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# Introduction to Perils for Science in Democracies and Authoritarian Countries

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Science has always been influenced by various societal factors, such as its politicization, funding constraints, market forces, and the challenges posed by opposing ideologies such as creationism or debunked racial theories. The articles in this special issue explore the challenges facing science in democracies and authoritarian countries, with a focus on the impact of new movements and policies operating under the names diversity, equity and inclusion (DEI); decolonizing science; wokeism; and social justice. While these policies are meant to promote equality and justice for underrepresented groups, they often conflict with the principle of equality of opportunity that is based on individual merit rather than group identity.

The essays were written by a multinational group of scientists and scholars, invited by the Jacques Loeb Centre for the History and Philosophy of the Life Sciences at Ben-Gurion University of the Negev in Israel. They provide different scientific and historical perspectives on how these policies pose a threat to the scientific merit system, the level of scientific performance, and the notion of scientific truth that affects countries to varying degrees, most strongly the United States. They point to the current suppression of free speech and an open discourse in academia, the devastating effects of identity and race policies and of the campaigns for decolonizing science and culture.

For example, advocates of ‘decolonialization’ of science and the humanities claim that mathematics education in schools in the US is Eurocentric, racist, and supremacist, and reforms are being implemented that lower the level of mathematics education in the name of equality. Changes such as these could have serious consequences for the future of science and technology, as well as the global economy.

To provide a historical perspective, some of the essays also explore the historical context of political interference with science, including the implementation of racial principles into academia through anti-Jewish measures in Nazi Germany and political interference with biology in the USSR and post-Soviet Russia. An example is the creation of ‘German physics’ in Germany in the 1920s. The originators advocated a ban on the theoretical part of physics that was too complicated for many and that they later labelled ‘Jewish physics’. During the Nazi era, the movement succeeded in abolishing some chairs of theoretical physics, but, after a few years, Nazi leaders re-installed theoretical physics because they realized that they needed it for the war effort.

Upholding the lessons of the past, equal treatment and the system of merit based on individual achievements regardless of race, gender, and class have been longstanding guiding principles to reduce injustice and, at the same time, maintain high standards in science. Conversely, ‘diversity and equity’ suggests or even mandates equality in terms of absolute numbers of people in specific subgroups. The resulting political pressure on individuals and institutions is not expected to lead to the same dire consequences as in authoritarian countries. However, according to many commentators, the damage done to careers and the downgrading of scientific standards will have serious long-term repercussions not only for individuals but for science as a whole. The policies and movements that were initially well-intended and aimed at fighting discrimination, have evolved into a bureaucratic machine whose primary goal is to eliminate disparities in representation at any cost, as noted by Percy Deift and colleagues (2021).

In his speech ‘A climate of digital intimidation’, PEN (Poets, Essayists, Novelists) President Ayad Akhtar (2022) highlights the dangers of identity policy for all intellectual enterprises. He points to the paradox of increased free speech through social media while also experiencing a rise in punitive interdiction and fear of speaking freely:

For as speech has become clearly freer in one sense, we find ourselves in the midst of a cultural shift in the United States to a discursive environment rife with punitive interdiction, where today’s politics of identity imposes contradictory moral maps about what speech is acceptable to what group and what speech isn’t. A climate of digital intimidation is on the rise, and with it, a fear to speak and even to think freely. On the rise as well is a profound and widespread intolerance to points of view deemed unacceptable, or even ‘immoral.’

Henry Louis Gates, an Afro-American literary critic and professor at Harvard University, complained about an intellectual tribalism and the focus on race and identity for the legitimization of an author. He considers this tribalism to be a sell-out of human fantasy. For example, the first comprehensive biography of Medgar Evers, one of the leading protagonists of the American civil rights movements of the 1960s, written by a leading Evers expert, did not find a publisher because Evers was black and the author white. The notion of decolonial scholarship has been dissected by

French scholars in a recent debate in France as a ‘deconstructionist device used to attack every accomplishment of Western society in literature, art, music, and even science’ (Bikfalvi et al. 2020). Leading scientific institutions, such as the journals *Science* and *Nature*, and grant agencies and university senates, are yielding to the pressure of activists or acting in anticipatory obedience, partly guided by feelings of guilt.

Historian and former Justice of the Supreme Court of the United Kingdom Jonathan Sumption (2023) severely criticized the ‘diversion of academic disciplines to a task for which they are usually ill-suited, namely the reform of modern society so as to redress perceived inequalities, notably of race’. In his opinion, the discipline of history has been particularly vulnerable to the discrediting and distortion caused by these endeavours. While ‘historical scholarship involves judicious selection from a vast and usually incomplete body of material’, he perceives a major danger to historical integrity when selection is based on criteria that are derived from a modern ideological agenda: ‘What we have been witnessing is the reshaping of the history of the last four centuries to serve as a weapon in current political disputes. Objectivity and truth have been the main casualties.’ Sutton points to the denial of the complexity of history and culture of these political agendas that support a ‘highly selective approach to the past which sees everything through the prism of race. Race becomes the supremely important phenomenon, masking every other aspect of a complex culture.’ He warns that the demands of a decolonization may lead to ‘redefine knowledge itself, in a way which artificially devalues western science’, citing as an example the decolonization statement of the Mathematical, Physical and Life Sciences Division of Oxford University that calls for ‘a broader understanding of what constitutes “scientific knowledge”’, which involves ‘challenging western-centric ideas of “objectivity”, “expertise” and “merit”.’

