" junctures.

Most researchers, following Pierson's advice "to go back and look," trace the roots of institutional change back to the origins of a "path."[42] We certainly do not disagree with this approach but contend that, if used exclusively, it overlooks the fact that some critical junctures may result in re-equilibration of an institution. Moreover, ignoring the near misses of history would actually deprive scholars of important and interesting negative cases with regard to the outcomes they seek to explain: in other words, it would introduce selection bias into their comparative analyses and consequently arrive at weaker (and possibly flawed) findings.[43] At the same time, some comparative analyses are sensitive to this issue. Capoccia, for example, analyzes several cases in which governing elites of European democracies took key decisions that played an important role in avoiding the breakdown of democracy during the interwar years.[44] By extending his analysis to both crises that resulted in regime breakdown and others that resulted in re-equilibration of democracy, Capoccia generates more leverage to identify the key actors, events, decisions, and their interconnections than he could have had he limited his analysis to cases of breakdown. He also avoids selection bias and thus arrives at more solid findings about the importance of key decisions during political crises.

[41] See, for example, Collier and Collier (fn. 4), 29–30; Abbott (fn. 25); Gal and Bargal (fn. 17), 437; Hogan (fn. 17).

[42] Pierson (fn. 14).

[43] King et al. (fn. 8), 128–37; and Barbara Geddes, *Paradigms and Sand Castles* (Ann Arbor: University of Michigan Press, 2003). See also David Collier and James Mahoney, "Insights and Pitfalls: Selection Bias in Qualitative Research," *World Politics* 49 (October 1996).

[44] Giovanni Capoccia, *Defending Democracy: Reactions to Extremism in Interwar Europe* (Baltimore: Johns Hopkins University Press, 2005).

Power Asymmetries and Key Actors

Most of the literature on path dependence in comparative politics draws inspiration from institutional economics.[45] Collier and Collier, as well as Mahoney, for example, see their studies as examples of a *more general* approach to the analysis of institutional development and explicitly link their work to research on path dependence in institutional economics.[46] Yet typical accounts of path dependence in institutional economics do not resort to the dual conception of institutional development that typifies the use of this framework in political science and sociology. Rather, they refer to situations in which a "host of small events" sets in motion a process characterized by increasing returns. For example, Arthur explains:

> Suppose in a certain island cars are introduced, all at more or less the same time. Drivers may choose between the right- and left-hand sides of the road. Each side possesses increasing returns: as a higher proportion of drivers chooses one side, the payoff to choosing that side rapidly rises. Casual thought tells us that we would observe a good deal of randomness to the proportions initially driving on each side, but that, if one side by chance got sufficiently ahead, other drivers would "fall in" on this side, so that eventually all cars would drive on (would allocate themselves to) the same side of the road . . . the actual outcome would likely be decided by a host of "small events" outside our knowledge—drivers' reactions, dogs running into the road, the timing or positioning of traffic lights.[47]

While this passage describes the properties of "lock-in" and "nonergodicity" (or path dependence) in a vivid fashion, it is apparent that the "genetic" moment of this nonreversible process is conceptualized differently than critical junctures normally are in historical institutionalism. The "phase of fluidity" (for example, when there is uncertainty as to which side of the road one should drive on) is conceptualized as a series of microscopic choices by actors—choices that eventually tip one way or the other largely for random reasons and then lead "the system into a trapping region."[48]

The typical implications of critical junctures in political analyses are unlikely to correspond to that model. In theory, we could certainly conceptualize political change as the result of a series of random small events that then tip one way or the other, but this would conceal a

[45] Arthur (fn. 13, 1994); David (fn. 12); and Douglass North, *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press, 1990).

[46] Collier and Collier (fn. 4), 27; Mahoney (fn. 4), 7.

[47] Arthur (fn. 13, 1994), 14.

[48] Paul David, "Path Dependence, Its Critics and the Quest for 'Historical Economics'" (Manuscript, Oxford and Stanford, 2000), 10.

key dimension of politics: power. Like other concepts imported from institutional economics, the concept of critical junctures needs to be adapted for application in political science.[49] Political science analyses of critical junctures (and synonyms) most often focus not on random small events but instead on decisions by influential actors—political leaders, policymakers, bureaucrats, judges—and examine how, during a phase of institutional fluidity, they steer outcomes toward a new equilibrium.[50] So Thelen writes, for example: "Groups and individuals are not merely spectators as conditions change to favor or penalize them in the political balance of power, but rather strategic actors capable of acting on 'openings' provided by such shifting contextual conditions in order to enhance their own position."[51] Indeed, even in the case of the direction of traffic, it is in actuality decisions of political elites, rather than the consequences of a host of microscopic decisions by drivers, that are often decisive. Even a cursory survey of the history of the direction of traffic in Europe shows that the establishment of a standard often had very little to do with drivers' decisions and much to do with political decisions. In France, for example, after some years of fluidity and uncertainty about the side of the road on which carts and other vehicles should drive, an official keep-right rule was introduced in Paris in 1794. Later, Napoleon's conquests spread the new French standard of driving on the right to Belgium, the Netherlands, Luxembourg, Switzerland, Germany, Poland, Russia, and many parts of Spain and Italy.[52]

IV. Methods

On the basis of the above, we can consider the analysis of critical junctures as the analysis of decision making under conditions of uncertainty. The methods adopted should therefore reconstruct, in a systematic and rigorous fashion, each step of the decision-making process, identify which decisions were most influential and what options were available

[49] See, for instance, Moe's work adapting principal-agent theory to the world of politics; Terry Moe, "The New Economics of Organization," *American Journal of Political Science* 28 (November 1984).

