### **Comments on Immergut**

# Social Science and History: How Predictable is Political Behavior?

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The chapter by Ellen Immergut provides a very nice survey of the methodological issues faced by historians who search for the proper lens through which to understand historical events and by other social scientists who use history as data to test the limits of alternative theories from social science. Toward the end of the essay, she poses a methodological puzzle from the history of Swedish constitutional reform.

Both her methodological survey and her overview of Swedish constitutional history are very well written, thorough, and interesting; however, Professor Immergut neglects two significant points in her analysis. The first is methodological: a difference exists between the aims of social science and history. From the vantage point of social science *much is inherently unpredictable* insofar as patterns of causality may be so complex as to defy systematic analysis, or truly stochastic events exist. From the vantage point of history, every historical event is open to explanation, because every event is a direct consequence of particular decisions and circumstances. The second point is an implication of the first. If the future is not entirely predictable, then much about the future is necessarily unknown to decision makers at the moment of choice. Consequently, rational decisions reflect both uncertainty and ignorance, and mistakes will be made. This may well have been the case for the 1970 reforms of the Swedish Riksdag, as suggested by Immergut's analysis. However, mistakes do not imply irrationality.

#### Determinism and Uncertainty in Social Science and History

To understand why social science is willing to accept uncertainty, perhaps even more so than modern physics, which has increasingly come to be erected on statistical foundations, consider the following example. Suppose that a leading government official is rolling two six-sided dice and desperately wants the numbers to add up to seven at the moment the dice come to rest. For a physicist, the solution to this problem is entirely within the realm of calculation. A sufficiently precise analysis of initial conditions: shape of the hand, weight and size of the dice, the coefficients of friction, gravity field, and inclination of the surface on which the dice will be rolled will imply that a wide range of forces and vectors that could, potentially, cause the dice to stop rolling at a particular place and with a particular numerical configuration. There are many perfect solutions; there are many ways to roll a seven on a particular surface!

The problem faced by an engineer who wishes to implement the physicist's theory is a bit more difficult than ordinary physics implies, because physicists tend to focus on general rather than specific cases. To design a machine that causes two dice to land at a particular spot and in a specific configuration involves other factors, which make the problem more demanding than implied by a physicist's precise and sophisticated computations of Newtonian forces and inertia. For example, the material of the dice and machines, themselves, absorb and release energy through time, and also slightly change shape as these processes take place. This does not mean that the physicist's conclusions are incorrect, but it does imply that other neglected factors may affect the final design of a dice-throwing machine.

A talented engineer might well be able to design a machine that would cause a pair of dice to stop at more or less the intended place with exactly the "correct" number of spots on the top, given specific characteristics of the dice, gravity, wind, temperature, and the surface upon which the dice are to be thrown. However, people are not machines. Historical experience has shown that no person can exercise sufficient control over his or her hand to achieve such predictable results if significant rolling of the dice is required. It is for this reason that casinos have long been profitable and that many commercial board

games use dice to induce a bit of playful uncertainty. It is entirely because of the limited precision of human coordination and calculation that games of chance remain entertaining and profitable.

Consequently, the extent to which a social scientist can predict the outcome of a particular roll of the dice by a top government official is limited. We can predict with absolute certainty that the numbers will add up to no less than two, nor to more than twelve, but we cannot predict much else about any single roll of the dice.

Fortunately, statistical theory allows us to go a bit beyond such well-informed statements of ignorance. Statistics implies that little can be said about a single roll of the dice, but that a variety of predictions can be made about a series of dice throws—the outcomes of the case in which our government official rolls the dice repeatedly. These predictions are testable, insofar as a series of rolls may refute a number of hypotheses about dice rolling—for example that "dice can be hot" if they are fair. Social scientists can, thus, provide explanations of particular "histories" of governmental dice rolling in more or less similar circumstances and can make predictions about as yet unrealized "histories" that would emerge in the future. A government official will roll a seven about 1/6 of the time using unweighted dice in ordinary circumstances.

For a historian the question is a bit different and in many ways more interesting. Having observed a particular roll of the dice, the historian wants to understand exactly why the values observed arose. Here, there are clearly proximate causes—more or less the same ones used by our physicist—and also more indirect causes: the government official rolling the dice was upset, was under pressure, had been exposed to different theories of rolling dice, was affected by beliefs about divine causality, was left handed, near sighted, weak from age, lived north of the equator, etc. All these factors might affect the manner in which the dice were thrown and, therefore, would largely determine the flight of the dice actually observed. It is entirely possible that this partial list of factors might have "determined" the exact trajectory of the dice imposed by the official who "controlled" the dice and the numbers that appeared on top.

