
Developing a Sounder Philosophical Foundation for Revolution Studies

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This article seeks to challenge the standard assumption of Revolution Studies that the occurrence and course of political revolutions can in principle be understood as conforming to scientific law. It develops a critique of the scientific ambitions of the study of revolutions. It does this by examining the successes and failures of theories of revolution, including Marxism, and theories of the so-called first to fourth generations of Revolution Studies, in explaining real-world revolutionary events. The empirical failures of Revolution Studies lead to a more fundamental questioning of the possibility of applying a framework from the hard sciences to complex social phenomena. This is based on the philosophical critiques of using the methodology of the hard sciences to study social phenomena. It draws on the work of Karl Popper, Friedrich Hayek, Michael Strevens, and others. Ultimately, it argues that it is unlikely that we will ever be able to formulate meaningful scientific laws of revolution. Hence the only thing we can do about revolutions in a strictly scientific manner is to collect empirical observations about them. This would, however, result in dry lists of empirical observations that would be unlikely to satisfy the two main reasons why revolution studies exist, which are simply satisfying curiosity about revolutions and informing practical decisions. In order to satisfy curiosity and inform practical decisions, this article argues for the introduction of elements from the art of rhetoric into the study of revolutions. In other words, revolution studies must construct appealing, though not strictly scientific narratives, to give readers the illusion that their questions about revolutions have been answered.

Keywords: Revolutions, Revolution Studies, Philosophy of Social Science, Rhetoric

I spent much of 2022 thinking about a very specific question: Will a revolution break out in Russia? For most of that year, I was working in Ukraine, so the answer to that question had real, practical implications for me, but I was also just curious. What would it take for Russia's quiescent population to rise up and bring down the fearsome authoritarian edifice of Vladimir Putin's regime?

It should be possible to come up with an answer. There is, after all, a whole field of political science called revolution studies and over the last two centuries, it has produced no shortage of literature trying to explain and understand revolutions. Sadly, revolution studies has not been a very successful field. Not only did it not help me predict whether a revolution would happen in Russia, it is not even very good at understanding and explaining past revolutions.

This essay will argue that the reason why it has not been successful is because it adopts a flawed epistemological approach. Revolution studies is a field of political science.¹ Hence, as the name implies, it maintains pretensions to using scientific methods adopted from the hard sciences where certain specific variables lead to particular outcomes; if the variables in a revolutionary situation are the same, the outcome will be the same. In other words, political scientists in the field of revolution studies try to formulate generally applicable laws that explain revolutions, in a manner similar to how physicists formulate general laws explaining motion in the field of mechanics.

The problem is that applying such scientific methods to highly complex systems, like human societies in the throes of revolution, is an extremely fraught endeavor, simply because, in practice, the number of variables determining an outcome is practically infinite and the variables themselves are messy and difficult to define clearly. It is unlikely that it will be possible to formulate neat laws with a comprehensible number of clearly-defined operational variables that reliably lead to an expected outcome.

In this article, I will not argue *a priori* that it is impossible to apply the principles of the hard sciences with their variables and laws to the study of human society or that human societies are somehow fundamentally

1 Scholars from outside the field of political science – i.a. historians, sociologists, anthropologists – also study revolutions, but this article focuses on the political scientific literature exclusively.

different to natural systems. Quite the contrary, in some cases, especially in fields where quantitative data are abundantly available, like macroeconomics or psychology, that approach can work quite well. As a starting point, I will accept the paradigm nearly all contemporary political science uses, that is, the scientific paradigm of formulating general laws and, from those laws, general theories (political science, after all, does call itself a science).² What I will then try to explain is that, specifically in the field of revolution studies, close to two centuries of scholarship have failed to show that hard-scientific principles are applicable and, furthermore, there is little reason to believe that future research has a hope of changing the situation. Hence, an alternative epistemological approach is needed.³

This alternative approach is needed because we cannot simply abandon the study of revolutions, even though we are, as the following pages will show, unable to meaningfully study them in an exclusively scientific manner. There are two main reasons why the continued study of revolutions is practically inevitable, both of which I alluded to in the opening paragraph of this essay. First of all, revolution studies is an applied field. Understanding whether or not a revolution might break out in Russia has important implications for policy, military strategy, and the daily lives of millions of people. Secondly, people are genuinely curious about revolutions. Not only do they want to know whether they might soon be titillated by images of the Kremlin burning on YouTube, they are also interested in past revolutions. The war in Ukraine has, for example, renewed interest in Ukraine's 2014 Euromaidan Revolution. And a recent big-budget film about Napoleon starring Joaquin Phoenix indicates that even the period of the French Revolution still inspires the popular imagination.

Rather than trying to put a futile hard-scientific veneer on revolution studies, this essay advocates a radically different approach. It argues for introducing an element of art, specifically the art of rhetoric, into the

² Nelson (1987b, p. 202).

³ Authors working within certain post-modern scholarly approaches such as heuristics or post-structuralism would argue that the principles of science simply cannot be used to study human societies, because societies can only be understood as complexes of socially constructed symbols and meanings, not as objective physical reality. This is an interesting idea that is not without merit, but it is slightly beyond the scope of this essay to address these postmodern methodologies. This essay accepts as its axiom that even in human societies there is a physical reality that can be studied.

study of revolutions, combined with a scientific methodology designed to explore phenomena that are only hazily understood. Though understanding revolutions through art may seem a slightly shocking proposition, given the gravity of most revolutionary situations, the final part of this essay will flesh out why this approach is not unprecedented, and why it is more honest than the existing failed scientific approaches. Before that final section, however, this essay includes two preceding sections. The first section examines in detail the reasons why it is difficult to use the methods of the hard sciences in the study of human societies. The second part delves into the literature from the field of revolution studies to demonstrate why this field is almost a perfect case study of the epistemological problems outlined in the first section.

Why Science Isn't So Great at Studying Human Societies

A whole scholarly career could happily be spent discussing what science is and what it should do. At the risk of oversimplification and cherry-picking, the following paragraphs will briefly look at a small segment of the literature on this topic that is relevant to the overall argument of this essay and helps understand, epistemologically, why revolution studies has not been a very successful field. Four concepts related to the definition of science, which are both relevant to the argument of this essay and that come up prominently in the literature on the definition of science, are observation, explanation, prediction, and falsification. The following paragraphs will look at them in more detail.

The fundamental building block of science is the systematic observation of empirical phenomena. Once it has systematically observed some interesting phenomena, for a scholarly activity to qualify as science, it must then try to explain and predict these phenomena.⁴ The formal in-

4 In addition to explanation and prediction, most sciences also include a descriptive aspect. For example, for a publication to qualify as scientific in the field of astronomy, it is enough for it to describe the discovery (i.e. the existence, hitherto unknown) of a new celestial body. Not much space is devoted to the descriptive aspect of science in this paper, because the field of revolution studies explicitly abjures the descriptive aspect of studying revolutions. In other words, merely identifying and describing a revolution in a certain country would not count as scientific activity in the field of revolution studies. This is generally in keeping with established practice in many of the social sciences (see Belcher (2019, p. 63)).

roduction of the – fairly intuitive – concept of observation into science is often credited to Francis Bacon in his book *The New Organon*. In *The New Organon*, Bacon wanted to understand the phenomenon of heat. He approached the problem of heat by simply listing as many examples as he could of heat (such as the sun’s rays or fibrous fabrics like wool)⁵ or situations where heat was conspicuously absent (moon rays, for example)⁶ that he had empirically observed in the world around him.

