Conclusion: Methodological Challenges and Qualitative Tools

Contingency and Determinism in Research on Critical Junctures: Avoiding the "Inevitability Framework"

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Introduction: Contingency and Determinism

For scholars who study critical junctures and their legacies, the distinction between contingent and deterministic causal relationships is an abiding concern. Among the methodological challenges faced by this tradition of research, this distinction deserves central attention. To be clear about this contrast: for present purposes, contingent outcomes are understood as subject to chance. They are possible or even probable, yet uncertain. Expressions such as less likely, likely, and very likely can indicate contingency. By contrast, deterministic relationships lack these attributes.[1]

Landmark books such as Roberts' *Changing Course in Latin America*[2]—a central point of discussion in this symposium—stress the importance of contingency. More broadly, some authors treat contingent choice, agency, and uncertainty as defining characteristics of critical junctures.[3] Others, by contrast, see critical junctures as determined by structural constraints and antecedent conditions. Slater and Simmons, for example, carefully avoid making contingency a defining attribute, and they underscore the impact of "critical antecedents" that strongly shape the critical juncture itself.[4]

In parallel, some researchers contrast the contingency of the critical juncture itself with a deterministic view of the *legacy* it generates. Thus, the legacy is produced and sustained by self-reinforcing, path-dependent processes, and determinism is seen as a defining characteristic of the path. Mahoney, for instance, treats contingency as a defining feature of the critical juncture, and determinism as a defining feature of the subsequent trajectory of path dependence.[5]

Finally, some accounts combine ideas of contingency and determinism in other ways. In Pierson's view,[6] as critical junctures and their legacies begin to unfold, no specific event initially has a high likelihood. However, due to a process of increasing returns, outcomes subsequently become more deterministic. Other scholars, by contrast, view the legacy in terms of contingency and/or as subject to diverse influences that reduce the likelihood of adherence to a path.[7]

Given these contrasting views—and the focus of many authors on the interplay between contingency and determinism—in this concluding essay to the symposium I propose a key priority: a preference for considering both deterministic and contingent causal patterns, as opposed to adopting methods that impose an a priori assumption in favor of one or the other. Given the importance of both contingency and determinism in theoretical treatments of critical junctures, we require empirical approaches that do not reject contingency out of hand. As I document here, foundational qualitative works in the critical juncture tradition rely centrally on claims about likelihoods, even as they also make reference to necessary and sufficient causes. This reflects the fundamental concern with the relationship between contingency and determinism, instead of a focus on one to the exclusion of the other.

The discussion proceeds as follows. First, it summarizes an analytic framework which is a particular point of concern here, which may be called the "inevitability framework." As will be explained below, this framework explicitly treats contingency as irrelevant in qualitative, case-oriented research. This approach has variously been identified with Qualitative Comparative Analysis (QCA),[8] with the broader perspective of set theory,[9] and with a new body of work on process tracing.[10] According to this framework, thinking in terms of probabilities is not meaningful in case-oriented research—and in particular, in studies focused on outcomes that have already occurred. Instead, causal patterns are seen as intrinsically taking the form of necessary and sufficient causes—and also INUS causes,[11] which combine necessity and sufficiency.

Against this backdrop, the essay then discusses substantive examples to illustrate how the treatment of contingency and determinism in fact plays out in case-oriented, small-N analysis. The examples include: (a) Illustrations of qualita-

[1] The distinction between contingency and determinism is deservedly the focus of substantial debates in the philosophy of science. The above is the meaning intended here.

[2] Roberts 2014.

[3] See e.g., Mahoney 2000: 507-508; Katznelson 2003: 277; Capoccia and Kelemen 2007: 352; and Bernhard 2015: 978.

[4] Slater and Simmons 2010, 889-890. See also Luebbert 1991: Chapter 9; and Thelen 2004: 30-31.

[5] Mahoney 2000, 507.

[6] Pierson 2000, 263.

[7] E.g., Roberts 2014: 281; Collier and Collier 1991: 498. See also Lieberson (1997), discussed below.

[8] Ragin 1987, 2008; Rihoux and Ragin 2009.

[9] Goertz and Mahoney 2012: 18-24; Schneider and Wagemann 2012.