[50] See, for example, Peter Hall and Rosemary Taylor, "Political Science and the Three New Institutionalisms," *Political Studies* 44 (December 1996); Luebbert (fn. 17), 312; John Keeler, "Opening the Window for Reform: Mandates, Crises and Extraordinary Policy-Making," *Comparative Political Studies* 25 (January 1993), 434, 477–80; Cortell and Peterson (fn. 34), 187–89; Geoffrey Garrett and Peter Lange, "Internationalization, Institutions and Political Change," *International Organization* 49 (Fall 1995), 629–31; and Jones-Luong (fn. 17), 276ff. We do not mean to suggest that accidental concatenations of unrelated, contingent, events—so-called Cournot effects—cannot play an important role in influencing the outcome of a critical juncture; see Pierson (fn. 3), 57. Events can obviously play an important role in influencing decisions and their consequences. What counts as "contingent" and "unrelated," however, depends on the theoretical framework adopted.

[51] Thelen and Steinmo (fn. 1), 17.

[52] Peter Kincaid, *The Rule of the Road* (Westport: Greenwood, 1991), 2–41.

and viable to the actors who took them, and clarify both their impact and their connection to other important decisions. Several methods are particularly apt for the task at hand: process tracing,[53] "systematic process analysis,"[54] "analytic narratives,"[55] and in general any form of structured, theory-guided narrative. A further key element of the analysis of critical junctures is the analysis of contingency: during critical junctures decisions are taken in a situation of high uncertainty and unpredictability, given the relaxation of the "normal" structural and institutional constraints on action. Taking contingency into account requires researchers to analyze "what happened in the context of what could have happened,"[56] a task for which we must complement our hindsight perspective (useful to identify moments of change) with a foresight one, which allows reconstructing not only what the consequences of actual decisions were but also what plausible consequences might have resulted from other, viable choices.[57] This move takes us to into the realm of counterfactual analysis. Below we elaborate on these two methodological tools, counterfactual analysis and theory-guided narrative.

Counterfactual Analysis

Leading historians and philosophers have long dismissed analysis based on counterfactuals as "virtual history." Recently, however, counterfactuals have been restored to their rightful place in history and historiography,[58] and the same has happened in the social sciences. Several contributions have highlighted the important role of well-constructed counterfactuals in assessing the causal impact of specific fac-

[53] Alexander George, "Case Studies and Theory Development: The Method of Structured, Focused Comparison," in P. G. Lauren, ed., *Diplomacy: New Approaches in History, Theory and Policy* (New York: Free Press, 1979); Alexander George and Timothy McKeown, "Case Studies and Theories of Organizational Decision-Making," in Robert Coulam and Richard Smith, eds., *Advances in Information Processing in Organizations*, vol. 2 (Greenwich: JAI Press, 1985); Alexander George and Andrew Bennett, *Case Studies and Theory Development* (Boston: MIT Press, 2005).

[54] Peter Hall, "Aligning Ontology and Methodology in Comparative Politics," in James Mahoney and Dietrich Rueschemeyer, eds., *Comparative Historical Analysis in the Social Sciences* (Cambridge: Cambridge University Press, 2003), 330–59; and idem, "Systematic Process Analysis: When and How to Use It," *European Management Review* 3, no. 1 (2006), 24–31.

[55] Robert H. Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast, *Analytic Narratives* (Princeton: Princeton University Press, 1998); Margaret Levi, "Producing an Analytic Narrative," in John R. Bowen and Roger Petersen, eds., *Critical Comparison in Politics and Culture* (Cambridge: Cambridge University Press, 1999); and idem, "Modeling Complex Historical Processes with Analytic Narratives," in Ian Shapiro, Rogers M. Smith, and Tarek E. Masoud, eds., *Problems and Methods in the Study of Politics* (Cambridge: Cambridge University Press, 2002).

[56] Isaiah Berlin, "Historic Inevitability," in Patrick Gardiner, ed., *The Philosophy of History* (Oxford: Oxford University Press, 1974), 176.

[57] A "foresight" perspective is obviously necessary to identify correctly those critical junctures that did not in the end lead to change.

[58] Johannes Bulhof, "What If? Modality and History," *History and Theory* 38, no. 2 (1999); Martin Bunzl, "Counterfactual History: A User's Guide," *American Historical Review* 109, no. 3 (2004).

tors on historical outcomes.[59] This literature has elaborated logical and methodological rules for assessing the plausibility of a counterfactual argument, differentiating counterfactuals with good heuristic value from those that belong to the thought-provoking but insufficiently rigorous realm of "virtual history."[60]

While advancing a whole roster of criteria (including clarity and logical consistency), this literature suggests that for counterfactuals to be plausible, they must respect first of all the criterion of *theoretical consistency*. Mahoney explains that analysts should focus on "a counterfactual antecedent that was actually available during a critical juncture period, and that, according to theory, should have been adopted."[61] *Historical consistency* is also critical. Also known as the "minimal-rewrite rule," this criterion constrains counterfactual speculations in several ways: for example, by considering only policy options that were available, considered, and narrowly defeated by the relevant actors or by ruling out counterfactuals in which the antecedent and the consequent are separated by such wide stretches of time that it is implausible that all other things would remain equal.[62]

