



Munich Personal RePEc Archive

Reconnecting the Broken Bonds: Environment, Politics, Economics and the State of the World

Pilon, André Francisco / AF

University of São Paulo, International Academy of Science, Health
Ecology

23 May 2023

Online at <https://mpra.ub.uni-muenchen.de/117539/>
MPRA Paper No. 117539, posted 07 Jun 2023 07:14 UTC

Societal Transformations, Development, Environment, People and the State of the World

André Francisco Pilon

University of São Paulo / International Academy of Science, Health & Ecology

Email: gaiarine@usp.br

Abstract:

An ecosystem theoretical and practical framework is posited for the evaluation and planning of advocacy, communication, public policies, research and teaching programmers, intertwining four dimensions of being-in-the-world (intimate, interactive, social and biophysical), as they combine, as donors and recipients, to induce the events (deficits/assets), cope with consequences (desired/undesired) and contribute for change (potential outputs). Earth's regeneration and mankind's regeneration, as faces of the same coin, are addressed simultaneously, in space and time, for their mutual support. Goals and new paths to reach them contemplate a set of values, norms and policies that prioritizes socio-ecological objectives, human well-being, natural and built environments, the aesthetic, ethical and cultural meaning of the existence.

KEYWORDS

Education, Culture, Politics, Economics, Ethics, Environment

Today's world is characterized by the increase of environmental degradation due to the predatory exploitation of natural assets, deforestation, desertification and geopolitical hegemonies related to oil and gas, while climate calamities, object of repeated scientific events, become evident and are continuously witnessed by ordinary people.

The hegemony of technological and technocratic solutions in all realms of life obscures the need for a holistic, integrative and transformative ecosystem approach encompassing all dimensions of being in the world, as they combine to elicit, maintain or transform the events, encompassing politics, economics, culture, education, environment.

Far beyond techno-scientific fixes, morality plays a crucial role in generating criticism and demands, whether 'progressive' or 'reactionary', in view of the multiple, controversial and often antagonistic ways in which social actors evaluate their actions and mediate political, economic, social and cultural demands in different epochs and places (Lidskog, Standring & White, 2022).

Science cannot be at the service of particular agendas, groups or movements which disguise themselves in the name of democracy, human rights (which should be universal, not the privilege of selected sectors of society), and other facades, but that do not promote "freedom, equality and fraternity", trapped as they are in their respective ghettos.

The focus should be on the general phenomenon, on the configurations deep inside the "boiling pot", where the problems emerge, implying public scrutiny, accountability and information, not on the "bubbles" of the surface (consequences, fragmented issues, object of reduced academic formats, media headlines and segmented public policies).

Dealing with science, education and political and economic interests

Science presupposes the acceptance of discussion and controversy. There is no official truth in science; the search for any conceivable truth is only possible in a context of freedom. Official truths led Giordano Bruno to the stake and Galileo to a false retraction (“*eppur si muove*”); nevertheless official truths continue to thrive in the most unsuspected cultivars.

Publishing scientific reports, teaching and learning about essentially the same environmental problems, but unimplemented solutions, reminds us that political and economic interests of privileged groups will always have a strong voice in public policies, communication, advocacy and propaganda, in the media, in finances and even in the academic world,

Academy cannot restrict its endeavors to training professionals to work in the establishment, but should prepare them with a critical vision and competence to act responsibly in view of the challenges of our time, as agents of change to transform the current political, economic, cultural and environmental turmoil, instead of submitting to the status quo.

Scholars and scientists (who supposedly would strive to the best of their abilities to diagnose and solve the crucial problems of our time), are being used to maintain the “status quo”, as participants and collaborator in a new modality of “science-business”, in concert with a system that ignore the precautionary principle in view of money-spinning technological devices.

Nowadays, culture “is reduced to a system of explicit codes, decontextualized and often globalized” there is a global deculturation, where communication processes manufacture an “autistic becoming” (Roy, O. 2022), people being forced to abandon language, culture, and customs for the sake of the political, economic and cultural power that dominates the world.