[10] Blatter and Blume 2008a, 32; Blatter and Blume 2008b, 322; Blatter and Haverland 2012, 92; Blatter and Haverland 2014, 9; Schneider and Rohlfing 2013, 569; Mahoney 2012, 573; Goertz and Mahoney 2013, 279.

[11] An INUS cause is "an *insufficient* but *necessary* part of a condition which is itself *unnecessary* but *sufficient*" (Mahoney 2008, 7, citing Mackie 1965, 246).

tive reasoning in everyday life. (b) Two critical juncture studies: Roberts, and Collier and Collier. (c) A prominent example of historically-oriented process tracing: Tannenwald. (d) A critique of determinism in path-dependent processes: Lieberson. (e) A consideration of contingency and counterfactuals: Roberts. Building on these examples, the final section seeks to draw lessons for the analysis of contingency and determinism in qualitative research.

The Inevitability Framework

The priority of having analytic tools that allow for an interplay between contingency and determinism leads to a methodological recommendation. I propose that the *inevitability framework* for case-oriented research is ill equipped to analyze critical junctures.

This inevitability framework in some respects appears appropriate for research on critical junctures and therefore merits close attention. First, it advocates the context-specific and historically embedded forms of analysis that are fundamental to research on critical junctures and to comparative-historical analysis more broadly. Second, in the major, initial formulation of this framework, Ragin offers as a lead example the scholarly work that is the foundation of current studies of critical junctures: i.e., Rokkan, including the field-defining study by Lipset and Rokkan.[12] Research on critical junctures and necessary/sufficient conditions are thus strongly connected. Third, for scholars in the Latin American field, the salience of this approach is reinforced by two major comparative-historical books that frame part of their findings in terms of necessary and sufficient causes: Wickham-Crowley's *Guerrillas and Revolution in Latin America* and Mahoney's *Colonialism and Postcolonial Development*.[13] Fourth, this framework is diffusing rapidly as an approach to case-oriented, contextualized comparison.[14]

Hence, scholars who study critical junctures would do well to think carefully about whether the inevitability framework is appropriate for their research.

What are the basic premises of this framework? A number of authors argue that qualitative research must inherently yield deterministic findings of causal necessity and sufficiency. Beach and Pedersen, for example, maintain that research based on the comparative method, small-N analysis, comparative case studies, and process tracing produces deterministic findings that exclusively involve necessary and sufficient causes.[15] In discussing "the tenets of qualitative case-oriented methodology," they advance the position that "it makes no sense to use a probabilistic understanding of causality when we are investigating single cases and their causes."[16] Their subsequent

2016 book makes the same arguments.[17]

Further, Goertz and Mahoney argue that the entire qualitative tradition, i.e., the "qualitative culture," is anchored in necessity, sufficiency, and INUS causes, suggesting that "ideas concerning necessary and sufficient conditions are at the core of qualitative research practices."[18] They also extend this position to natural language, arguing that it is likewise structured around the logic of necessary and sufficient conditions.[19] Rohlfing and Schneider hold the same view,[20] and variants of this position are found in the wider literature on Qualitative Comparative Analysis and in the literature on process tracing cited above.[21]

Beach and Pederson offer a specific defense of this framework, quoting in detail from Mahoney's discussion of small-N, case-oriented research.[22] Mahoney argues that:

> …the very idea of viewing causation in terms of probabilities when N = 1 is problematic. At the individual case level, the ex post (objective) probability of a specific outcome occurring is either 1 or 0; that is, either the outcome will occur or it will not….To be sure, the *ex ante* (subjective) probability of an outcome occurring in a given case can be estimated in terms of some fraction. But the real probability of the outcome is always equal to its ex post probability, which is 1 or 0.[23]

This statement motivates the label "inevitability framework": outcomes are not subject to chance. Thus, Mahoney notes with approval authors who see the idea of probabilities for individual cases as "meaningless"[24]—notwithstanding his use of the probabilities of 1 and 0 in the formulation above. Similarly, Beach and Pedersen, seeking to build on an important consensus in the literature, maintain that "most qualitative methodologists" reject a probabilistic approach.[25] These authors do not accept the frequentist logic associated with large-N statistical analysis, which "assesses the magnitude of causal effects of X on Y, or the degree to which the presence of X raises the probability of Y in a population….In contrast, the comparative method aims at assessing necessary and/or sufficient conditions that produce Y."[26] As is clear from the discus-

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[12] Ragin 1987, 126-128; Rokkan 1970; Lipset and Rokkan 1967.

