Introduction

Cause is a metaphysical doctrine . . . [It] is not of much use in a world like this, in which the same antecedents never again concur, and nothing ever happens twice.

James Clerk Maxwell[1]

Cause is a problematic concept in all fields of knowledge. The reason, as Hume and Maxwell observed, is that cause is not a feature of the world but a human invention. We organize information in terms of cause and effect to impose order on the world and make it more predictable. Our naïve understanding of cause builds on the concepts of succession and continuity, and the assumption that some necessary connection exists between them. This understanding is useful in everyday life, and we may be hardwired to think this way. Like all cognitive shorthands, reliance on cause can stand in the way of more sophisticated understandings. Recognizing this limitation, some physicists have given up the search for cause in the belief that it is unnecessary and even counterproductive.

Most philosophers and ordinary people feel there is something missing in accounts of the natural or social worlds that are not causal. In his famous dissent from the Copenhagen interpretation of quantum mechanics, Albert Einstein refused to accept that the universe was indeterminate at its most fundamental level. "God does not play dice," he insisted, and remained hopeful throughout his life that physics might somehow develop a deeper, deterministic, and causal theory. Other physicists and philosophers have followed Bertrand Russell in rejecting cause as something that stands in the way of science. Alternatively, they have tried to devise formulations of it more consistent with the empirical findings of the sciences. These formulations abound, and they

[1] Maxwell, "Progress of Physical Science."

all are deeply problematic and recognized as such by most philosophers of science.

Cause is inseparable from ontology and epistemology. We cannot analyze it independently of our conceptions about the proper units of analysis and the nature and conditions of knowledge. As there are different and competing understandings of ontology and epistemology, it is difficult, some might say, unwarranted, even unfair, to evaluate formulations of cause across them. For this reason, I initially do so within the ontological or epistemological frameworks of their advocates. This allows me to assess their logical robustness and comprehensiveness. These assessments in turn provide grounds for interrogating the ontological or epistemological assumptions on which they rest.

Ontological and epistemological commitments generally influence, if not determine, a scholar's approach to cause. The arrows of influence nevertheless point in both directions. New understandings of cause, or greater appreciation of the conceptual and empirical problems associated with an existing understanding, can encourage a rethinking of one's ontological and epistemological commitments. This is one of my goals, because I believe that social science has been dominated by epistemologically indefensible understandings of cause.

Following Hume, positivists attempt to finesse cause by searching for associations that can be used to make predictions. Others aspire to make law-like statements to which empirical regularities can be subsumed. Both strategies are deeply problematic. Regularities are not causes. Nor can they be used to predict if they are irregular, context dependent and temporally bounded, as they almost invariably are in the social world. There are no social laws, and they could not be considered causes unless they incorporate mechanisms or processes responsible for the regularities they describe. A more fundamental objection to both approaches is that they rest on an inappropriate ontology. They falsely assume the physical independence of the "things" described as causes and effects, what Hume called "distinct existences." However, as Maxwell argued, all objects and events in the social world are the products of socially constructed categories, as are any hypothesized connections among them. A half-century before Hume, Giambattista Vico observed that conceptual categories change in response to changes in practice and the questions that engage us. As both evolve in

path-dependent ways, he insisted, the study of society is as much historical as analytical.[2]

According to Max Weber: "as soon as we attempt to reflect about the way in which life confronts us in immediate concrete situations, it presents an infinite multiplicity of successively and coexistently emerging and disappearing events." The social world is not naturally divided into categories whose members can be considered comparable in all meaningful ways. It is neither lawful nor rational; it is rendered this way – in appearance only – by our own transcendental faculties.[3] I follow Weber in believing that conceptualization and causal inference in the social world are pure reification. They may be useful but do not ultimately capture anything that might be described as real.

Chapter 1 analyzes the concept of causation. Toward this end, I turn to physics and philosophy of science. I am not drawn to physics as a model, but to its use of diverse understandings of cause to make an important analytical point. Physics has no general approach to causation, but field and subfield-specific ones that scientists find to varying degrees useful in their research. Social science should follow and develop understandings that seem useful and appropriate to researchers in diverse domains.

Philosophy is the discipline in which the concept of cause has been studied most intensively. I describe some of the principal cleavages and controversies in this literature. They include the nature of causation, the extent to which it is a feature of the world, and different ways of conceiving cause. Debates about these questions reveal deep divisions, but also a consensus that all formulations of cause are problematic because of logical problems and inability to cover all possible causal situations. Philosophical debates address for the most part the physical world. In the social world, where constant conjunctions are never found, and where covering laws are inapplicable, prediction is far more problematic. Paradoxically, the concept of cause is more important in this circumstance. We must turn to "thicker" conceptions of cause, to causal mechanisms and processes, to try to make sense of the imperfect correlations we find and the social world more generally. This is a more demanding task.

