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Review

Politics and expertise: How to use science in a democratic society

Zeynep Pamuk
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Pressing global problems like the climate crisis, world pandemics, the availability of energy, and contemporary wars make particularly salient what has become a structural feature of modern capitalist state development: the impact of the natural sciences and technology on our lives. Our increasing dependence on scientific and technological expertise generates serious challenges for democracy. Centrally, the asymmetric relations that emerge from expert authority often put at risk fundamental democratic principles such as citizen's autonomy and equal standing in decision-making. Indeed, as the COVID-19 pandemics has shown, democratic societies have not sufficiently developed institutional ways to deal with many of these challenges, including that of ensuring that basic democratic values like autonomy and equality are secured along the way.

Zeynep Pamuk's *Politics and Expertise* addresses some of these challenges in a way that is both original and compelling. The book brings together questions in philosophy of science and political theory to provide useful guidance for shaping our democratic institutions. Pamuk's starting point is a critique of the Weberian distinction between scientific expertise, on the one hand, and human values, on the other. She argues that natural sciences are intrinsically incomplete and uncertain, as everyday decisions about the topics, methods, and results of scientific research are deeply influenced by the values and purposes of the researcher. Accordingly, expert knowledge is not value- and interest-neutral. If democratic decision-making is to preserve basic values, such as inclusion, accountability, and legitimacy, it should respond to the value-ladenness of science by developing institutional innovations through which both citizens and scientists make explicit and engage with the values and interests guiding scientific research.

Pamuk develops her view in several steps. In Chapter 1, Pamuk notes that the values and interests of scientists affect the methods they implement, the concepts they apply, the models they develop, the evidence they gather, and the hypotheses they test. Her main focus is on scientific advice and, particularly, the democratic status of advisory boards, since they represent one of the most relevant institutional

forms in which natural science influences democratic decision-making. Chapter 2 then engages with what Pamuk calls the 'Paradox of Scientific Advice' (p. 63), which refers to the fact that scientific advisory boards need to choose between approaching the ideal of neutral knowledge or making their scientific advice useful for decision-making. If neutrality is simply not possible, democratic societies should prefer useful advice from scientists. However, if we want to avoid a situation in which advisory boards endanger basic democratic values, such as inclusion, representation, and accountability, we should democratize the work done in such advisory boards by submitting it to public scrutiny.

For Pamuk, scientific disagreement yielding important political decisions is one of the main challenges of current democracies. Hence, as we have seen in the Covid-19 pandemic, conflict among scientific views is often confusing for citizens, and it often contributes to undermining public trust in expert authority. In order to address this challenge, Chapter 3 fledges out an institutional proposal that seeks to overcome the limits of two other approaches: parliamentary scrutiny and mini-publics. While limiting the democratization of science to parliamentary scrutiny would leave citizens without criteria for judging their own representatives, many current mini-publics are too influenced by moderators and organizers. Furthermore, the latter are also pervaded by the problems generated by strong asymmetries in knowledge between experts and citizens. In order to avoid these difficulties, Pamuk proposes an innovative institution, the 'science court,' that would 'be initiated by ordinary citizens, and its decisions would advise political decision-making' (p. 112). The court would include different stages: agenda setting, selection of experts, expert's public defense of their own positions against other positions and, finally, citizen deliberation and decision-making.

A central aspect of Pamuk's proposal is that science courts should institutionalize 'adversarial proceedings' (p. 115). By this she means developing mechanisms in which experts formulate different often incompatible scientific views in a clear way and argue against or for them in front of the citizen jury. Pamuk identifies political and epistemic advantages in adversarial debates, since the discussion of conflicting views in debates is able to expose 'background assumptions, political biases, and omissions of rival views as well as clarify the levels of uncertainty' (pp.100–101). This facilitates the critical scrutiny of positions and offers the best conditions for making political judgements. Importantly, the court would be composed of experts as well as of a randomly selected jury of ordinary citizens. The latter would be in charge of deliberating and taking a vote on the policy in question by evaluating 'the different claims and evidence presented by the experts, focusing on both the scientific aspects need value judgments to make a decision' (p. 121).

Pamuk engages with two further questions of relevance for current discussions on the status of natural science in democracy. The first concerns the way we can justify decisions in the public funding of science. Answering this question brings

Pamuk to engage with two important questions. First, concerning the nature of scientific 'progress,' and second, about the political status of science as a public good. She challenges, on the one hand, the view that science develops at its best when scientists have the only say about how to spend public money in research. She draws her argument from the claim that scientists have many incentives to be conservative about the value of their paradigm, rejecting any considerations that would bring them to put it into question. On the other hand, Pamuk challenge John Rawls' assumption that science is a private good. Instead, she provides a political argument for the public funding of science, arguing that science is essential to reaching desired political outcomes, but also to providing citizens with knowledge that is independent from the state, and in determining the issues that will be relevant for decision-making. Finally, in Chapter 6, Pamuk provides arguments for banning certain kinds of dangerous research, such as research on high-risk technologies. Her view is that we should find a balance between expert's analysis and democratic decision-making, while social and political concerns should to be decisive.

In my view, Pamuk's book is able to develop a convincing criticism of the current status of science in democratic societies as a value-neutral sphere that should be left out of political control, without falling prey to the populist reduction of truth and science to mere instruments for achieving political power. Hence, as her Epilogue on the Covid-19 pandemics makes clear, Pamuk's central point is that we should not react to the populist threats to science with an uncritical apology of current scientific research. On the contrary, the book argues that only if we seriously engage with the indeterminacy and interest- and value-ladenness of science and technological development can we expect a genuine gain of trust on the side of citizens.

I would like to raise two critical points that are meant to motivate further discussion of the ideas of the book. First, in regard to Pamuk's 'science court,' one might want to consider that the most pervasive and negative forms of scientific influence in society are based on general scientific and social consensus. Hence, enhancing adversary procedures might not be sufficient. Thus, under certain conditions, they might prove ideological in this context, since they may tend to leave out of public scrutiny those deeply consensual assumptions which are nonetheless problematic. Hence I believe that adversary proceedings should be complemented with critical practices (Celikates, 2018) which take existing scientific and social consensus as something to be deeply scrutinized.

Secondly, Pamuk's book focuses the relation between scientific research and democratic decision-making, often leaving aside the role that capitalist markets play in funding science, and the ways in which they influence the status of scientific research in democratic societies. In most contemporary societies, markets are deeply entangled with scientific research, opening up different influence for social values, purposes, and interests (Herzog, 2023). Scientific research may not only

influence democracy through the values of researchers but, more broadly, through the values and interests of capitalist markets which influence practices of research in many different ways. In my view, this means that the institutional innovations proposed by Pamuk should not only make explicit and deliberate on the disagreements that pervade scientific research but also reflect on the institutional arrangements in which scientific practices are embedded.

That said, Pamuk's book represents a formidable and necessary contribution to the debates on the status of science in democratic societies. It contributes to undermining some well-stablished assumptions about science which, though well-intentioned, tend to undermine democratic norms and to perpetuate public distrust in science. And it provides support for valuable innovations that address some of the challenges posed by current institutional solutions. To this extent, it is a valuable tool for defending democracy against populism and expertocracy.

References

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