

A PLUS OF DEMOCRACY BROUGHT BY THE SOLUTION OF CONTEMPORARY CRISES WITH THE HELP OF SCIENCE

Diana DĂNIȘOR¹; Gheorghe DĂNIȘOR²

Abstract: The survival of our societies has always depended on overcoming the multiple crises they have faced throughout history. Major crises, such as the climate crisis, are accompanied by conjunctural ones, such as the CORONA VIRUS pandemic or the economic crises that hit humanity regularly, the effects of which do not add up, but multiply. A major challenge for our civilization, overcoming these multiple crises requires the mobilization of all resources - economic, social, political and human - to anticipate, manage and avoid them. For imagining solutions and anticipating shocks, the capacity for innovation and adaptation allows understanding the deep springs of the situation through the essential role played by science and technology. The question that arises is whether our societies, in order to avoid catastrophe, must ask for the help of science and technology, without changing their way of life, or whether political action in its relations with science will constitute a favourable ground for the foundation an effective action to collectively solve the current challenges in order to achieve more democracy.

Keywords: *crises, democracy, sciences, collective action, survival*

DOI <https://doi.org/10.56082/annalsarscipphil.2023.1-2.47>

Faced with the health crisis of recent years, society has been forced to act quickly and decisively, once again confronted with death and the fragility of human and social institutions. In managing the current crises, our societies and political systems have shown numerous shortcomings that should prompt us to reflect on the fact that we are not masters of the surrounding environment, which is often hostile to us, and that we should learn to live within our limits.

Science, with its methods of observation, experimentation, and reflection, allows us to establish a special relationship with reality, and the pandemic in the current era cannot be seen as a divine punishment but should be analysed as a complex phenomenon that can be understood through virology, epidemiology, as well as sociology, social psychology, political science, history, or semiotics.

Crisis management brings to light the opposition between authority and power as the foundation of governance in our societies. A means to obtain the adoption of a given behaviour from others, authority relies on justifications that can stem from individuals' interests, values, or the authority of a particular source,

¹ PhD at University of Craiova, Faculty of Law. Associate member of the Academy of Romanian Scientists.

² Full member at the Academy of Romanian Scientists.

whereas power is based on threat, in case of non-compliance with a certain behaviour. Science, in general, is the one that confers authority in explaining the principles and ideological foundations underlying the necessary actions of the governors.

Power based on threat allows for the release from the voluntary adherence of the recipients of injunctions but assumes that the threat is credible, strong, coherent, and relentless to obtain obedience, considering that democracy is distrustful of power and seeks to drastically limit it.

Crises are a matter of society, of social practices, not one that concerns the individual, with the impacts on some being the result of collective processes that raise the issue of common respect for the fragility of others and care for one another.

Therefore, crises raise a triple issue, bearing "on the relationship with reality, on the foundations of political action relative to authorities or powers, and on the collective nature of current challenges."³ To overcome crises, public policies must rely on scientific knowledge and make enormous efforts to popularize them to make the population and even the politicians understand what they are dealing with. However, what frequently happens is that politicians ignore the conclusions of scientific studies, and large-scale reforms are decided upon without any prior examination of the state of knowledge. The field of public policy evaluation should be developed by commissioning interdisciplinary research for the management of current crises, with conclusions in the medical, epidemiological, and economic fields, as well as regarding poverty, labour and enterprise organization, mental health, and access to happiness. This would help politicians consider the state of knowledge before deciding on the policies to be adopted. The relationship with science is nothing but a deepening of the democratic requirement of those in power to be accountable to the collective for the committed policy. Scientific assessments would allow citizens, the press, and civil society to better control public officials.

Science versus Democracy

Even in times of crisis, democracy may appear weak, and health, environmental, or economic emergencies might call for a strong power that enforces clear and ambitious solutions. However, this would lead to the destruction of the world as we know it in the West under the pretext of saving it from a threatening catastrophe. The scientific assessment of public policies is the tool that allows for the deepening of democracy, which is preferable.