Once scientists have collected some empirical observations, they then proceed to explaining them. Explaining phenomena, in its simplest form, is answering “why” questions. Another way of formulating this condition is to say that all events have a cause and explanation involves discovering causes.⁷ Of course, the progression is rarely as neat as the preceding sentences might suggest. In most cases, scientists are collecting empirical facts when some sort of explanation for a given phenomenon already exists. Empirical observation and explanation, and prediction and falsification, which will be dealt with in the following paragraphs, often take place simultaneously.

The next significant concept in the definition of science, predicting phenomena, does not strictly mean guessing at future events. Rather, it means that, if a scientist knows what the value of certain variables is, she will know the outcome of a given situation.⁸ In the so-called hard, or natural, sciences these variables are often numerically quantifiable, but qualitative variables can also be used in prediction.

In the social sciences, prediction works in fundamentally the same way, though with some nuances. Some social scientists will happily apply the term prediction in the way it is employed in everyday speech and use the general laws of their field to prognosticate future events. Think of economists who often try to predict future economic outcomes based on laws of supply and demand, public debt, etc.⁹ Other scientists, for example, those in the field of revolution studies, do not claim to predict

5 Bacon (2000, p. 110).

6 Ibidem, p. 129.

7 Hempel (1994, p. 44).

8 Ibidem, p. 45.

9 Gordon (1993, p. 609).

future events. That does not mean that they do not engage in prediction.¹⁰ Though they abjure predicting whether a revolution will break out in a particular country at a particular future date, they do try to formulate general laws based on certain variables that are present in all revolutions and that determine their course and outcome.¹¹ Implicitly, their claim is that if the same variables are present in any society, now, in the past, or in the future, a certain revolutionary outcome will result (a revolutionary outcome could be a successful revolution or an unsuccessful revolutionary attempt, for example).

Predictions and explanations concerning more complex, abstract phenomena, like evolution or gravity, are called theories. Theories are based on laws, sometimes just one law, but usually several. Prediction and explanation, in relation to both theories and laws, are connected to falsification, which is another broad concept that often comes up in explanations of what science is. This concept was introduced by philosopher Karl Popper, who, to some extent normatively, described science as a search for falsification.¹² According to Popper's approach, for a law or theory to be scientific, it must be falsifiable, that is, if we observe a case where the outcome predicted by a law or theory does not actually occur, we can consider that law or theory to be invalid or, in other words, falsified.¹³

It should be noted that Popper's concept of falsification is nuanced and complex. Furthermore, it has been updated and criticized since it was first introduced, most prominently perhaps by Thomas Kuhn, who showed that in scholarly practice falsification takes much more than one case that does not conform to a theoretical prediction.¹⁴ Furthermore, in the social sciences, some theoreticians, perhaps most prominently Adam Przeworski and Juan Linz, have argued in favor of abandoning a must-happen/cannot-happen approach to prediction and falsification. Instead they argue in favor of a probabilistic approach to scientific laws.¹⁵ In other words, in

10 Hempel (1994, p. 46).

11 I make this claim based on a study of the political-scientific corpus of literature on revolutions. There is hardly a mention of a country where a revolution has yet to break out, but the author expects a revolution to break out within a specific future timeframe.

12 Williams & May (1996, p. 29).

13 Popper (2005, pp. 9–10, 33).

14 Kuhn (1996), Gordon (1993, p. 615), Hammersley (2008, p. 167).

15 Przeworski & Teune (1982, p. 19).

the social sciences, predictions do not have to be empirically correct every time for a law to be valid. It is enough if they get it right with a certain probability. That said, even probabilistic laws must be empirically tested and can be falsified if they consistently fail to predict empirical outcomes.¹⁶

Though falsification is an intuitive concept, its application in the social sciences does include some specificities, one of which is particularly relevant to the argument of this essay. Specifically, some laws and theories that use scientific jargon are, in fact, unfalsifiable, and hence, unscientific.¹⁷ They can be hard to spot, especially in the social sciences. According to Karl Popper, complex ideas like Marxism and Freudianism belong to the category of unfalsifiable theories, because in practice they are so broad-ranging, flexible, and unclearly defined, that it is impossible to find a real-world occurrence that cannot somehow be twisted to confirm them.¹⁸

Bearing all that in mind, the use of the term falsification for the argument of this article is highly simplified. Nevertheless, as the following pages will show, theories in the field of revolution studies have been falsified to the extent that they meet almost any definition of falsification. Hence, we need not concern ourselves too deeply with all the finer details of the concept of falsification as used by Popper or later authors.

Furthermore, falsification, as well as explanation or prediction, do not always have to happen in science. There have been historical instances when there simply were no theories to explain or predict a given phenomenon or competing theories existed simultaneously, of which none could be falsified and they were roughly equal in their ability to explain and predict observed phenomena.

The situation with two equally plausible theories obtained, for example, in the first half of the nineteenth century during the debate between the caloric and kinetic theory of heat. Proponents of the caloric theory claimed that heat was a fluid moving from hotter to cooler bodies, while the kinetic theory claimed heat was the result of molecular motion. Both theories were fairly successful at explaining and predicting some phenomena and

¹⁶ Munck & Snyder (2007, pp. 478, 481).

¹⁷ Hugh & Sharrock (1997, p. 91).

¹⁸ *Ibidem*, p. 88.

unsuccessful in others. Experiments that could falsify the caloric theory would only appear in the middle of the century.¹⁹

This did not mean that science stopped. Rather, it reverted to collecting more empirical observations. In Bacon's case, his lists of examples of heat led to the formulation of coherent theories of the phenomenon, both by Bacon himself and later authors. In the case of the caloric vs. kinetic debate, empirical observations, in the form of more sophisticated experiments, eventually settled the question.

Though the concepts of explanation, prediction, and falsification work well in some scientific fields, attempts to explain and predict tend to run into problems when they are applied to what Friedrich Hayek terms complex phenomena.²⁰ Complex phenomena are systems where an outcome is determined by a very large number of different, complicated variables.²¹

Max Weber uses an interesting analogy that illustrates what a complex phenomenon is and why predicting and explaining outcomes in it is difficult. Think of a process that produces a seemingly random outcome, like putting five dice in a cup, shaking it, and casting the dice on the table. It is practically impossible to predict the combination of numbers on the dice or to explain why a certain combination arose once we have cast the dice.²² Theoretically, however, it might be tempting to claim that if we knew exactly the shape and composition of the dice, their initial position in the cup, the exact angle and speed with which we shook it, and a whole host of other physical variables, we could, in fact, make a prediction. While it is perfectly true that the laws of physics apply to the dice in the cup, that these laws are well established, and that the motion of physical bodies like dice can successfully be described using these laws, it soon becomes clear that the number of variables that would have to be taken into account to produce a successful predictive or explanatory theory for the dice is too large to be actually possible.