[13] Wickham-Crowley 1993; Mahoney 2010.

[14] For example, the COMPASSS website lists over 700 substantive and methodological publications, based on different variants of these methods. http://www.compasss.org/bibdata.htm. Viewed June 30, 2017.

[15] Beach and Pedersen 2013, Chapters 3 and 5: e.g. 26-28, 76-78.

[16] Beach and Pedersen 2013, 28.

[17] Beach and Pedersen 2016. While their 2016 book acknowledges the value of methodological pluralism, they argue that "using ontological determinism and asymmetry [i.e., necessity and sufficiency] as the core common foundation for case-based research is the only logical position when taking causation at the case level as the point of departure" (Beach and Pedersen 2016: 15).

[18] Goertz and Mahoney 2012: 11; Goertz and Mahoney 2013.

[19] Goertz and Mahoney 2012: 17-19.

[20] Rohlfing and Schneider 2014, 30.

[21] See footnote 10.

[22] Beach and Pedersen 2013, 28. Here Mahoney uses the example of N=1 to illustrate issues that arise more broadly in small-N analysis.

[23] Mahoney 2008, 415-416.

[24] Mahoney 2008, 416.

[25] Beach and Pedersen 2013, 28; citing Blatter and Blume 2008a and Mahoney 2008.

[26] Beach and Pedersen 2013, 76.

sion above, this overall position is held by a number of authors.[27]

A key further element in the inevitability framework is the treatment of contributing causes. With a dichotomous outcome, contributing causes increase (or decrease) its likelihood; with a graded outcome, they cause it to have higher (or lower) values. The inevitability framework subsumes contributing causes under the concept of necessity, sufficiency, and INUS conditions;[28] the size of their "contribution," that is to say, their marginal effect, is not analyzed. As Rohlfing and Schneider put it, this group of methods "focuses on multiple conjunctions and distinguishes between necessary and sufficient conditions as opposed to marginal effects."[29] Mahoney views contributing causes as "probability raisers" that are relevant for quantitative analysis but not for qualitative, case-oriented research.[30]

Overall, the inevitability framework has become an important position in the literature.

Analysis of Contingency: Substantive Examples

What are we to make of the inevitability framework? This section considers examples which show that, contrary to the claim of this framework, ideas of likelihood and probability are central to qualitative, case-oriented reasoning. Such ideas are often informal—that is, they are not formalized mathematically and quite appropriately do not evoke any specific statistical concept of probability—yet they are nonetheless central to qualitative research.

Examples from Everyday Life. It is hard to understand how the inevitability framework can be plausible, given that in our ordinary experience it is so standard and intuitive to think about the likelihood of a singular event that has already occurred. For example, a military mission may have had a relatively high risk of failure, have been fairly likely to succeed, or have been in-between—and the commanders who analyze it in retrospect will certainly think carefully about the difference. After a game, baseball fans might argue about "lucky doubles," "unlucky outs," or an "easy win."[31] The bursting of a real estate bubble, once it has (or has not) occurred, might be seen as having been extremely likely, quite possible, or improbable.

It hardly requires an elaborate commitment to any notion of probability to accept the intuitive idea of likelihood illustrated by these straight-forward examples.

Critical Juncture Studies: Roberts, and Collier and Collier. A focus on the varying likelihood of events that have already occurred is also routinely found in case-oriented research in the tradition of process-tracing, comparative-histori-

cal analysis, and specifically the study of critical junctures. Consider two key books in this tradition: Roberts' *Changing Course in Latin America*, and Collier and Collier's *Shaping the Political Arena*.[32]

These books demonstrate that arguments about likelihood and probability play an important role in qualitative research about outcomes that have already occurred. This calls into question basic premises of the inevitability framework. They also show how conventional qualitative work makes reference to the ideas of necessity and sufficiency, thereby casting doubt on the argument that these are sharply contrasting traditions. Of course, in inferring either contingent or deterministic causation these studies might make mistakes. The point is not to claim that these studies are unquestionably making correct inferences, whether contingent or deterministic. Rather, the point is to show that they are open to finding both types.