[2] Vico, *New Science*. [3] Weber, *Methodology of the Social Sciences*, p. 78.

The major difference between the physical and social worlds is agency. Human actors and their collectivities do not merely convey forces like electrons, or respond to them like billiard balls; they have goals of their own and idiosyncratic understandings of context. Rational choice and other rationalist approaches take individual actors as their unit, but effectively deprive them of meaningful agency by analyzing their behavior as responses to external constraints and opportunities. People see the world differently, and their understandings are not independent of their desires and fears. People are reflective and change their goals and their modus operandi in the light of experience. To explain most political outcomes we must break out the analytical problem out into two steps: the behavior of actors, and its consequences. The task of the former is to reconstruct the world through the eyes of actors to understand their choices and behavior. The latter step is an aggregation problem as social outcomes are usually the product of interactions of multiple agents.

Chapter 2 examines the applicability of diverse formulations of cause to international relations. Most are based on ontological and epistemological assumptions that seem inappropriate. The search for regularities, and the Humean conception of constant conjunction on which it rests, are embedded in Cartesian dualism and its understanding of mental activities as the product of reason.[4] In practice, every imagined relationship between an "X" and "Y" is embedded in a broader social context from which it cannot meaningfully be extracted because these contexts determine the extent to which "Y" varies with "X." Associations are imperfect at best; they tell us what *may* happen, not what will happen. In international relations, they cannot even provide base rates as the conditions from which so-called base rates are derived are constantly evolving. So too are the characteristics of whatever we describe as dependent and independent variables.

I employ context in two different ways in this book. The first has to do with the outcomes of interest to us. They are all context dependent, even those in which agency is not decisive. Important macro developments like the replacement of hunter-gathers by settled agricultural societies depended on access to water and arable land and did not develop where these features were absent. Jared Diamond argues that European and Asian societies had a significant economic advantage

[4] Jackson, *Conduct of Inquiry in International Relations*, pp. 24–40.

over their American counterparts because they could domesticate more species of animals and had temperate zones that were connected because the Eurasian land mass ran east–west rather than north–south.[5] Ken Pomeranz suggests that one of the factors that facilitated industrialization in Europe and retarded it in China was the collocation of iron and coal in the former and waterways that facilitated the transport of raw materials or manufactured goods to urban centers of consumption.[6] All three outcomes were dependent on specific physical contexts. Pomeranz also recognizes a number of important social conditions, and, while the product of human behavior, their consequences cannot be attributed to the agency of individuals.

Medium- and shorter-term developments are more influenced by social than physical features of the environment. Subjective understandings of context, as well as agency and confluence, are critical in shaping outcomes and are, by definition, outside of any theory of international relations. They are one reason why associations are imperfect and short-lived. It follows that social theories can do little more than structure problems for us. They are most useful as starting points for narrative explanations or forecasts. Narratives have the potential to combine and benefit from general and local knowledge.

My second meaning of context concerns our personal involvement in any research question. We are never independent of what we investigate because there is no reality out there waiting for us to discover or describe through increasingly better approximations. The social world is the product of our conceptions as well as our practices. Again taking my cue from Weber, I contend that our approach to knowledge and the questions we ask are not independent of our cultural setting. Our analytical interventions in turn influence this setting. Good scholarship requires awareness and sensitivity to these interactions and recognition of the subjective nature of our research and findings independent of the robustness of our methods. It follows that there are no "right" answers, only useful ones, and perhaps multiple useful ones, given the diverse interests of actors.

Building on this double meaning of context, Chapters 2 and 3 develop an approach that I call "inefficient causation." It rests on the premise that many, if not most, international events of interest are best described as instances of what philosophers call singular causation. We

[5] Diamond, *Guns, Germs, and Steel*. [6] Pomeranz, *Great Divergence*.

can construct causal narratives about these outcomes, but they cannot be explained or predicted by reference to prior generalizations or narratives. Nor do they allow us to predict future events. Singular causation understands cause as the glue that holds a story together; it is something akin to a plot line in a novel. Such an understanding resonates with another side of Hume, who distinguished literature and history on the one hand from chronicles on the other. The former are made meaningful by emplotment, while a chronicle is a mere recital of past events. Hume regarded history, once freed from its Christian and mythical roots, as the proper paradigm of human understanding because its narratives connect our consciousness with what lies outside of it.[7] In this formulation, cause makes sense of the social world in a manner consistent with evidence in a way that has some social value beyond its internal structure. In speaking of cause, as I do throughout the book, I intend it in this sense.