Weber's dice serve as an analogy for the many complex phenomena in our empirical universe, but they are, if anything, a system much simpler

19 Strevens (2020, ch. 4).

20 Hayek (1994, pp. 61–62).

21 Ibidem, p. 57.

22 Weber (1949, p. 182).

than phenomena observed in human societies, because unlike studying physical phenomena, the variables needed to study complex systems like human societies are rarely clearly defined or discrete entities.²³ Take, for example, the concept of class, which is a crucial variable in many Marxist theories. Industrial societies, according to Marx, have several major classes, such as the aristocracy, bourgeoisie, proletariat, and lumpenproletariat. In the real world, determining who belongs to which class is not easy. Are fast-food workers proletarians or lumpenproletarians, for example?²⁴ Hence, it is very difficult to determine the class structure of a society with any precision and, therefore, explaining and predicting based on this variable is fraught at best.²⁵ Significantly, the problem of precisely defining variables also explicitly applies if we adopt the probabilistic approach to falsification. Writing specifically about this approach Adam Przeworski and Henry Teune state that for variables to be useful, they must be “empirically understandable”.²⁶

The real world which we inhabit contains some simple phenomena and a great many complex phenomena. Hayek asserts that many of the phenomena that the theoretical hard sciences study are simple.²⁷ That is why hard sciences are relatively successful at formulating laws and generally applicable theories. Human societies, as well as individuals, on the other hand, most often seem to behave like the dice in Weber’s cup. The laws of science apply to them fully, and it would be tempting to believe that if we identify and evaluate all the right variables, we will be able to explain and predict outcomes, but in reality, this is not usually the case.²⁸

23 Hammersley (2008, p. 29).

24 An early reviewer of this article argued vehemently that fast-food workers are not lumpenproletarians, while I remain equally convinced that they are (though without the negative connotation that this term sometimes carries). Low levels of unionization are but one indicator of low class consciousness among this group. Its members are also characterized by a high fluctuation and precarity of employment and wages that are among the lowest in developed societies. This disagreement with my reviewer, in a roundabout way, proves my point. Reasonable people can disagree about which class fast-food workers belong to, with both sides marshalling reasonable arguments. This makes operationalizing the variable of class difficult. In case a reader is not convinced by the example of fast-food workers, there are other examples of ambiguous class affiliations, like a small vendor renting her shop.

25 Malcolm (2016, p. 66).

26 Przeworski & Teune (1982, p. 20).

27 Hayek (1994, pp. 56–57).

28 Ibidem, p. 55–56.

There are some exceptions. According to Hayek, the use of statistics can go a long way to reducing complexity. When using statistics, variables must be made more clear-cut and precisely defined. By reducing the human experience to numbers, which involves a large dose of abstraction, simplification, and de-personalization, systems become less complex.²⁹ Hence, social sciences where large amounts of quantitative data are available can have a certain amount of success in producing general laws and theories. Economics has arguably been the most successful of the social sciences in using this strategy to its advantage, mainly because quantitative statistical data is abundant in economics.³⁰ But outside a few exceptional fields like economics and psychology, the systems under study in social science are so complex that no general laws or theories have emerged so far and, not only that, there is no reason to believe that we will ever be able to discover the right combination of variables to produce such laws.³¹

Revolution Studies and the Search for a Theory of Revolution

An example of a field where scholars have tried to apply the principles of science to the understanding of human societies is revolution studies. Revolution studies, as the name implies, is a field of political science that tries to understand revolutions. Revolutions are events where mass popular action tries to, or succeeds in, bringing down a government. Though there are some differences in how various scholars define the term, there is, overall, a high degree of consensus on what constitutes a revolution. Hence, the definition of revolution includes things like revolutionary civil wars and mass protest movements.³² Coups, regicides, and other changes of government that do not involve mass public action are not, on their own, revolutions, although coups, regicides, etc. can be a part of a revolution if they are accompanied by mass public action. Revolutions can be peaceful or violent, and they can take place completely outside the constitutional

29 Scriven (1994, p. 74), Hayek (1994, p. 59).

30 Hayek (1994, p. 62).

31 Scriven (1994, pp. 72–73), Hayek (1994, p. 66).

32 See e.g. Skocpol (1994, p. 5), Foran (1997), Lawson (2019, p. 5).

order of the state or largely within it (like the so-called Velvet Revolution in Czechoslovakia in 1989, where a transfer of power was negotiated after a peaceful wave of protests). Revolution studies also concern themselves with revolutions that were unsuccessful in that, despite a mass uprising against the government, no change of government took place. These could perhaps more accurately be termed failed revolutions or revolutionary attempts, but they are still an object of study of revolution studies.

Some scholars refer to revolutions as the “sex of politics” indicating that they are both highly significant and highly fascinating events. As such they have been the object of specialized study in the field of political science for over a hundred years. Fundamentally, revolution studies have tried to answer two questions: Why do revolutions start and why do some revolutions succeed and others fail? Revolution studies, as a field of political science, tries to study these questions in a scientific manner, that is by formulating general laws and (based on those laws) theories of revolution that would explain and predict the outbreak and success of revolutions.³³ In other words, revolution studies tries to justify the inclusion of the word “science” in the term “political science”. In this, they try to set themselves apart from, i.a., historians and journalists who happily write about revolutions without the rigors of theory.

Obviously, if revolution studies could find general laws and theories, that would be great.³⁴ Unfortunately, revolution studies has not been a very successful field. As John Foran, one of the leading contemporary scholars of revolutions, states in the introduction to *Theorizing Revolutions*, a volume that tried to survey exhaustively the state of the art in revolution studies, a comprehensive theory of revolutions is “ever-elusive”³⁵. As the following pages will show, most proposed theories of revolution have been falsified by observing specific cases of revolution, which simply do not accord with what the theories predict. If there is one

33 Revolution studies usually claim to be looking for theories of revolution, rather than laws. Strictly speaking, this is correct, as revolution studies tries to explain a complex, abstract phenomenon. The literature on revolutions rarely mentions the word “laws” explicitly though implicitly, of course, the use of variables to predict outcomes indicates that revolution studies is, indeed, also searching for laws that form the basis of those theories.

