



Book Review

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New Earth Politics: Essays from the Anthropocene.

Edited by **Simon Nicholson and Sikina Jinnah** (both from American University).
Earth System Governance Series. Cambridge MA: MIT Press, 2016, 442 p., \$34pb.

“Humans now influence all biological and physical systems of the planet. Almost no species, land area, or part of the oceans has remained unaffected by the expansion of the human species. Recent scientific findings suggest that the entire earth system now operates outside the normal state exhibited over at least the past 500,000 years. Yet at the same time, it is apparent that the institutions, organizations, and mechanisms by which humans govern their relationship with the natural environment and global biogeochemical systems are utterly insufficient—and poorly understood.”

Frank Biermann (Utrecht University; WAAS Fellow) & **Oran R. Young** (UC-Santa Barbara)
Earth System Governance Series editors, in Foreword, p. xi

As of mid-2016, the number of humans on planet Earth exceeded 7.4 billion.* By 2050, barring a major calamity, the population will likely swell to more than 10 billion. As noted by the editors of this important volume, “the collective impact of our species is vast,” and “humanity is stretching the world to and beyond ecological limits,” such that an Earth 2.0 is being created, where the challenges are “immediate, pressing, and unprecedented.” (pp 1-2)

In the year 2000, Nobel Prize-winning chemist and WAAS Fellow Paul Crutzen and biologist Eugene Stoermer coined the term *Anthropocene* for a new geological and climatic epoch characterized by this human dominance of Earth’s major processes. The term is gaining acceptance by many scientists and is being considered for formal adaptation by scientific groups. The New Earth frame used here is not meant to supersede or challenge the power of the Anthropocene concept, but rather to complement it.

This illuminating book is distinguished by a unique format of eight paired sections, where different authors offer contrasting essays with points of constructive overlap. Moreover, each of the 16 non-technical essays are undergirded with both extensive footnotes and bibliography. Although the book is hardly encyclopedic in discussing all issues raised by the Anthropocene, it is certainly a broad introduction.

* **2016 World Population** Data Sheet. Washington: Population Reference Bureau, August 2016. As of mid-2016, PRB calculates world population at 7.42 billion, with projected population in 2050 at 9.87 billion. Projections have been creeping upward, however, so it is likely that they will exceed 10 billion in 2018. Unfortunately, there is a widespread tendency to use lower outdated figures without attribution both for current population rounded to 7 billion and for the 2050 projection, usually at 9 billion.

1. CAUSES OF THE NEW EARTH. *Ken Conca* (American University) highlights three inflection points that seem likely to condition environmental politics on the New Earth: complications of economic globalization, a missed political window in world politics, and decline of the sustaining middle class (in contrast to over-consumers and the marginalized); thus strategies of the modern environmental movement are unlikely to be effective. More emphasis is needed on the “rights-and-risks approach”: environmental human rights and risk management. *Daniel Deudney* and *Elizabeth Mendenhall* (both Johns Hopkins University) describe an emergent planetary green civilization. Their “conditional optimism” sees a wealth of visions and ideas, new sustainable practices, and institutional arrangements that are partial solutions to the overarching environmental problem. The greening of religion and green religions have been a salient feature, as well as greening economics from anti-capitalism to “natural capitalism,” green urbanism, and industrial ecology. But, as climate change rapidly emerges as the master environmental problem, previous environmental programs need reassessment, e.g. nuclear power to replace fossil fuels.

2. SCHOLARSHIP AS ENGAGEMENT. After a long career on the science/policy interface, *Oran R. Young* (UC-Santa Barbara) recounts his involvement in maintaining the Arctic as a zone of peace and in crafting the UN’s new Sustainable Development Goals, where goal-setting is seen as a form of governance, concluding that working back and forth between theory and practice has been “enormously helpful” in crafting governance in stateless settings. WAAS Fellow *Richard Falk* (UC-Santa Barbara), author of *This Endangered Planet* (1971) and much more, expresses skepticism about devoting energy to influence national governments, as well as world politics beholden to the ethos of “old earth.” Rather, “the center of gravity of New Earth scholarship has been moving in the direction of biopolitics and spiritual renewal as vital ingredients of a restorative ecological response.” (p.100) The gap between feasibility and necessity cannot be closed without a transformational post-Marxist social mobilization from below built around a New Earth synthesis.

