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Learning from each other: causal inference and American political development

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Learning from Each Other: Causal Inference and American Political Development

Jeffery A. Jenkins
Price School of Public Policy
University of Southern California
jajenkins@usc.edu

Nolan McCarty
Department of Politics
Princeton University
nmccarty@princeton.edu

Charles Stewart III
Department of Political Science
Massachusetts Institute of Technology
cstewart@mit.edu

Abstract:

Within political science, a movement focused on increasing the credibility of causal inferences (CIs) has gained considerable traction in recent years. While CI has been incorporated extensively into most disciplinary subfields, it has not been applied often in the study of American political development (APD). This special issue considers ways in which scholars of CI and APD can engage in mutually beneficial ways to produce better overall research. As the contributions to the symposium demonstrate, clear scientific gains are to be had from greater CI-APD engagement.

Keywords: causal inference; American political development; gains from engagement

JEL Codes: C18; N41; N42

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1. Introduction

In recent years, a trend toward research based on more careful and explicit “causal inference” (CI) has spread throughout political science and other social science disciplines. The causal inference movement stresses the development of research designs that produce relationships among variables that can credibly be interpreted as causal. While the CI movement has had its greatest impact within the discipline’s methodology community, it also has had a profound effect on the applied (quantitative) subfields of American politics, comparative politics, and international relations.

The most common approach to CI within political science is based on the potential outcomes framework (Rubin 1974, 1977, 2005; Holland 1986). That approach is predicated on a hypothetical comparison of an outcome Y associated with a treatment T with the counterfactual outcome absent the treatment. The central problem, of course, is that for any observation, it is impossible to observe both the outcome and the counterfactual. But under certain assumptions, the causal effect of T can be estimated as the observed difference in the mean values of the observed outcomes of the treated and untreated units. Roughly speaking, those conditions are met when the treatment T is randomized across units and the treated units have no spillover effects on the untreated units. For that reason, many scholars refer to the randomized controlled trial (RCT), wherein the researcher can control the randomization and minimize spillovers, as the *gold standard* for causal inference.¹

But for many questions in political science the RCT standard may be out of reach. Either practical or ethical considerations preclude randomization or efforts to induce compliance with

¹ For an example, see Imbens (2010). See Cartwright (2007) and Deaton and Cartwright (2018) for push-back.

treatments.² Moreover, some researchers may want to address theories about why a particular outcome was observed. In such cases, observational data may be the only reasonable source of information available to assess causal claims. Fortunately, political scientists have been able to take advantage of a number of tools and research designs, such as like difference-in-differences, regression discontinuities, and instrumental variables, that can bolster the credibility of causal estimates by approximating the conditions of the RCT (Angrist and Pischke 2009, chapter 2).

Despite its impact on much of empirical political science, CI has made much less headway in the field of American political development (APD).³ Historically, APD has operated on a parallel track from the quantitative social-science approaches to American politics. Some of that parallelism has had to do with the nature of APD's emergence – for example, historically minded political scientists did not believe that the dominant behaviorally based studies of the 1970s appreciated fully or incorporated explicitly the study of history and institutions, or the “state” more generally, and set out to create an alternative path built around historical sociological analysis (Evans, Reuschmeyer and Skocpol 1985; Orren and Skowronek 2004). Nevertheless, APD scholars care about causality and often seek to make causal arguments, albeit with an eye toward “complexity” and “contingency”, and in the form of more traditional narrative-based approaches.

The difficulty comes with the aforementioned complexity. APD scholars often study big, sweeping events that occur across decades or centuries, which may not be (obvious) candidates for the application of CI techniques. APD scholars also may privilege understanding over causal explanation, given the scope of the questions and the complications (such as multiple institutions

² While one might try to work around such problems by making use of hypothetical experiments, concerns about external validity will loom large.

³ Our focus here is on APD and historical American politics. CI also has had a limited impact on historical political science more generally.

and players; temporal variation; the importance of contingency and the timing and sequence of decisions) therein. As a result, APD scholars often seek analytical leverage by incorporating different (and complementary) data and analyses (Sheingate 2014; Schickler 2016), none of which typically satisfy traditional CI standards.