Several authors have highlighted the connection between the analysis of contingency during critical junctures and counterfactual thought experiments.[63] The focus on the role of political actors and their decisions during critical junctures is amenable to *plausible* counterfactual thought experiments that can be supported by the historical record.[64]

[59] James D. Fearon, "Counterfactuals and Hypothesis Testing in Political Science," *World Politics* 43 (January 1991); Ellen Immergut, "Historical Institutionalism in Political Science and the Problem of Change," in Andreas Wimmer and Reinhart Kössler, eds., *Understanding Change* (Basingstoke: Palgrave, 2005); Richard Ned Lebow, "What's So Different about a Counterfactual?" *World Politics* 52 (July 2000); Amartya Sen, *Rationality and Freedom* (New Dehli and Oxford: Oxford University Press, 2002); and Philip Tetlock and Aaron Belkin, "Counterfactual Thought Experiments in World Politics: Logical, Methodological, and Psychological Perspectives," in Tetlock and Belkin, eds., *Counterfactual Thought Experiments in World Politics* (Princeton: Princeton University Press, 1996), 1–38; interview with Adam Przeworski, "Adam Przeworski: Capitalism, Democracy, and Science," in Gerardo L. Munck and Richard Snyder, eds., *Passion, Craft, and Method in Comparative Politics* (Baltimore: Johns Hopkins University Press, 2007), 479.

[60] As mentioned above, our reference to counterfactual analysis here is more specific than simply considering them as a necessary logical part of a causal argument; see King et al. (fn. 8), 88–89. In the critical juncture framework, it is possible to reconstruct *plausible* counterfactual scenarios that could have had a *large* causal effect on outcomes.

[61] Mahoney (fn. 21), 513; and James Mahoney and Gary Goertz, "The Possibility Principle," *American Political Science Review* 98 (November 2004).

[62] Tetlock and Belkin (fn. 59), 23–24.

[63] Mahoney (fn. 21), 513.

[64] See Lebow (fn. 59), 559; and Henry Ashby Turner, Jr., "Human Agency and Impersonal Determinants in Historical Causation," *History and Theory* 38, no. 3 (1999), 300–306. As Turner points out, reducing history to impersonal causes gives rise to "a deterministic version of the past that lends a spurious air of high probability to what happened and blots out the effects of contingency that spring from immediate circumstances and individual choices" (p. 305). Lebow (fn. 59)

The difference between a factual and a counterfactual argument as regards the availability of historical sources should not be exaggerated: there may be as much historical evidence about decisions that were taken as about those that were considered, discussed, and ultimately discarded. Similarly, there may be enough evidence to produce informed speculations at least on the immediate consequences of other decisions that could realistically have been taken.[65]

Theory-Guided Narrative

The use of narrative is ubiquitous in historical accounts in the social sciences. While perhaps the most prominent examples of the use of historical narrative focus on long-term processes, the use of narrative is even more important in the analysis of shorter phases such as critical junctures. To use Polanyi's expression, in the analysis of "critical periods" "time expands" and so must our analysis.[66] Recent theoretical and methodological literature in both history and the social sciences has shown a large consensus that "narrative" does not necessarily equate with undisciplined or ad hoc storytelling. In political science and in comparative analyses in particular narratives are often adequately structured by explicit theoretical models.[67]

A theoretical model simplifies reality and drives the construction of the narrative, which focuses on the aspects considered salient by the theory itself; in the case of critical junctures, such aspects include the main actors, their goals, preferences, decisions, and the events that directly influenced them. Whether a formal or a nonformal approach is used, however, the analysis of critical junctures requires two things. First, the narratives should specify not only the decisions and actions that were taken but also those that were considered and ultimately rejected, thus making explicit the close-call counterfactuals that render the critical juncture "critical." Second, the narrative should reconstruct the consequences of the decisions that were taken and (as much as the available data allow) the likely consequences of those that could plausibly have been taken but were not. Below we briefly discuss the advantages and disadvantages of each approach.

argues that affected by this "certainty of hindsight bias," structural explanations "fail to recognize the uncertainty under which actors operated and the possibility that they could have made different choices that might have led to different outcomes" (p. 559). See also William H. Sewell, "A Theory of Structure: Duality, Agency, and Transformation," *American Journal of Sociology* 98, no. 1 (1992), 2.

[65] See, for example, Richard Ned Lebow, "Contingency, Catalysts, and International System Change," *Political Science Quarterly* 115, no. 4 (2000).

[66] Polanyi (fn. 9); see also Turner (fn. 64), 302.

[67] Tim Büthe, "Taking Temporality Seriously," *American Political Science Review* 96 (September 2002), 483.