Trying to integrate competitor parts does not lead to integration, which depends on a new conceptual level, on the non-partition of knowledge; excellence will not be obtained by the agglutination of parts, by the sum of isolated efforts, but by the construction of and convergence of all endeavors towards common objectives and full understanding of things.

This combines different areas of research and teaching, communication, advocacy and integrative policies should integrate the general curriculum, encompassing the human sciences on equal terms with the exact and natural sciences in view of an all-inclusive formation; all areas of knowledge should be interconnected in light of cross-cultural and inter-disciplinary phenomena.

Rather than perpetuate the concentration of wealth and power by promoting climate isolationism’s narrow focus on technological innovation and the financial success, colleges and universities should contribute to leverage their role to demonstrate climate justice innovations and catalyze social change toward a more equitable, renewable-based future (Kinol, A., et al., 2023)

Kevin Le Merle (Foundation for European Progressive Studies), draws attention to the gap between fundamental ethics, political discourse and resulting practices, highlighting the “instrumental importance of ethical principles in the value-laden field of climate discourse, encompassing the global redistributive climate justice in policy outcomes (Le Merle, K., 2022).

Andrew Sayer (Lancaster University), points out that social and political scholars often opt to describe local peculiarities (contingent values, interests, choices), avoiding confrontation with moral issues, the universal principles that govern common human existence, which imply the basic relationships between people and between people and the world (Sayer, A. 2011).

Johan Christensen (University of Leiden), alerts to specializations that became part of and legitimize the dominant discourses: “economic science is used to legitimize the neoliberal government regime and business interests; health experts promote a medicated approach to health problems and drive profits for pharmaceutical companies (Christensen, J., 2020).

Michael Crow explicitly (Arizona State University), condemns chemical structures and manufacturing techniques which are building, with the academic world, molecules that cause cancer; relinquish to others the solution of the problems they create; attention should be given to why people lead and to where they are leading us (Bozeman, B. and Crow. M. M., 2021).

The presence of chemical pollutants in our environment is another matter of concern. A groundbreaking epidemiological study has produced the most compelling evidence yet that exposure to the chemical solvent trichloroethylene (TCE), common in soil and groundwater, increases the risk of developing Parkinson's disease (Wadman, M., 2023).

In order to bring together areas that deal with isolated topics, it is necessary to stimulate discussion among them on controversial aspects of dominant issues, such as, for example, the emphasis on a certain type of monoculture as the flagship of world food security, which includes other fundamental issues (among them, the need for a balanced diet).

Despite loss of biodiversity, overexploitation and the beginning of a new era of mass extinction, the million species of plants and animals facing extinction, natural systems continue to be degraded, both directly by human activities and "indirectly" by the resulting climate crisis, exacerbated by exploitation of land and sea and aggravated by overall planetary pollution,

Agriculture produces significant carbon dioxide emissions; it generates methane and nitrous oxide emissions, with greater warming potential than CO₂. The combined methane emissions of the 15 largest meat and dairy companies on the planet are greater than the emissions of some of the largest countries in the world, including Canada, Russia and Australia.

Effects of micro and nanotechnology, ultra-processed food, genetic transformations, electromagnetic radiation, the widespread deployment of technologies linked to the so-called artificial intelligence, are currently under scrutiny by international organisms, in view of the effects on biodiversity, toxicity and action on human health and the environment.

Breeding birds are threatened; pesticides and tiny chemical contaminants (micro plastics) are found on remote mountain tops, in ocean water thousands of miles from human settlements, in table salt and even in the organs of humans. In recent decades, the life span of honey bees has been reduced by half, with serious consequences (Molina-Montenegro, M. A. et al., 2023)..

Transport is responsible for about 33% of the total CO₂ produced by large cities, buildings and constructions account for nearly 40% of global energy-related carbon emissions in urban areas and adjacent regions. Chaotic urban growth, lack of green areas, insecure public spaces, affect the conviviality, identities and the sense of belonging and connection.

Common environmental contaminant increased rate of neurodegenerative affliction in one population by 70%. A groundbreaking epidemiological study has produced the most compelling evidence yet that exposure to the chemical solvent trichloroethylene (TCE)—common in soil and groundwater—increases the risk of developing Parkinson's disease (Wadman, M., 2023).

