The promises and perils of predictive politics

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Abstract
Rachel Friedman’s *Probable Justice* and Jeffrey Friedman’s *Power without Knowledge* explore the promises and pitfalls of the application of predictive tools to the solution of social and political problems. Rachel Friedman argues that a fundamental duality in philosophical interpretations of probability allowed social insurance schemes to successfully accommodate two rival visions of liberal justice over the centuries. But in focusing on ideas around probability, she misses the limitations of the experts who put these ideas into practice and threatened to undermine them in the process. Jeffrey Friedman, by contrast, is centrally concerned with the limitations of experts. While he shows how these undermine one rather narrow conception of technocratic legitimacy, he avoids examining their implications for democratic legitimacy understood more broadly.

Keywords
Prediction, technocracy, welfare state, legitimacy, justice, expertise

“The probability calculus applied to the life of nations, to the case of war and revolution, is the foundation of all high politics. Depending on whether this calculation is...
rigorous or wrong, thorough or disdained, politics is glorious or disastrous, great or small. To govern is to foresee: to foresee nothing is not to govern but to run to one’s ruin.” These prescient words by 19th century French journalist Émile de Girardin (1855: 19) describe a form of politics that is pervasive in the modern world: a politics based on prediction. It involves the application of mathematics and statistics to social and political problems, harnessing risk management tools to state power. Risks are analyzed, pooled and distributed to make individuals less vulnerable in the face of uncertainty, providing security against fortune backed by the authority of mathematics. Prediction is more than just a tool for political decision making; it is the site where political conflicts play out.

Two new books — Rachel Friedman’s Probable Justice and Jeffrey Friedman’s Power without Knowledge — explore the promise and limits of predictive politics, historically and today. Rachel Friedman surveys the history of philosophical views about probability and shows how they mapped onto changing moral and political views about risk and insurance. She argues that these views, in turn, influenced justifications of and narratives around the welfare state. Girardin is among her cast of characters, which consists of mathematicians, philosophers, economists and statesmen interested in the use of prediction to regulate social and political aims. Jeffrey Friedman focuses on predictive politics in the contemporary world and is concerned especially with its limitations. He argues that a politics based on prediction faces significant philosophical challenges and describes the shortcomings of technocrats who promise to deliver good results. He then traces the implications of these limitations for a certain conception of technocratic legitimacy. Both works combine philosophy of science with political theory in fruitful ways.

To say that this is an appropriate moment to reflect on predictive politics is to state the obvious. The COVID-19 pandemic has revealed the dependence of governments and citizens around the world on the latest predictions from scientific models. Climate change and the 2008 financial crisis have shown how experts’ accurate predictions of disaster and their failures to predict disaster can equally result in a pathological politics. Developments in artificial intelligence and machine learning have multiplied predictive capacities by many orders, making predictive politics seem inescapable and perhaps more tempting, while also exposing its weaknesses on a bigger scale. We live in an age of predictive politics, and these books are tremendously valuable for helping us reflect on our predicament.

Both books explore how mathematical or social scientific capacities for prediction affect which political structures and processes are — or are perceived to be — desirable or legitimate. Both are also concerned with how the limits of prediction impact political processes built on the promise of predictive success. Interestingly, they offer opposed views on this question. While Rachel Friedman argues that a certain degree of ambiguity about the correct philosophical interpretation of probability allowed social insurance schemes to appeal to people with different values, Jeffrey Friedman argues that the limits of our predictive abilities call into question the legitimacy of political structures predicated on their success. While she maintains that limitations of understanding could be an asset for strategic coalition building over predictive institutions, he argues
that the limits of our knowledge undermine this kind of politics altogether. So who is right? Let me take each in turn.

**Mathematics and morals**

One of Rachel Friedman’s central claims is that philosophical treatments of probability have always been tinged with moral and political concerns. From the classical probability of dice rolls and coin flips in the seventeenth century to the frequentist/statistical views of the late eighteenth and nineteenth centuries to the subjectivist view of the twentieth century, each new conception was interpreted in terms of practical concerns around justice and fairness in the face of uncertainty. Mathematical ideas evolved in tandem with moral ideas, and developments in probability were deployed to offer novel justifications for social insurance schemes that were designed to allocate the benefits and burdens of risk fairly.

The interlinking of mathematical and moral in the development of probability is an interesting story in its own right, but Friedman has a specific argument about its upshot. She starts from the observation, made most notably by Ian Hacking (2006), that the concept of probability is Janus-faced: it can be interpreted either subjectively, as referring to the degrees of belief warranted given a body of evidence or objectively, as describing the laws governing the tendencies of chance events in the physical world. On the former view, probability is a guide to individuals’ rational decision making under uncertainty. On the latter, it becomes meaningful only across a group of people or series of events; it is inapplicable to a single person or event. Friedman’s project is to show that this philosophical duality was mirrored in the moral justifications offered for social insurance and the productive coexistence of two different moral visions contributed to the success of the welfare state.