2. Gains from engagement

To examine how causal inference and APD could complement and enhance one another, we held a conference in January 2019 at the University of Southern California, sponsored in part by a National Science Foundation grant awarded to the Society for Political Methodology.⁴ We envisioned, for example, that scholars of causal inference might be able to provide advice on how particular CI techniques and methodologies could help APD scholars develop deeper and cleaner causal arguments. In addition, we also believed that APD scholars could help causal inference scholars to identify cases – and the historical contexts surrounding them – that would be candidates for the application of standard causal-inference designs.

In organizing the conference, we asked authors to think about and address one or more of the following four questions:

2.1 What can CI do for APD?

While certain strands of APD are interpretivist and non-positivist, much of its scholarship seeks to make causal claims (Galvin 2019). Many of those claims are based on explicit counterfactual reasoning, fully compatible with the CI framework. So a basic contribution of CI is the laying the conceptual foundations for establishing causal claims, such as the exogeneity of the shock or intervention, the lack of spillover effects, and so on. As Gailmard (2019) and Gordon and

⁴ The Dornsife College of Letters, Arts and Science at the University of Southern California provided matching funds.

Simpson (2019) argue, the process of conceptualization of historical processes as a causal chain may be aided greatly by reliance on formal theory.

Second, CI can help APD scholars conceptualize “critical junctures” and “contingent outcomes” as “exogenous treatments” that can utilize the instruments in the CI toolkit. As Wawro and Katznelson (2019) discuss, such an approach has been used in the fields of economic history and development for some time. They suggest a number of avenues for bringing such thinking more fully into historical political science and APD. Harvey (2019) notes instances wherein historical outcomes such as the enactment of public accommodation laws during the Reconstruction Era can be used causally to identify the impact of legal institutions on citizen welfare. Finally, McConnaughy (2019) argues that APD scholars should engage the study of subnational development for both substantive and CI-related methodological cases and examples.

2.2 How can APD provide for (better) CI?

APD scholars are historical experts. Their knowledge has great social-science value. By envisioning their knowledge in the context of exogenous change (as above), APD scholars can help CI scholars in identifying natural experiments and exogenous shocks. APD scholars possess tremendous raw knowledge of history (and historical events), which, as Gordon and Simpson (2019) note, can be a valuable asset in assembling cases for further study.

But APD scholarship often provides its own questions and conceptions of causality that quantitative social science should embrace. Chatfield and Caughey (2019), for example, argue that given APD’s focus on “causes of effects” and systemic or general equilibrium effects, traditional CI may not always be helpful alone. But rather than avoid such questions, causally oriented empirical scholars should prioritize the development of new approaches that can bridge

the gaps. For example, Gelman and Imbens (2013) argue that studying the causes of effects (or reverse causal inference) can be very helpful in checking CI models. APD is full of effects that can aid CI researchers.⁵

Bateman and Teele (2019) go further in suggesting ways in which confronting APD problems can contribute to expanding the CI toolkit. They argue that because APD research must deal with sparse datasets in conjunction with dynamic processes, traditional design-based inference may not often be helpful. Instead, they suggest a research process centered around the identification of all of the important counterfactual nodes in an unfolding historical process. Causal credibility for a theory may then be established based on the explanatory power of the theory in correctly choosing outcomes at each node.

2.3 How do standard CI techniques apply to APD specifically?

As noted, a set of standard CI techniques have been applied in asking and answering questions in contemporary American politics. The techniques include regression discontinuity designs, difference-in-differences, and instrumental variables. To what extent do these CI techniques “travel” to earlier periods of American politics? And can their application help us better understand particular aspects of big, complicated questions that are of interest to APD scholars?

Here the authors in our symposium provide many great examples of fruitful application of CI techniques. Harvey (2019) supplies several examples of how regression discontinuity design (RDD) can be used to study important APD concepts like state capacity. Gordon and Simpson (2019) review their application to historical cases, ranging from the emergence of

⁵ We note that APD scholars often want to understand a particular case and may not care if its cause generalizes to other situations. Put differently, while individual APD scholars may not think much about external validity, we believe that their collective efforts and published work, when assembled and integrated by CI scholars, often can be made to speak to more general phenomena.

English common law to localized appropriations in the 19th century United States. Clinton (2019) demonstrates how CI-motivated counterfactual analysis can help adjudicate between competing theories of partisan agenda control in Congress. Caughey and Chatfield (2019) discuss the use of instrumental variables – distance from dams – and matched panels to study the political effects of the Tennessee Valley Authority. And, finally, Grose and Wood (2019) show how randomized controlled trials – specifically random audits of government institutions (in their case, Congress in the 1970s) – enhance the study of political history.

