The most ambitious goal of modern social sciences is to develop theories that explain observed facts as the effects of their causes. Why have birth rates been declining for decades, why is voter participation dropping everywhere in Europe and why do large portions of Africa remain undeveloped? Politicians, however, as people of action, are interested in explanations only when what is being explained has practical significance for them, allowing the causes claimed by the theory to be influenced by political means in such a way that their effects are changed in a desired direction.

A theory that traces declining performance in school to accelerated biological development in youth may be true or false, but it holds no interest for political leaders (unless it could be used to release the government from responsibility). It would be a different story if the explanation were increased class sizes or, say, the elimination of grades for personal conduct: in these cases, the determined cause can be used as a lever – by the government, to improve student performance, or by the opposition, to hold those in charge accountable.

Unlike explanations, politicians are almost always interested in predictions. These, too, are based on theories and are, in principle, also explanations, but of future states rather than present or past states. Many scientists, including some social scientists, consider the ability to make predictions to be the real mark of a good theory. Since politicians must continually bet on the future, they hold a similar view.

Thus, those who, as scientists, promise information about how much the economy will grow or shrink in the coming year, which occupations will see the highest growth rates in the next ten years, how many additional births extra parental benefits will encourage, or which new electoral candidate might propel his party forward, can expect not only an attentive ear, but also extensive financial contributions from governments and political parties.

Many scientists consider the ability to make predictions to be the defining feature of a good theory.
Nevertheless, there are good reasons to suspect that the ability of the social sciences to predict the future is not only currently and coincidentally, but also fundamentally limited. “Why did no one see this coming?” asked the Queen during a visit to the London School of Economics in November 2008, referring to the global financial crisis. The researchers, as the representatives of their own interests, could have responded: Because too little was invested in research. But not even economists were that hard-nosed back then; the shock was apparently too great.

In early 2008, the six biggest German economic research institutes were still on average predicting economic growth of 1.6 percent for 2009. In April 2009, they revised their forecasts to minus 4.1 percent, with extreme values of “significantly more than minus 3.0” to minus 5.0 percent. A catastrophe? Today, forecasts are being merrily bandied about again – right down to the exact tenth of a percent, as always. And politicians gladly accept them and quote them as if nothing ever happened.

A better answer to the Queen’s question would have been: some did see it coming, as any event is always predicted by a few people if there are enough people making predictions about it. After all, someone usually wins the lottery, too – and twice a week, at that. In both situations, a person can be right without having known anything.

Not that actual knowledge would have hurt – such as a working short-term memory of history that included the LTCM crisis, the popping of the technology bubble, the Asian crisis and similar events that took place after 1972. Of course, scientists who rely only on theoretical, model-based knowledge, disregarding historical knowledge per se, will have difficulty accessing this memory. Perhaps their models simply shouldn’t have excluded the possibility that markets can, on occasion, also be inefficient. In the discipline’s groupthink, however, this would have made their authors outsiders. Still, despite the strong pressure among economists to conform, there are a few of them around. They knew good reasons for suspecting that there would be another crash sometime, because there is no such thing (yet?) as capitalism without a crash. But even they could not know what form the crash would take, where it would begin and how or whether it would end.

That they could not know this is not due to a lack of research, but rather lies in the essence of the matter: in the nature of the social world and the kind of knowledge we are able, in the best case, to obtain about it. The word is now spreading that the social sciences are incapable of making so-called point predictions – predictions about individual cases. Point predictions, however, are likely to be the only predictions that those in politics could be interested in.

For example, while it may be good to know that economic growth contributes to the creation of stable democracies, what policymakers really need to know is whether this will also apply to China or the Philippines in the first decade of the 21st century. But science can’t tell us this. All it can give us are statements of probability with no guarantees for individual cases, whether relating to democratization or election results, military coups, the outbreak and outcome of wars and – of course – financial crises.