Roberts' book on critical junctures periodically makes claims about the likelihood of a particular outcome, given a specific antecedent factor—i.e., the conditional likelihood of the event.[33] He uses what might be interpreted as partially ordered categories: "unlikely" (2 times); "less likely" (1); "likely" (8); "more likely" (11); "far more likely" (1); "especially likely" (1); "disproportionately likely" (1); and "most likely" (2). In addition, "probable/probability" occur twice, and "unlikely" is used three additional times not as a conditional probability, but simply to characterize the likelihood of a given outcome. Thus, ideas of likelihood do indeed play an important role in Roberts' argument.[34]

Roberts' focus on likelihoods does not preclude a concern with necessity and sufficiency, however, and he occasionally discusses causal patterns in those terms as well. For instance:

> Delayed industrialization stunted the growth of urban middle and working classes, preventing organized labor from emerging as a significant political factor....[35]

> Economic and political changes by the early decades of the 20th century made it impossible to reproduce exclusive oligarchic regimes by electoral means.[36]

In the first sentence, "prevent" means that the antecedent condition is sufficient to yield a politically weak labor movement. In the second example, the antecedent conditions were sufficient to block, i.e., render "impossible," the electoral reproduction of oligarchic regimes. The ideas of necessity and sufficiency are not elaborately conceptualized here, but specific causal claims correspond to these concepts. Thus, Roberts avoids adopting one approach to the exclusion of the other.

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[27] Its salience as of 2017 is reflected in the fact that Mahoney's 2008 article is one of the first two readings in a course on process tracing offered at ICPSR in June 2017.

[28] Goertz and Levy 2007, 10.

[29] Rohlfing and Schneider 2014, 30.

[30] Mahoney 2008, 415.

[31] This example is from Lewis (2004: 134). Overall, this book is about large-N statistical analysis, but these examples involve singular events that have already occurred.

[32] Roberts 2014; Collier and Collier 1991.

[33] Roberts 2014, passim.

[34] These word counts exclude instances that appear to express the author's uncertainty, or to express inadequate information. Thus, they reflect statements about the probabilistic process through which causes shape outcomes.

[35] Roberts 2014, 66.

[36] Roberts 2014, 177.

Collier and Collier, like Roberts, periodically discuss the conditional likelihood of events.[37] Some of the terms, once again, might be seen as ordered: "unlikely" (3 times); "less likely" (2); "likely" (13); and "more likely" (10). The term "probably" is used periodically (13), and "likelihood," "probable," "probability" and "probabilities" appear occasionally (4).

The ideas of necessity and sufficiency are also employed by Collier and Collier in discussing state-labor relations—specifically contrasting patterns of mobilization and cooperation. For example, with regard to necessity they argue that "in order to mobilize support successfully an exchange was necessary in which real concessions were offered."[38] With regard to sufficiency, they suggest that "the inducements contained in the law were thus initially sufficient to motivate the dominant sector of the labor movement to cooperate with the state."[39] However, as with Roberts, the idea of likelihood is more central to their analysis.

Process Tracing: Tannenwald. Given that process tracing is a fundamental tool in research on critical junctures, it is also appropriate to illustrate this argument about likelihoods with a well-known example of that method: Tannenwald.[40] Although the process-tracing authors discussed above, such as Beach and Pedersen,[41] place their approach clearly in the inevitability framework, Tannenwald's work makes it clear that their view of process tracing is seriously incomplete.

She seeks to explain the non-use of nuclear weapons by the United States in international crises in the decades after the Second World War. Contrary to the authors cited above who see process tracing as inherently yielding findings of necessary and sufficient causes, the causal language used by Tannenwald is more nuanced.[42] She frequently refers to factors that decrease or increase the likelihood of alternative outcomes. The word count for terms that refer to decreasing the likelihood is as follows: "constrain" (21 times); "inhibit" (11); and "limit" (3). For terms that entail increasing the likelihood, she uses: "encourage" (2); "raise" (2); and "bolster" (1). Some terms directly express probability: "likely" (5); "unlikely" (2); and "probability" (2).

