

Smoke, but No Fire? In Social Science, Focus on the Most Distinct Part

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ABSTRACT Causality in social science is hard to establish even through the finest comparative research. To ease the task of extracting causes from comparisons, we present the benefits of tracing particularities in any phenomenon under investigation. We introduce three real-world examples from 2011: British riots, worldwide anticapitalist protests, and the highway crash near Taunton in southwestern England. Whereas all of these three examples have broad causes, we embark on the quest after specific factors. The Taunton accident can send a powerful message to social scientists, which is about the danger of making general statements in their explanations. Instead of saying much but explaining little, the merit of singling out the specific is substantial. As social scientists, when we are faced with “smoke” but no “fire,” let us then focus on the part that is distinct.

We are suspicious of pretentiousness, of all the fad words that the social scientists have coined to avoid making themselves clear to ordinary mortals. I urged them to be natural.

—William Zinsser (2006, 168)

In Britain in the summer of 2011, groups of disaffected youth took to the streets to demonstrate, and to loot. In the fall later that year, protesters in large numbers staged anticapitalist protests, in some cases camping in tents. Then during the Bonfire weekend in England, on November 4, on a southwestern highway, a massive pile-up occurred. The Bonfire weekend is a commemoration of the Guy Fawkes night.¹ At the popular level, it is celebrated in British towns and cities with displays of fireworks. As we shall soon realize, a display of fireworks was blamed for the Taunton highway crash.

In the British media, these three events were analysed in terms of “when,” “what” and “how” questions. Later, the experts said these events were, respectively, caused by lack of perspectives; corporate greed; the celebratory fireworks. These events produced chaos by bringing information that needed to be filtered and attached a certain causal weight. If political science research indeed has—or is to have—a “public role,” in the words of Robert Putnam (2003), we might want to learn from the daily news and harness its journalistic power for our scholarly wisdom.

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FOCUSING ON THE PART THAT IS DISTINCT

“Smoke, but no fire” occurs when a factor of general character (smoke) acts as a potential explanation of the event under examination. Fire is a true cause. To illustrate the difference between the two, consider a plane crash. Weather conditions, if they were bad, probably will be later referred to in early analysis as a potential cause.

By focusing on the most distinct part, we mean reversing the trend of first searching for a general or plausible explanation. Instead, we propose to distinguish first any features of a phenomenon that we are going to explain. This methodological step pushes the explanation in new directions. This exercise reverses the knowledge advanced by theorists such as Kenneth Waltz in his book *Theory of International Politics* (1979). When a goal is different, then a tool and a method need to be different, too. What we propose is Waltz (1979) *inverted*. The ability to discern timeless patterns in the social environment is highly prized in academia, but of less use to those who need to explain a particular event.²

The focus is on the most distinct part in any phenomenon needing explanation. The social crisis was a broad background of the August 2011 riots in British cities. Yet, what distinguishes these from similar cases is the stealing of expensive brand goods. Then demonstrations in locations across the world, known as the “Occupy Wall Street” movement, present a true laboratory for international comparison, as they took place in 82 countries. Generalizing is not the most interesting part here; instead, in our method of comparison, let us focus on the parts that are distinct. This allows us to explain the features distinguishing these events. The theme of the protests was essentially the same around the world, but every nation protested differently; these specifics are

interesting. Only the protest in Rome, for example, turned violent; in Tokyo the turnout was modest; in Stockholm, the rally was about calm attendance of public speeches (Randall and Thomas 2011). These details can show us a lot: violence in Rome, modest presence in Tokyo, a peaceful rally in Stockholm. But much of the explanation can be lost if we fail to show enough care. Rather than presenting a broad picture of these events a more fruitful enterprise is to distinguish intriguing parts in any of these protests.