Meanwhile, counter-movements against wokeism, identity policies, etc., are growing, some of which are also damaging the education system and science. Thus, government actions in Florida against wokeism and DEI are not only removing ideological passages from mathematical textbooks, but, according to PEN America (2023), are also banning dozens of books that include protagonists of colour, LGBT themes or that touch on race or racism. Similarly, the de facto abolition of tenure in Georgia’s public colleges and universities in 2021, and also in other places, is seen as an attack on academic freedom and a ‘flagrant violation of the joint 1940 Statement of Principles on Academic Freedom and Tenure’ (American Association of University Professors 2021).

Some universities have taken measures to restore academic freedom and defend themselves against the exertion of influence from the outside. An example is the University of Hamburg, which in February 2022 composed a ‘Code of Academic Freedom’ (Albers et al. 2022), that the university’s president, Professor Dr Dieter Lenzen, presented to the public as follows:

Science and scholarship does not conform to political, religious, or other wishes but rather to its own guiding principles. In this respect, science and

scholarship is inextricably linked to responsibility. Any incursion into academic freedom and any form of curtailment of this freedom must be viewed all the more critically, and real threats such as these must be stopped. (University of Hamburg Press Office 2022)

The debate about freedom of speech, inside and outside of classrooms, is not new. I conclude with an early twentieth century statement by the German sociologist Max Weber. Weber is best known for his strong advocacy of the separation of science and values in research, but he considered it necessary for teaching to include a debate on cultural and ethical values. He concluded: 'The contention that the university teacher should be entirely devoid of "passion" and that he should avoid all subjects which threaten to arouse over-heated controversies constitutes a narrow-minded, bureaucratic opinion which every independent teacher must reject' (Weber 1949: 2). The current suppression of free debate about what the conditions for good science are contributes to its decline.

This Focus does not pursue political goals or deal with general political campaigns but focuses on the dangers that identity politics as eligibility criterion and the suppression of academic freedom pose to science, irrespective of the political tendencies they may emanate from.

The Focus opens with an article by Sergiu Klainerman who sees scientific enterprise in the United States seriously challenged by powerful anti-scientific trends. He refers to 'postmodern relativism', which under the pretext of anti-racism, anti-sexism, and anti-colonialism undermines the foundations of science as a quest for truth, and 'radical egalitarianism', which under the name of equity erodes the criteria of selection and rewards based on merit. His focus is on mathematics that, as he emphasizes, is the most universal, non-racist academic activity in its content as well as applications. He shows that, contrary to what is claimed today by what he calls the 'radical equality dogma', gender and ethnic inequalities in the sciences are not primarily the result of discrimination, but of biological, cultural, environmental, and other factors.

The existence of racial and gender inequalities as a result of causes other than discrimination is also a topic of Ute Deichmann, who provides a historical perspective to the current discussions about ideology and science by reviewing how the violation of scientific norms, in particular universality and objectivity, impacted scientific success in the Union of Soviet Socialist Republics (USSR) under Stalin and Nazi Germany. She makes it clear that her comparison does not aim at equating situations from then and now but can help understand social and political mechanisms of current events and highlight consequences that a violation of scientific norms may have for science.

Nathalie Heinich looks at the perils for the quality of science generated by 'wokeism' in academia and the blurring of the boundary between knowledge and opinion or ideology. Her focus is on the humanities and social sciences in France, where on the one hand she shows their vulnerability to wokeism and on the other hand explains reasons for their resistance against wokeist communitarianism, such as the universalist tradition in France.

Ahmad Mansour, an Israeli Palestinian German psychologist, who works in various projects to prevent radicalization, especially in the field of Islamism, dedicates himself to the fight for democratic values and against any kind of anti-Semitism in Germany. His target groups are mostly young Muslim migrants. He shows that his work is getting harder every day, not because the young Muslims are unapproachable, but because of the problems caused by identity policy activists on the one hand and activists of political Islam on the other. Activists of identity policy also try to direct some sciences according to their ideology, defaming scientists, cancelling lectures, and declaring some fields of research as racist or immoral. According to Mansour, these groups abandoned their original ideas of universality, justice, and criticism of religion, focusing instead on demonstrating their moral superiority. He warns that the widespread refusal to debate causes harm to democracy, whose essence is the exchange of arguments and tolerance of different opinions.

Focusing on medical research, Andreas Bikfalvi analyses the relationship between values and science. He considers the ideological intrusion of social justice ideology into science and medicine as a major problem in Western democracies. According to him, this ideology derived from scholarship in the humanities (law, social sciences, branches of philosophy, etc.) and was subsequently transferred to the fields of science, technology, engineering, mathematics and medicine.