Tannenwald also makes reference to causal necessity/sufficiency: "contribute decisively to" (1) and "prevent" (1). These statements show that her framework does not exclude ideas of necessity and sufficiency, yet overall she rejects determinism in favor of a view based on likelihoods and probabilities: "Norms do not determine outcomes, they shape the realm of possibility."[43]

Overall, the examples of Roberts, Collier and Collier, and Tannenwald underscore two key points. Qualitative research routinely uses intuitive ideas of likelihood and probability in analyzing events that have already occurred. It is simply in-

correct to say that they do not. At the same time, these authors also use ideas of necessity and sufficiency, thus combining these two traditions and calling into question the idea that they are two distinct methodological cultures. A key point is that the analytic framework employed in these three studies is open to finding likelihoods—rather than precluding such findings, as occurs with the inevitability framework.

Path Dependence: Lieberson's Critique. The inevitability framework also leaves the researcher unable to respond to Lieberson's important challenge to the idea of path dependence.[44] In Lieberson's view, even with fairly tightly structured causal relationships, the probability of staying on a path at each step is doubtless not 1.0. Hence, the cumulative probability of staying on the path may drop sharply across the steps. To illustrate using numerical probabilities,[45] take the example of a path with only three steps and a fairly high probability of the posited outcome at each step, perhaps 0.8. In that case (and if the probabilities are independent at each step), the cumulative probability that a given case will stay on the hypothesized path is only 0.5. If the probability at each step is 0.7, which is still high, the cumulative probability drops to 0.3. This point invites us to look more closely at the ideas about contingency, path dependence, and increasing returns discussed above.

Scholars should be attentive to Lieberson's critique. Perhaps it does not apply to all forms of path dependence, such as the processes described by Pierson.[46] But if researchers are committed to the questionable assumption that at each step the outcome is inevitable, then they are simply unable to place themselves in dialogue with Lieberson's argument. Similarly, if scholars respond by insisting that qualitative works simply do not use ideas of probabilities—to reiterate, an argument clearly contradicted by the examples discussed above—then this response is simply incorrect. Again, they would fail to place themselves in dialogue with Lieberson's argument, which is an important loss.

Counterfactuals: Revisiting Roberts. Roberts' book *Changing Course in Latin America* illustrates a key feature of critical juncture research: demonstrating how contingent choices during the critical juncture produced outcomes that could have been different.[47] For example, he considers the contingent process through which mechanisms of reproduction shaped the legacy—as with "reactive sequences" in the aftermath of a critical juncture.[48] As Kaufman suggests (this symposium),[49] this focus calls for counterfactual thinking—including arguments about what might have happened if the actors

[37] Collier and Collier 1991, passim.

[38] Collier and Collier 1991, 197.

[39] Collier and Collier 1991, 54.

[40] Tannenwald 1999.

[41] Beach and Pedersen 2013; Beach and Pedersen 2016.

[42] Tannenwald 1999, passim.

[43] Tannenwald 1999, 435.

[44] Lieberson 1997.

[45] A qualitative version of this example could also be employed, based, for example, on the gradations of likelihood used by Roberts.

[46] Pierson (2000) describes "Polya urn" processes, in which early random draws strongly shape the probability distribution of later outcomes.

[47] Roberts 2014.

[48] Mahoney 2000.

[49] Kaufman 2017.

in the critical juncture had made different choices. Such arguments may depend on within-case process tracing, as well as cross-case comparisons.[50] Establishing what would have happened in the counterfactual absence of some choice or event is difficult.[51] Yet for theories that attribute legacies to critical junctures, this is a first-order objective.

Roberts meets this challenge in his effort to demonstrate how contingent differences among cases exposed to a common external shock produced divergent outcomes. He argues that, in the context of the exhaustion of statist development models, pressures for market liberalization affected all Latin American countries in the 1980s and 1990s. However, due in part to accidents of timing, reforms were led in some countries by traditional center-left or populist parties, whereas in others conservative actors took the lead.

Thus, in countries like Venezuela, Ecuador, Bolivia, and Argentina, traditional center-left or populist parties implemented structural adjustment policies. This pattern led to de-alignment, as center-left/populist parties lost the ability to project clear programmatic positions and opened space for extreme left challengers. By contrast, in Brazil, Chile, and Uruguay, conservative-led reforms instead aligned party systems programmatically. Here, conservative actors took the lead, and traditional left parties could then channel Polanyian resistance to market orthodoxy. As a consequence, partisan competition stabilized around programmatically consistent alternatives and ultimately produced relatively moderate "left turns" as a legacy of events during the critical juncture.