There are solid and logical reasons why the social sciences cannot say much about individual cases. Nor can this be changed, even with the most ingenious refinements to their scientific toolbox. Research on social processes will always involve fewer cases than the number of factors that could explain these cases, thus inevitably leading to more than one valid explanation for any given state of affairs. And every future state comes about as a unique result of a unique interplay of many factors – a one-of-a-kind situation for which there is no normal distribution, and whose distinctive features thus can’t be derived from general laws.

This can also be expressed in a more pointed fashion: the essential historical actuality of the social world is proven in the impossibility of imagining a future adjusted for coincidences. History becomes what it is through events that could have also not occurred, and thus would have permitted a different history. With-
out World War I and the Russian Revolution, which didn’t have to occur, the 20th century would have taken a different course and modern capitalism would have developed differently. Just how differently, no one can know. Without the extinction of the dinosaurs from the impact of a meteorite, there would be no mammals, and thus no humans. We can know this without being able to know what would have become of the dinosaurs if they had been allowed to go on (for example whether their present-day offspring would be eating with knives and forks or with chopsticks).

Historical events such as the collapse of Communism in 1989, the reunification of Germany or the current financial crisis can subsequently be reconstructed as probable or even declared inevitable; but until they have occurred, other events can prevent, delay or modify them, without anyone ever being able to know that they were just about to occur.

What politicians would like even better than predictions are technical instructions for controlling social developments. Politicians like to see society as a machine with set screws: adjust the right screw and the world works just the way you want it to. The task of science is to label the set screws legibly.

Where does this mechanistic world view come from, and the social utopias that feed on it? The dream of scientific methods for controlling behavior – methods that trigger no resistance because those who are affected don’t even notice them being applied – clearly persists. Many believe that their development is the real task of a truly scientific social science. For example, their colleagues from the natural sciences sometimes ask social scientists for measures they can use to turn off the public’s “hostility to technology”; after all, that is the subject they are supposed to be familiar with.

But unlike in the natural or engineering sciences, the field of social sciences consists of subjects who are capable of making observations and taking action, and who are not at all indifferent about what science claims about them and for what ends governments use their findings. People recognize attempts to steer their actions, and attribute intentions to such attempts. In turn, they respond with their own intentions. These include a fundamental need to be persuaded with reason rather than controlled by technologies of social engineering.

All democratic societies – societies whose members have a say – therefore strictly regulate the use of behavior control techniques. So for example, even if the research on neuromarketing were to deliver what its promoters promise, the application of its findings will inevitably be subject to strict legal limitations.

Just as the social sciences are incapable of predicting the future, the reactions of acting subjects to scientific attempts at control are unpredictable. Social science theories cannot be kept secret. Their use for behavior control will be noticed sooner or later. When that happens, they will be examined to determine their intentions, and responded to intentionally. For example, the researchers in the famous Hawthorne experiments (1924 to 1932) claimed to have found that female workers worked faster and better even without a pay increase if they were treated in a friendly manner and if the walls in their workshop were painted yellow. But after word had gotten out among the staff that the management merely wanted to save money through kind words and yellow paint, they demanded higher wages and went on strike.

A similar fate befell John Maynard Keynes, who knew better than any other economist of his time how important expectations are for behavior. When, in the 1970s, Keynesian global management of the economy by means of monetary and fiscal policies had become established practice, firms and consumers responded increasingly sluggishly to low interest rates; they believed that even lower rates could be expected if stagnation continued. In the end, the theory no longer worked because it had become generally known.

Many other facets of the relationship between forecasts relating to human actions and the actions themselves could be described, but all of them have...
one thing in common: the fact that social science theories can be recognized in the world they analyze influences their validity in one way or another.

A special variant of this relationship is the use of forecasts in economic policy. When economists predict growth, participants in the economy gather up their courage and invest or consume – or at least that is what economists and governments believe. They become, in the jargon of what economists consider psychology, “optimistic.” If, however, the forecast is bad, then “pessimism” ensues, and investment and consumption decline.

Now it is true that the economy is a system of action. The expectations of actors in the system with respect to what will happen are thus – and no one understood this better than Keynes – of causal significance. Indeed, hardly anywhere has Robert K. Merton’s term “self-fulfilling prophecy” taken on such everyday significance as in economic policy.