34 Scriven (1994, p. 72).

35 Foran (1997, p. 6).

thing that revolution studies has proved, it is that, like the dice in Weber's cup, the number of variables that determine a revolutionary outcome is so large that taking them all into account is impossible. This is reflected in the overall trajectory of research in revolution studies over the past few decades. Attempts to formulate simple, clear theories of revolution based on a small number of laws, based in turn on a small number of simple variables have given way to so-called multi-causal theories that are so vague and broad-ranging that they are almost unfalsifiable. Attempts to find general scientific theories, or laws, of revolution are usually divided into four schools or generations, based on certain shared traits and also the chronology of their development (although the generations overlap temporally to a large extent).³⁶

The first generation of revolution studies, usually dated to the period before the Second World War, viewed revolutions as a disturbance in the equilibrium of society, often using a medical metaphor.³⁷ Revolutions were seen as a sort of illness in the body of society that had specific symptoms and a specific course. By extension, this approach emphasizes a certain set revolutionary cycle, starting with economic development that leads to rising expectations among the population. Simultaneously, some new ideology takes hold among the intelligentsia. The combination of these factors leads to a revolutionary challenge against the regime.³⁸ Following the fall of the regime, there is a phase of radical government followed by a phase of moderate government, known, based on the example of the French Revolution, as the Thermidorian phase.³⁹ According to scholars of the first generation, this cycle is, in its main features, present in all revolutions.⁴⁰ In simplified terms, the variables that the first generation of revolution studies worked with were economic development and the

36 See e.g. Foran (1993). Other taxonomies of the literature on revolution do, of course, exist, but they are not much more useful. Timothy Wickham-Crowley (1997), for example, divides the literature based on how much emphasis they place on four variables: structure, contingency, cultural factors, and social factors. The trouble with Wickham-Crowley's taxonomy is that it is highly reductive. It does not fully take into account the various types of variables that can enter into the study of revolutions.

37 Goldstone (1982, p. 189).

38 Lawson (2019, p. 48–49).

39 Grinin & Korotayev (2022, p. 111–112n).

40 Lawson (2019, p. 48–49).

presence of a new ideology among the intelligentsia. If these two factors were present, revolution, with all its ensuing phases, would follow. This makes it precisely the type of general theory or law that would make revolution studies a proper science.

There is just one big problem. The theories of the first generation of revolution studies are not very good at explaining revolutions. Most revolutions simply do not conform neatly to the pattern described above. Though there may be certain superficial similarities in the course of various revolutions around the world, one would be hard-pressed to find a radical phase and a Thermidorian phase following the anti-Communist revolutions in Eastern Europe at the end of the 1980s, for example. Even in older revolutions, it is often a stretch to claim that they conformed to the first-generation model. First-generation scholars could plausibly claim that following the Bolshevik Revolution, the Thermidorian phase started with the implementation of the New Economic Policy in 1922 that allowed the resumption of small-scale capitalist activity in the Soviet Union.⁴¹ But the model does not really have an explanation for the abandonment of the policy in 1928 and a return to a regime, under Stalin, that was arguably even more radical and repressive than the initial post-revolutionary regime under Lenin. Crane Brinton, one of the most influential of the first-generation scholars, dismisses the Stalinist terror as an anomaly that does not conform to the normal pattern of revolution caused by the “backward[ness of Russia] in political and economic structure”.⁴² On a more general note, Brinton admits that the various phases, which all revolutions supposedly have in common, take on vastly different forms and durations in different revolutions.⁴³ The phases are, in fact, so varied that it is entirely possible to conclude that the whole theory of revolutionary phases is actually a case of apophenia. Certainly, at the very least, the phases of revolution are not a general and universally applicable law, and, thus, it seems that first-generation theories have been falsified by empirical observation of real-world revolutions.

Rather than using the body as a metaphor for the state or society and illness as a metaphor for revolution, some scholars have tried to explain

41 Halliday (1999, p. 201).

42 Brinton (1968, p. 208).

43 *Ibidem*, p. 205.

revolution based on economic or psychological variables. These economic and psychological explanations have their roots in the nineteenth century and eventually led to the formulation of theories of what would later be called the second and third generations of revolution studies. Perhaps the most famous explanation of revolution based on economic factors can be found in classical Marxism (which, of course, predates most of the works of the first generation cited above). In Marxist theories, the development of capitalism is a fundamental variable that results in revolution. According to Marx's *Manifesto of the Communist Party*, capitalism leads to industrialization, the alienation of labor, a crisis of capitalism, and revolution.⁴⁴ In other words, according to Marx, the fundamental law of revolution is simple. If capitalism develops then revolution results. Marx views revolution as inevitable in capitalist societies. Once again, this is a general law that seems to be scientific.

Other theoreticians, many of whom definitely did not share Marx's normative or descriptive outlook, have also attempted to explain revolution based on a small number of economic variables. Barrington Moore Jr., a quintessential writer of the so-called third generation of revolutionary theory, tries to explain revolutions based on the class structure of the societies where revolutions occurred. In his work *Social Origins of Dictatorship and Democracy* (1966), Moore identifies three social classes that determine the form of government in the state: the aristocracy, the bourgeoisie, and the peasantry. If the bourgeoisie and the aristocracy feel threatened by the peasantry and form a coalition to oppose it, a fascist dictatorship results. If the bourgeoisie is weak and the peasantry is stronger than the aristocracy, a communist revolution followed by dictatorship will result. If the bourgeoisie is strong, the peasantry is weak and the aristocracy joins forces with the bourgeoisie or cannot resist it, a liberal-democratic revolution will result.⁴⁵ Though class structure is a more nuanced phenomenon than the mere existence of capitalist development, Moore's main project shares with Marx the desire to understand revolution by observing one socio-economic variable and formulating a general law based on it.

44 Marx & Engels (1977, ch. 1, esp. 48).

45 Moore (1966, p. 413–414).

Ted Gurr, another scholar who is definitely not a Marxist, also explains revolution as the result of economic development. Gurr is considered to be part of the so-called second generation of revolutionary theory, although his most famous book, *Why Men Rebel* (1970), came out later than Moore's *Social Origins of Dictatorship and Democracy*, which belongs to the third generation. Gurr explains⁴⁶ that economic development sometimes creates feelings of "relative deprivation" among populations. Relative deprivation means that members of a population believe they are enjoying fewer benefits than they are entitled to. When a sufficient number of people develop this belief, revolution results.⁴⁷

The trouble with theories that try to reduce revolution to a small number of simple economic variables comes down to two of the major problems with using scientific methods to study societies that were introduced in the preceding chapter. First of all, such theories are very difficult to substantiate empirically and hence are often easily falsified. They simply do not conform to a large number of empirically observable cases of revolution in the real world. Secondly, seemingly simple and clearly-defined variables are often more complex and include a very large number of historical and structural phenomena, which cannot easily be abstracted and simplified to be used as inputs for laws or theories.

Take the Marxist interpretation, which suffers primarily from the first shortcoming, i.e. the lack of empirical substantiation. A cursory look at Western Europe or the US shows that capitalist development does not inevitably lead to a socialist revolution, undermining the core tenet of Marx's revolutionary theory. A socialist revolution did occur in tsarist Russia, a country that Marx and Engels declared was not far enough along the road of capitalist development for a socialist revolution to take place.⁴⁸

Moore and Gurr have been famously criticized by Theda Skocpol, a student of Moore's and herself a prominent theorist of revolution, for the deficiencies of their theories. These deficiencies can be clearly illustrated using the case of Germany, which Moore claims had a strong aristocracy and a relatively weak bourgeoisie, resulting in a fascist dictatorship. This

46 Gurr (1970, p. 44).

47 Ibidem, p. 24.

48 Newman (1955, ch. VIII).

was because, according to Moore, the Stein-Hardenberg Reforms that took place in Prussia in 1807–1814 created a strong, labor-repressive aristocratic class. Clearly, a lot took place between 1814 and the rise of fascism in Germany, and Skocpol argues that a lot of it actually worked to strengthen the bourgeoisie and weaken the aristocracy, making Moore's claims empirically dubious.⁴⁹

Furthermore, it is difficult to measure the relative strengths of the classes, opening Moore's work to the criticism that what are said to be clearly defined variables, are, in fact, messy, unclear abstractions. Skocpol points out that it is difficult to believe, as Moore implies, that the French Revolution resulted in liberal democracy, because the bourgeoisie was strong, whereas the Russian Revolution resulted in communism because the bourgeoisie was weak. Over a hundred years of capitalist development between the French and Russian revolutions would probably have ensured that the Russian bourgeoisie in 1917, though perhaps not dominant, had a social role at least as important as the French bourgeoisie in 1789.⁵⁰ It seems that rather than reducing the causes of revolutions to a small number of clear and easily-observable variables, Moore includes anything that supports his argument and leaves out anything that does not.