It is clear from Roberts' discussion of each case that the reactive sequences that followed from market reforms were in no way deterministic or pre-ordained (see above on the role of likelihoods in his analysis). In all of Roberts' cases, the party implementing structural reform could easily have differed—either if left/populist parties had made alternative choices, or if the greatest pressures for market liberalization occurred when these parties happened to be out of power. Alternative outcomes are easy to envision. Rigorous reasoning about counterfactual alternatives is a great challenge, for reasons outlined by authors such as Fearon.[52] Yet it is essential to good causal inference—and crucial, for present purposes, for careful thinking about contingency versus determinism.

Drawing Together the Argument

These several examples, which demonstrate the importance of contingency in qualitative, case-oriented work, point to major concerns about the treatment of likelihood and probability within the inevitability framework. This section draws together key points that emerge from the discussion above.

A key premise of this framework is that ideas of probability are irrelevant in qualitative research and are an extremely

well-worked-out paradigm in quantitative research.[53] Questions can be raised about both parts of this premise. On the one hand, the claim that probabilistic thinking is not part of the qualitative tradition is called into question by these examples. On the other hand, some statisticians argue that in quantitative research, the concept of probability is too often used in settings where it may not be appropriate—for example, because a chance model is not relevant.[54] One plausible view is that intuitive ideas of likelihood are an essential concern of qualitative methods, whereas formal notions of probability remain contested in statistics and quantitative methods.

A further problem arises with the claim that, once an outcome *has occurred*, its probability is 1.0. The implausibility of this claim can be shown by examining an argument made by Roberts. He maintains, for example, that "inequalities are more likely to be politicized when parties establish programmatic linkages to social groups."[55] What happens to Roberts' argument if this politicization of inequalities has *already* occurred? In that case, according to this idea of "ex-post" inevitability, the probability of this outcome can only be 1 or 0, and we should conclude that Roberts is simply wrong in arguing that it is "more likely." But this makes no sense at all; a more credible account would suggest that this idea of ex-post inevitability is misleading, and Roberts should definitely not abandon his own argument.

The subordination of contributing causes also gives up too much. In the inevitability framework these are seen as probability raisers that play a fundamental role in quantitative research, whereas in qualitative research they are subsumed under necessary, sufficient, and INUS causes. Yet major studies discussed above—to reiterate, Roberts, Collier and Collier, and Tannenwald—show that reasoning about marginal effects plays a central, and not subordinate, role in case-oriented research. Hence, the analysis of probability raisers, far from being a peripheral concern, is crucial in qualitative work.

Finally, this framework treats inevitability as true a priori, which preempts the possibility of treating it as an empirical finding. Obviously, if an outcome occurs in a given case, then by the definition of necessity, no necessary causes are absent. Further, if the outcome occurs, by the definition of sufficiency, a sufficient cause or combination of causes must be present. With this line of argument, such claims come close to being a "re-description" of the cases, and they neglect inferential challenges. One key facet of this neglect is the failure to provide a basis for inferring whether the outcome was likely, unlikely, or somewhere in between. This approach likewise neglects the interesting possibility that inevitability could be an empirical finding, rather than true by assumption.

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[50] On the combination of within-case process tracing and cross-case comparison, see e.g. Dunning (2014: 215-218).

[51] This involves the so-called "fundamental problem of causal inference" (Holland 1986: 947).

[52] Fearon 1991.

[53] See again Mahoney 2008.

[54] For example, in the social sciences the ubiquitous use of significance tests for sample-to-population inferences is routinely inappropriate, given that—to a far greater degree than scholars acknowledge—samples are not random and populations are ill defined. For an interesting treatment of this problem from a related perspective, see Freedman and Stark (2003).

[55] Roberts 2014, 26.

Conclusion

The inevitability framework—which encompasses Qualitative Comparative Analysis, set theory, and a new body of work on process tracing—fails to address a fundamental priority of research on critical junctures: distinguishing between contingent and deterministic causal claims. This failure derives from the argument that qualitative research inherently yields findings of necessity and sufficiency—which is contrasted with the probabilistic foundation of quantitative research. According to this framework, treating qualitative, case-based research in terms of probabilities is meaningless.