The application of game-theoretic tools to the analysis of critical junctures has several advantages. The rigorous specification and formalization of actors' payoffs and their available moves and strategies has the potential to make very explicit the alternatives facing the actors and their consequences. Furthermore, a formal approach may spell out at least some of the close-call counterfactuals that could have led to alternative equilibria. The analysis of "off-the-path behavior" and subgame perfect equilibria is particularly powerful in this regard.[68] One potential disadvantage of a formal approach is that the need for manageable game-theoretic models may require an excessively impoverished account of complex situations. This becomes more problematic in cases of cross-sectional comparison of critical junctures in different units, where it is normally more difficult to apply a single model to more than one case.[69] A further potential disadvantage is that the specification of the game being played may not be satisfactory, if it does not demonstrate empirically that the hypothesized causal mechanisms were actually at play.[70]

Nonformal narrative accounts of institutional crises have a long tradition.[71] Explicit reference to process tracing[72] is increasingly common in such scholarship. "Tracing the process" that led from a situation in which several options were open to a new equilibrium based on the choice of one of them is a flexible enough methodology: it can easily be applied to different units of analysis, can account for the "paths not taken," and can offer a stylized but compelling reconstruction of the key decisions and choices that produced the final outcome.[73] The potential disadvantages of a nonformal approach mirror, to some extent,

[68] See Barry Weingast, "Off-the-Path Behaviour," in Tetlock and Belkin (fn. 59), 230–45. See also Daniel Carpenter "What Is the Marginal Value of Analytic Narratives?" *Social Science History* 24, no. 4 (2000). In his critique of the "analytic narratives" approach, Carpenter maintains that making explicit the counterfactuals by applying formal methods to historical accounts is of no value added, since it specifies only *some* of the possible (potentially infinite) counterfactuals. Carpenter misses the distinction between plausible and nonplausible counterfactuals. While game-theoretic modeling might not make explicit all the possible counterfactuals, it can clarify the most plausible ones and exclude others as nonplausible.

[69] John Ferejohn, "Rationality and Interpretation: Parliamentary Elections in Early Stuart England," in Kirsten Renwick Monroe, ed., *The Economic Approach to Politics* (New York: Harper, 1991); Avner Greif, "Self-Enforcing Political Systems and Economic Growth," in Bates et al. (fn. 55); idem, *Institutions and the Path to Modern Economy* (Cambridge: Cambridge University Press, 2006).

[70] This is one of the main points in critiques of *Analytic Narratives*; see Jon Elster, "Rational Choice History," *American Political Science Review* 94 (September 2000); or the symposium in *Social Science History* 24, no. 4 (2000).

[71] Juan J. Linz and Alfred Stepan, eds., *The Breakdown of Democratic Regimes* (Baltimore: Johns Hopkins University Press, 1978).

[72] George and McKeown (fn. 53); and George and Bennett (fn. 53), 205–38.

[73] It should be noted that process tracing is not incompatible with the use of formal methods and rational choices analysis; see George and Bennett (fn. 53), 205–32.

the advantages of formal approaches: while the narrative can be more respectful of the historical record, it may include too much detail and thereby sacrifice parsimony or elegance.

V. Comparing Critical Junctures

Multiple Narratives and Spatial Unit Comparisons

Critical junctures, like any other concept, can be compared along several dimensions of variation and can be part of different kinds of comparative research designs.[74] The most common research design used in comparative arguments involving critical junctures is based on a theoretical framework that identifies similar historical processes in different units (for example, countries, parties, interest groups) that involve critical junctures in which the same kind of actors act in a similar strategic environment and face similar challenges. Variation normally comes from the contingent outcomes of decisions and strategic interactions during critical junctures.

In this context, comparing processes of development that involve critical junctures (or producing "multiple narratives")[75] presents several advantages. First, a counterfactual argument in one unit may actually be a factual argument in another. In other words, if critical junctures occur in similar units and under similar conditions, then different decisions of the same actors can give rise to different outcomes, allowing variation and increasing the overall leverage of the analysis. Second, this facilitates the identification of negative cases, that is, junctures that present the same characteristics of structural fluidity and actors' prominence but do not actually give rise to sweeping change. Third, comparing similar junctures (possibly with different outcomes) helps focus on the important actors, moments, and choices, while omitting less relevant contextual details.

This kind of design is typical of both classical macrohistorical work on critical junctures mentioned above and more recent comparative work. The earlier scholarship, however, is largely couched in terms of analysis of whole periods rather than in terms of specific decisions. By contrast, recent comparative studies by Kalyvas on the emergence of Christian democracy in Europe[76] and by Capoccia on democratic cri-

[74] Giovanni Sartori, "Comparing and Miscomparing," *Journal of Theoretical Politics* 3, no. 3 (1991).
[75] Büthe (fn. 67).
[76] Stathis Kalyvas, *The Rise of Christian Democracy in Europe* (Ithaca, N.Y.: Cornell University Press, 1996).

ses in interwar Europe[77] place the decision-making process at the center of the analysis. Both studies—the first adopting a formal approach and the second a nonformal one—compare different cases in similar contexts, focus on the same set of actors and decisions in each case, and achieve variation on the dependent variable by including cases of change and nonchange as resulting from similar moments of fluidity.

A possible caveat for this research design emerges when the comparison involves "similar" junctures happening in different spatial units at different points in time. Under such circumstances, political learning can have an impact on the independence of the cases being compared.[78] If the junctures are similar in some important trait (for example, crisis of a democratic regime due to the rise of fascist parties) but happen at different points in time, the actors involved in later cases may know about the outcomes of earlier cases and adjust their behavior accordingly.[79] In such circumstances researchers must account for the influence of earlier junctures on later ones.[80]

"Criticalness" and Longitudinal Comparisons

Longitudinal comparisons—that is, comparisons of two or more critical junctures argued to explain an outcome in the *same* unit of analysis—present different problems. Rival explanations may identify different historical moments that they claim are critical junctures with respect to an outcome. Two scholars supporting rival claims may present convincing causal arguments, counterfactuals, and evidence, and ultimately academic audiences may be convinced that each juncture is critical in its own way.[81] How can we assess such rival arguments?

