Defining, Interpreting, Deconstructing the Global Environment

An Introduction

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The centrality of the human environment

Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights the right to life itself[1].

This was the first article of the declaration of the 1972 UN Conference on the Human Environment in Stockholm. In announcing the conference, the UN General Assembly stated that the major purpose of the conference was to provide guidelines for action by governments and international organizations designed to protect and improve the human environment by means of international cooperation, with special attention to developing countries, to encourage them to address these problems.

Preceded by the meeting in Founex, Switzerland, in mid 1971, also focusing on environment and development, the Stockholm Conference directly or indirectly took up much earlier ideas – such as the UN Scientific conference on the conservation and utilization of Resources in 1949, the first intergovernmental conference on the protection of the biosphere organized by UNESCO in 1968 and the Man and the Biosphere Programme of 1971 for the protection of ecosystems – and created in 1972 the United Nations Environment Programme (UNEP). It would be responsible for monitoring the environmental policies of the different states through a mechanism called Earthwatch, with the task of coordinating, harmonizing and catalyzing the environmental observation activities of the various United Nations agencies and producing an-

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[1] *Declaration of the United Nations Conference on the Human Environment*, https://stockholmdeclaration.org/about/.

nual reports on the state of the environment on a global level. The first three reports discussed a broad spectrum of issues including water and land resources, climate change, the state of the biosphere, population growth, toxic substances and pollution. The landmark report, *The State of Environment*[2], was published ten years later, in 1982, but UNEP was not the only institution to produce reports on the subject in the following decades: the Worldwatch Institute launched its annual State of the World report in 1984 and the World Resources Institute published the first World Resources Report in 1986.

According to many scholars, the Stockholm Conference was foundational, the culminating moment of the post-war internationalist vision that emphasized the existence of a single world and the transition from the world conservation movement to the birth of global environmentalism. Perrin Selcer writes in this regard:

> It was in 1972 that *Blue Marble*, the first photograph of the whole Earth from space, inspired hopes of a «second Copernican revolution». A new «planetary consciousness» would mean that individuals, whatever their national and ethnic affiliations, political ideologies, and religious convictions, would finally recognize their membership in a single family sharing a common home»[3].

It was in the aftermath of the Stockholm conference that several international agencies, in particular the Food and Agriculture Organisation (FAO) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO), took steps to create international «epistemic communities» of experts, with the collaboration of the «non-political» network of scientists. The idea of a planet as a single, interconnected system was at the core of their vision and inspired the world community and international institutions by creating forms of transnational cooperation that, born in those years and evolving later, would foster and solicit declarations and treaties in the field of global environmental governance, with considerable success and much ambiguity on the part of states as well.

Also emerging from the second half of the Eighties was the concept of sustainable development to which particular attention was devoted by the Brundtland report *Our Common Future* of 1987[4]. A multifaceted concept that simultaneously encompasses the preservation of natural resources, the creation of appropriate standards for resource exploitation, the equitable use of resources and the integration of these prac-

[2] UNEP, *The State of Environment 1972-*1982, United Nations Environment Programme, Nairobi, Kenya, 1982.
[3] P. Selcer, *The Postwar Origins of the Global Environment: How the United Nations Built Spaceship Earth*, New York, Columbia University Press, 2018; R. Falkner, B. Buzan (eds.), *Great Powers, Climate Change, and Global Environmental Responsibilities*, Oxford, Oxford University Press, 2022.
[4] I. Borowy, *Defining Sustainable Development for Our Common Future. A History of the World Commission on Environment and Development (Brundtland Commission)*, London and New York, Routledge, 2014.

tices into economic and development plans, it involved technical experts – particularly anthropologists and economists – and international agencies such as the World Bank and the International Monetary Fund[5].

The topic of sustainable development and its evolution overcame the contradictions of policy makers who, immediately after the Second World War, had conceived of environmental protection and economic development as clearly separate goals. In the course of time, awareness of environmental problems and their effects grew among policy makers, scientists and citizens, some of whom became activists in the field of environmental protection by involving themselves in resistance actions.

The tension between environmental protection and the pursuit of economic growth at the national and global level is known as the environmental-development nexus and was initially conceived as an issue related to developing countries with an emphasis on inequality in resource allocation and poverty[6]. Over the course of two decades, the issue, which also strongly concerned Western countries and could have become a guiding force for governments, firms, and non-governmental organizations, lost its original meaning that held nature, economics, and social justice together, fragmenting into many different objectives that made it meaningless[7]. Calls to give meaning back to the concept have multiplied with a strong focus on taking into account local needs that differ widely: «sustainable development must be redefined repeatedly, from the bottom up, wherever it is to be put into practice»[8].