We provide four more examples. Just one edition of *The Economist* offers the first three powerful cases. Let us take the first: “Ealing, which is heavily Asian, has London’s lowest rate of youthful substance abuse. But if stricter Asians were the explanation, northern cities like Bradford would also be abstemious. They are not always.” This leads us to look deeper. Second, on the American highways, cars have become more efficient—they can go more miles per 1 gallon of petrol; it sounds like good news, but for the mass-transit system, fuel efficiency is a “disaster.” Here we need a nonstandard lens to analyze the situation. Third, we have French employees who “actively dislike” their firm’s top managers; in contrast, American, British, or German employees are reported to be on friendly terms with their line managers. In this case, we are possibly dealing with a hidden—cultural—cause (*Economist* 2011a, 2011b, 2011c). A fourth example is this: “Things can sometimes be too quiet, however. Electric cars can be difficult to hear at low speeds, which makes them dangerous to pedestrians and blind people” (*Economist* 2013).

And in all these cases, our task is to cut across explanatory “smoke.” This smoke sometimes means a temptation of a superficial cause, as in the first example. Sometimes it can be a wrong perspective—what is a gain or a loss and for whom, as in the example on the electric car. And it can mean a choice for one “analytical screen” against the other, as in the French employees’ case, where cultural or political factors might prove useful. These examples constitute a good primer for social science students. Can we imagine a gain that would come from incorporating pieces of information from newspapers or other media? Examples of wars or alliances from the nineteenth century might be overused; they may also prompt students to stop thinking, reaching instead for pre-studied ways of explaining them. When we throw at students brand new and not necessarily purely political phenomena, we urge them to think out of the box and to try out a novel explanatory toolkit.

Our primary concern here is to avoid throwing the baby out with the bathwater. As we shall see next, the smallest detail may turn the most precious.

TAUNTON ACCIDENT

This massive pile-up crash occurred on the M5 highway near Taunton in Somerset, southwestern England, as shown in figure 1.

A driver who passed the accident site recalled hitting “a solid wall of white that came out of nowhere,” with the BBC referring to the “bonfire smoke” (BBC 2011a). The *Guardian* referred to “fog” in the area, but later it was identified as smoke: it “caused a bank similar to a fog bank” (Morris and Siddique 2011). But the rugby club in Taunton reassured everyone that no bonfire took place.³ Let us then investigate other potential causes. In line with the Ockham’s razor, attempting the simplest hypothesis, we may posit that the tragedy’s enormous scale was caused by one single truck. The evidence shows that six trucks were involved in the total of 34 vehicles (Mackenzie and Cooper 2011). Huge flames

Figure 1
The M5 Highway in Southwestern England



Source: Highways Agency, <http://www.highways.gov.uk/roads/projects/11019.htm> (January 22, 2012). (Color online.)

were seen in those trucks (BBC 2011b). This is as much evidence as we have; under these conditions, “Transport Secretary Justine Greening said it was too early to consider what measures could be taken to prevent similar accidents” (BBC 2011a). To design effective measures, knowing *what* was similar matters. Specific was the scale, and we argue that the scale was caused by trucks—for otherwise we would not know what “similar” means.

In retrospect, the *Independent* (November 7, 2001) used a “blaming” language: “Thick clouds of smoke from nearby firework display being blamed for motorway pile-up” (Smith, Hall, and Manning 2011).⁴ In writing or speaking, “may” is often a better choice. Here, a short piece of the *International Herald Tribune* reporting (November 7, 2011) is commendable. In the title, it uses careful language: “Smoke from fireworks display *may have had* part in crash” (emphasis ours). Note also the careful language in the Associated Press quote that reads: “Police said they have now zeroed in on the fireworks show after evidence taken from witnesses indicated that black smoke emerging from it *may* be the main culprit” (*Guardian* 2012).

As another, expanded example of good practice we suggest that readers look at the expert opinion quoted in the *Guardian*. These experts believe that smoke from the fireworks display alone was unlikely to lead up to a crash. Other factors might have played a role, such as vehicles burning as a *result* of the accident. The temporal dimension needs to be included in the analysis, and as “a government minister” quoted in the newspaper suggested, people could have been confusing smoke from the fireworks, which were believed to be the “cause,” with smoke resulting from the burning vehicles, which was the consequence of the disastrous road crash (for this valuable source of information, see Morris 2011).