Assessing just "how critical" a critical juncture is requires an operationalization of criticalness. In our view, criticalness is measured by two factors, which we call *probability jump* and *temporal leverage*. The probability jump measures the change of probability of the outcome of interest that is connected with the juncture, and it has two components: first, the change (increase) in probability of the outcome of interest in

[77] Capoccia (fn. 44).

[78] Nancy Bermeo, "Democracy and the Lessons of Dictatorship," *Comparative Politics* 24 (April 1992).

[79] Büthe (fn. 67).

[80] The significance of such learning effects is evident in the rapidly growing literature on policy diffusion. For a recent review, see Beth Simmons, Geoffrey Garrett, and Frank Dobbin, "Introduction: The International Diffusion of Liberalism," *International Organization* 60, no. 4 (2006).

[81] See, for example, Mahoney (fn. 4), 26–27. Mahoney remarks on Yashar's interpretation of regime development in Costa Rica and Guatemala; Deborah J. Yashar, *Demanding Democracy* (Stanford, Calif.: Stanford University Press, 1997). Lynch's (fn. 17) work on the development of pension systems in Italy and the Netherlands includes the analysis of two different critical junctures in each country.

relation to its probability at the lowest point immediately prior to or during the critical juncture;[82] second, how close the probability of the outcome of interest post–critical juncture is to 1. The greater the probability of an outcome at the conclusion of a critical juncture relative to its probability at the lowest point during or immediately preceding the critical juncture and the closer that post–critical juncture probability is to 1, the more critical the juncture. The temporal leverage is a measure of the duration of the impact of the critical juncture relative to the duration of the juncture itself. The higher the value of this measure, the more critical the juncture.

In a formalization, these factors can be combined, weighted, and discounted in several ways to form a single measure of criticalness. We suggest one possible strategy in the operationalization of criticalness in equation 1.

$$CJ_y = \left(\frac{P_{y'} - P_y}{1 - \ln (P_{y'})} \right) \left(\ln \frac{T_{x'}}{T_x} \right) \quad (1)$$

Y = outcome of interest
CJ_y = criticalness score, with respect to outcome Y
P_y = lowest probability of outcome Y immediately preceding or during critical juncture
$P_{y'}$ = probability of outcome Y after critical juncture
T_x = duration of critical juncture
$T_{x'}$ = duration between end of critical juncture and outcome Y

For any $CJ_y > 0$, as CJ_y increases, the criticalness of a critical juncture with respect to Y increases.[83] Our measure of *temporal leverage* captures the notion that the briefer a critical juncture is relative to the duration of the path-dependent causal process that it instigates, the more critical it is (that is, where values of $T_{x'}/T_x$ are high).[84] Our measure of the *probability jump* combines, first, how much the probability of the outcome increased as a result of the critical juncture ($P_{y'}$-P_y); and second, how close the probability of the outcome of interest was to 1 after the

[82] One must consider the lowest probability of the outcome *during* rather than simply immediately prior to the critical juncture exactly because not all critical junctures result in change: considering only the probability before and after the juncture would lead analysts to ignore the criticalness of critical junctures that result in re-equilibration of the pre–critical juncture status quo.

[83] If $CJ_y \leq 0$, then CJ was not a critical juncture with respect to outcome Y.

[84] We take the natural log of $(T_{x'}/T_x)$ in order to discount the effect of time. Otherwise, critical junctures occurring in the distant past would produce the highest criticalness measures, even if they had a very modest impact on the probability of the outcome.

critical juncture is concluded $(1/(1-\ln(P_y)))$.[85] The measure is designed to gauge the overall impact that the choices made during the critical juncture had on the likelihood of the outcome in question.

The point here is *not* to suggest that historians and political scientists should calculate criticalness scores for their arguments.[86] Rather, the model is simply a heuristic device that can make us more conscious of what we are already doing implicitly in rhetorical battles between rival historical narratives. For example, the model clarifies that a critical juncture should be shorter than the path-dependent process it initiates. The model also captures why decisions taken years before an outcome, which raised the probability of that outcome considerably (say from .1 to .6), could be deemed more critical than decisions taken hours before the outcome, which raised its probability from .9 to .95.

Apart from being a tool for comparing rival arguments, this operationalization of criticalness has the potential to contribute to a more rigorous use of the concept of critical junctures. First of all, it can help scholars concentrate on those junctures that are "most critical." Figure 1 conveys the same intuition as does equation 1 by broadly summarizing the variation in criticalness scores that the model produces. Researchers analyzing long-term processes of institutional development should concentrate on those critical junctures that present both high temporal leverage and high probability jump (quadrant 4) with carefully justified excursions into quadrants 2 and 3.