Singular causation is, I believe, the most appropriate approach to understanding an open-ended, non-linear, and reflexive political world. As noted, I factor the causal problem into two sequential steps. The first concerns actors and their reasons for behaving. All politics consists of human actions and we want to know why it occurs. We are equally interested in the outcomes to which it leads. Reasons and behavior are best approached from a constructivist perspective, by searching for the reasons why people act as they do. Its consequences are the product of interactions among multiple actors, and not infrequently defy the expectations of those involved. We need a different set of tools to study aggregation; we must identify the mechanisms and processes that transform behavior into outcomes. Mechanisms and processes are also important in the first step of the causal problem because they mediate between cognitive and visual frames of reference and behavior influenced or shaped by them.

There are other similarities between behavior and aggregation. Neither can usually be attributed to single causes. To tease out multiple causes and relationships among them we need to employ so-called factual and counterfactual arguments. They help us identify pathways that might qualify as causal and construct multiple causal narratives,

[7] Hume, *Inquiry Concerning Human Understanding*, section iii, "Of the Association of Ideas," and "On the Study of History"; Livingston, *Hume's Philosophy of Common Life*.

or what I describe as causal maps. Narratives of this kind allow richer depictions of the world and more informed judgments about possible underlying "causes," the level at which they are found, and their key enabling conditions. The mapping of many outcomes and their possible causes will ultimately provide us with a more useful understanding of the world than the search for regularities, covering laws or the properties philosophical realism associates with things. But we must be clear that context is almost always determinate, so causal maps and any generalizations they allow are at best starting points for forecasts, never for predictions.

Chapter 4 offers a case study of inefficient causation. It explores the connections between deep cognitive frames and political goals and the mechanisms that connect them. I argue that the visual revolution of the Renaissance was an underlying cause of the territorial state because it made it possible, even necessary, to imagine this political form. The Renaissance visual revolution was characterized by linear perspective, but also by a concern to represent people as distinct individuals. There was a greater commitment to what we call realism and to life in this world in contrast to the next. The principal mechanism linking developments in the arts to political conceptions was maps, which underwent a radical transformation in design and purpose. At a deeper level, I suggest that visual revolution and territorial state alike might best be understood as expressions of the growing commitment to autonomy. This initially had individuals as its focus, but was extended to political units.

There has been a more recent visual revolution that initially found expression in Riemannian geometry, and later in parallel but independent developments in art and literature. Non-linear perspective – the key feature of this revolution – has nevertheless had relatively little effect on political conceptions and practices. At most, it contributed metaphors like webs, networks, and filaments. The difference in political consequences between the two visual revolutions may be due to the absence of any underlying psychological transformation of identity. The Renaissance and early modern projects of constructing the autonomous individual relied on the new visual frames or provided incentives for their application in diverse spheres of representation.

My case study only addresses the first step of the causal puzzle surrounding the territorial state: its emergence as a political conception and goal. I direct my attention to the problem of cognitive frames with

two goals in mind. The first is to make the case for their causal consequences. In the process, I confront the conundrum that the deepest and most important cognitive frames are generally the most difficult to study and document because they leave the fewest traces. The second is to expand our understanding of cognitive frames. For the most part, constructivists direct their attention to identities, but they are only one kind of cognitive frame or emotional commitment. Visual frames, which I emphasize in my case study, are different from and largely independent of identities, although they interact with them.

My other focus is on mechanisms and processes. They mediate between cognitive frames and political goals and behavior and are critical to aggregation. There are some differences between mechanisms and processes, but how we distinguish between them is generally a function of the task we assign to them. I offer broad definitions of mechanisms and processes to free them from the straitjacket in which positivists and rationalists have attempted to wrap and restrain them. They do this to prevent unobservables from entering the causal picture, but there is no way to avoid engaging mechanisms and processes at the metaphysical level.

Chapter 5 puts my theoretical and empirical arguments into broader perspective. It revisits the three fundamental cleavages among philosophers about cause I describe in Chapter 1. It situates inefficient causation in this debate and defends its ontological and epistemological premises. It goes on to consider the relationship between cause and knowledge. I conclude by offering some thoughts about the extent to which social science should focus on cause, given its conceptual problems and the empirical difficulty of establishing causal connections in the social world.