3. PEDAGOGIES OF HOPE. *Karen T. Litfin* (University of Washington) outlines the utility of contemplative approaches to teaching and learning about sustainability, arguing for working with deeply felt emotions and somatic responses; enrollment in her course on Global Environmental Politics has greatly expanded since begun in 1991, but a purely cognitive approach tends to elicit fatalism and paralysis. Contemplative inquiry opens the space to envision new possibilities. A “contrarian view” is expressed by *Michael F. Maniates* (Yale-NUS College, Singapore), who states that “anything less than straight talk about the enormity of our predicament feels cowardly and paternalistic;” we must look reality squarely in the eye no matter the cost. The problem we face is not some dearth of hope, but a set of walls and canals that imprison our hope in cell blocks of despair and immobility. He discusses eight hope-restricting myths, e.g. the state prevails, things change only in a crisis, top-down change is bad, a few simple things done by all can change the world.

4. NEW EARTH INSTITUTIONS. *Kate O’Neill* (UC-Berkeley) examines state-led global environmental institutions such as the UN Environmental Programme; the system is highly piecemeal with few formal connections, it does not adjust fast enough to changing and escalating challenges, there is “summit fatigue” and a tendency to lowest-common-denominator bargaining, and the convention for bargaining is too slow and provides too little too late. Still, the state-led system has not been static, and many global environmental

problems are likely to have been much worse without it. *Maria Ivanova* (University of Massachusetts-Boston) looks at UNEP as the anchor institution for global environmental governance, and highlights its major development milestones. She also considers efforts to design and reform the institutional structure for the environment at the four major global conferences over the past four decades. Concludes that the environment-economy dichotomy needs to be reframed, and that a new ethic of global citizenship is essential for effective, legitimate, and equitable governance.

5. SOCIAL MOVEMENTS AND CIVIL SOCIETY. *Peter J. Jacques* (University of Central Florida) asserts that, “despite important impacts, environmental civil society—the transnational network of environmental NGOs and other components of the movement—has not had the impact necessary for humanity to live on this New Earth.” (p.222) True sustainability requires changing the basic operating principles of world civilization, where real public interests matter more. But neoliberalism places the interests of capital over the Earth and society, and environmental civil society has not penetrated the structures that govern market civilization. Economism continues to encourage “a violent and rapacious form of growth,” while environmental solutions have been narrowed to green consumerism of products. Viewing our most likely future planet as “Venus Junior,” *Erik Assadourian* (Worldwatch Institute) insists that preventing this future, if possible, “will require a radical reformation of the environmental movement as either a bolder political force, a missionary religious force, or ideally both.” (p.247) The current environmental movement “at its best is doing little more than slowing the spread of the global cancer that human civilization currently has become and at its worst is legitimizing the unsustainable growth and consumer culture that the movement is embedded in.” (p.248) “Ultimately, the only way we get to a sustainable future is by reining human civilization back within planetary boundaries, and that will require dramatic degrowth of energy and material usage, consumption, and the total population.” (p.252) A new “ecophilosophical missionary movement” may offer more hope than light green environmentalism, perhaps leading to a day where ecocracies (ecological theocracies) become the dominant form of state—just as Christian, Islamic, and Buddhist kingdoms once guided the world.

6. NEW EARTH GEOPOLITICS. *Joyeeta Gupta* (University of Amsterdam) develops the concept of ecospace—the resources and ecosystems that humans share—as a source of growth, conflict, and cooperation in the global arena. The New Earth is marked by emerging ecospace realities that require a new social contract: limited abiotic resources (minerals, metals, rare earths), limited sinks, the need to maintain ecosystem services, and unlimited demand for fixed resources (land, topsoil, freshwater). “If we overuse this space, we run the risk of crossing planetary boundaries.” Global sustainable development governance must take these issues into account, as well as persistent North-South and rich-poor challenges. But the sustainable development community has now split into two subdiscourses: the green economy (focusing on internalizing externalities, industrial transformation, dematerialization, and decarbonization) and the inclusive development paradigm (reinventing the role of the state as provider of amenities, infrastructure, and the rule of law for all). Geopolitics in an anarchic world leads to fragmentation and incoherence. “In the Anthropocene, global constitutionalism and the rule of law are increasingly becoming an escapable necessity.” (p.287) *Judith Shapiro* (American University), author of *China’s Environmental Challenges* (2nd ed, Polity Books, 2016), argues that China’s impact on the planet is so great that it deserves a

major place in any consideration of the future global environment. She provides an important overview of China's planetary footprint: China's contribution to climate change, traditional Chinese cultural practices that endanger biodiversity and animal welfare, the Chinese shift to a meat-based diet, China's projection of economic clout overseas, and how this resources push has raised geopolitical tensions and catalyzed geopolitical risk.