There is a dissonance between the legal framework, international conventions and the practices of political and economic groups that endorse the abuse of nature, devastating huge areas through logging, mining, industrial chemical production and "commodities" to export; indigenous and preservation areas are constantly at risk of invasions related to all kinds of interests.

Inequalities of income, wealth and opportunity prevent people of lower socioeconomic status from being able to go beyond the daily concerns of life and this add to the indifference of the wealthiest people, who, immersed in the "business world", remain unconcerned, as long as their privileges and socio-economic situation is not threatened by the panorama.

There are strong interdependencies between public policies, business models and consumer practices: "technologies of power shape and guide the behavior of consumers, leading them to adopt the norms of affluent consumption by activating and playing on their dispositions acquired through market socialization" (Dubuisson-Quellier S., 2022).

No policy analysis can define consensual policy goals, or describe a policy situation, or determine policy instruments and assume institutions can achieve policy targets (Chailleux and Wokuri, 2020); what about the policies at stake, the actors in policy making and implementation, the rules governing their behavior (Lejano and Leong, 2012)?

	INTIMATE	INTERACTIVE	SOCIAL	BIOPHYSICAL
DIAGNOSIS OF THE EVENTS	SUBJECTS' COGNITIVE AND AFFECTIVE ACTUAL STATUS	GROUPS' AND COMMUNITIES' DYNAMICS AND COHESION	PUBLIC POLICIES LAW ENACTMENT CITIZENSHIP PARTICIPATION	NATURAL AND MAN-MADE ENVIRONMENTS BEINGS, THINGS
ELICITING NEW EVENTS	DEVELOPMENT OF SUBJECTS' EXISTENTIAL SELF-CONTROL	DEVELOPMENT OF GROUPS AND PRO-ACTIVE COMMUNITIES	DEVELOPMENT OF PUBLIC POLICIES AND CITIZENSHIP	PROMOTION OF NATURAL AND MAN-MADE ENVIRONMENTS
IMPACT ON EACH DIMENSION	ENHANCEMENT OF SUBJECTS' WELL-BEING	ENHANCEMENT OF GROUPS AND COMMUNITIES	ENHANCEMENT OF POLICIES AND CITIZENSHIP	ENHANCEMENT OF OVERALL ENVIRONMENT

Fig. 1 Dimensions' Role in the Generation of the Events

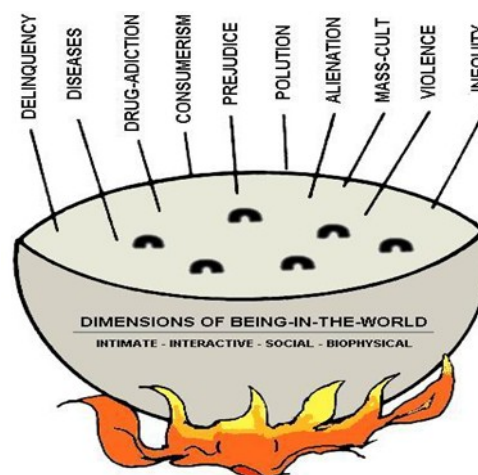


Fig. 2 The problems are generated deep inside the boiling pot, they are not in the bubbles of the surface

As several ecologists recall, “economic growth”, in any forum – academic conference, public policy debate, business round table – will certainly have its own heralds, and many will bring ideas to stimulate, maximize and sustain what they call “development”, despite basic demographic and structural disparities, climate change, loss of biodiversity and pollution.

"Systemic" interpretations, supported by theories about "complexity" and the "Anthropocene" as a new era in the history of the humanity, may inadvertently obscure the role and effective action of people and groups who control the economy and politics in today's world, who thus have yet another excuse to take no responsibility for their actions.

Problems should be defined and dealt with in view of the imbrication of all dimensions of being in the world (intimate, interactive, social and biophysical), taking into account their complementary and reciprocal synergy [fig.1], as they combine to generate the events (deficits/assets), cope with consequences (desired/undesired) and contribute for change (potential outputs).