In contemporary democracies, we are faced with a dual process of "the scientification of politics" and "the politicization of science," with the collaboration between politicians and scientists being more necessary than ever in

³ C. Mincke, „Le virus de la démocratie”, La revue nouvelle, nr. 01/20021.

attempting to solve the crises humanity faces. However, the intervention of science in politics most often leads to the exclusion of the people.⁴ There is an opinion according to which the guardians of universal progress are differentiation, heredity, and competition. Living beings perfect themselves precisely because the weak disappear in the face of the strong, the elements of organisms specialize without reservation and without turning back, and the qualities of individuals are embedded in their race. However, isn't the levelling, mixing, and blunting of everything a fatal consequence of the egalitarian logic? The democratic spirit is led to ignore all the conditions essential to the health of organisms. The great organizations upon which this spirit is imposed, our Western societies, will soon be paralyzed. "Though they resisted nature, nations that have succumbed to democracy will be erased from history."⁵ Scientific ideas have had a variable influence on ethics and politics, favouring, in some respects, democratic and revolutionary movements, but also authoritarian and counter-revolutionary movements.

Democracy emerged as the greatest revolutionary movement in history since the advent of Christianity, questioning the entire social and political system, reinforced by the economic and social transformations that occurred as a result of the industrial revolution. The scientific revolution revolving around the works of Galileo, Descartes, and Newton encouraged new ways of thinking, giving importance to verifiable observations and favouring free will, critical habits of the mind, and the exploration of fundamental "natural laws." Although scientific discoveries did not seem to have any revolutionary political consequences, with René Descartes and his *Discourse on the Method*, which established Cartesian philosophy, the individual could, through reasoning, arrive at the knowledge of truth, which would deeply affect the political repercussions of the scientific revolution. The incompatibility of the Cartesian attitude with a social and political order based on authority, custom, and traditional privileges led the French Revolution to adopt the ideas of scientists, as scientific knowledge of the world and the universe compelled people to fundamentally reconstruct their conception of social life and governance.

The philosophical foundation of modern political modernity as democracy in the West was established on the dualistic logical chain that begins with Lutheran thinking, continues with Cartesian philosophy (thinking in the singular), and evolves with Rousseau, who forms the synthesis. Democracy's problem lies in forming an individual as an autonomous subject and in perpetuating the unity

⁴ G. Gay-Para, "La science contre la démocratie. Science et politique à l'ère du Covid-19", *Le Philosophoire*, 2022/1 (n° 57), p. 53-83. DOI : 10.3917/phoir.057.0053. URL : <https://www.cairn.info/revue-le-philosophoire-2022-1-page-53.htm>

⁵ 3 C. Bouglé, „La démocratie devant la science”, *Revue de Métaphysique et de Morale*, t. 12, nr. 1 (januarie 1904).

between individuals, each of them being an end in themselves. With the philosophy of the subject, ideas of freedom and individuality develop but evolve synthetically in the thought of Rousseau, providing the ideal foundation of modern democracy, the principle of pluralism and otherness, conceived in terms of the general will. It is a pluralistic thinking that enables a true existential dialogue and the alternative.⁶

"Science is not reducible to power," but offers other means, with policymakers justifying their decisions by invoking science. In times of crisis, political power can do nothing but consult scientists to provide an opinion for making the best decisions. However, consultation remains merely formal and informal; it takes an institutional form through the assessment of the state of the disaster, the reference of scientific knowledge to it, and the adoption of appropriate measures to put an end to it. In this sense, the government is brought closer to scientists and forms scientific councils and analysis committees, for crisis management.

In managing the health crisis, we have all faced, we have observed the lack of a democratic character, with experts expressing their opinions in all fields, even those beyond their competence, fuelling distrust and suspicion of scientists, leading to the emergence of irrational ideas, conspiracy theories, and populist behaviour.

"The complex relationships between scientific work, politics, and society are dialectically characterized by two tendencies: on the one hand, the autonomy of the scientific field, and on the other hand, its connection to society." Seen as a Pandora's box, the source of all evils (ecological disasters, the degradation of living and working conditions, etc.), science, on the other hand, leads to the solution of all the problems facing humanity. Rulers have always wanted to bring science under their tutelage and in their service, being an important element of ideological struggle.

In our economic system, science has been placed at the service of capital, with scientific personnel tending to consider, above all, the anticipated benefits of their respective research, knowledge not only favouring economic development but also being an economic asset of the "knowledge economy." The Lisbon Agreement of March 2000 envisaged Europe "becoming the world's most competitive and dynamic knowledge-based economy," with dominant ideas in research being competition, competitiveness, leadership, merit, inspiring a selective policy and a competitive climate, framing research and development activities leading to project funding, the precariousness of scientists, and the financial insecurity of research teams, all done with a specific purpose: subjugating scientists to the priorities of major multinational groups.