The subjectivist view was used to support an individual-focused view of social insurance, which involved charging individuals according to their risks and compensating them according to their expected returns. Rational individuals would agree to insurance contracts because they expected to benefit in proportion to their own contributions and the risks they faced. This view emphasized rationality, prudence, personal responsibility and the freedom to enter mutually beneficial contracts. On the objectivist view, social insurance was built on the principle of equal vulnerability to fate. It was based on egalitarian ideals of burden sharing and redistribution; those who ended up lucky subsidized those who did not. The animating values were equality and solidarity. These two views represented rival conceptions of what justice required in the face of uncertainty, and both enjoyed the advantage of avoiding divisive concepts such as desert and need. Friedman’s insight lies in noting that justifications of social insurance blurred the line between these two interpretations over the centuries, thus managing to satisfy defenders of each. Social insurance was like the duck-rabbit illusion: different people saw it as something different, and it was sufficiently ambiguous to sustain both interpretations at once.

One of the most interesting aspects of Friedman’s argument is that she explains the success of social insurance in accommodating these two views as being rooted in ambiguity about the philosophical limits of each. If you press too hard on either interpretation,
their theoretical foundations begin to appear shaky. Views based on individual rationality must face the fact that expected values are ultimately calculated on the basis of a statistical group, which is composed of individuals assumed to be similar. It may not actually be rational for an individual to be part of the group if other members are not sufficiently like her. Likewise, those who view insurance as an egalitarian institution run into trouble with the fact that this equality is extended only to members of statistical groups. This may not — usually does not — correspond to all members of the polity, often leaving out those who are most vulnerable and deprived. These issues are concerning from a philosophical point of view, but Friedman argues that the lack of clarity about these limits was strategically useful and contributed to the success of social insurance for many decades, until things fell apart in the twentieth century with a decisive turn toward a radically subjectivist, Bayesian interpretation of probability.

Friedman presents her argument as a story about the relationship between mathematical and moral ideas in social insurance, but it is also the story of how expert risk calculation joined and held together the two values at the core of liberalism: individual liberty and equality. Predictive politics does not get off the ground without a class of people capable of doing the complex technical work it requires. Friedman claims that the history of social insurance is the history of the forging of a “liberal democratic political order”; if this is true, then the lynchpin of this political order is the state expert doing the risk calculus. Whether one sees this to be paradoxical or not depends on how compatible one sees liberalism and technocracy to be. The most disappointing aspect of Friedman’s book is that she does not explore this question. The omission is surprising since, in one sense, this is what her story is all about. Friedman remarks on the “technocratic and eventually statist character” (p. 45) of social insurance but does not interrogate the implications of this for her own argument. She presents the interpretive ambiguity around the two moral justifications of social insurance as a success story, at least while it lasts.

The fact that this achievement can only come about through the activities of experts, however, could be seen as posing a threat to both liberty and equality, thus undermining the success Friedman claims for social insurance as an institution of liberal justice. If justice has been rescued from the vagaries of fate by the promises of prediction, it has subsequently been entrusted to the vagaries of expertise. This raises two distinct worries. The first is the Weberian concern that institutions of social insurance could become instruments of control that rationalize and depoliticize the social world (see Klein, 2020 for a discussion). Moral and political values are expressed as objectively calculable quantities, thus limiting the space for meaningful human agency and choice. The equality of citizens is reduced to equal subjection to a bureaucratized state oriented toward managing risk.

The second worry is that despite the appearance of sophisticated expertise, the actual predictive capacities of experts are severely limited by uncertainty, the dearth and low quality of available statistics, the complexity of the social world, and the personal biases of experts themselves. The tools of probability, so precise for dice and coins, are not as effective when it comes to human affairs; they leave too much room for subjective judgments. In a politics that depends on expertise, moral and political values are embedded in and enacted through the work of prediction itself, which is entrusted to
experts (Pamuk, 2021). This is both intrinsically problematic for the freedom and equality of citizens and likely to lead to unequal and unfair policies in practice.

If we stop to think about the calculations involved in making social insurance work, it becomes clearer how messy it all is. Experts must determine the nature and quantity of risks facing different groups of individuals, classify individuals into statistical groups based on the notoriously subjective notion of similarity, quantify the costs of mitigating risks, and decide on the proper distribution of burdens across individuals with different risk profiles. Each of these is both technically difficult and requires contentious moral and political judgments. In practice, the promise of social insurance in accommodating different visions of fairness depends on how experts make these judgments and on whom the costs of their errors, omissions and biases fall.