As for Gurr, Skocpol rightly points out that the concept of relative deprivation is also difficult to measure,⁵¹ so determining the level of relative deprivation in a society, and inferring a connection between levels of relative deprivation and revolutions is impossible.⁵² Since the level of relative deprivation cannot be measured, it can only be estimated by unrigorously looking at a huge range of empirical conditions present in that society. This makes it problematic as an operational variable. Furthermore, some feelings of relative deprivation exist in nearly every society, yet not every society experiences revolution.⁵³ The explanation of revolutions provided by Gurr is therefore unsatisfactory.

49 Skocpol (1973, p. 24).

50 *Ibidem*, p. 13.

51 Gurr (1970, pp. 64–65) does try to develop some methods for quantifying relative deprivation. It is doubtful whether his methodology is universally applicable and depends on proxy variables that hardly express the totality of people's perceptions of their material well-being.

52 Skocpol (1979, p. 115).

53 *Ibidem*, p. 34.

Skocpol tried to remedy these deficiencies by providing her own theory of revolutions. Although she still tries to provide a set of simple laws that explain revolutions, she has had to abandon the idea that a small number of clear variables can serve as the inputs for these laws. In fact, most of the variables that she describes as leading to revolution are broad and impossible to define precisely. As a result, she once again uses imprecise common-sense assessments that are based on imprecise, unclearly-defined variables that are difficult to operationalize. In her book *States and Social Revolutions*, Skocpol claimed that revolutions result when state institutions are unable to meet the aspirations of their populations and simultaneously face some form of outside military threat.⁵⁴ State institutions are a broad and complex category, as are the aspirations of the population. State institutions can fail to meet the expectations of their populations in myriad different ways. This means that there is no precise, clearly-defined way to determine whether states have let their populations down. Despite this, it is very difficult to determine how important these failures were in the revolutionary uprising. It is difficult to say when exactly economic conditions became intolerable, or whether economic problems on their own were enough to cause an uprising or when corruption among politicians becomes unbearable, etc. Once again, the only way to determine whether this variable of the state failing its population is actually present is to unscientifically, holistically look at an almost infinite number of variables in a state and see if we are convinced that the state institutions are indeed failing to meet the demands of the population.

Skocpol's *States and Social Revolutions* came out in 1979, the year of the revolution that overthrew the shah of Iran. In the same year, left-wing Sandinista rebels ousted the dictatorship of Anastasio Somoza Debayle in Nicaragua. Skocpol later admitted that her theory, as presented in *States and Social Revolutions*, did not explain the Iranian and Nicaraguan revolutions. In 1994, she published another book, *Social Revolutions in the Modern World*, that attempted to incorporate the theoretical lessons learned since 1979.⁵⁵ In it, she concedes that other variables, especia-

⁵⁴ Ibidem, p. 280–281.

⁵⁵ Ibidem, pp. 3–4.

lly culture and ideology, play a role in revolutions.⁵⁶ In the case of Iran, she credits the use of Shia religious symbolism and the organizational structure of the clerical establishment with a major role in the overthrow of the shah.⁵⁷

But even bringing in the extra variables of culture and ideology does not fully explain revolutionary events in all countries around the world. Goldstone, for example, criticizes Skocpol, because she does not satisfactorily explain why the factors leading to state breakdown and revolution were present at precisely the moment when the revolutions occurred.⁵⁸ Goldstone insists on bringing in the variable of demographics as a major determinant of when revolutions happen. According to him, political crises, such as revolutions, result when state institutions are unable to cope with population growth and this population growth combines with limited or uneven development and any of a number of problems in the military, political, or economic field.⁵⁹

Generally speaking, the introduction of every new variable into a theory of revolution always seems to lead to more empirical challenges suggesting that the new variable is insufficient to explain why a revolution happened and why it succeeded or failed. As a result, authors of the so-called fourth generation of revolutionary theory have reached for what they call multi-causal explanations. They see revolutions as “amalgams of systemic crisis, structural opening, and collective action, which arise from the intersection of international economic, political, and symbolic factors”.⁶⁰ Since revolutions are undoubtedly complex, multi-causal phenomena, this would seem a welcome development, but it leads to a situation when it is difficult to formulate these complex, multi-causal explanations of revolution into rigorous general laws or theories. Precisely because they try to incorporate so many factors, most of which are not clearly defined, they must resort, in great measure, to unscientific, intuitive, common-sense thinking. Since no one knows, for example, how much foreign military threat and what form of foreign military threat is needed to facilitate revolution, the best

⁵⁶ *Ibidem*, pp. 204–205.

⁵⁷ *Ibidem*, p. 249.

⁵⁸ Goldstone (2016, pp. 173–173).

⁵⁹ Goldstone (1997, pp. 103–104).

⁶⁰ Lawson (2019, pp. 51–52).

we can do is look at the available information on the military threat facing a country and unscientifically assess how it might impact a revolutionary situation. It is almost impossible to turn external military threat into a true operational variable. An analogous process pertains to nearly all of the various variables in multi-causal explanations of revolutions. As a result, these multi-causal theories of revolution are at risk of losing any form of scientific rigor and turning into mere historiographical or journalistic accounts of revolution.

This is the impression that a reader can get, for example, from reading George Lawson's case studies in his book *Anatomies of Revolution*, where it seems he has included almost any fact that seems to fit with his broad argument, in the interest of multi-causality. His emphasis on what he calls "historicity" allows for the inclusion of practically any fact from a country's history that seems to have contributed to a revolution.⁶¹ His category of "relational social action" allows for the same in relation to the economy and the actions of governmental institutions.⁶² The result is that his case studies of various revolutions, spanning from the revolution in Haiti (1791–1804) to the Euromaidan revolution in Ukraine in 2013–2014, resemble superficial historiographical vignettes, based exclusively on secondary sources. It should be added that Lawson explicitly distances himself from a merely historical interpretation of revolutions.