“An Anthropocene lens emphasizes an integrated perspective of evolving social-ecological systems that require not only active management of human influences, but also the adaptation of human societies to inescapable changes.” – Frank Biermann

7. CLIMATE CHANGE AS NEW EARTH'S DEFINING PROBLEM. *Navroz K. Dubash* (Center for Policy Research, Delhi) discusses energy transformation in four narrative frames: climate change as the most urgent global case for an energy transition, energy security to meet domestic needs (the dominant narrative in India), energy poverty as a central theme for many developing countries, and local environmental pollution. These multiple narratives can lead to dissonance and institutional fragmentation, but are important to understand and map complexity and linkages. “Working within well-defined silos and categories is no longer a viable option...engagement with energy systems in all their complexity is a necessary starting point.” (p.333) *Wil Burns* and *Simon Nicholson* (both from American University) outline problems of governing climate engineering: the wide array of speculative technologies and techniques that could help avoid passing critical temperature thresholds while the global community moves toward decarbonization. Consideration of climate engineering dates back to the President's Science Advisory Committee in 1965, and in recent years has been getting serious consideration. Options include stratospheric sulfur injection to weaken monsoons, carbon dioxide removal schemes, carbon sequestration, ocean fertilization, etc. Sustainable governance requires a regime with broad range and legitimacy.

8. NARRATIVE FRAMES FOR LIVING ON A NEW EARTH. *Paul Wapner* (American University) considers the first wave of environmentalism as a counter-narrative to the dominant narrative of the Industrial Revolution, critiquing the rapacious grab on resources, inhuman working conditions, and the threats to wilderness. Over the decades, environmentalism deepened and expanded its critique to include mass consumerism, population growth, loss of biodiversity, and widespread use of toxics. But environmentalists have always been underdogs and Cassandras, pegged as misanthropes and espousing an apocalyptic sensibility. Indeed, environmentalism will probably always fight an uphill battle and live at the margins of collective life. *Peter Dauvergne* (University of British Columbia), author of **Environmentalism of the Rich** (MIT Press, Oct 2016, 218p), explains how multinational business has tried to control the sustainability debate and rewrite the narrative of sustainability to expand business, reduce costs, and gain more control over suppliers through certification programs and codes of conduct. Scholars should weigh the evidence, debunk corporate rhetoric, interrogate collaborating NGOs, and reveal what is really going

on. Specific comments are made about Walmart and Coca-Cola. Acknowledging the New Earth in the frame of “an age of unsustainability” can bring to the fore the need to think in geological time and the shadows of consumption.

In a concluding Epilogue, **Frank Biermann**, co-editor of the Earth System Governance Series of ten books so far and author of **Earth System Governance: World Politics in the Anthropocene** (MIT Press, 2014, 267p) writes “one irrefutable conclusion” of this book: “today we are living on a New Earth” which has aptly found its new scientific title as a distinct and unprecedented epoch. “An Anthropocene lens emphasizes an integrated perspective of evolving social-ecological systems that require not only active management of human influences, but also the adaptation of human societies to inescapable changes.” (p.407) Five elements of changes in political analysis and practice are needed: revisioning institutional architectures, new normative debates and discourses such as the “2 degree target” and “tipping points” for planetary boundaries, new efforts to integrate social science disciplines to understand socioecological systems, seeking new alliances between political science and political practice, and envisioning alternative futures that can protect and enrich the lives of all people while maintaining life-supporting functions of the planet, especially transformative ideas based on sound theory and evidence.

COMMENT: THE LONG AND BUMPY ROAD AHEAD

New Earth, the new Anthropocene epoch, and planetary boundaries* are powerful and complementary concepts. They are broader than climate change, and similar to the Club of Rome’s “world problematique” basket of concerns about environmental degradation, poverty, insecure employment, economic disruptions, pollution, population growth, and depletion of nonrenewable resources, which led to its famous *Limits to Growth* report in 1972, launched with a “sense of extreme urgency.”† The report received widespread attention in the 1970s, but none of the three new concepts have received much attention or debate to date. The “New Earth” frame is convincing, to me at least. The problem is making it widely visible in a world of infoglut so that it leads to necessary action by many governments and NGOs.

This book on New Earth Politics is a small step forward. The eight sections on causes, scholarship and policies, pedagogies of hope, state-led institutions, social movements, geopolitics, climate change remedies, and narrative frames all offer useful perspectives.

But at least two additional perspectives deserve to be added, as concerns institutions and social movements, as well as politics and learning.