⁶ 4Fusakazu Asano, *Trois origines de la subjectivité : Luther, Descartes, Rousseau : fondement de la démocratie moderne*, teză, 1991, Paris.

Scientific ideas may reinforce the arguments invoked in favour of governance by an elite or a technocratic government, to the detriment of the democratic ideal of governance based on popular consent. Similarly, as specialized experts, scientists may have a certain inclination toward an expert government. These antidemocratic tendencies, unexpected from science, have been studied by F.A. Hayek. Particularly interested in positivism and the not-so-democratic effects of applying certain notions and methods from the natural sciences to the study of social sciences, he denounces the abuse of reason, the road to freedom, as well as the one to slavery being paved with moral ideas and political theories extracted from the careers of science.

The Paradoxical Interweaving of Science with Democracy

While science relies on the objectivity of facts and rationality, democracy is part of a regime of truth that is fundamentally different, based on opinion and the majority of suffrages. The millennial effort of science has been to understand natural phenomena, so it cannot be reduced to the search for short-term profitable results, as money is not the main motivation for most scientists, their only and sole objective being driven by the realization that their work contributes to universal knowledge.

Within the current logic of research funding, public authorities delegate to a few researchers the role of defining the collective interest. However, to define research priorities, there should be a close dialogue between scientific communities and citizens, guaranteeing the scientific pluralism necessary for the technical development of society and the restoration of public trust in science. This does not mean that citizens and politicians themselves produce scientific knowledge - this is the prerogative of scientists - but research orientations must be debated so as not to be determined solely by large industrial groups. Citizens can no longer be satisfied with being mere spectators in this movement of the sciences; collective appropriation of knowledge thus constitutes a political stake of contemporary society. Being largely funded through public credits, citizens can claim control of scientific activity, provided that the specific characteristics of this activity are respected. For citizens to be able to debate research policy orientations, they must have acquired the necessary knowledge and techniques, leading to the need for the development of scientific education and popularization initiatives. The focus of the debate should be on achieving the common good, not just expressing particular interests (e.g., pharmaceutical laboratories hiding research results that prejudice their financial interests). To restore public trust in science, the definition of research priorities must be made through dialogue between citizens and scientific communities and the restoration of the margins of autonomy in the research world, which will guarantee the scientific pluralism necessary for the technical development of society.

Democracy needs science, the latter being the compass of the former.⁷ Science does not participate in political decision-making; it adjudicates on the "possible," which leads to the need for scientists to participate in public debates, the dissemination of scientific culture in society, and more vigorous investment by public authorities in research. Democracy needs science because the only argument for authority regarding the occurrence of a possible future comes from science. It presents an image of neutral and objective knowledge, which aims to eliminate prejudices by revealing the truth. How often do we hear from those who govern us expressions like: "It is proven that...", "From a scientific point of view...", "Objectively, the facts show that..."?⁸ But this identification between power and science is false, although science and democracy are crucially linked, with rationality always built on challenging relations of authority and dominant legitimizing modes. In "Science, Truth, and Democracy", Philip Kitcher wonders about the role of science in democratic societies. Skeptical about a "pure" science, and affirming the existence of a "well-ordered" science, even if scientific activity is not morally or politically neutral, the realistic and constructivist epistemological perspective presents a state of science in which "truth retains its place" but "is inscribed in a democratic framework". Seen in this way, scientific research is the subject of informed deliberation resulting from dialogue between the agents involved. In democracy, science is no longer just a tool of power but is not devoid of any political stake either. The World Forum on Science and Democracy (FMSD) was born from the desire to welcome scientists to global social forums, starting from the observation that they, especially researchers in techno-sciences, shape our modern societies but only participate in the dialogue of the World Social Forum (WSF) individually, if at all. The situation changed from 2009, when a large-scale international dialogue between scientists (who are generally associated with the production and transmission of knowledge) and civil society (the users) was established on January 26-27 in Belem, on the eve of the WSF, within the FMSD, to achieve greater democratization of the sciences.⁹ The complexity of the stakes and challenges in establishing a real collaboration led, after numerous exchanges of ideas and debates, to a consensus on several directions. The first is the affirmation that science, as part of knowledge, constitutes the common heritage of humanity, the greatest achievement of humanity being the enlargement of this heritage. Defending it and making it