What is in cause is the “general phenomena”, the “world-system”, with its boundaries, structures, techno-economic paradigms, support groups and rules of legitimization. The problems are deep inside the “boiling pot”, not in the “bubbles” of the surface [fig.2], object of fragmented public policies, reduced academic formats, mass-media headlines and public outcry.

In the socio-cultural learning niches, both in the academia and in the society at large, heuristic-hermeneutic processes could generate awareness, interpretation and understanding beyond established stereotypes, from a thematic (“what” is at stake), an epistemic (“how” to understand and define things) and a strategic (who, when, where) point of view (Pilon, A. F., 2019).

Environmental, Political and Economic Perspectives for the Income Decades

The contemporary and intersectional crises involving the environment, economy, society and politics, “imply a fundamental transformation of social values, beliefs and practices in many sectors of society” (Lidskog et al., 2022), a transformation that cannot be confused with the “techno-scientific corrections” to increase market dominance and profit.

The climate process must shield itself from the intense lobbying of business corporations and the fleeting glare of headlines, which should focus on the vigilance over legally binding global conventions, (including past neglected ones), national laws and the performance of politicians and public officers that may put private interests above the public good.

In the contemporary world, the convergence of ideological, political, and technological forces have driven an ever-greater concentration of economic and political power in a handful of corporations

and financial institutions that rules the planet and left the market system blind to all but its own short-term financial gains (Korten, D., 2016).

Although the richest countries have agreed to financially compensate the poorest nations for the environmental damage suffered so far, it is imperative to stop the chain of events that causes new injuries in the present and in the future; it differs from a mere car or health insurance, which covers misfortunes, but does not care for the causes associated with them.

Ironically, people continue to demand new subsidies for carbon capture technology, instead of taking steps to phase out and staying away from the growing production of fossil fuels; talks to compensate vulnerable countries for costly climate-related disasters have made little progress to reduce emissions that could prevent even worse disasters in the future.

Australia, Brazil and Mexico, (whose role was fundamental for the adoption of the Paris Agreement on climate change in 2015), are among the top 15 global emitters, and should be key players, along all the countries in the world, in coalitions within the framework of the United Nations climate regime, which, now as then, require the involvement of the entire planet.

Global leaders recently agreed to conjointly deal with climate change, ecosystem degradation, desertification, loss of soil and biodiversity through nature-based solutions (ENACT program, an initiative of the COP 27). Would this be sufficient and instrumental for the implementation of the commitments made in view of subsequent international meetings?

The ENACT program identified seven priority areas, as follows: (1) food security and land productivity; (2) adaptation and disaster risk reduction; (3) oceans and sustainable blue economy; (4) urban resilience; (5) gray-green infrastructure; (6) national and subnational mitigation strategies; (6) mobilization of private investment; and (7) health and climate.

The United Nations Environment Programmed indicated that if one billion people adopt eco-friendly behaviors, global carbon emissions could drop by 20%. But this depends less on individual decisions, than on the political and economic prevailing policies, which should prioritize, among other things, green energy and urban and interurban transport.

Recycling and reusing materials could play a key role in limiting emissions, as their production processes are highly emissions intensive. Nevertheless, domestic utilities, private cars, are purposely produced for a short lifespan; they are put out of line in a few years and simple repairs are no longer possible due to the lack of technical assistance, components and supplies.

Although Brazil and the United States are back and Europe, China, Japan are launching new commitments, they must enshrine in their laws the duties of corporations towards the environment throughout their operations worldwide (international treaties should hold transnational corporations to account for environmental violations).

Earth's regeneration and mankind's are the faces of the same coin and should be addressed simultaneously, for their mutual support; a set of values, norms, policies should prioritize socio-ecological objectives, aesthetic, ethical and cultural values as the fulcrum of public policies, advocacy, communication, research and teaching programs.

Besides speeches, concrete actions are expected, verifiable by scientific and environmental protection organizations, at local, regional, national and international levels: a good policy would be to carry out an inventory of the conditions that enable or prevent the achievement of these objectives in different countries of the world.

Problems and the contexts in which they occur should be re-interpreted and restructured through an ecosystem lens, thus altering the ways to address them. Bioclusters, new socio-cultural learning niches, both in the academia and in the society at large, should explore the conditions for transitioning to new forms of being in the world (Pilon, 2020).