In contrast to this self-imposed limitation of the inevitability framework, examples of qualitative analysis discussed here—from ordinary experience, work on critical junctures, and historically-oriented process tracing—show that ideas of likelihood are fundamental. In addition, these studies also periodically use causal ideas of necessity and sufficiency, consistent with Goertz's useful reminder that necessary causation receives wide attention in comparative and historical analysis.[56]

The inevitability framework fails to bridge these alternative perspectives. This makes it unsuitable for the study of critical junctures, which has focused centrally on understanding the combination of contingent and deterministic patterns. The examples in this essay also highlight more broadly the emphasis on contingency in a range of work in the qualitative tradition, including major works of historical-comparative inquiry as well as process tracing involving single cases.

The exclusive focus on necessity and sufficient causation therefore seems unsuitable as a methodological recipe for a great deal of qualitative research, definitely including research on critical junctures.

References

Beach, Derek and Rasmus B. Pedersen. 2013. *Process-Tracing Methods: Foundations and Guidelines*. Ann Arbor, MI: University of Michigan Press.

Beach, Derek and Rasmus B. Pedersen. 2016. *Causal Case Study Methods: Foundations and Guidelines for Comparing, Matching, and Tracing*. Ann Arbor, MI: University of Michigan Press.

Bernhard, Michael. 2015. "Chronic Instability and the Limits of Path Dependence." *Perspectives on Politics* vol. 13, no. 4: 976-991.

Blatter, Joachim and Till Blume. 2008a. "In Search of Co-Variance, Causal Mechanisms or Congruence? Towards a Plural Understanding of Case Studies." *Swiss Political Science Review* vol. 14, no. 2: 315-356.

Blatter, Joachim and Till Blume. 2008b. "Co-Variation and Causal Process Tracing Revisited: Clarifying New Directions for Causal Inference and Generalization in Case Study Methodology." *Qualitative Methods* vol. 6, no. 1: 29-34.

Blatter, Joachim and Markus Haverland. 2012. *Designing Case Studies: Explanatory Approaches to Small-N Research*. Basingstoke, UK: Palgrave Macmillan.

Boas, Taylor. 2017. "Potential Mistakes, Plausible Options: Establishing the Legacy of Hypothesized Critical Junctures." *Qualitative and Multi-Method Research* vol. 15, no. 1: 18-20.

Capoccia, Giovanni and R. Daniel Kelemen. 2007. "The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism." *World Politics* vol. 59, no. 3: 341-369.

Collier, Ruth Berins and David Collier. 1991. *Shaping the Political Arena: Critical Junctures, the Labor Movement and Regime Dynamics in Latin America*. Princeton: Princeton University Press.

Dunning, Thad. 2014. "Improving Process Tracing: The Case of Multi-Method Research." In *Process Tracing: From Metaphor to Analytical Tool*, edited by Andrew Bennett and Jeffrey T. Checkel. New York: Cambridge University Press, 211-236.

Fearon, James. 1991. "Counterfactuals and Hypothesis Testing in Political Science." *World Politics* vol. 43, no. 2: 169-195.

Freedman, David and Phillip Stark. 2003. "What is the Chance of an Earthquake?" *NATO Science Series IV: Earth and Environmental Sciences* vol. 32: 201-213.

Goertz, Gary. 2003. "The Substantive Importance of Necessary Condition Hypotheses." In *Necessary Conditions: Theory, Methodology, and Applications*, edited by Gary Goertz and Harvey Starr. New York: Rowman and Littlefield, 65-94.

Goertz, Gary and Jack S. Levy, eds. 2007. *Explaining War and Peace: Case Studies and Necessary Condition Counterfactuals*. London: Routledge.

Goertz, Gary and James Mahoney. 2012. *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences*. Princeton: Princeton University Press.

Goertz, Gary and James Mahoney. 2013. "Methodological Rorschach Tests: Contrasting Interpretations in Qualitative and Quantitative Research." *Comparative Political Studies* vol. 46, no. 2: 236-251.

Holland, Paul. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association* vol. 81, no. 396: 945-960.

Katznelson, Ira. 2003. "Periodization and Preferences: Reflections on Purposive Action in Comparative Historical Social Science." In *Comparative Historical Analysis in the Social Sciences*, edited by James Mahoney and Dietrich Rueschemeyer. New York: Cambridge University Press, 270-301.

Kaufman, Robert R. 2017. "Great Transformations but no Critical Juncture? Latin America in the Twenty-First Century." *Qualitative and Multi-Method Research* vol. 15, no. 1: 16-17.