⁷ Denis Guthleben, „La démocratie a-t-elle besoin de la science ?”, *Histoire de la recherche contemporaine* [En ligne], tom IX – nr. 2/2020, consulting 03.11.2022. URL : <http://journals.openedition.org/hrc/5260> ; DOI : <https://doi.org/10.4000/hrc.5260>

⁸ I. Stengers, *Sciences et pouvoirs. La démocratie face à la technoscience*, Paris, La Découverte, 2002.

⁹ The audio debates can be accessed at the following link: <http://fm-sciences.org/spip.php?article423> or <http://sauvonslarecherche.fr/spip.php?article2378>, consulting 03.11.2022.

accessible is a challenge for present-day society, by promoting emancipatory knowledge that promotes the advancement of societies. The pursuit of the common good, and not just the use of knowledge by large profit-hungry enterprises, should guide the choice of regimes and conditions for framing research development. How can science solve the problems that it itself has given birth to? It is about recognizing the contribution of the sciences (technosciences, in fact) to the emergence of environmental, economic, and food crises, as well as the development of war-related industries. We must be vigilant in this regard. The universal nature of science, the autonomy, freedom of research, and the exercise of social responsibility allow researchers, in theory, to have a critical and open judgment about the world and contemporary cultural and social diversities. But in reality, these values do not allow the avoidance of the pressures of capitalist globalization and its excesses, with scientists finding themselves in the position of making compromises due to competition and restrictive criteria in obtaining funding for their research. These demands are inspired by the private sector, but they are integrated into government policies, leading to an increase in the vulnerability of scientists and the weakening of research integrity. Based on the observation that the common good and human life must be the central values of research practices, some believe that there must be an alliance with civil society for decision-making processes to be democratic and to counter the confiscation of the production and dissemination of scientific and technological knowledge by private, military, and state corporate powers, and even religious ones, which currently dictate research and innovation priorities.

Does the development of scientific knowledge itself contribute to determining the purposes for which this knowledge is used? It is often claimed that a scientific discovery is politically and ethically neutral, regardless of its repercussions on social conditions and human life. It is also argued that science only enhances human power, with what humans do with science being a matter of ethics and politics. This is true for all material discoveries of science, whatever the social and political context. However, in modern societies, ethical and political beliefs have suffered a profound influence not only from scientific ideas but also from the methods and principles of scientific research. It cannot be demonstrated that scientific development is ethically and politically neutral. Until the beginning of the century, scientists and enlightened minds believed that scientific progress would bring such obvious benefits and blessings to humanity that it would imprint on society and politics conducive forms for the continuation of research. It was postulated that science, being a factor of progress, favours "progressive ideas," and the freedom of thought, experimentation, and expression demanded by scientists would inevitably reinforce democratic political movements favourable to this freedom. However, it has been observed that political systems and moral beliefs are determined by many other factors besides scientific ideas and

advancements, also becoming evident that scientific research needs as much order and organization as it needs freedom, with authority being the only one capable of providing science with the financial resources and material it needs.

Starting from the observation that the common good and human life must be the central values of research practices, some believe that there must be an alliance with civil society to ensure that decision-making processes are democratic and to counteract the confiscation of the production and dissemination of scientific and technological knowledge by private corporate, military, and state powers, and even religious entities, which currently dictate priorities in research and innovation.

Conclusions

Exploring the intricate connection between science, democracy, and society, we have highlighted the significance of scientific knowledge in managing contemporary crises. We have emphasized the need for an alliance between science and civil society to ensure democratic decision-making processes and counteract the monopolization of scientific and technological knowledge by private corporate, military, or state powers. We have also addressed the issue of the relationship between power and authority within governance, highlighting the importance of an approach based on dialogue and transparency in managing current crises. In conclusion, we have revealed the complexity of the interaction between scientific knowledge and democratic processes, emphasizing the need for a balanced and transparent approach in managing contemporary crises, by involving citizens in defining research priorities, as well as promoting an accessible and inclusive scientific culture. We encourage deep reflection on how science can be used for the common benefit of society, respecting democratic values and the fundamental rights of citizens.

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