In this sense, communication, advocacy, public policies, research and teaching programs should:

- 1) define the problems in the core of the “boiling pot”, instead of reducing them to the bubbles of the surface (effects, fragmented, taken for granted issues);
- 2) combine all dimensions of being in the world (intimate, interactive, social and biophysical) in the diagnosis and prognosis of the events, assessing their deficits and assets, as donors and recipients;
- 3) promote the singularity of (identity, proper characteristics) and the reciprocity (mutual support) between all dimensions, in view of their complementarity and dynamic equilibrium;
- 4) prepare the transition to an ecosystem model of culture, a long-awaited systemic and infrastructure change, towards consistency, effectiveness and endurance.

REFERENCES

- Chailleux, S. and Wokuri, P. (2021). Are positivistic approaches to policy-making able to shed light on ecological transition? *Proposal for the 5th International Conference on Public Policy*, Barcelona. <https://www.ippapublicpolicy.org/conference/icpp5-barcelona-2021/panel-list/13/panel/are-positivistic-approaches-to-policy-making-able-to-shed-light-on-ecological-transition/1101>
- Christensen, J. (2020). Expert knowledge and policymaking: a multi-disciplinary research agenda, *Policy Press*, 49 (3), 455–47 <https://bristoluniversitypressdigital.com/view/journals/pp/49/3/article-p455.xml>
- Bozeman, B. and Crow. M. M. (2021), *Public Values Leadership: Striving to Achieve Democratic Ideals*, Baltimore: John Hopkins University Press.
- Dubuisson-Quellier S. (2022). How does affluent consumption come to consumers? A research agenda for exploring the foundations and lock-ins of affluent consumption, *Consumption and Society*, 1(1), 31-50.
- Kinol, A., et al. (2023). Climate justice in higher education: a proposed paradigm shift towards a transformative role for colleges and universities. *Climatic Change*, 176(15). <https://doi.org/10.1007/s10584-023-03486-4>
- Korten, D. (2016). The New Economy: A Living Earth System Model, *The Living Economies Forum* <https://davidkorten.org/new-economy-system-model/>
- Le Merle, K. (2022), *Applying Climate Ethics to Policy: The Case of an EU-China Carbon Border Adjustment Mechanism*, UNU Institute on Comparative Regional Integration Studies.
- Lejano, R. and Leong, C (2012). A hermeneutic approach to explaining and understanding public controversies, *Journal of Public Admin. Res. & Theory*, 22(4), 793-814.
- Lidskog, R. et al., (2022). Environmental expertise for social transformation: roles and responsibilities for social science, *Environmental Sociology*, 8(3), 255-26. <https://doi.org/10.1080/23251042.2022.2048237>
- Molina-Montenegro, M. A. et al., (2023). Electromagnetic fields disrupt the pollination service by honeybees, *AAAS Science Advances*, 9(19). <https://www.science.org/doi/full/10.1126/sciadv.adh1455?et rid=198145672&af=R&et cid=4729282>
- Pilon, A. F. (2019). Returning the Earth to Mankind and Mankind to Earth: an Ecosystemic Approach to Advocacy, Public Policies, Research and Teaching Programmes, *EcoEvoRxiv*, eScholarship Publishing at the California Digital Library. <https://doi.org/10.32942/osf.io/95wu4>

Pilon, A. F.. (2020). Thinking and Acting in a Disrupted World: Governance, Environment, People, Inequality and Disease, *EuroScientist Journal*. <https://www.euroscientist.com/thinking-and-acting-in-a-disrupted-world-governance-environment-people-inequality-and-disease/>

Roy, O. (2022). L'Aplatissement du monde : la crise de la culture et l'empire des normes, Éditions du Seuil.

Sayer, A. (2011). Why Things Matter to People: Social Science, Values and Ethical Life, *Cambridge: Cambridge University Press*.

Wadman, M., (2023). Widely used chemical strongly linked to Parkinson's disease. *Science*, 15 May 2023 <https://www.science.org/content/article/widely-used-chemical-strongly-linked-parkinson-s-disease>