At the same time, all of the authors acknowledge that localized casual inferences are unlikely to provide completely satisfactory historical accounts. Thus, all of the applications highlight the role of deep historical knowledge and social science theory in addition to design based inference.

2.4 What to do about issues of “complicated causality”?

A number of issues raised in the traditional APD literature (e.g., time, sequence, path dependency, contingency, and policy feedback) make causal inference either more difficult or less useful (e.g., less likely to generalize or to be externally valid). What should we do in those cases? Are best standards available for situations when “clean” or generalizable inference is not possible or practical?

The symposium’s contributors provide a rich set of answers to those questions. All approached their task with a deep appreciation of the complications that historical analysis presents. Moreover, a common understanding arose that no “one-size-fits-all” answer is likely. But some common themes emerged:

1. The inability to employ design-based inference should not be a deterrent to asking

interesting and substantively important questions.

2. Credible causal claims also may be based on a triangulation of established causal effects, properly interpreted correlational evidence, deductive theory and generalization.⁶

Binder (2019) exemplifies those two premises. In her piece, she describes her recent research on the extent to which the Federal Reserve is politically independent of the US Congress. While such a question undoubtedly is central to understanding the nature of American political economy, it does not lend itself directly to canonical causal inference. We can hardly randomize legislative preferences; instances of quasi-random variation, such as closely divided elections for control, are too few to make for precise inference. So to make progress, Binder draws heavily from institutional theories that specify (1) how a dominant political actor would design a new bureaucracy and (2) how a bureaucracy would respond to an influential political principal. From the auxiliary hypotheses generated by the theory, she is then able to investigate a large set of empirical relationships. Some of them are more credibly casual than others, but the constellation of theory and evidence makes a persuasive case for substantial congressional influence on the Fed.

Jenkins and Stewart (2019) speak to the same issues. They analyze the rise and fall of the gag rule in Congress in the antebellum United States, by analyzing both votes in Congress (the supply side) and the rise of anti-slavery interest groups in the broader American society (the

⁶ The two themes also appear in recent work that is not part of the symposium. For example, in his recent book providing an analytical history of constitutional decision making, Clark (2019, p. 317) notes that his “goal has been to strike something of a middle ground between historical description and traditional social-scientific causal inference.” He notes that “while at times the evidence does not rise to the level of what has come to be known as a ‘credible’ causal estimate, the invocation of an underlying, micro-founded theory of decision making has aided in the interpretation of those patterns.”

demand side). They provide a careful and detailed analysis of how support in Congress for the gag rule eroded over time, as popular pressure led to electoral pressure – and then finally to partisan pressure on a group of northern Democrats whose previous support for the rule was pivotal for its continuation, and whose flipping on the issue was the rule’s downfall. The authors thus draw on different data, methodologies, and empirical approaches to arrive at a better understanding of an important historical event that played itself out over time.

3. Conclusion

We believe that our efforts in this special issue of *Public Choice* have started a useful dialogue between scholars of causal inference and American political development. As we have discussed, clear “gains from engagement” are open for scholars in the two traditions to speak to and work with one another. Each set of scholars possesses a unique and important skill set, which when combined can lead to research that is both rich and broad. As in most interdisciplinary endeavors, scholars must strive to step out of their individual research silos and extend in ways that put them outside of their comfort zones. In his concluding essay, Schickler (2019) provides ways in which further mutual engagement can occur.

And, as noted, we consider this special issue to be only a start in thinking about the issues involved. We approached the conference that preceded the publication of the present issue by identifying a set of CI scholars with distinct historical (and APD) sensibilities. Galvin (2019), however, notes that our choice of a starting point might have structured things in a particular way – framing what APD is through a lens of causal inference. He then notes that the starting point could easily have been reversed, and that we could have selected APD scholars with distinct CI sensibilities. Such a conference and special issue – and the resulting work therein – may have unfolded very differently, and the ways in which CI and APD engagement could have unfolded

might have been very different. We believe that such a starting point is equally valid, and we hope that a subsequent group of scholars will pursue it. More research inquiries, from multiple angles and perspectives, are better than any single one. The resulting benefits for CI and APD scholarship will only be richer for it.

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