

Editorial

The Dynamics of Science in the Face of Global Geopolitical Conflicts

Science has never been produced in a historical vacuum. On the contrary, its development has always been deeply intertwined with the political, economic, cultural, and territorial transformations that shape human societies. In periods of stability, scientific production tends to broaden horizons, strengthen cooperation networks, and foster innovations capable of improving living conditions. However, in periods marked by wars, diplomatic crises, geoeconomic disputes, territorial conflicts, climate change, forced migration, and institutional instability, science assumes an even more strategic role: it becomes, simultaneously, an instrument of emancipation, an object of dispute, and a field of resistance.

It is within this context that *Diversitas Journal* presents the theme of this issue, **“The Dynamics of Science in the Face of Global Geopolitical Conflicts,”** proposing a broad and interdisciplinary reflection on the challenges confronting knowledge production in an international landscape characterized by profound transformations.

The twenty-first century has witnessed a reconfiguration of the global order across multiple scales, marked by the rise of new powers, intensifying technological competition, disputes over strategic natural resources, the crisis of multilateral institutions, and the emergence of new forms of coloniality that shape the circulation of scientific knowledge.

Contemporary wars demonstrate the persistence of armed violence as an instrument in disputes over territories, borders, natural resources, political influence, and control of strategically important areas. Interstate conflicts, civil wars, military occupations, separatist disputes, and confrontations involving regular forces, armed groups, and private military companies form an increasingly complex landscape. New technologies of warfar: drones, autonomous systems, artificial intelligence, precision weapons, satellites, and surveillance mechanisms, expand the destructive capabilities of states and profoundly transform the nature of combat, further blurring the boundaries between military and civilian spaces.

The consequences of these wars fall particularly heavily on civilian populations. Deaths, injuries, hunger, the destruction of homes, disruption of healthcare services, school closures, and forced displacement are among the most dramatic manifestations of contemporary conflicts. Millions of people are forced to leave their territories, becoming refugees or internally displaced persons and facing insecurity, discrimination, and the loss of community ties. The destruction of universities, laboratories, libraries, hospitals, and research centers compromises not only the present circumstances of affected populations but also their future prospects for social, cultural, and scientific reconstruction.

Armed conflicts also generate profound and long-lasting environmental impacts. Bombings, fires, intensive mining, toxic substance leaks, the destruction of dams, contamination of soil and water resources, deforestation, and the use of chemical weapons compromise entire ecosystems and threaten biodiversity. Moreover, wars increase greenhouse gas emissions, hinder environmental monitoring, and facilitate the illegal exploitation of forests, minerals, water, and energy resources. Geopolitical and environmental crises, therefore, are not separate phenomena: they reinforce one another and reveal how disputes over the control of nature lie at the heart of many contemporary conflicts.

Contemporary conflicts thus extend far beyond traditional battlefields. They manifest themselves in disputes over technological sovereignty, control of information, dominance in artificial intelligence (AI), cybersecurity, access to critical minerals for the energy transition, intellectual property rights concerning medicines, seeds, and technologies, as well as the governance of data and digital platforms. The geopolitics of science has therefore become one of the central elements for understanding the functioning of contemporary societies.

The struggle over natural resources occupies a central place in this new geopolitical configuration. Water, oil, gas, arable land, forests, biodiversity, and strategic minerals have become fundamental to sustaining national economies and advancing technological development. The expansion of the so-called energy transition, although necessary in the face of the climate emergency, has also intensified demand for lithium, cobalt, nickel, copper, and rare earth elements, increasing pressure on territories inhabited by Indigenous peoples, traditional communities, and peasant populations.

These dynamics demonstrate that environmental problems cannot be understood merely as technical or natural issues. Climate change, biodiversity loss, desertification, ocean pollution, water scarcity, and extreme events are directly related to development models, economic inequalities, and the power relations that structure the international system. Although the effects of the environmental crisis are global, they do not affect all countries and social groups in the same way. Historically vulnerable populations are often those who contribute the least to environmental degradation and, paradoxically, those who suffer its consequences most severely.

At the same time that science is called upon to respond to global challenges such as climate change, pandemics, food insecurity, energy crises, and population displacement, it also faces growing attempts at political instrumentalization. In different parts of the world, funding cuts, attacks on university autonomy, the spread of disinformation, scientific denialism, restrictions on the international mobility of researchers, and the strategic use of scientific production as a mechanism of power and international influence can be observed.

Within this complex scenario, it is essential to reaffirm science as a collective heritage of humanity. Producing knowledge requires intellectual freedom, sustained funding, strong institutions, international cooperation, and an ethical commitment to democratic values. The defense of science extends beyond universities and research centers; it is an indispensable condition for building fairer, more resilient societies capable of confronting problems whose nature no longer recognizes national borders.

Science plays a fundamental role both in understanding conflicts and their consequences and in developing pathways toward peace, reconstruction, and environmental justice. Researchers from a wide range of fields contribute to documenting human rights violations, monitoring environmental impacts, developing humanitarian technologies, protecting cultural heritage, combating epidemics, and proposing public policies aimed at affected populations. Such work, however, requires ethical commitment, intellectual independence, and constant vigilance to ensure that scientific knowledge is not placed exclusively at the service of military strategies, corporate interests, or projects of domination.

The articles gathered in this volume reflect this diversity of perspectives. The contributions engage with different fields of knowledge and, rather than offering

definitive answers, invite critical reflection on the role of scientific research amid the uncertainties of the present. The epistemological diversity represented in this issue reaffirms a fundamental principle of *Diversitas Journal*: understanding contemporary phenomena requires permanent dialogue among different disciplinary fields, while valuing plural, intercultural, and socially engaged approaches.

In a world marked by political fragmentation and growing polarization, science remains one of the most important universal languages of cooperation among peoples and nations. Although shaped by economic interests and power struggles, it retains its capacity to build bridges, produce evidence, foster critical thinking, and expand opportunities for dialogue among different societies.

This issue of *Diversitas Journal* therefore reaffirms the journal's commitment to open, ethical, democratic, and socially grounded science—a science committed to human dignity, the defense of life, environmental sustainability, the promotion of social justice, and the construction of a future founded on dialogue, international cooperation, and the strengthening of scientific institutions.

We hope that the studies gathered here will contribute to broadening the academic debate on the complex relationships among science, geopolitics, conflicts, and the environment, while encouraging new research, interinstitutional partnerships, and reflections capable of informing responses to the major challenges of our time.

We invite our readers to engage with the pages of this issue with a critical perspective, openness to dialogue, and a willingness to reflect on the role of science in a society undergoing profound transformations. May each article represent not only an opportunity to engage with knowledge produced by researchers from different fields, but also an invitation to collectively build more sustainable, democratic pathways committed to peace, justice, and human development.

We wish all our readers an enriching reading experience and fruitful reflections.