Such completely accurate histories may, thus, fully account for what happened without shedding light on what will happen on the next roll. Although "history will repeat

itself," about 1/6th of the time in this case; little of the detail that applies to a particular instance of dice rolling will be relevant for explaining the next similar event (rolling a seven). Either the underlying chain of causality is too complex to be fully understood or truly stochastic phenomena occur.

This is not to say that social science is only about prediction or that history only analyzes particular historical events, because the persons who engage in these enterprises are often themselves interested in both questions to varying degrees, and properly so. Social science provides a lens through which particular historical events can be understood, and historical research often produces new hypotheses to be tested as well as facts that may be used to test existing hypotheses. Such "convex combinations" of research interests produce a more useful and compact body of knowledge for fellow travelers, teachers, readers, and practitioners than would have been produced by methodological "purists."

Moreover, in areas where there are few determining factors, the analysis of historians and social scientists tend to be very similar. The light went on because a person flipped the wall switch. The building survived a direct lightening strike unharmed because it was protected by Ben Franklin's invention (the lightning rod). The battle was lost because the losers were greatly outnumbered, outgunned, and caught by surprise. Prices rose in 17<sup>th</sup> century Spain because of the influx of gold from South America. In cases where causal relationships are simple, even a single instance may generalize perfectly to a wide variety of settings.

In other cases where causality is more complex, there are often many plausible claims and counter claims. Here disagreements are commonplace both across disciplines and within disciplines.

### The Scope of Uncertainty in Social Science

Controversy is not always caused by differences in research interests, as might be said about differences between social scientists and historians. Disagreements within social science exist, at least in part, because there is disagreement about the extent to which human behavior is predictable, in general or in particular circumstances, and therefore on the extent to which particular empirical results can be generalized.

To appreciate this point, consider the time series of data points depicted below in figure 1. For those who believe that the world is completely explainable, the "finely nuanced" dashed fitted line, g(x), will be the sort of theory they aspire to. For those who believe that the world is not so readily explained, the "essential" dotted linear line, f(x), is all that they believe can be accounted for. Disagreements of this sort may cause social scientists to disagree for reasons that are similar to those discussed above, but that are subtly different. Some social scientists would insist that "we" can, or will be able to, *predict* each successive dice roll; others would regard such precision to be very unlikely.

## FIGURE 1 AROUND HERE

It seems clear that we know a good deal about social phenomena that can be generalized and a good deal that cannot be generalized. Yet, there is little systematic evidence on the "meta-questions" that might allow us to assess the extent to which longstanding theories will explain new cases or the extent to which special factors or new theories will be necessary to understand the cases not yet analyzed. Indeed, each "side" can point to scientific episodes in which "they" have been proven correct.

## **Rational Choice and Swedish Constitutional Reform**

To make this point a bit more concrete, consider the case of Swedish constitutional history. There is clearly a sense in which it represents a time series of events analogous to the data points in figure 1. The constitution of 1809 underwent three major reforms over the course of a century and a half. In 1866 the four-chamber unelected parliament was replaced with an elected bicameral parliament, with various wealth restrictions on voting and qualification for office. Between 1909 and 1920, universal suffrage was adopted and proportional rule replaced the weighted first-past-thepost electoral system as the method of counting the votes of the new much broader electorate. In 1970, as noted by Immergut (2002), the bicameral legislature was replaced with a unicameral legislature. These three major episodes of reform led to the core features of the modern Swedish constitution formally adopted in 1976.

To a political historian, it is obvious that the main results of these reforms can be accounted for. Particular people wrote and accepted each of the constitutional reforms in particular political circumstances. For example, Baron de Geer is credited with the ingenious constitutional reform of 1866 that used bicameralism and wealth-weighted voting to secure the required approval by the four chambers of the old Riksdag. Wealth weighted voting in the new first chamber secured majority approval by the noble and burger chambers. The new directly elected second chamber secured approval of the farmer's chamber, and a new church council helped obtain the consent of the clerical chamber (Verny, 1957). Credit for engineering the electoral reforms of 1909 is attributed to Arvid Lindman, who combined proportional representation, universal suffrage and bicameralism to secure supermajorities in the first and second chambers for radical reforms of election law (Verny, 1957). Similarly, Tage Erlander is credited with engineering the end of bicameralism that took place in 1970 (Ruin, 1990).

How much of this can be attributed to general features of the political and historical setting and how much is peculiar to the men and circumstances that confronted constitutional reformers is not immediately obvious, and well-informed individuals may disagree about what is causal and what is the result of chance in given circumstances. Although there were just three major episodes of constitutional reform in Sweden during the past two hundred years, proposals for major and minor constitutional reforms were continuously advanced during the entire period. It seems clear that at least some of the reforms adopted were particular to Swedish personalities and circumstances. Nowhere else in Europe was an explicit wealth-weighted voting system adopted. None the less, broadly similar patterns of reform were adopted in several other northern kingdoms during the same time period. Denmark, the Netherlands, the United Kingdom, and Norway also adopted constitutional reforms in the nineteenth century that produced

broad increases in suffrage and a gradual transfer of power from their kings to their parliaments.

