Studies in History and Philosophy of Science 62 (2017) 6–13

Contents lists available at ScienceDirect

Studies in History and Philosophy of Science

journal homepage: www.elsevier.com/locate/shpsa

Process tracing in political science: What's the story?☆

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ARTICLE INFO

Article history:
Available online 14 March 2017

Keywords:
Narrative
Process tracing
Causal mechanism
Case studies

ABSTRACT

Methodologists in political science have advocated for *causal process tracing* as a way of providing evidence for causal mechanisms. Recent analyses of the method have sought to provide more rigorous accounts of how it provides such evidence. These accounts have focused on the role of process tracing for causal inference and specifically on the way it can be used with case studies for testing hypotheses. While the analyses do provide an account of such testing, they pay little attention to the narrative elements of case studies. I argue that the role of narrative in case studies is not merely incidental. Narrative does cognitive work by both facilitating the consideration of alternative hypotheses and clarifying the relationship between evidence and explanation. I consider the use of process tracing in a particular case (the Fashoda Incident) in order to illustrate the role of narrative. I argue that process tracing contributes to knowledge production in ways that the current focus on inference tends to obscure.

1. Introduction

During the late-19th and early-20th centuries, as European powers scrambled for control of the African continent, British and French interests intersected in the North Nile River Valley. In July of 1898, a small French expedition occupied the village of Fashoda in a move to secure a trade route between their colonies in the east (Senegal) and west (Djibouti) of the continent. Anglo-Egyptian forces led by Sir Herbert Kitchener were moving south from Cairo as part of an effort to reassert control over the Sudan. After receiving orders to investigate the French presence in Fashoda, Kitchener marched on the village and arrived there on September 18. While cordial on the ground, the meeting sparked outrage at home, touching off "a diplomatic crisis over the division of colonial rights in the Upper Nile" (Schultz, 2001, p. 176). The two forces sat waiting instructions from their respective governments with tensions rising until early November, when the French government backed down and withdrew their troops thus ending the crisis.

Although a seemingly minor episode during the European imperialist conquest of Africa, the Fashoda Incident has been thought interesting for a variety of reasons: its resolution shaped colonial control of Northern Africa; it marked the last time that French and British forces appeared on opposite sides of a conflict, marking a shift in international alliances; and it came close to providing a counterexample to the robust empirical generalization that democracies do not go to war against each other—the democratic peace.[1] A narrative of the incident—a story that pulls together the events surrounding the encounter at Fashoda—may thus be told in a variety of ways. If we are interested in the history of the European colonial presence in Africa, there are aspects of the case that will be more relevant than others—the location of the village is crucial, for example. Fashoda is roughly the intersection of a proposed trade and communication route—the Cape to Cairo railroad proposed by Cecil Rhodes in 1892—and a potential east-west link between the French colonies. The French withdrawal gave the British their north-south pathway and secured their control of Egypt, which had been in dispute. The story of the Fashoda Incident can also be told so that it bears on international relations debates about militarized conflict and the democratic peace. On this telling, the location is less important than the nature of the government and the dynamics between the nations. That the nations are democracies that *nearly* go to war is more important than where the incident takes place.

Different narratives of the same case carry with them frameworks within which the story needs to make sense. Paul Roth makes this point in his discussion of Clifford Geertz's classic "Deep Play: Notes on a Balinese Cockfight." There he understands Geertz as constructing "a particular storyline, that is, a way of reading the event of the cockfight as a tale about Balinese society" (Roth, 1989,

☆ This paper appears in a special issue of SHPS on 'Narrative in Science'.

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[1] The democratic peace is one of the few widely accepted empirical generalizations in international relations. Bruce Russett, for example, begins *Grasping the Democratic Peace* with, "Scholars and leaders now commonly say 'Democracies almost never fight each other'," and refers to "The Fact of Democratic Peace" (Russett, 1993, p. 3).

http://dx.doi.org/10.1016/j.shpsa.2017.03.002
0039-3681/

p. 450). As Roth puts it, "A narrative is not determined by sequencing some prior set of events. Rather, what comes first is some more general view of what counts; the particular events—the elements relevant to one's narrative—emerge from this" (Roth, 1989, p. 455).

For political science, such frameworks, and consequently the stories they inform, are usually causal. If, for example, the Fashoda Incident is the story of a "near miss"—that the two democracies, Britain and France, nearly went to war—then the causal factors that sustained the peace are most salient. But how are such factors to be identified? One answer to this question is that they are identified through hypothesized causal mechanisms. Such hypotheses might be either empirically or theoretically driven—that is, suggested by empirical observation or by theories of why nations do and do not go to war. A number of such theories appear in the international relations literature. Testing various hypotheses against the events as they occurred through a case study of that event is one way of providing evidence for or against these competing hypotheses. One method proposed for uncovering this evidence is causal process tracing.