Our operationalization, with its emphasis on temporal leverage, pushes scholars to focus their analyses on specific decisions taken by powerful actors during narrowly circumscribed periods, rather than talking (often misleadingly) about "moments" of choice (which in some accounts may actually last for a number of years) in little more than a metaphorical sense.[87] Indeed, the high levels of structural fluidity and

[85] In arguments built on increasing returns and path dependence, the probability of the outcome of interest at the *beginning* of the path cannot equal 1, as this would deny the very logic of self-reinforcing mechanisms. Our formula captures this idea, in that if the outcome of interest happens *immediately* after the end of the critical juncture, the "temporal leverage" fraction would have a numerator of 0 and taking the natural log would give a result of negative infinity, rendering the CJ score meaningless.

[86] While historical arguments relied on assessments of the likelihood of various outcomes, it is obviously problematic to assign precise probabilities to predictions in historical explanations; see Max Weber, *Methodology in the Social Sciences*, ed. and trans. Edward Shils and Henry A. Finch (New York: Free Press, 1949), 183.

[87] The actual duration of a critical juncture obviously depends on the object of the analysis. Collier and Collier's critical junctures lasted between nine and twenty-three years; see Collier and Collier (fn. 4), 32. In Ackerman's theory of American constitutional development, the critical junctures, or "constitutional moments," lasted up to a decade; see Ackerman (fn. 17). See also Daniel Ziblatt, *Structuring the State* (Princeton: Princeton University Press, 2006). Ziblatt identifies "national critical junctures" in Italy and Germany, leading up to national unification, in "the decisive years of the late 1850s and 1860s" (p. 24).

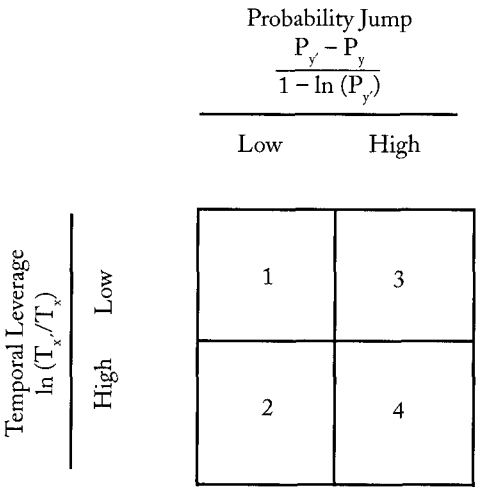

FIGURE 1
JUST HOW "CRITICAL" IS A CRITICAL JUNCTURE?

actor freedom associated with critical junctures are unlikely in the presence of high values of T_x (that is, critical junctures lasting a long time). In such cases, actors' choices are likely to be influenced in a substantive way by preexisting or newly emerged structural constraints, and it may be better to adopt a different model of institutional change.[88]

In the next section we give two examples of empirical application of our framework: one single-case study, one of the latest historical contributions to the long debate on the fall of the Weimar Republic, and one comparing and adjudicating between two different moments of change (both considered potential "critical junctures") in the process of constitutionalization of the European Union.

VI. EMPIRICAL EXAMPLES

CRITICAL JUNCTURES AND REGIME CHANGE

Several examples of critical junctures can be found in the political history of interwar Europe. Taking regimes as our unit of analysis, for example, one can see that democratic breakdowns depended in several instances on the action and decisions of key political actors in key

[88] Ziblatt (fn. 87).

moments—decisions that increased or decreased remarkably the probability of a regime embarking on a particular path of development in future years.[89] Turner eloquently shows this for Weimar Germany, for example. In *Hitler's Thirty Days to Power* he analyzes the events and the political choices of the key political actors in the German political establishment during January 1933, the thirty days preceding the appointment of Hitler to the chancellorship and the beginning of the Nazi era.[90] During that month, he maintains, the return to a fully democratic regime was no longer possible, but options other than the establishment of a Nazi regime were still on the table, most importantly, the establishment of a military regime in Germany.

Although Turner does not use the term, his entire book is a detailed analysis of a critical juncture, the decisive moments that steered the German political system toward a new equilibrium. All the characteristics of a critical juncture are present. Contingency, in the form of both decisions of key actors and sheer chance events influencing those decisions, is more important than in "normal" times. In those troubled weeks, key actors rose to an unprecedented importance: Turner identifies them—their total number hardly surpasses a dozen—and shows how their decisions and choices were important, often decisive.[91] The consequences of these decisions, given the situation of social and political crisis in Germany, were much more momentous than decisions taken by actors in similar positions would have been in a situation of social and political stability.

Turner tackles head-on the key questions of whether a different outcome of the juncture itself would have been possible given, first, that different decisions of these actors were viable, and second, that such decisions could have made a substantial difference for the outcome. Turner investigates directly the question of whether the decisive actors really had a range of options available or whether instead they were maneuvered by "powerful behind-the-scenes vested interests" that in turn would respond to more "structural" conditions and therefore be much less "contingent."[92] This is, ultimately, an empirical question:

[89] Linz and Stepan (fn. 71); Giovanni Capoccia, "Defending Democracy: Strategies of Reaction to Extremism in Inter-War Europe," *European Journal of Political Research* 39, no. 4 (2001); and idem (fn. 44).

[90] Henry Ashby Turner, *Hitler's Thirty Days to Power* (Reading, Mass.: Perseus, 1996).

[91] Listing the key players, Turner (fn. 90) maintains that "it was one of these frequent junctures in human affairs when the fates of many rested with very few" (p. 166).