The Taunton case is valuable here because it demonstrates the struggle for the specific. Well-meaning, engaged attempts were undertaken afterward to explain the tragedy with a display of fireworks, hosted by a rugby club nearby. The problem is that during the Bonfire weekend in Britain, nearly every town staged a fireworks display. The massive pile-up accident, however, during that weekend happened only near Taunton. The point is that if Bonfire weekend smoke, both from bonfires and fireworks, was “causing” a highway crash, then from Cardiff to London to Inverness, and in all small villages, crash after crash would have happened on the British roads.

To show causality in social science in a pure way, we need, instead, to focus on a process. To illustrate this point, we look at how plane crashes are explained. In most cases, poor weather conditions play a role. But if poor weather was an explanation, then any hail or thunderstorm would bring flying planes to the ground! It is not the case. But it is correct to say that poor weather makes a human mistake more likely. The value of showing the mechanism of causality is that we *explain* a specific case. This would amount to some extra explanatory work and a painstaking collection of evidence exclusive to a given event or accident.

THE EXPLANATORY PYRAMID

To point us in the direction of evidence-based, case-specific explanations, imagine an explanatory pyramid. At the lower levels, we have obvious conditions, common to a vast majority of accidents, like bad weather or fast driving. The higher we climb up the pyramid, the more specific the conditions become: be it local events or dense traffic. To focus on the most distinct part, we aim for the

circumstances—to recreate what exactly happened; we cannot go back and see if any other element was distorted. On the other hand, we are likely to be intellectually tempted by general conditions: weather (fog); local events (fireworks); obstacles reported by survivors (smoke spreading over the highway.) Worse still, we may turn to the phenomena that were not even observed, but are highly plausible: the traffic in the southwest was busy.

Such “logicalities” might be useful as a starting point, yet they are not what we aim for; to reach the pyramid’s peak, we need carefully researched, case-specific evidence. Then we can compare these with the general explanations that first come to mind, and corroborate or refute them.

The presence of large trucks on the scene and the scale of the accident point us in the direction of the trucks, which play a major part in the explanation. The point is not just to believe in evidence-based research, but to believe only in research that is evidence based.

CONCLUSION

No snowflake in an avalanche ever feels responsible.

—Stanislaw Jerzy Lec, 1964

We therefore focus on the pyramid’s peak rather than its bottom, where social scientists like to search for law-like regularities. In demonstrations and in riots, we will expose peculiar behaviors—be it stealing brand goods or camping in tents. In new institutions, we consider their distinct characteristics. But there is nothing characteristic in economic interdependence—unless we find some interdependence in the Arctic; then it would be distinctive.⁵ We should

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pyramid’s peak. There are, of course, problems with reaching the pyramid’s top.

We may say that smoke from the fireworks played a part in leading to the catastrophe, but we cannot say, with clear “scientific” conscience, that they were a cause, an explanation. In early November, fireworks took place all over England; perhaps in many places there was also fog. Weather, meaning a broad condition, will not render our explanation stronger, as in the following example from the *Financial Times*: “Those seeking to explain poor results [of retail sales] refer to all kinds of conditions,” with weather figuring as the main culprit (Barrett and Kavanagh 2011). But weather cannot cause anything; plane crashes are never caused by weather, but by a human error *in response to* the weather. Explanatory smoke may prevent us from reaching the pyramid’s highest point; we have seen such smoke in the examples of a fireworks display that was just a background, which is wide, and not an explanation, which needs to be specific.