To give one example, Friedman cites but does not engage with the work of Dan Bouk (2015), who shows how life insurers in the United States in the nineteenth century failed to properly assess risks facing African Americans. This was both because statistics were deeply shaped by historical injustice and because the legacy of slavery made it difficult to extrapolate from past data into a post-Civil War future about which people had wildly varying expectations. As a result, life insurers simply refused to insure African Americans. They also struggled to assess women’s health risks and life expectancy because women did not participate in the labor market, which was insurers’ main source of information. In the hands of real actuaries, physicians and other experts, the vision of fairness and equality through probability did not always apply equally to all, thus undermining the egalitarian and universal promise insurance offered in theory.

Friedman would likely want to push back against the claim that she does not pay enough attention to the politics of expertise by pointing out that the aim of the book is precisely to show how social insurance has always been a site of ethics and politics, despite its appearance as a technical issue. This is true but only in one sense: her argument about the role of moral and political values operates at the level of ideas and justifications — of the values embedded in philosophical ideas of probability and the justifications of social insurance developed on their basis. There is far less in the book about actual politics — decisions, actions, conflicts and compromise — whether among experts, politicians or citizens. The book’s main argument that two rival visions of justice were successfully accommodated in social insurance schemes is ultimately explained by the philosophical plasticity of the idea of probability and the moral and political assumptions of those formulating liberal visions rather than the political and technical work it took to realize these visions in practice.

The limits of prediction

If Rachel Friedman does not pay enough attention to the limits of expertise in practice, Jeffrey Friedman is centrally concerned with them. In Power without Knowledge, he argues that the philosophical difficulties facing predictive social science cause a serious legitimacy problem for technocratic regimes, which are justified on the basis of their ability to use social scientific knowledge and predictions to solve social, economic and political problems. State-led problem-solving efforts on issues ranging from social
insurance to crime reduction, environmental protection to tax policy assume the ready availability of reliable knowledge that will connect proposed policies to desired ends. Friedman contends that such reliable knowledge is extremely difficult to obtain. Social scientific predictions are often wrong, and policy interventions on their basis are subject to unintended consequences.

It is important to clarify that the book works with an unusually expansive definition of technocracy. While the term is typically applied to expert rule, Friedman uses it to describe any government or person who believes in solving social problems through state power. Citizens count as technocrats if they support this mission, as do politicians and political parties that put forward competing visions about which policies will bring about desired results. Most modern politics qualifies as technocratic on this definition. Indeed, Friedman claims that pluralism and deep disagreement over values is less of a problem for modern political systems than factual disagreements between political actors who make naive predictive claims.

Although Friedman’s observation that social scientific predictions are not reliable is not particularly controversial, he focuses only on one source of this failure: what he calls the problem of “ideational heterogeneity.” Predictive social science assumes that humans will respond in uniform ways to changes in external conditions, much like plants or physical objects. However, unlike plants or physical objects, the behavior of humans is determined by their beliefs and ideas, and each person has a unique ideational web shaped by the knowledge, evidence, and cultural influences they have encountered. Since the social sciences assume uniformity where there is heterogeneity, they are essentially built on a false premise. Unless technocrats pay attention to the conditions under which their assumption of behavioral regularity is justified, policies based on social scientific predictions are likely to go awry. This undermines technocratic claims to legitimacy, which Friedman defines as requiring a demonstration that the regime “tends to do more good, overall, than the harm it creates in the form of costs, including unintended ones” (p. 75).

Friedman does not take up the task of showing that particular technocratic regimes have failed this standard. The book’s main argument is framed as an aprioristic possibility: if ideational heterogeneity is true, then technocrats may be prone to bad predictions. He believes the burden is on technocrats to show that they can meet this legitimacy criterion. He doesn’t rule out the possibility of a “judicious” technocracy that is more attentive to its own limits and clear about the conditions under which the behavioral regularity assumption holds, but he is pessimistic that current technocrats are up to this task. Friedman’s preferred alternative is exitocracy, which is built on the principle of allowing individuals as much freedom as possible to exit social arrangements they are dissatisfied with. He defends this on epistemic grounds: each person possesses knowledge about their own contentment, and this knowledge, at least, is reliable.

Elsewhere, I have pointed out that Friedman’s argument can be opposed in one of two ways (Pamuk, 2020; see also J. Friedman, 2020). The first, more positivist route is to push back against his epistemology, and specifically his suggestion that ideational heterogeneity is a significant challenge to the validity of social science. Social scientific predictions may fail for a variety of reasons related to the limits of their data and methodology, but
many of these problems could in principle be resolved through better data and improved methods. Friedman does not show that ideational heterogeneity is a major issue for social science rather than one whose effects are negligible in practice, especially compared to other sources of failure. Until ideational heterogeneity is shown to seriously affect predictive capacities, it is not clear that social scientists should shift their attention to it.