[92] If this were true, then there would be very little "critical" in the events of January 1933 in Germany: structural conditions would create formidable organized interests that would then impose certain courses of action on whoever happened to be in positions of power in an ostensibly critical phase.

documents and other historical evidence can tell whether key actors in a critical juncture acted with a significant degree of freedom or not. At the end of his study, based largely on previously unavailable documents, Turner concludes that "all these men were free to make political decisions according to their own predilections."[93] As for the second question, of whether different decisions would have had a significant impact on the outcome, again Turner offers a positive answer: the power of the military to control public order and to relegate the Nazi movement to a marginal role, the hostility of large sectors of the military to Hitler, and the electoral decline of the NSDAP suggest that different political decisions could have plausibly led to the establishment of a viable military regime in Germany in 1933.

Turner's focus on key microdecisions at a very specific and circumscribed moment in time (roughly four weeks) constitutes a model application of our approach to the study of critical junctures: the temporal leverage of the juncture is very high (one month's duration for a regime that will last twelve years). Also high is the probability jump: taking as the end point of the juncture the appointment of Hitler to the chancellery on January 30, 1933, at that stage the probability of achieving a fully consolidated Nazi regime was dramatically higher than it had been a month earlier.

Critical Junctures and Constitutionalization of the European Union

Over the past five decades the European Union (EU) has been constitutionalized. Remarkably, a treaty-based international organization has been transformed into a quasi-federal polity based on a set of treaties that are a constitution in all but name. A substantial body of scholarship has examined this process,[94] and one conclusion supported by the vast majority of such studies is that the constitutionalization of EU law has followed a path-dependent, self-reinforcing process.

Looking back at this path-dependent process, can we identify a critical juncture (or junctures) when well-placed actors made choices that set the EU legal system on a trajectory to the outcome we observe today? The history of the EU legal system suggests many candidates for the status of critical juncture: institutional provisions inserted in Treaty of Rome, landmark rulings by the European Court of Justice (ECJ), the

[93] Turner (fn. 90), 168.

[94] Joseph H. Weiler, "The Transformation of Europe," *Yale Law Journal* 100 (1991); Karen Alter, *Establishing the Supremacy of European Law* (Oxford: Oxford University Press, 2001); and Alec Stone Sweet, *The Judicial Construction of Europe* (Oxford: Oxford University Press, 2004).

introduction of qualified majority voting, and nonevents, such as moments when powerful national governments chose not to confront ECJ activism. Aside from any landmark steps, microlevel cumulative processes—such as steady increases in referrals to the ECJ from national courts—have also driven the process forward. In light of the abundance of major steps and micromutations, perhaps constitutionalization is better conceived of as an outcome resulting from an evolutionary, cumulative set of causes[95] than as one driven by critical junctures?

Though most literature on legal integration views the process as a gradual one, few scholars would disagree with the notion that there were moments when crucial decisions affected the likelihood that the EU treaties would be constitutionalized. In the remainder of this section, we assess the significance of two such moments. The first is the period in which Treaty of Rome negotiators chose to establish the preliminary ruling procedure, and the second is the period when the ECJ established the landmark doctrines of supremacy and direct effect. The first of these periods stands out as a significant critical juncture in the constitutionalization of EU law, while the second has a far lower degree of criticalness and arguably does not merit the label of critical juncture.

Article 177 of the 1958 Treaty of Rome established the preliminary ruling procedure. That procedure provides that whenever a national court is hearing a case involving a question of European law, that court may refer the case to the ECJ to ask for the proper interpretation of the law.[96] The decision to incorporate Article 177 into the Treaty of Rome was a highly contingent event, and its eventual impact was certainly not anticipated by the governments that agreed to it. As Keohane, Moravcsik, and Slaughter put it: "There is no doubt that [its impact] was unforeseen by the member states; Article 177 was an incidental provision suggested by a low-level German customs official in the Treaty of Rome negotiations."[97]

While it is clear that Article 177 might easily not have been incorporated in the Treaty of Rome, the central question (captured by the probability jump dimension of criticalness) concerns the degree to which the introduction of Article 177 set in motion a path-dependent process that dramatically increased the likelihood of constitutionalization. A full exploration of this question lies beyond the scope of this article, but the abundant literature on the development of the prelimi-

[95] Balkin and Levinson (fn. 17).

[96] Article 177 gives all national courts the option of making references to the ECJ in cases hinging on EU law and *obliges* final courts of appeal to do so.

[97] Robert Keohane, Andrew Moravcsik, and Anne-Marie Slaughter, "Legalized Dispute Resolution," *International Organization* 54, no. 3 (2000), 483.

nary ruling procedure and comparisons with the experience of other courts[98] suggest that the path-dependent process set in motion by Article 177 was very resilient. This process was based on a judicial dialogue between the ECJ and national courts that steadily strengthened the ECJ and EU law.[99] The preliminary ruling procedure generated a large flow of cases to the ECJ, which enabled it to build up a body of case law that it could use in justifying subsequent expansive judgments.[100] Furthermore, because the power to refer cases lay with national judges, they saw the ECJ as a potential ally in domestic battles. Finally, many litigants hoped to use the procedure to leverage EC law in the service of domestic policy battles.[101] The preliminary ruling procedure thus allowed for the self-interested behaviors of the ECJ, national courts, and private litigants to reinforce one another and promote the constitutionalization of EU law.