Despite these setbacks, international cooperation grew in intensity in the Nineties, especially since the United Nations Conference on the Environment and Development in Rio De Janeiro in 1992[9]. The following year, a report submitted to the Executive Director of UNEP, Elizabeth Dowdeswell, launched new ideas suggesting the improvement of UN agencies' participation in Earthwatch activities, the expansion of relations with non-governmental research institutes, the decentralization of its global action with a stronger focus on the regional dimension, and the strengthening of technical assistance to different countries for environmental monitoring[10]. The report encouraged the participation of non-state actors and helped to initiate the progressive involvement of non-governmental organizations of a different nature, even if this

[5] N.J. Vig, R.S. Axelroad, *The Global Environment Institutions, Law, and Policy*, Washington DC, CQ Press, 1999.

[6] H. Shue, *Global Environment and International Inequality*, «International Affair», 1999, 75, 3, July, pp. 531-545.

[7] D.G. Victor, *Recovering Sustainable Development*, «Foreign Affairs», 2006, 85, 1, January-February, pp. 91-103.

[8] *Ibidem.*

[9] J.F. Morin, A. Orsini, S. Jinnah, *Global Environmental Politics. Understanding the Governance of the Earth*, Oxford, Oxford University Press, 2020.

[10] J. Bakkes, M. Cheatle, N. Mžavanadze, L. Pintér, R.G. Witt, *Keeping the World's Environment under Review. An Intellectual History of the Global Environment Outlook*, Budapest and New York, Central European University Press, 2022.

progressive dynamism in the relationship between environment and development was partly limited by internal North/South tensions within the United Nations, which could have encouraged more radical and comprehensive changes.

Environmental policy makers had a good understanding of the problems through interaction with scientists, but it was the 1992 UN Summit that clearly showed the interconnectedness of the two concepts. Since then, there have been ruthless reports on the climate change that is leading to the inevitability of desertification in many areas especially in Africa, and thus on the need for pro-active policies and legislation on climate change that can at least mitigate it[11].

Today, the 2030 Agenda for Sustainable Development calls for new approaches to the issues of health, environment and equity by integrating socioeconomic development and environment protection, health and well-being, an approach also supported by the World Health Organization (WHO), which encourages paying close attention to the relationship between health and environmental risk by implementing good public health standards to be integrated into broader decision-making processes[12].

Historiography between delays and multidisciplinarity

While many historical studies deal with different aspects of environmental governance with a focus on nation-states, the role of scientists, particularly in international organizations, has been somewhat neglected.

Experts and their networks are at the centre of several transnational histories of the XX century. While the role of economists, sociologists and anthropologists has been thoroughly examined, hardly any mention is made of natural scientists even though, from the Sixties onward, physicians, biologists, sociologists, ecologists and geologists (to name just a few) became increasingly involved as consultants in policy making, and especially in development planning. A significant body of literature has grown around the key event in the history of global environment – the Conference on the human Environment of Stockholm of 1972 – and around the activities carried out by international organizations, including environmental NCOs that transformed the practices of major development lending institutions, primarily the World Bank and the United Nations. The roles of scientists, however, are still understudied as are the relationships between globalization and the environment in terms of health poli-

[11] I. Stavi, *Rio (1992) to Glasgow (2021): Three Decades of Inadequate Mitigation of Climate Change and Its Slow Onset Effect*, «Frontiers in Environmental Science», 2022, 10, https://www.frontiersin.org/journals/environmental-science/articles/10.3389/fenvs.2022.999788/full.

[12] WHO, *WHO Global Strategy on Health. Environmental and Climate Change. The Transformation Needed to Improve Lives and Wellbeing Sustainably through Healthy Environments*, WHO, 9 February 2020, https://www.who.int/publications/i/item/9789240000377.

cies and the limits placed by many governments on local and global sustainability through the World Trade Organization[13].

After Stockholm, a key international policy journal, «International Organization», devoted a special issue to environmental change, while after the Rio De Janeiro conference in 1992, there was a growth of research centers, academic programmes, scientific associations, specialized journals, annual conferences, scientific awards, research grants, special collections.

Although historiographical interpretations have differed at times considerably, the clearest explanation seems to be that which indicates Global Environmental History as the history of the lives of humans, societies and species, both human and non-human, with attention to the various aspects of their relationships with the physical and biological environment.

This history not only opens up new perspectives on the past, but also changes the way history is written and interacts with other disciplines and allows historians to live in the present by actively participating in political decisions and contributing significantly to the public debate on the environment. Gabriella Corona writes in this sense «I believe, indeed, that global environmental history can only grow and expand through global communication»[14].