Even worse, some aspects of multi-causal theories of revolution are practically unfalsifiable. The clearest example of this appears in theories that try to incorporate the variable of systemic crisis in their explanations of revolution. Some form of systemic crisis is present in any society at any given time. Operationalizing the variable of systemic crisis would require a clear definition, something that simply is not present in the existing literature. Rather, it seems that most authors look for some kind of systemic crisis, usually in the form of vaguely defined economic problems, *post-hoc* in the revolution they study. This, for example, is the case with John Foran's (2015) influential study *Taking Power: On the Origins of Third-World Revolutions*, which tries to examine a large number of revolutions from different regions and historical periods using a compa-

61 Ibidem, pp. 73–74.

62 Ibidem, p. 60.

rative method. Foran does find some measurable evidence of an economic downturn in each of the cases of successful revolution that he studies, but in nearly every case, the metric used to show the existence of a downturn is different. In Chile before Allende's election (which Foran considers a revolution), the symptom of downturn was inflation. In Mozambique's independence war (also apparently a revolution) it was the movement of Portuguese capital out of Portuguese colonies.⁶³ This results in a weak argument because we could probably find some measurable evidence of an economic downturn in any society at any given time.

We could, perhaps, give revolution studies, and especially its fourth generation, the benefit of the doubt and assume that its authors are working with a probabilistic approach to prediction, rather than a must-happen/cannot-happen approach. This benefit of the doubt requires the reader to make a fairly substantial independent inference from the existing revolution-studies texts. Practically nowhere do revolution studies authors state that their predictions are probabilistic rather than must-happen/cannot-happen. Furthermore, if the theories were probabilistic, there would have to be cases that do not conform to the predictions. Scouring the revolution-studies literature reveals nary a mention of a case where all the expected variables were present, but the predicted outcome did not result. The reader could independently assume that they exist, but would find no trace of them in the literature. At very least, if revolution studies is working within the probabilistic approach, it is guilty of very un-thorough scholarly writing.

Still, it might still be tempting to put the past failures behind us and build a modified version of revolution studies that does take lessons from previous scholarship, but formally and explicitly introduces the element of probability into the field. This methodology has not been much used in revolution studies to date. It does have one major drawback, however. Even an explicitly probabilistic theory of revolutions would still need to work with variables. Here probabilistic theories of revolution would again encounter the problem that in complex systems, the number of variables is just too large in order to meaningfully incorporate them into a prediction or explanation. Furthermore, the operational variables used in probabili-

63 Foran (2015, pp. 121, 179).

stic predictions and explanations must be “empirically understandable”, something that previous writing on revolutions, with its endless lists of nebulous variables has shown to be nigh on impossible. We could then try to limit the number of variables and abstract and simplify them. This, however, basically involves bringing the unsuccessful theories of the second and third generation, with their attempts to explain revolutions based on simple variables, back in through a probabilistic back door.

The quality of many case studies in revolution studies also indicates a broader problem with political scientists trying to create universal, or at least broad-ranging, theories of revolution. This problem is closely related to the problem of empirical falsification. It is simply extremely difficult for one scholar to have expert knowledge of a large number of case studies of revolution. Most scholars are loth to admit this weakness, but any subject matter expert with deep knowledge of a particular case study will likely find many empirical problems in the cursory versions of revolutionary events included in broad-ranging theoretical works. Skocpol’s account of the Iranian revolution in *Social Revolutions in the Modern World* contains many glaring errors of fact that even an undergraduate in the field of Middle East Studies would pick up on. Skocpol, for example, claims that Iran is the only state with a Shia majority, which is patently not true. She also claims that the Iranian revolutionary movement coalesced under the leadership of Ruhollah Khomeini, which allowed it to create a united front against the regime.⁶⁴ In fact, the situation in revolutionary Iran was confused and unclear with a number of factions competing for dominance.

Goldstone, to his credit, is one of the few scholars who at least tries to explicitly address the problem of weak empirical knowledge⁶⁵, but his argument is not very convincing. He does not deny that each of his case studies of revolutions in the early modern world is probably going to be dissatisfying to a specialist in the particular historical period or region that he is discussing. So, he encourages specialists to focus on the other case studies in his volume, that is, the ones where they do not possess expert knowledge. In other words, Goldstone resigns himself to the fact that his empirical understanding of each revolutionary situation will not be state-of-the-art.

64 Skocpol (1994, p. 242).

65 Goldstone (2016, p. xxvii).

Certainly, simplification and abstraction might be needed to create general theories, and every text, even the most narrow and detailed case studies produced by erudite specialists, is bound to contain some errors of fact. This, however, does not excuse what many, if not all, revolution studies scholars have done with their case studies. To return to the example of Skocpol's interpretation of the Iranian Revolution, it is not unreasonable to say that the events of that revolution simply did not happen in the way that Skocpol describes them. In other words, Skocpol created a partially fictional, imaginary version of the Iranian Revolution and then proceeded to try to create a general, and very real, theory of revolutions based on those fictional, imaginary events. This is somewhat akin to trying to formulate a theory of international relations based on the events described in *The Lord of the Rings*. Furthermore, errors of fact are less catastrophic in scholarly works that only attempt to draw limited conclusions from the events they narrate. If the goal is simply to describe events as they happened, small imprecisions have no effect on the overall narrative. If the goal is to create a general, global theory, imprecisions undermine the very foundations of that theory by falsifying it even before it is published.

Perhaps the biggest contribution of the fourth generation of revolution studies is that they have convinced the critical reader that contemporary political science simply does not have a coherent theory of revolutions. After over a century of systematic scientific research into revolutions, we still cannot explain or predict them. Without saying so explicitly, the fourth generation implies that the number of variables that affects revolutionary outcomes is huge and any new case study may add new variables to the list. It is practically impossible to incorporate all of these variables into one theory.

How to Salvage Revolution Studies

While it is impossible to rule out completely that political science will one day stumble upon just the right combination of operational variables that will lead to a successful theory of revolutions, the long-term development in the field of revolution studies seems to suggest the opposite.⁶⁶ Each

66 Popper (2005, p. 198), Scriven (1994, p. 72).

new theory of revolution includes a longer list of ever-vaguer variables. Despite this, their predictive and explanatory power is weak. But that does not mean that we can simply stop studying revolutions, because, as mentioned in the introduction, people are still curious about revolutions and revolutions do affect life and policy choices in significant ways.

As a result of revolution studies' inability to explain revolutions, the field finds itself in a situation similar to that of Francis Bacon when he was writing about heat. Fundamentally, Bacon's approach was to collect ad hoc examples of the phenomenon in the hope that a theory would later emerge. Should revolution studies then resign itself to a similar approach of collecting ad hoc observations about revolutions, with the added disadvantage that, as argued above, this collection of observations is unlikely to ever result in a theory? Strictly speaking, this would qualify as science.

On some level, this solution would be possible, and from an epistemological point of view, it would even be honest. But it would require revolution studies to resign, at least for the foreseeable future, from addressing the two main issues that currently form its *raison d'être*: the fact that revolution studies is an applied science, and that scholars and readers are simply curious about revolutions. Instead, it would produce dry, ad hoc lists of empirical observations about revolutions devoid of prediction or explanation.⁶⁷ A corollary of this approach would be that if it was not scholars providing practical knowledge about revolutions, or satisfying readers' curiosity, it is almost certain that somebody else would. In other words, non-scholars using non-scientific methods would answer the "why" questions and provide the predictions relating to revolutions. Revolution studies would become an even more obscure discipline of impractical academics in back rooms producing tedious lists of unconnected observations of revolutions.