Where the moment of the introduction of Article 177 stands out clearly as a critical juncture, the establishment of the doctrines of direct effect and supremacy has a far lower degree of criticalness. Of course, these two doctrines, which were enunciated in landmark ECJ decisions in 1963 and 1964, were necessary for the subsequent development of the European legal system.[102] But the fact that these doctrines were necessary building blocks—indeed cornerstones—in the construction of the EU's quasi-federal legal order does not mean that the period between 1963 and 1964, when the ECJ first asserted these doctrines, was a critical juncture.

First, supremacy and direct effect were not established simply on the days that the ECJ ruled in these cases. Rather, the doctrines asserted in these precedents were established incrementally, as they were reaffirmed in subsequent case law and gradually accepted by national judiciaries and governments. It was not until 1979 that these doctrines were finally established across the EU. If we take this longer period to be the potential critical juncture with regard to the establishment of supremacy and direct effect, then we are dealing with a sixteen-year period (1963–79).[103]

[98] Alec Stone Sweet, *Governing with Judges* (Oxford: Oxford University Press, 2000); Alter (fn. 94); and Karen Alter, "Private Litigants and the New International Courts," *Comparative Political Studies* 39 (February 2006).

[99] Anne-Marie Burley and Walter Mattli, "Europe before the Court," *International Organization* 47 (1993); and Alter (fn. 94).

[100] Stone Sweet (fn. 98).

[101] Alter (fn. 94).

[102] Direct effect *(Van Gend en Loos*, Case 26/62, [1963] ECR 1) provides that EU law creates rights for individuals that they can rely on directly within their national legal systems, whereas supremacy (*Costa v ENEL*, Case 6/64, [1964] ECR 585) holds that EU law takes primacy over conflicting national laws.

[103] Stone Sweet (fn. 98); and Alter (fn. 94).

Second, given the ECJ's institutional self-interest in expanding the scope and power of European law, it had a consistent motive to establish these doctrines, and given its steady flow of cases, it had ample opportunity to do so. Hence, the probability that the ECJ's choices in 1963 and 1964 would affect the direction of European law was not *substantially* heightened relative to that in prior or subsequent years. To put it another way, if the ECJ had not established direct effect and supremacy in 1963 and 1964, it might well have done so later. These rulings represented a key step in the process of constitutionalization of EU law, but a less substantial step than the incorporation of Article 177 into the Treaty of Rome.

VII. Conclusion

Critical junctures are *rare* events in the development of an institution: the normal state of an institution is either one of stability or one of constrained, adaptive change. Moreover, transformational change is not necessarily the result of a critical juncture; it can also be the result of an incremental process.[104] Caution and clarity in the use of the concept are vital, particularly given how ubiquitous the term and its synonyms are in historical institutionalist literature. To date, some of the work relying on this concept has done so rather casually, adopting different definitions of the concept and not considering all the implications of the definitional and conceptual choices. In this article we sought to clarify these muddied conceptual waters by presenting a precise definition of critical junctures, highlighting which methods of analysis should be used to study critical junctures, assessing the pros and cons of different theoretical approaches and comparative research designs, and illustrating the utility of our approach with a set of brief case studies.

We identify contingency as the key element of critical junctures. During critical junctures change is substantially less constrained than it is during the phases of path dependence that precede and follow them. In critical junctures contingency is enhanced, as the structural constraints imposed on actors during the path-dependent phase are substantially relaxed. Only by taking counterfactual analysis seriously can contingency be studied. The reconstruction of plausible counterfactual scenarios, based on theoretically informed expectations and narrative reconstruction of the decision-making process supported by empirical evidence, is therefore key in this kind of analysis. Theory-guided and

[104] Thelen (fn. 1); and Streeck and Thelen (fn. 32).

empirically well founded narrative is compatible with various theoretical approaches, ranging from nonformal to game theoretic. Hence, our conceptualization is compatible with different strands of institutional analysis, from historical to rational choice.

When trying to explain an institutional outcome that derives from a process of self-reproduction and path dependency, it is of course vital to "go back and look"[105] for the genetic moment that launched the process. Our approach emphasizes, though, that researchers must not stop with simply identifying the critical juncture but must instead deepen the investigation of the historical material to identify the key decisions (and the key events influencing those decisions) steering the system in one or another direction, favoring one institutional equilibrium over others that could have been selected. Particular attention should be paid to the alternative choices that were available to the decision makers, as those can be reconstructed from the available record. The deeper understanding of key decisions and their immediate context is likely to have at least two positive consequences for comparative historical analysis. First, it can lead to the identification of comparable negative cases—critical junctures that did not result in change. Second, it facilitates the assessment of rival claims concerning the importance of different junctures for the emergence of a particular institutional equilibrium. Our operationalization of criticalness will of course not end disagreements among scholars concerning the causal significance of various critical junctures, but it may at least clarify more sharply where the disagreements lie and hence guide further research.

The use of such well-crafted cross-sectional and longitudinal comparisons can substantially increase confidence in the findings of historical institutionalist analyses. More generally, following this protocol in institutional analysis might contribute to correcting what we see as an imbalance in this kind of research—the emphasis on phases of institutional reproduction and path dependence and the relative neglect of genetic moments of institutional equilibrium—and to giving due attention to both.

[105] Pierson (fn. 14), 264.