**Causation**

Causation is both surprisingly elusive and yet so central to the study of history that, as one famous historian described it, history is the “study of causes.”

We take causation for granted. After I eat I feel satiated. The food *caused* me to feel full. If I knock a glass of water over the water spills onto the floor. Knocking the glass over *caused* the water to fall onto the floor. Causation seems simple and straightforward. Causation is typically defined as the act or agency which produces an effect. Seems self-evident, right?

The way we instinctively determine causation is by cataloging the factors present in the situation we are studying and then we identify the one factor that, if absent from the scenario, would yield a different result in the situation being studied. This is ‘but for’ logic in which we utilize a counter-factual hypothesis to determine what caused the outcome we are studying. Take, for example, the case of Tom. He lives in Seattle and walks to work. Tom strolled down a sidewalk on the way to work last week that was dampened by a rain shower earlier in the day. He slipped and he fell. What caused his fall? Most of you would say that it was the rain. The explanation for such a conclusion is that if there had been no rain then he would not have slipped and fallen. We will explore the weaknesses in the logical process that yielded the conclusion that the rain caused his fall in a moment but let’s first address a huge problem about the nature of your inquiry.

You have assumed that you have all the facts to make a reliable assessment; you have assumed that the storyteller, the historian, has given you the pertinent facts that bear upon causation and yet this is a questionable assumption because the historian’s choices are shaped by his biases and these might be about what caused the fall in the first place. Would it have altered your thinking if you had known that Tom had been in a physical confrontation with someone in the moment before he fell? Surely it would. So, your initial inquiry needs to be the gathering of sufficient facts about the situation you are analyzing before you begin to analyze causation.

But, assuming that what you have been provided is sufficient, let’s proceed back to Tom after he has fallen and your conclusion that the rain caused him to fall. After a quick check of the weather in Seattle you realize that it rains most mornings in Seattle. This seems, at first, comforting and confirming but wait a second. It has rained virtually every day but Tom has fallen just this once this year. Suddenly you find yourself asking about the cause of his fall anew amidst a set of facts that make his fall seem unique and possibly unrelated to the rain: in other words, he walked to work one hundred times the year of his fall on rain-dampened sidewalks but he fell just this once. Thus, just because it rained and the sidewalk was wet didn’t lead to a fall 99% of the time. An explanation that seemed so obvious and compelling at first now seems decidedly tenuous. Do you see how just the basic set of facts can be presented in a way that leads you toward a conclusion that after some additional reflection is not persuasive?

Putting aside the aspect of culling and choosing what facts to rely upon, the process that we typically rely upon to determine causation is flawed in a number of ways. Let’s summarize here: In our process of identifying causation we often rely upon: 1) a logical process that utilizes speculation about what *didn’t* happen to confirm the cause of what *did* happen and; 2) we often choose a factor, in this case rain, as the object of our speculation, that as we have seen, might lack a well-considered basis for being the focal point of our inquiry. Both the process and the instinctive choice as the object of our speculation are subject to lots of fallacies and biases that led you quickly to an answer that proved ultimately unpersuasive. The deeper we dig the less certainty we find about causation.

Causation is, in fact, more complicated than the definition lets on because, upon closer inspection, causation and actions are not the same. Let’s go back to our premise that the rain caused Tom’s fall or, in other words, that the rain acted in some way or was the agency that precipitated (pun intended) his fall. There are lots of problems here. First of all, the rain had stopped before he even left his apartment. Okay you say, so was it the water--the residual rain--on the sidewalk that caused the fall, right? The problem with this rebuttal is that the water was just there; it didn’t act; it didn’t *do* anything. It is, to the extent that you are searching for an act or agent of change, no different than the pavement upon which he stepped or the soles of his shoes. As it turns out, even though, it is at first an appealing candidate as the cause, the water is, in fact, no more of a cause than a whole series of factors which you have assumed are *not* causal elements in his fall: his shoe soles and the pavement.

But you might respond that it is a fallacy to choose only one agent as the cause of Tom’s fall and that this entire exercise is flawed because you have been told to search for a single cause. The argument here is that causation is more likely the consequence of a *series* of actions or a *set* of actions occurring simultaneously. This is appealing because it invites you to describe the causation in Tom’s fall by identifying a whole host of factors that worked together, in their totality, to bring Tom crashing to the pavement that included the pavement, the water, and his shoes. But a new challenge awaits; do you see it? How does one describe the *interaction* of the various factors and weigh their *varying degrees* of causation relative to other factors? This will require a degree of complexity and nuance that we haven’t addressed yet and that invites even more questions!