Before proceeding I want to be more explicit about my ontological and epistemological starting points. I do not consider cause a feature of the world, let along the "cement of the universe," as J. L. Mackie asserts, deploying a phrase of Hume's out of context.[8] Pace Hume, I consider cause a cognitive shorthand. We invoke it to make sense of our physical and social environments, but because it is a purely human construct it neither maps neatly nor effectively on to the world. This is the fundamental reason why philosophers have never been

[8] Mackie, *Cement of the Universe*. The original Hume reads: "they are really *to us* the cement of the universe."

able to devise a formulation that comes close to meeting the requisite logical and empirical tests. Like all cognitive shorthands, that of cause must be assessed in terms of its practical payoffs, and, perhaps, its psychological utility. The logical tests of philosophers are useful in identifying shortcomings of our formulations, but are in other ways beside the point.

In practice, the demonstration of cause in the social world is all but impossible. Outside of the laboratory, where closed and controlled systems can sometimes be created, the best we can do is to make rhetorical claims about cause. For the same reasons, assertions of cause are correspondingly difficult to disprove. This situation makes it all the more imperative for us to be as explicit as possible about our epistemological assumptions, methods, and procedures for making inferences.

There is much to be gained by recognizing the imperfect nature of our conceptions of cause and the near impossibility of ever establishing cause empirically. It shifts the burden of "proof" away from the application of any particular method or appeal to any procedure of validation to more cautious claims that positing a causal relationship will prove useful to us in the world. Wider recognition of the impossibility of demonstrating cause should make producers and consumers of scholarship more aware of the extent to which the seeming persuasiveness of any causal claims rests with their packaging. This in turn could make us more suspicious of all assertions of cause and more sophisticated in our responses to them.

I employ two different kinds of benchmarks to assess causal claims. The first is the criteria used by philosophers to assess causal frameworks: logical consistency and empirical adequacy. I argue that all formulations of cause fail one or both tests, and that this is inevitable as cause is not a feature of the world but a concept we impose on it. Some formulations of cause show a better fit with international relations than others, but all confront insurmountable challenges.

My second benchmark is empirical. Our choice of ontology and epistemology dictate the kinds of theories and methods to which we turn. These theories may or may not tell us something useful about the world. It is our substantive theories – not our formulations of cause – that we test, or at least evaluate, against empirical evidence. The two benchmarks are distinct but far from independent, given the links between ontology and epistemology on the one hand and theories and methods on the other. Success or failure of our empirical

projects should heighten or diminish our confidence in our ontology and epistemology. I accordingly support the use of external as well as internal criteria as benchmarks for assessing causal frameworks. Such an approach is rooted in nineteenth-century American pragmatism. Its founders, Charles Sanders Peirce and William James, were driven to formulate it in response to their recognition that cause could never be logically or empirically established.[9] Cause, along with all truth claims, is nothing more than an idea. In the words of James, something "*becomes* true, is *made* true by events. Its verity is in fact an event, a process: the process namely of is verifying itself."[10] Truth for James was nothing more or less than an expedient way of thinking, analogous to the concept of right, which he thought the only expedient way of behaving.[11] Both kinds of truths should be envisaged as "rules for action" and end products of thinking.[12] We nevertheless believe in cause with good reason because experience teaches us its utility.[13]

The problematic nature of cause has pushed social scientists in different directions. Initially, it encouraged approaches to knowledge that finesse cause. This was, of course, an important motive behind Hume's move to constant conjunction, an epistemology that still undergirds most social science research. Rationalist theories and many kinds of computer simulation go a step further and more or less dispense with cause. Dissatisfaction with "thin" conceptions of cause of the kind represented by constant conjunction and other theories of association, has also been a incentive to develop "thicker" formulations of cause that emphasize the processes and mechanisms responsible for outcomes. My conception of "inefficient cause" is in this tradition, although based on different epistemology than other formulations that invoke mechanisms and processes.

David Hume sought to devise an understanding of cause so thin that it all but did away with it. Constant conjunction appealed to him because it relied on observables, in contrast to earlier formulations of cause that rested on metaphysical foundations. The difficulty, previously noted, is that there are no constant conjunctions in the social world, only imperfect ones, so it becomes necessary to think about mechanisms and processes that might enable "causes" to have their

[9] Menand, *Metaphysical Club*, ch. 9.
[10] James, *Pragmatism*, p. 97, italics in original.
[11] Ibid., p. 106. [12] Ibid., p. 259.
[13] James, *Principles of Psychology*, vol. II, p. 1264 and *Pragmatism*, pp. 93–4.