Causal process tracing has been characterized as a way of "formulating and testing explanations with case studies" (Mahoney, 2015, p. 200). The value of process tracing is thus thought to rest in how it provides evidence for causal mechanisms. Statistical and experimental methods may be able to establish a link between a dependent and independent variable, but they cannot reveal what is in the "black box"—the mechanisms through which the cause brings about the effect. The idea is that if we are able to trace the process, we will be able to identify the causal mechanism as it is operating in a particular case.

Recently, characterizations of process tracing have been accompanied by an effort to provide a more rigorous account of how the method works to provide evidence.[2] The focus on the use of process tracing for testing hypotheses in these efforts has indeed provided a more rigorous characterization. These accounts have helped to clarify the variety of approaches that are described under that name, offered suggestions for how the method provides evidence for causal inference, and urged greater transparency in how process tracing is used, but these approaches have also moved the understanding of the method away from its roots in the narrative elements of case studies. Nina Tannenwald remarks that while these recent accounts have value because they make process tracing more transparent and rigorous, she warns that the "'armature' of method should not become such a fetish that it overwhelms the narrative" (Tannenwald, 2015, p. 227). She continues, "It is a tall order to be both methodologically rigorous and narratively engaging but that is a worthy goal to which security studies can continue to aspire." (Tannenwald, 2015, p. 227). Although Tannenwald couches her remark in terms of aesthetic appeal, in this essay I argue that the role of narrative is not merely aesthetic. A consideration of the narrative elements of case studies illuminates how process tracing contributes to knowledge production in ways that the current focus on inference tends to obscure.

The structure of the essay is as follows. I start by giving an account of the key concepts used and the relationships among them: process tracing, causal mechanism, and narrative. I next consider Bennett's reconstruction of Kenneth Schultz's use of process tracing to evaluate various hypothesized causal mechanisms offered to account for the Fashoda Incident. I argue that Bennett treats Schultz's reasoning as a matter of constructing arguments using process tracing as a means of identifying evidence to be used in those arguments. Bennett's account serves as an example of problems with an approach to process tracing that isolates the elements of the hypothesized causal mechanism uncovered through process tracing and downplays the cognitive work played by the narrative elements of case studies.

Specifically, I identify two areas in which elements of narrative are core to process tracing: 1) consideration of alternative hypotheses and 2) the relationship between evidence and explanation. The narrative of the case guides process tracing so that it does more than uncover events, actions, and entities that are relevant for testing hypotheses. To illustrate this, I offer an alternate reading of Schultz's use of process tracing, arguing that his reasoning depends on a more holistic reading of the events—one in which they are made coherent through a narrative. In this way, I argue that process tracing requires creating a narrative through a hypothesized causal mechanism and that involves more than uncovering pieces of evidence to test a hypothesis. The hypothesized causal mechanism not only provides a framework from which information to test hypotheses can be gleaned, but the narrative does cognitive work through making the causally salient elements of the case coherent.

2. Process tracing

The key idea behind process tracing is that through seeking the key elements of a hypothesized causal mechanism within a case, it should be possible to identify whether the mechanism is operating—that is, one should be able to trace the mechanism from the cause to the effect. This might be forward looking—starting with the cause and moving to the effect—or backward looking—starting with the effect and tracing its origin in the cause. The case might be taken to be exemplary and so provide the grounds for some generalization or hypothesis (theory-building) or it might be a case in which a hypothesized causal mechanism is thought to be operating. The examination of the case provides evidence that the mechanism is or is not operating (theory-testing). George and Bennett put it this way: "Process-tracing attempts to empirically establish the posited intervening variables and implication that should be true in a case if a particular explanation of that case is true" (George & Bennett, 2005, p. 147).

Bennett and Checkel describe process tracing as "the examination of intermediate steps in a process to make inferences about hypotheses on how that process took place and whether and how it generated the outcome of interest" (Bennett & Checkel, 2014, p. 6). This characterization closely follows George and Bennett's description of process tracing as a method that "attempts to identify the intervening causal process—the causal chain and causal mechanism—between an independent variable (or variables) and the outcome of the dependent variable" (George & Bennett, 2005, p. 206).

Unlike quantitative observational and experimental methods that work with larger populations and produce evidence of average effects, process tracing requires the careful examination of a single case or a few cases and provides evidence for singular causation. That is, rather than providing evidence for the distribution of Y, given X in a population, process tracing provides evidence that an instance *y* of Y occurred in *this* case. Furthermore, process tracing is thought to give insight into *how y* occurred. For methods that are appropriate for populations, we may find ourselves both wondering how X brought about the distribution of Y in the population (what is the causal connection between X and Y?) and whether instances of Y will occur in individual/event/activity *a* or not since there is no assurance that any singular case will exhibit an instance of Y just because Y is on average likely to be present in the population. Conversely, if we know that X brought about Y in *n* we cannot infer that X will do the same in different populations (or subpopulations

[2] I specifically have in mind Beach and Pedersen (2013) and Bennett and Checkel (2014).