How much of this pattern of reform is explainable by general economic, social, and political forces might be debated by serious and well-informed scholars for a variety of reasons. For example, a good deal of the controversy within social science reflects differences in hypotheses about human behavior. Is human behavior driven by narrow self-interest—wealth and power—or more generalized political and economic interests. Is individual behavior largely determined by social pressures and genetic influences that are beyond the individual's control; a consequence of rational decisions to make effective use of what is available in his or her historical circumstances; the result of impulse, whimsy, and creativity—or some combination of all three?

Moreover, as noted above, even social scientists who agree about the aim of science and share a common vision of human behavior may reach different conclusions, because they disagree about how predictable a particular historical event is, or series of such events, can be. A rational self-interested individual cannot know the future any better than a well-informed social scientist can and, therefore, is bound to make mistakes both in assessing his or her interests and in predicting the consequences of the range of actions that may be taken, at least on occasion. Such mistakes produce an irreducible residual of uncertainty in rational choice models and imply that predictions based on those models are better able to describe families of similar events than particular case histories.<sup>1</sup>

This residual of uncertainty is bound to exist even if the rational choice model is perfectly true—as long as individual actors cannot be perfectly informed. To predict human behavior in such cases requires social scientists to know what individual interests

<sup>&</sup>lt;sup>1</sup> Such "meta" disagreements can lead to differences in methodology as well. Social scientists will be more or less interested in historical detail according to their beliefs about the underlying predictability of the events being analyzed, because this affects beliefs about what can be learned from different kinds of data. If not much is truly predictable, a good deal of historical data is simply random noise, rather than part of the underlying causal chain. For example, scholars who differ in their assessment of the returns from charting the course of deliberations within the chambers where constitutional reforms finally came to be adopted would clearly be more or less inclined to carefully review those deliberations.

were, what they believed about the connection between their actions and consequences, and the limits of both types of knowledge.<sup>2</sup>

In the Swedish case, it seems clear that the main political decisionmakers were very aware of some of the effects that constitutional reforms would have on their own future interests, on their own parties, and on the average Swede, all of which are interconnected. A current member of parliament is more likely to be reelected if the consequences of its policies are good for his or her party, and that party is more likely to be successful if the policies are good for its country. Unfortunately, these are complex relationships that are difficult to fully model and estimate. Consequently, even very well informed legislators may differ in their predictions about the consequences of particular public policies or institutional reforms, and mistakes will be made.

The rational choice hypothesis predicts that political decisionmakers "get it right" on average. The self-interest hypothesis implies that parliamentary decisions will generally advance member political and economic interests. The very high incumbent success rates in parliamentary systems suggest that members of parliament do get it right on average. Indeed, it is sometimes argued that a member of parliament or congress is more likely to lose office because of death than electoral failure, barring truly outrageous behavior. The observed advantage of incumbency suggests that elected officials do understand and promote their long-term electoral interests, which requires doing a good job of anticipating the consequences of public policies.

The same logic applies to constitutional reforms. For example, the 1970 Swedish reform of parliament did not literally eliminate the first chamber, but merged the two chambers together in a manner that was likely to yield a "new" parliament with essentially the same membership as the old. The increase in proportionality also tended to increase the power of party leaders. Similarly, in the other two periods of major constitutional reform, the members favoring reform generally continued in office after the reforms

<sup>&</sup>lt;sup>2</sup> Failure does not necessarily conflict with rationality. Purchasing a losing lottery ticket is not necessarily a mistake as far as the individual is concerned. He or she may freely purchase another on the hope of winning next time. In the case of lotteries, a series of such purchases may be mistaken, in that it reflects a poor understanding of probability theory, but it may be entirely rational given what is known at the time the decisions were made. On the other hand, even a fair game will have losers along with winners.

were adopted, although many who voted against the reforms did not (Verney, 1957). Yet, it certainly is possible that parties make mistakes on constitutional matters. For example, the liberal party evidently did not do as well in the long run under popular suffrage as they had anticipated after the 1909-20 reforms. The consequences of constitutional reforms are often more difficult to predict than are the effects of ordinary policies.

Immergut (2002) makes a convincing case that the unicameral reforms of 1970 were mistakes as far as the partisan interests of the Swedish Social Democrats were concerned. I have argued elsewhere (Congleton, 2003) that the reforms were also a mistake for the country as a whole, insofar as unicameralism made Swedish public policies less transparent and less predictable. Thus, there clearly is evidence that mistakes were made in 1970. However, these *ex post* analyses do not necessarily shed light on the thoughts of the members at the time of the reforms, because our research does not directly address the knowledge question.