In fact, the weakness of the Baconian approach of ad hoc fact collection is apparent to the modern reader reading Bacon's treatment of heat in the *New Organon* itself. If someone is curious to learn about heat, her curiosity is unlikely to be satisfied by reading the random, tedious, and often incorrect list of instances of heat that Bacon observed (returning to the case from Bacon cited earlier, in the view of modern science, fibrous

⁶⁷ It should be noted that this *raison d'être* is not based on philosophy, but rather on practical considerations.

fabrics like wool do not produce heat, for example). Quite frankly, most modern readers come away from reading the *New Organon*, at least if they consider it a treatment of the topic of heat, rather than a classical philosophical work, thinking it is rather lame. On a side note, I might also point out that the *New Organon* has a lot in common with the works of the fourth generation of revolution studies. They also contain somewhat random, tedious observations that are often incorrect.

In order to stay at least somewhat within the framework of its existing *raison d'être* of being an applied science that actually satisfies curiosity about revolutions, revolution studies needs to pull off a sort of confidence trick. Before the rigorous, methodologically-minded reader closes this article and mentally tells me to go kick rocks, I should mention, however, that the confidence trick I will propose is fairly well established in the literature on the methodology of the social sciences.

To understand the first part of this confidence trick is related to the understanding of curiosity about revolutions, and beyond that, the concept of curiosity in general, is. In this, the work of scholar Robert Nisbet is very helpful. Nisbet, in his book *Sociology as an Art Form*, identifies curiosity as the major driving force in any scholarly endeavor.⁶⁸ In other words, answering the “why” questions is what drives scholars of all kinds in their work. With the occasional exception, only once they have satisfied their curiosity do scholars fashion their findings into formal theories or try to fit them into an existing theoretical framework.⁶⁹ Nisbet writes primarily about scholars in the field of sociology, but his findings also apply to other sciences.

Curiosity is not a strictly rational drive. It is rather more akin to aesthetic taste or the need for beauty, another not-fully-understood human trait that, nevertheless, nearly all humans share.⁷⁰ It makes sense, therefore, that science and art are, in some ways, very similar. Nisbet is not opposed to the idea that there is a need to formulate general laws and theories in the social sciences. But he does call for an acknowledgement and emphasis on the aesthetic function of science.

68 Nisbet (1976, p. 4).

69 Ibidem, pp. 15–16.

70 Ibidem, p. 19.

The view that art and science are based on the same fundamental human impulses is not unique to Nisbet. Plato declared that the drive for understanding astronomy was essentially the same as the drive to produce aesthetically pleasing work.⁷¹ Kepler saw no difference between the motivations of the astronomer, the theologian, and the artist.⁷² Popper says that every discovery contains an irrational element or creative intuition. Popper also quotes Albert Einstein, who says that the effort to discover general laws can only be realized based on an initial dose of intuition. There is no systematic way to discover such laws.⁷³ And Juan Linz, a prominent exponent of probabilistic and comparative approaches in the social sciences, when asked by an interviewer why he continues to do research even though social science has produced little meaningful knowledge on human societies, replied, “I have fun”.⁷⁴

In more recent times, the unity of art and science is one of the themes running through *The Rhetoric of Human Sciences* series (edited by Dierdre N. McCloskey and John S. Nelson).⁷⁵ The series provides details on how this unity is applied in the social sciences. Broadly, it argues that discourse in the social sciences is fundamentally rhetorical, i.e. its purpose is to convince the audience of the author’s position or to stimulate discussion.⁷⁶ For this purpose, authors in the social sciences use a number of artistic literary devices, but that does not mean that the series’ position is anti-scientific or anti-quantitative (quantitative language can also be convincing). Rather, according to McCloskey, the content of the argument is one of several rhetorical elements necessary for crafting convincing arguments, the other two being structure and style.⁷⁷ That means that without solid research content to back up an argument, it will probably not be convincing.

Additionally, several of the series’ authors argue that science rarely conforms to any formal methodology based on a philosophy of science. Rather, scientists are usually convinced, in the rhetorical sense of the

71 Plato (Book VII), Nisbet (1976, pp. 4–5).

72 Nisbet (1976, pp. 4–5).

73 Popper (2005, pp. 8–9).

74 Munck & Snyder (2007, p. 177).

75 Published by University of Wisconsin Press (Madison, WI, 1985–1998). For a more specific example, see Nelson, Megill & McCloskey (1987, p. 3).

76 McCloskey (1998, p. xx).

77 Ibidem, p. 10.

word, of the validity of an argument or theory, and not because a theory conforms strictly to a formal philosophical definition of what a scientific theory should be.⁷⁸ A major driving force is, once, again, primarily aesthetic taste.⁷⁹ Based on this, McCloskey strongly suggests an alternative definition of science, different from that based on any current philosophical theory. Anything that is the subject of long-term, systematic inquiry, and scholarly speech would qualify.⁸⁰

Though McCloskey's book is about economics, all of its conclusions can be applied to other social sciences as well. On a side note, it should also be noted that the rhetorical approach is not unknown even in the philosophy of the hard sciences. Paul Feyerabend, in his book *Against Method*, describes how, in its early years, Galileo's views on cosmology gained traction not because they were supported by superior empirical evidence (they were not), but rather because Galileo was able to argue for his views more convincingly than were his rivals. The supporting empirical evidence reliably emerged only later.⁸¹

Specifically in relation to the field of revolution studies, Nisbet and the authors of the *Rhetoric of the Human Sciences* series would probably say that it cannot hurt to try to find a scientific, theoretical framework that we could use to frame our empirical findings, but since, as I have discussed above, no such framework exists, and probably never will, this will be a futile endeavor. To return to the metaphor of the *New Organon*, it would be more fruitful to try to produce a more interesting, a more fun, an easier to read version of the *New Organon's* treatment of heat that would leave the reader convinced that she had actually learned something and satisfied her curiosity. And herein lies the crux of the confidence trick. In addition to the ad hoc collection of empirical facts about revolutions, these facts need to be presented in a convincing way to give the reader the feeling that they have explained something.

Crafting convincing arguments is more of a rhetorical, artistic activity than a scientific one. This does not mean that the approach is unscientific. The scientific aspect is satisfied by basing all scholarly writing on empirical

78 Nelson (1987a, p. 414), McCloskey (1998, pp. 156, 176).

79 McCloskey (1998, p. 180).

80 Ibidem, p. 20.

81 Feyerabend (1993, chs. 6 & 7, esp. p. 65).

observation. Revolution studies is collecting and evaluating empirical evidence on revolutions as best it can. The rhetorical, artistic aspect can best be viewed as another, separate level in the methodology on top of the scientific methodology intended to satisfy the reader's curiosity.