Lewis, Michael. 2004. *Moneyball: The Art of Winning an Unfair Game*. New York: W.W. Norton and Company.

Lieberson, Stanley. 1997. "The Big Broad Issues in Society and Social History: Applications of a Probabilistic Perspective." In *Causality in Crisis? Statistical Methods and the Search for Casual Knowledge in the Social Sciences*, edited by Vaughn McKim and Stephen Turner. Notre Dame, IN: University of Notre Dame Press, 359-385.

Lipset, Seymour Martin and Stein Rokkan. 1967. "Cleavage Structures, Party Systems, and Voter Alignments: An Introduction." In *Party Systems and Voter Alignments: Cross-National Perspectives*, edited by Seymour M. Lipset and Stein Rokkan. New York: Free Press, 1-64.

Luebbert, Gregory M. 1991. *Liberalism, Fascism, or Social Democracy: Social Classes and the Political Origins of Regimes in Interwar Europe*. New York: Oxford University Press.

Mackie, John L. 1965. "Causes and Conditions." *American Philosophical Quarterly* vol. 2, no. 4: 245-264.

Mahoney, James. 2000. "Path Dependence in Historical Sociology." *Theory and Society* vol. 29, no. 4: 507-548.

Mahoney, James. 2008. "Toward a Unified Theory of Causality." *Comparative Political Studies* vol. 41, nos. 4-5: 412-436.

Mahoney, James. 2010. *Colonialism and Postcolonial Development: Spanish America in Comparative Perspective*. New York: Cambridge University Press.

[56] Goertz 2003.

Mahoney, James. 2012. "The Logic of Process Tracing Tests in the Social Sciences." *Sociological Methods & Research* vol. 41, no. 4: 570-597.

Pierson, Paul. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." *American Political Science Review* vol. 94, no 2: 251-267.

Ragin, Charles. 1987. *The Comparative Method: Moving Beyond Qualitative and Quantitative Methods*. Berkeley: University of California Press.

Ragin, Charles. 2008. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: University of Chicago Press.

Rihoux, Benoît and Charles C. Ragin, eds. 2009. *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*. Thousand Oaks, CA: Sage Publications.

Roberts, Kenneth M. 2014. *Changing Course in Latin America: Party Systems in the Neoliberal Era*. New York: Cambridge University Press.

Rohlfing, Ingo and Carsten Q. Schneider. 2014. "Clarifying Misunderstandings, Moving Forward: Towards Standards and Tools for Set-Theoretic Methods." *Qualitative and Multi-Method Research* vol. 12, no. 2: 27-33.

Rokkan, Stein. 1970. *Citizens, Elections, and Parties: Approaches to the Comparative Study of the Processes of Development*. New York: David McKay.

Schneider, Carsten Q. and Ingo Rohlfing. 2013. "Combining QCA and Process Tracing in Set-Theoretic Multi-Method Research." *Sociological Methods Research* vol. 42, no. 4: 559-597.

Schneider, Carsten Q. and Claudius Wagemann. 2012. *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis*. New York: Cambridge University Press.

Slater, Dan and Erica Simmons. 2010. "Informative Regress: Critical Antecedents in Comparative Politics." *Comparative Political Studies* vol. 43, no. 7: 886-917.

Tannenwald, Nina. 1999. "The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use." *International Organization* vol. 53, no. 3: 433-468.

Thelen, Kathleen. 2004. *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan*. New York: Cambridge University Press.

Wickham-Crowley, Timothy. 1993. *Guerrillas and Revolution in Latin America: A Comparative Study of Insurgents and Regimes Since 1956*. Princeton: Princeton University Press.

these listed under Division 46 in the online program, found at https://convention2.allacademic.com/one/apsa/apsa17/. We encourage our readers to attend many of them, as well as the QMMR section's Business Meeting at 6:30pm on Thursday, August 31, in the Cyril Magnin I room of the Parc 55 hotel—to be followed at 7:30pm by the QMMR reception in the Bay View Room of the Nikko hotel.

We close by underscoring our invitation to QMMR scholars to submit proposals for articles and symposia for future issues. We especially encourage proposals relating to methodological approaches or problems that are currently animating debate or shaping research practice in large segments of the discipline, as well as recent books of major significance and broad interest for QMMR scholars.

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