Yonatan Dubi discusses how the accumulation of biases at the institutional and scientific level as well as in public, together with strong feedback loops, can lead to a politicization of science. He shows that in almost every aspect of modern life where science is relevant, entities of the UN or national governments create reports or other statements that are disseminated by media. They have led to policy suggestions that have begun to abolish the freedom to choose one's research direction if it is not dedicated to solving some of the world's pressing problems or if it deviates from what is widely considered the correct way of solving a problem.

The politicization of science is also the topic of Anna Krylov and Jay Tanzman who see the greatest threat of politicization today coming from a set of ideological viewpoints, collectively referred to as Critical Social Justice (CSJ). The authors examine how CSJ has detrimentally affected scientific publishing by means of social engineering, censorship, and the suppression of scholarship. Their examples for the ideological subversion of scientific publishing largely focus on chemistry, where they analyse, among other things, how biases have been statistically 'justified'.

Methodological issues are at the centre of the article by Charles Reichhardt, Alex Small, Cristiano Nisoli, and Cynthia Reichhardt. They had written a critical evaluation of a controversial article in physics education claiming the presence of 'whiteness' in the physics classroom. The study in question did not have proper controls and completely lacked a scientific methodology, such as refutation. But the journal, a prominent journal of science education, did not publish their critique. Reichhardt *et al.* also point to the lack of respect for scientific methodology of the authors of the questionable paper who proclaim that their study cannot be judged by standards common in science.

Dorian Abbot discusses practical solutions to the threat to free inquiry and scientific progress, such as diversity, equity, and inclusion bureaucracies at American universities. His proposed solutions are politically liberal, based on historical experiences at the University of Chicago as well as his own personal experience. He makes it clear that the implementation of the solutions requires working with alumni, journalists and politicians. The solutions are based on three reports from the University of Chicago between 1967 and 2014: the first preventing the University, and any unit of it, from taking a collective position on social and political issues; the second requiring that faculty hiring and promotion be done solely on the basis of research and teaching merit; and the third ensuring free expression on campus, even if someone claims to be offended, hurt or harmed by it. Abbot urges that these reports be officially adopted and strictly enforced at every university.

We hope that this collection of articles highlighting different societal and political threats to various sciences today will contribute to the debate about what the conditions for good science are and thus help prevent its decline.

## References

- Akhtar A** (2022) *A climate of digital intimidation*. Available at <https://penberlin.de/keynote-akhtar/>. Accessed June 2023.
- Albers M, Behrens J, Braham M, Felix D, Guse A, Lübcke E, et al.** (2022) *Code of Academic Freedom*. Available at <https://www.uni-hamburg.de/en/uhh/profil/leitbild/kodex-wissenschaftsfreiheit/code-academic-freedom.pdf>. Accessed June 2023.
- American Association of University Professors** (2021) *Academic Freedom and Tenure: University System of Georgia*. Available at [https://www.aaup.org/file/Academic\\_Freedom\\_and\\_Tenure\\_University\\_System\\_Georgia.pdf](https://www.aaup.org/file/Academic_Freedom_and_Tenure_University_System_Georgia.pdf). Accessed June 2023.
- Bikfalvi A et al** (2020) *Open letter: a response from the '100' French scholars*. Available at <https://www.opendemocracy.net/en/can-europe-make-it/open-letter-response-100-french-scholars/>. Accessed June 2023.
- Deift P, Jitomirskaya A and Klainerman S** (2021) *As US Schools Prioritize Diversity Over Merit, China Is Becoming the World's STEM Leader*. Available at <https://quilllette.com/2021/08/19/as-us-schools-prioritize-diversity-over-merit-china-is-becoming-the-worlds-stem-leader/>. Accessed June 2023.
- PEN America** (2023) *Florida Book Bans Are No Hoax: Here Are The Facts*. Available at <https://pen.org/florida-book-bans-not-a-hoax/>. Accessed June 2023.
- Sumption J** (2023) *The New Roundheads. Politics and the Misuse of History*. Available at [https://historyreclaimed.co.uk/the-new-roundheads-politics-and-the-misuse-of-history/?mc\\_cid=cacaaaf0e28&mc\\_eid=f4371fa750](https://historyreclaimed.co.uk/the-new-roundheads-politics-and-the-misuse-of-history/?mc_cid=cacaaaf0e28&mc_eid=f4371fa750). Accessed June 2023.
- University of Hamburg Press Office** (2022) *Against the Threat to Research and Teaching: Universität Hamburg Publishes Code of Academic Freedom*. Available at <https://www.uni-hamburg.de/en/newsroom/presse/2022/pm4/pm-4-22.pdf>. Accessed June 2023.
- Weber M** (1949) *The Methodology of the Social Sciences*. Glencoe, Illinois: The Free Press. Available at [http://fs2.american.edu/dfagel/www/Class%20Readings/Weber/weber\\_on\\_methodology\\_of\\_social\\_sciences.pdf](http://fs2.american.edu/dfagel/www/Class%20Readings/Weber/weber_on_methodology_of_social_sciences.pdf). Accessed June 2023.

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