To see how a multiplicity of factors can complicate matters, take for example a baseball player standing in the batter’s box awaiting a pitch from the pitcher. The pitcher throws the ball and the batter swings the bat and knocks the ball out of the ball park for a homerun. What caused him to hit a homerun? Surely it was swinging the bat but the problem with this explanation is that he swings the bat often without hitting a homerun or even hitting the ball for that matter. Maybe it was the pitcher’s act of throwing the ball, in this at-bat, in a way that was easy for the batter to hit? Isn’t the causation to be found in what made it easy for the batter to hit the pitch? Or maybe the cause lies in the reasons that led the pitcher to throw that pitch at that time during that at-bat? So suddenly causation becomes a *result* of a combination of actions each of which begs a whole series of questions as to why it happened. Causation is some *consequence* of actions and realities that is really a description of a series of interactions that leads to a result. Causation is to be found in the result of connections between the actions and realities.

Causation in human affairs is further complicated by the fact that humans, actors in the drama of history, act pursuant to complex motivations that are often hard to explain. Ask yourself this question: What is the difference between the forces at work in the natural world absent humans--the laws of nature--that we study in science, on the one hand, and, on the other hand, the causation associated with human behavior in history? The causation involving history and humans is more elusive because humans make decisions that are fraught with motivations and complicated by a multiplicity of factors that weigh into the decision-making process. Take, for example, this question: What are the causes of the American Revolution? Answering this question depends upon, at least in part, an analysis of the motivations of those who rebelled. What were their motivations, why did they do it? How did they come to have these motivations? What forces or individuals shaped their views such that they were motivated to rebel? Do you see how this can become a regressive process in which you can keep digging deeper and deeper into their motivations searching for the causes and, in this process, you will find forces that impelled some of the colonists not to rebel while the same forces led other colonists to rebel? These forces also created forces that were the driving factors in why some of those colonists didn’t rebel? Do you see the complexity here? Now we have opened the door to forces that caused and forces that worked contrary to the impulse to rebel?

Causation associated with the laws of nature is different than in the realm of humanity because it is certain and irrevocable. This is why we call them *laws* rather than *theories*. We have a law of gravity but there are no laws of history. In fact scientists search for causation as a certainty because the laws of nature, short of uncertainty at the subatomic level, are immutable and, in fact, so certain that we can reduce their working to formulas. When certainty eludes scientists they assume that the process they are studying is more complicated than they previously thought and so they research more to uncover those elements as yet unknown that, if revealed, would yield certainty. For them, causation is certainty whereas for humans causation has likelihood rather than certainty.

Here are a few final thoughts for you as you answer questions of history that inevitably affect causation. Causation that is attenuated, at some great remove in time, has the potential to both explain a great amount of history but it lacks explanatory power the closer you get to the events you are studying. Take, for example, the question about the causes of the American Revolution. It is true that but for the English colonial effort of 1607 there would have been no American Revolution but did the colonizing effort *cause* the American Revolution? Most likely not when considering the amount of time and the large number of factors and individuals between1607 and 1776 that shaped the history in ways buried in decisions that others made later. In fact, if we follow the logic of the argument that the colonizing effort caused the American Revolution you are left with the inevitable conclusion that the colonizing effort also caused all the forces that sought to restrain revolution. So how would you describe the relationship of the colonial effort to the Revolution?

On the other hand, causation that is too immediate and close to the events being studied also lacks explanatory power. Again, consider the question of the causes of the American Revolution. One can argue that it was caused by the first soldier who pulled the trigger of his musket that discharged a lead ball that struck and killed a British soldier: this nameless rebel and others like him caused the American Revolution but this answer leaves us with no explanation of what motivated the soldier to be there with the musket in his hands in the first place and, in the course of answering this question, you find yourself back in the search for the variety of causes that motivated the soldier to be there in the first place.

So as you ponder causation think about these questions:

1. How would you define causation?
2. What is an important first step as you search for causation that helps you avoid flawed assumptions?
3. Might there have been some evolutionary benefit to our natural means of determining causation that isn’t serving us well in many circumstances today?
4. Think about causation and how it is integrated into history. Find the words describing causation as you read history over the next few days? Identify the words that reflect causation and describe those words and the ways in which authors describe causation to you.
5. Write a half page paper describing the connection between the making of the first English colony in the New World in 1607 and the American Revolution. You don’t have to know the history of either to do this.