The second route is to accept Friedman’s epistemological critique but push back against his claim that what follows from it politically is an escape into exitocracy. If we start from the belief that neither experts nor citizens have superior knowledge, then it makes sense to distribute power equally among citizens—not because they are more likely to get decisions right, but because no one is. Democracy could be legitimated as the fairest and most peaceful way of resolving disagreements in the absence of a reliable epistemic procedure for settling them. A critical epistemology of the sort Friedman offers could thus be one of the strongest foundations on which a radical democracy could be justified.

I will not comment further on the details of Friedman’s argument here, but instead reflect on how these two books speak to one another. It is stimulating to read them together because they are concerned with the same political phenomenon but take different positions on it. They both focus on a mode of politics centered on prediction and emphasize its significance for understanding modern states. But where Rachel Friedman sees predictive politics as having been instrumental for the realization of liberal democratic values in the welfare state, Jeffrey Friedman diagnoses a fundamental legitimacy problem for technocratic regimes, which he traces to the philosophical obstacles to prediction. He extends this legitimacy problem to any mode of state-led social problem-solving, including social insurance and the welfare state, which are the focus of Rachel Friedman’s book.

To understand the source of their disagreement, it is helpful to unpack the conception of legitimacy that Jeffrey Friedman works with. He argues that defenders of democracy can be analyzed in two categories. In the first group are those who do not take democracy to have any special competence but deny that competence is necessary for the legitimation of a regime. Instead, they trace legitimacy to values such as freedom, equality, stability or individual rights. Friedman puts Locke, Rousseau, Schumpeter and Popper in this category. In the second group are utilitarians and Progressives, who legitimate democracy on the grounds that it is more likely than other regimes to bring about good outcomes. Friedman’s main target in the book is this latter kind of instrumental standard; his aim is to mount an internal critique of its logic.

On the one hand, Friedman is surely right that this technocratic standard of legitimacy is a bad one. You don’t have to be persuaded of the significance of ideational heterogeneity to agree with him that the predictive limits of social science make it nearly impossible to demonstrate that some political system will bring about more good than harm all told. Where would one even start? Given the methodological difficulties that attend even the much simpler task of determining whether democracies or non-democracies cause more economic growth (Acemoglu et al., 2008), we can be fairly certain that the task of empirically comparing regimes across all possible outcomes will not be feasible. On the other hand, this conclusion calls into question the prima facie plausibility of this standard and
its worthiness as a target. For those who do not think political regimes are legitimated by a claim to bringing about good outcomes, it is not clear what Friedman’s argument has to offer.

Since Friedman’s argument is targeted at one particular conception of legitimacy, it is difficult to hold up his critique of technocracy as a response to an argument like Rachel Friedman’s, which takes a favorable view of state-led problem solving without claiming that its legitimacy is due to an ability to bring about more good than harm. After all, the welfare state and other predictive projects need not trace their legitimacy to some standard of accuracy or a cost-benefit calculus. They can instead derive legitimacy from the being desired and widely supported by a majority of citizens within a political system that in turn derives its legitimacy from its ability to realize some other value, such as freedom or equality. While Rachel Friedman is not directly concerned with the concept of legitimacy, implicit in her argument is the empirical claim that social insurance enjoyed sociological legitimacy. A large number of citizens enthusiastically supported it because it offered benefits they wanted, and the distribution of benefits could be justified according to their own conception of liberal justice. Expert calculation thus served as a way of managing a political disagreement about how to distribute benefits by combining the purported impartiality of math with a convenient ambiguity over moral interpretations.

Jeffrey Friedman’s critique of technocracy does not apply here because this argument falls outside the scope of his conception of legitimacy. This is a shame because the limitations of prediction that he so astutely highlights do not just threaten narrowly technocratic notions of legitimacy. They also create problems for political systems justified on the basis of values such as freedom, equality and consent, and they force us to consider the conditions under which public acceptance is a genuinely legitimating force. These issues bring us to more familiar concerns about the problems that reliance on expertise cause for the freedom and equality of citizens, and the question of what, if anything, can make a predictive mode of politics compatible with or even a site for democracy. Perhaps surprisingly, neither of these books directly engages with this question, though each offers provocative ideas that will stimulate further reflections on the topic.

These books expand the conversation on politics, expertise and prediction in promising new directions. Anyone interested in these issues would benefit from engaging with them.

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