If we think it all the way through, we arrive at the paradoxical possibility that a prediction that was originally and objectively wrong can become right as a result of being made known: When bad times are impending, the wrong prediction of good times can lead to the bad times not actually occurring, and everything turning out fine. Politicians who are at a loss when faced with an impending crisis in any case like to play it down or deny its existence, in the hope that it will then somehow go by. If, in contrast, other members of the political class (especially those who are in the opposition) express the fear that things could get bad, they will be accused of talking the catastrophe into existence – even if, according to all of the scientific criteria, it is objectively impending.

In or just prior to a crisis, economists may in this sense mutate into politicians and let themselves be persuaded to embellish their forecasts in order to avoid a panic and ease the job of economic policy. Their responsibility would no longer be to explain the world, but rather to influence it.

In the extreme case, as at the peak of the financial crisis, elite cartels can then emerge whose members undertake to be pointedly optimistic, regardless of how abysmal the outlook has been and still is. And what else can they do when, in a highly uncertain situation, they have no suitable instruments at their disposal anyway?

So politics and science – and the latter in its most positivistic variation – can transform into magic: into an attempt to prevent the worst from happening by forbidding any mention of it and invoking the best. As highly trained communications experts, politicians already have a natural tendency toward a magical world view that we can justifiably make fun of. But its rational core is the particular responsiveness of the social world: the fact that it sometimes really is influenced by symbols and can be healed by faith healing. Does that justify lying to it in its own supposed interests?

I will leave that question aside and mention merely that here, too, control can fail when its instruments are recognized as such. Positive forecasts must be taken to be scientifically true if they are to trigger the optimism they need to trigger in order to come true. If it were to become known that they were doctored for the sake of this result, then the outcome would not be optimism but a deep loss of trust – and a crash that could be far worse than anything that could have been expected.

In any case, the notion that a social scientist can truly have an advantage over experienced practitioners when it comes to the choice of suitable means for specific goals can be reasonably doubted. The gap between theory and intuition is smaller than many social scientists would like to believe. But that doesn’t mean that the social sciences have to be politically useless – only that it is not the theory-building research so highly prized by the scientists themselves that can contribute to improving politics. Although counting, measuring and observing social issues may seem trivial to some, it is anything but that.

The modern state and democratic discourse are in many ways dependent on information about the state of society that is not easily available, and the collection of which is often extremely complicated and requires extensive expert knowledge. Only a small portion of the data needed by politics is immediately evident from the state’s own administrative records: for example, the number of births and divorces or of recipients of social benefits of any kind, the average grades of high school graduates or the age structure of retirees. But more often, the state is not allowed or not able to collect key information itself – such as the number of newborns with a migration background or the actual extent of substance abuse.
Other factors that may seem entirely unproblematic have to be determined through complex estimation operations that require constant refinement. These include not only the GNP, but also the population, which has not been counted directly since the last censuses in 1981 (GDR) and 1987 (BRD), but only updated with complicated, more or less satisfying methods. The reason is that society is resistant to being counted – a further example of the active role that the subject of social science plays for it by responding to it.

Politically important issues, such as per capita economic growth, the birth and immigration rate or the unemployment rate are thus known with far less certainty than is normally assumed. In fact, there are examples of problems that governments have tried for years to solve, or problems for which voters called them to account, that, when the statistical data was later revised, turned out not really to have been problems after all.

The only possibility to make visible the decisions and interests that contribute to the official descriptions of social reality is an independent social science. Only it can ensure the necessary pluralism through which alone politically problematic issues can come to light, or how small changes in legal definitions or administrative procedures – for example in the definition of unemployment or in the classification of job applicants by the employment offices – can change what is presumably the case, like the rate of unemployment.

The same holds true for the measurement of poverty and inequality or in determining the performance level of students and schools or workers’ satisfaction with their working conditions. In short, without society having methodologically serious, critical information about itself, the political discourse would be even more void of content than it already often is.

**Often, the state is not allowed to collect key information itself**

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