What members believed would happen following the reforms cannot be directly inferred from what did happen, and neither can alternative futures that did not happen—for roughly the same reason. The members of the Swedish parliament in 1967 clearly could not have read the Immergut or Congleton pieces, because they were not available at the time the constitutional negotiations were underway. And, to the extent that those pieces of research meet current professional standards, their analyses are nontrivial and not intuitively obvious. Thus, it is unlikely that the members of parliament during the late 1960s would have had these exact consequences in mind when they voted, more or less along party lines, to approve the new Riksdag act by an overwhelming majority.<sup>3</sup> Such work is more capable of uncovering political mistakes than irrational calculation.

<sup>&</sup>lt;sup>3</sup> On May 17, 1968, a series of decisions were made regarding the proposed reorganization of the Riksdag. First, a decision was made regarding the transition regulations, which were approved by visual inspection of opinion, but a vote count was demanded by member of parliament (MP) George Pettersson; 105 voted for, 18 against, and 8 abstained. Next, the remainder of the constitutional amendment was considered. Again, the vote was visually determined to be overwhelmingly pro. The Speaker noted that these reforms were the most important for Swedish democracy in a long time and was pleased that so little opposition existed. (Only the very small Swedish communist party opposed the reform.)

It bears noting, however, that the votes cast by the nonsocialist MPs are clearly explainable in terms of narrow partisan and self interest. The shift to unicameralism made it more likely that the nonsocialists would gain control of the government at some point in the near future, and they did gain control within ten years of the reform. It is the votes cast by the Social Democrats that are difficult to explain from a rational choice perspective, as indicated by Immergut's analysis.

There are several possible rational choice explanations. For a good bit of their history, the Social Democrats favored unicameralism for partisan reasons. The indirectly elected first chamber remained in the control of the non-socialists for nearly three decades after the adoption of universal male suffrage in 1909. During this period social democrats often argued that the bicameral system was "undemocratic" and should be eliminated to make Swedish politics more democratic. This normative case for unicameralism provides a rational choice explanation for some of its ongoing support among social democrats. However, the ideological or norm-driven explanation cannot be the only source of support for the unicameral reform, because the Social Democrats could easily have eliminated the first chamber when they finally gained control of it in 1937 (as some social democrats proposed at the time), but they did not.

A second and complementary explanation is that after the unicameral proposal was clearly on the table, it became more difficult for the Social Democrats to hold on to the moral high ground, which they had successfully defended for decades, and which may have accounted for a significant fraction of their electoral support. Fear of future losses in the absence of reform is mentioned by several scholars as an explanation for the Social Democrat vote in favor of unicameralism (Holmberg and Stjernquist, 1996). The non-socialists had won control of the second directly elected chamber briefly during 1957, partly by running against bicameralism, and it was this result that again focused attention on the "non democratic" aspect of the old bicameral system.

Party leaders may have been believed that by voting in favor of unicameralism the party would do better in subsequent elections than they would have by appearing "too" partisan. This motivation is entirely compatible with a rational choice model, even if subsequent evidence demonstrated that those fears were unfounded. Mistakes are

possible in rational choice models. It bears noting that even correct decisions in uncertain circumstances can look like mistakes, ex post. The leaders of the Social Democrats might have been entirely correct in their assessment of the full range of possible outcomes that might follow their constitutional choice, but *appear* to have voted "incorrectly" given the particular events that transpired. There are losers as well as winners in every fair bet.

Immergut's counterfactual history only examines what happened given that the Social Democrats *did* vote for unicameralism. It does not examine what would have happened among their supporters—at the margin—had the party behaved in an extremely pragmatic fashion and rejected unicameralism simply because it temporarily protected their control of the Swedish parliament. That is to say, Immergut's counterfactual history does not analyze the political consequences of *blocking* constitutional reform. There clearly is a puzzle here, and Immergut's analysis sheds important light on it, but her work is not sufficient to challenge the rational choice explanation of the event. The social democrats might well have done worse under bicameralism in the long run, if they had become an "undemocratic" party.

Moreover, even if Professor Immergut is entirely correct about the effects of the constitutional reform, her results only allow one to reject the perfectly informed model of rational decisionmaking. This is a very limited critique, although not an unimportant one given the widespread use of rational expectations theories by many economists and political scientists for the past two decades.

Mistakes, however, are predictions of rational choice models in settings where causal connections are difficult to untangle and information is incomplete or unavailable (Congleton 2001a, 2001b). Nowhere is this more likely to be the case than on constitutional issues. Acknowledgement of this fact and the risk associated with mistakes is evidently one of the reasons why major constitutional reforms are infrequent, and subject to more scrutiny and review than are more narrow forms of legislation.

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