Since satisfying curiosity is an artistic pursuit, it is difficult to clearly define rules for how it is to be done, much like no-one can tell you how to paint a pretty picture or compose a pleasing piece of music. One element of a revolution-studies text that satisfies curiosity, as I alluded above, is that it will have to convince readers that it has explained something, without actually explaining anything in the strict scientific sense using laws and theories. This can, however, be done without being devious. It is simply necessary, when the text moves beyond the Baconian observation of dry facts, to make explicitly clear that it is abandoning a strictly scientific discourse and that the author is moving into (rhetorical) argumentation, speculation, guesswork, or unfounded conclusions. In practice this means that authors in revolution studies can provide some explanations and predictions, but they must alert the reader that they are not, in that moment, being strictly scientific. And they certainly should not deploy the language of general laws and theories.

Beyond that, writing a text that is convincing and satisfies curiosity is, nominally, shamelessly simple and can be learned in a high-school English or writing class. Convincing texts must be clear, well-structured, and engaging. Of course, as many high-school students failing their English classes will attest, this is easier said than done.

There is one further element that lies at the intersection of the artistic and the scientific aspects of writing revolution studies. The texts must try to be as exhaustive as possible, i.e. they must take into account as much of the available relevant empirical information on the revolution or revolutions that they are studying as possible. There are two reasons for this. The first is based on the Baconian approach. As mentioned several times previously, science should simply try to collect as much relevant information as possible in the hope of that information eventually converging into a theory.

The second reason is rhetorical. To be convincing, texts must take into account as much of the available information about a given revolution as

possible, in order to avoid “but-what-about...?”-type questions. Naturally, it is never going to be possible to take into account all the information that could be relevant to a revolution, but a satisfying answer is one where there are few, if any, glaring omissions. At the same time, it is part of the artistic skill of the writer to constantly bear in mind the need to avoid producing a text that reads like a dry list.

Nevertheless, even if a scholarly work satisfies the curiosity of a reader or scholar, that still leaves the question of the practical applicability of revolution studies. Very few people seriously advocate making random policy decisions in any field, much less in relation to momentous events like revolutions. An aesthetically-pleasing, curiosity-satisfying answer is not necessarily a policy-relevant answer. Here, we must bear in mind that, for all its scientific veneer, revolution studies never explicitly claimed to be designed to inform policy decisions (though it implicitly does engage in prediction). Not only that, the track record of attempts to actually predict the outbreak or course of revolutions has not been good. Hence, we are not really losing anything by abandoning revolution studies as an applied science. There is no reason to believe that decisions informed by convincing scholarship that satisfies curiosity will fare significantly worse than decisions informed by the existing scientific theories of revolution. Of course, what constitutes a successful policy decision is another thing that is so vague and difficult to define that it verges on the metaphysical.

An Analogy as a Conclusion

In 1961, John Muth published an economic study of US agricultural markets.⁸² Muth concluded that economists, that is, scientists, are no better at predicting developments in agricultural markets than are the people who work in these markets, i.e. farmers and traders in agricultural commodities. Economics had not produced any fancy scientific models that could predict something that Wisconsin dairy farmers did not already know. Of course, it is possible to object that Muth’s study is dated, or that its empirical conclusions are incorrect, or that revolutions are fundamentally different to pigs and soybeans, but that is not quite relevant to the reason

⁸² Muth (1961).

why I bring up this study here. Rather, I am using it as an analogy. Like agricultural markets, revolutions will continue to exist with or without the interventions of political scientists. People who are affected by them will continue to make decisions on how to react.

Just because Wisconsin dairy farmers do not need economists and agricultural markets would function just fine without scientists trying to study them, does not mean that economists should give up and go find a different job. There is still a role for explaining the functioning of agricultural markets. Similarly, just because policymakers and even publics can do just as well as political scientists in predicting revolutionary outcomes for practical purposes, that does not mean that understanding revolutions is useless.

Hence, the fundamental question is how to understand revolutions in a meaningful way. Since scientific approaches based on explanation and prediction have not been successful, and likely never will be, a fundamentally different approach is needed. This article proposes emphasizing the aesthetic, curiosity-satisfying aspect of the study of revolutions in addition to collecting empirical data on them. This approach would satisfy the main reasons why revolution studies exist in the first place: because people are simply interested in revolutions and revolutions have major practical implications. At the same time, the approach does not abandon the scientific premises of revolution studies, maintaining an emphasis on the collection of empirical observations and, hence, at least some level of scientific rigor. If some readers find this approach unsatisfactory, they can feel free to do better. If they are able to provide stronger predictions and explanations than revolution studies has provided hitherto, I will be the first to congratulate them.

Finally, this article is not just a critique of a very specific and arcane field of political science. Rather, it is intended as an outline of a new epistemological approach applicable to a variety of subjects in the social sciences. This is because revolution studies is not the only area where scientific approaches have failed. I am nearly certain that scholars in many fields will find that the objections raised here to the use of science in the study of revolutions apply equally to their research. Like revolution studies, those fields might also benefit from approaching their work as an artistic, rather than a purely scientific, endeavor.

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Abstrakt

Budovanie pevnejších vedeckých základov pre štúdium revolúcií

Článok poukazuje na to, že vznik a priebeh revolúcií nie je možné skúmať cez prizmu vedeckých zákonov, a to aj napriek tomu, že existuje celý pododbor politológie s názvom revolučné štúdiá, ktorý sa snaží presne takéto zákony formulovať. Článok poskytuje prehľad doterajších úspechov a neúspechov revolučných štúdií v ich snahe formulovať všeobecné teórie a vedecké zákony o revolúciách, ktoré by dokázali vysvetliť a predvídať skutočné, empiricky pozorované prípady revolúcií, pričom sa sústreďuje na teórie z najvýznamnejších smerov revolučných štúdií, Marxizmu a tzv. prvej až štvrtej generácie revolučných štúdií. Prichádza k záveru, že revolučné štúdiá zlyhali v snahe vysvetliť a predvídať revolúcie, čo ho privádza k otázke, či je vôbec možné používať vedecké metódy na výskum komplexných spoločenských javov. Vychádzajúc z prác Friedricha Hayeka, Thomasa Kuhna, a Michaela Strevensa konštatuje, že je málo pravdepodobné, že sa niekedy podarí objaviť zmysluplné vedecké zákony, ktoré by vysvetľovali priebeh revolúcií. Jediná naozaj vedecká činnosť, ktorú je v súvislosti s revolúciami možné realizovať, je zbierať o nich empirické pozorovania. To by však viedlo k vzniku suchých zoznamov empirických pozorovaní, ktoré by neplnili dve základné funkcie, pre ktoré vznikli revolučné štúdiá: uspokojenie zvedavosti o revolúciách a poskytovanie informácií pre praktické rozhodnutia v súvislosti s revolúciami. Na to, aby boli splnené tieto dve funkcie, článok argumentuje, že je do štúdia revolúcií potrebné zakomponovať prvky z umenia rétoriky. Inými slovami, je potrebné, aby revolučné štúdiá produkovali atraktívne, aj keď nie čisto vedecké, texty ktoré dajú čitateľom ilúziu, že zodpovedali ich otázky v súvislosti s revolúciami.

Kľúčové slová: Revolúcie, štúdium revolúcií, filozofia spoločenských vied, rétorika

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