The journal that hosts the cited essay – «Global Environment» –, founded in 2008 with the intention of making transdisciplinary history, unites natural and social sciences in order to foster a common language and vision, while taking into account very different spatial and cultural points of view and replacing «the notion of "hierarchy" with that of "relationship" and "exchange" between continents, states, regions, cities, central zones and peripheral areas – in studying the construction or destruction of environments and ecosystems»[15]. A few years later, *Global Environmental History: An Introductory Reader*[16] was published, a study of the complex apparatus of relations between humans and the biosphere – historically, geographically, ecologically – in a global perspective. The globe was seen as a human-centric construction of networks of ideas, people, institutions, infrastructures that interacted with plants, animals and other organisms. With one foot in the sciences and one in the humanities, this history is involved in a broad debate with the inter- and transdisciplinary Environmental Humanities.

[13] N.A. Ashford, B. Bluestone, P. Freeman, J.D. McAteer, W.R. Moomaw, *Globalization and the Environment*, «Journal of Public Health Policy», 2002, 23, 2, pp. 225-238.

[14] G. Corona (ed.), *What is Global Environmental History? Conversation with Piero Bevilacqua, Guillermo Castro, Ranjan Chakrabarti, Kobus du Pisani, John R. McNeill, Donald Worster*, «Global Environment», 2008, 1, 2, January, p. 249, http://www.environmentandsociety.org/node/2711.

[15] *About the Journal*, https://www.whp-journals.co.uk/GE/about.

[16] J.R. McNeill, A. Roe (eds.), *Global Environmental History. An Introductory Reader*, London, Routledge, 2012.

If the history of science utilized by global change researchers is rarely used as an object of critical reflection but only as an element of contextualization, the narrative often lacks the self-attribution of agency even though the historical account has attributed scientists the ability to initiate and direct the work leading to sustainable development. This scenario changed a decade ago with the Anthropocene narrative in which scientists, policy makers and other stakeholders were identified as important actors in sustainable transitions[17]. Today, since the publication in 2017 of the *Future of Global Environmental Assessment Making Project*[18], the historiographical scenario appears more open to different methods and protagonists, flexible to interactions and hybridizations, and ready to tackle case histories reflecting global issues.

The articles of this issue

The essays collected in the monographic issue are inspired by the changes and developments in global environment history and range across themes and contexts that are very far apart: from Africa to Japan, from the United States to Italy, to which two essays are dedicated.

The protagonists are institutions, scientists, non-governmental organizations, political decision makers, the scenario is that of the post-World War II period and especially the decades since the Seventies.

Chiara Pulvirenti analyses UNESCO's Arid Zone Programme and its attempts to combat desertification from the early Fifties onwards with the support of a number of dedicated scientists whose profiles are analysed. The author stresses how the program propagated colonial bias towards arid regions, promoted some false myths about desertification, and had insufficient resources from UNESCO, but points out the building of a transnational network of scientists engaged on the issue.

Sara Lorenzini and Sara De Simone focus their essay on the controversial construction of Megadams by choosing a few case studies and explaining the role played by scientists who placed their scientific knowledge in the context of often controversial political and economic choices. The authors stress the construction in both colonial and post-colonial governments' development planning as a means to control water resources and generate electric power.

Elisabetta Bini delves into the experience of anti-nuclear scientists by outlining the ways in which a transnational community of radiation counter-experts was built up in the Seventies and Eighties, denouncing that the study of scientific counter-expertise in the realm of nuclear research has received but scant attention.

[17] O. Uhrqvist, B.O. Linnér, *Narratives of the Past for Future Earth: The Historiography of Global Environment Change Research*, «The Anthropocene Review», 2015, 2, 2, pp. 159-173.
[18] J. Jabbour, C. Flachsland, *40 Years of Global Environmental Assessments: A Retrospective Analysis*, «Environmental Science & Policy», 2017, 77, November, pp. 193-202.

Oliviero Frattolillo focuses his essay about the crucial role that Japanese public intellectuals played in forcing questions of environmental injustice onto the public agenda throughout the Sixties ad the Seventies and especially about the position of scientist Ui Jun, his environmental activism in Seventies Japan, and his ability to create transnational movements against environmental pollution.

For the Italian case, Salvatore Romeo tackles the theme of the contribution of technicians and scientists to fight smog in Milan between the Fifties and Seventies, making the city an incubator of environmentalist consciousness, while Mauro Elli outlines the path that led with difficulty to the disposal of nuclear waste, with particular attention to the action of experts and scientists in search of a possible solution to the problem thanks to their relations with political decision-makers.

Finally, Flavio d'Abramo presents in the «Tracce» section a selection of documents on the impact on human health of antibiotics used in food and feed and the World Health Organisation's action on the subject.

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