The search for the specific entails that we assume a tentative hypothesis. On the one hand, it may be that only on the M5, given the fog and the smoke, a large truck abruptly stopped, leading to the catastrophic pile-up. It could be our explanation—the one specific truck. The problem is that such a truck, one specific cause, is hardest to find. When we are already faced with the debris of vehicles on the spot, we are not able—under normal

not take the broad and unspecific conditions for definitive explanations; these can serve only as a background, or smoke. What social scientists need to discover is the specific cause, or the fire.

This, of course, does not suggest that one needs solely to look at the fire, but only that the virtue of detecting a specific cause through focusing on the most distinct part should be more fully acknowledged. Although such research design has not always received the attention it deserves in political science, it surely offers a useful point from which more accurate conclusions might be reached in answering the question: why “smoke,” but no “fire?” This will aid us in understanding what makes smoke appear in the first place, as our efforts to search for a specific cause of the fire help us to construct specific causal mechanisms of different kinds of fire: be it “bush fire,” “house fire,” or, again, a “bonfire.” From there, we are able to move up the ladder of more realistic explanations and more accurate predictions of smoke *and* fire. Then we will have better explanations, and better social science on the way.

The search after a real cause or “fire” is seen here as a scientific enterprise. A different task concerns both policy makers and academics who want to offer real-world solutions. From such a perspective, a key task is to resolve the problem by addressing the emergency and its aftermath. Learning from what has happened may help to prevent, or minimize, occurrence of such crises in future. Then we will design better evacuation routes, install better

fire doors, and even prevent occurrence of crises. Whether they are catastrophes involving casualties, like the Taunton accident, or social protests, the task is the same: to identify their causes and learn from them.

To emphasize, we do not look at complex, social phenomena but rather at news from the front pages that any observer or student of world affairs comes into contact with on almost a daily basis. Having an apparatus at hand to think systematically about these cases is of considerable merit for teachers as well.

To reiterate our plea, “expert” knowledge might be full of hasty generalizations. Does every protest have unemployment in the background? Little merit comes from giving expert judgment before asking simple questions: “In this particular protest, were there some distinguishing features?” By focusing on studying these features, we stand good chances of being nearer to the ground and saying what specific causes were. When a real cause is covered in explanatory smoke, we need to temporarily put aside our temptation for broad and general explanations, to give priority to any prominent, distinctive features. This exercise is fraught with risks as pinpointing a definite cause might be a difficult and time-consuming exercise. The danger is that others will not agree with us. But this is exactly the merit of being scientific in the way that we let our answers be tested and in some cases even contradicted.

Our search after better explanations resembles the final sentence from *The Great Gatsby*, where F. Scott Fitzgerald wrote: “So we beat on, boats against the current, borne back ceaselessly into the past” ([1926] 1994, 188). Yet this effort pays off, as we pass through the fog and reach the safe shore of explanation. ■

NOTES

1. Guy Fawkes was among the most famous conspirators in the Gunpowder Plot planned for November 5, 1605. It was an attempt by dissatisfied Catholics to blow up the English Parliament and King James I (1603–1625), on a day marked as opening of the Parliament. The king was warned, through a letter, not to attend that opening session. The plot led to strengthening of laws against the Catholics.
2. On adjusting theoretical tools to the desired means, see Elman (1996).
3. The Taunton Rugby Football Club website, <http://www.tauntonrfc.co.uk/> (accessed November 11, 2011).
4. Police investigations have led to prosecutors charging the *organizer* of the fireworks display with seven counts of manslaughter. These charges were later dropped, in January 2013, on the grounds of insufficient evidence. The barrister said that his client should never be charged with manslaughter; the charges were subsequently changed into the ones of violations against health and safety; the evidence presented was not sufficient to charge any driver (Morris 2012a; 2013).
5. Soon we should start to take interdependence for granted even in the Arctic. See a feature in the *New York Times* (2011), on how powers strive to secure access to the Arctic’s abundant oil and gas resources, enmeshing it with the world, and thus creating interdependence (Erickson and Collins 2012) See also the illustration “Antarctica: the quiet race for national influence” (IISS 2013).

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