The good news, potentially, is that the state-led institutions, academic institutes, and especially independent think tanks and international NGO action groups are far greater in number than perhaps anyone realizes. **The Security & Sustainability Guide**, a WAAS project underway since 2014, has now identified over 1,500 organizations in the August 2016

* The “planetary boundaries” concept was introduced in 2009 and is explained in several books, e.g. **Bankrupting Nature: Denying Our Planetary Boundaries, a Report to the Club of Rome** by Anders Wijkman and Johan Rockström (Earthscan/Routledge, 2012), **Big World Small Planet: Abundance Within Planetary Boundaries** by Johan Rockström and Mattias Klum (Max Strom Publishing, 2015), and **The Age of Sustainable Development** by Jeffrey D. Sachs (Columbia University Press, 2015, Chapter 8, pp181-218).

† **The Limits to Growth: A Report for The Club of Rome’s Project on the Predicament of Mankind** by Donella H. Meadows et al. (Universe Books, 1972, p.196).

Interim Draft.* By early 2017, at least 300 more organizations will be added. They include think tanks concerned with security and/or sustainability (in that sustainability is ultimately a major security problem, and vice versa), climate and/or renewable energy, biodiversity, water, oceans, pollution, human rights, etc. But if Kate O'Neill (above) complains that the system of state-led global environmental institutions is "highly fragmented," the myriad "S&S" organizations are far more so. The "S&S Guide" has identified at least a hundred alliances, consortia, and networks to overcome this fragmentation, but much more collective leadership is needed to promote a more coherent message and build political visibility and strength.

This leads to the bad news. It is time for environmentalists and sustainists to get real about politics and recognize it as an ongoing struggle to get good ideas in power, embed them in wise law and policy, and keep them from being eroded or reversed. At the same time, bad ideas for the New Earth must be fought off,† and the political opposition favoring the status quo or going backwards must be recognized. No better example is available than the 2016 election for president of the United States, where a climate denier won the highest office in the country, arguably the most powerful in the world. Climate change, although briefly mentioned in passing, was not an issue in the long and divisive campaign. Suffice to say that climate policy will very likely turn backwards in the US, and perhaps the world if America pulls out of the Paris climate agreement, as promised by the new president.

It is time to get smart about promoting New Earth politics. Paul Wapner (above) argues that environmentalists have always been underdogs at the margins of collective life. But this need not be so if they aim to mainstream their message and avoid the widespread "sandbox syndrome" of self-marginalization. They can do so, by example, by stressing green jobs, the co-benefits of wise climate policy (better health, secure energy, cost savings), truth-telling green economics, public investment rather than mere spending, and climate change as a "threat multiplier" that will make security and migration concerns far worse. And they can push businesses large and small toward greener capitalism and the ethical triple bottom line (people, planet, profits), while recognizing that business will always fall short of Ideals and there will always be some greenwashing and self-congratulation. Peter Dauvergne (above) is correct in pointing out that multinationals promote sustainability to their own advantage and are not always sincere. But capitalism is not going to go away, and can and should be prodded by the UN Global Compact, the World Business Council for Sustainable Development, the Natural Capital Coalition, the Global Reporting Initiative, the Climate Bonds Initiative, and scores of other organizations urging sustainability that are identified in a new report derived from the S&S Guide: *Greening Capitalism, Quietly: Seven Types of Organizations Driving the Necessary Revolution* (Feb 2017, 46p).

The rightward turn in American politics, as well as in many European nations,‡ is fueled in part by anti-immigration and anti-globalization nationalism. And the growing wave of

* **The Security & Sustainability Guide: 1500+ Organizations Pursuing Essential Global Goals** compiled by Michael Marien, David Harries, and Michael Sales (Interim Draft, August 2016, 277p; available at www.securesustain.org).

† An example of a relatively sophisticated approach between "alarmist" and "denier" camps that may soon underlie US climate policy is **Lukewarming: The New Climate Science That Changes Everything** by Patrick J. Michaels and Paul C. Knappenberger (Washington: Cato Institute, Sept 2016), which argues that "the evidence of some human-caused climate change is compelling but it is hardly the alarming amount predicted by the models." Worse, outright denial of climate change may soon direct US policy.

‡ **Far-Right Politics in Europe** by Jean-Yves Camus and Nicolas Lebourg (Belknap Press of Harvard University Press, March 2017), on staunchly nationalist parties.

immigrants is likely to increase as environmental problems worsen, thus creating a vicious circle eroding human security. World tensions are rising due to terrorism and cyber-security, which draws attention and resources from New Earth concerns. The long and bumpy road ahead can easily accelerate the various environmental and economic calamities that many already see. Or the immediate years ahead may spark the “radical reformation of the environmental movement” prescribed by Erik Assadourian (above). Massive uncertainty lies ahead, and it is far too soon to forecast whether 21st century rationality will prevail. But, as Michael Maniates insists (above), we must “look reality squarely in the eye.”

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