

SUSTAINABILITY'S PREHISTORIES

Beyond Smooth Talk Oxymorons, Ambivalences, and Other Current Realities of Sustainability

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Do we know where we are going with sustainability? Many say that the goals are clear enough – namely, to protect nature, even save the Earth; and that each realm of practice, from economics to policy and from design to manufacturing, should contribute its bit to this noble goal. But such a goal has “shaky grounds,” given that nature has no “norm” around which specific sustainability targets can be set (Worster 1993: 133–45). Ecologists themselves speak of nature as inherently disorderly, and can no longer claim to set the standards for a “healthy nature” with certainty (there can be no set “steady-state population” for fish; nor an “optimum yield” for a forest, for example). Consequently, if the science of ecology cannot determine the targets for sustainable use of seas and forests, how can others set paths for sustainability in other realms of practice?

The above question pertains to design fully. If it may have been possible for visionary designers of the previous century to chart across space and time and rationalize the processes of the built environment and the distribution of planetary resources (as in Fuller's geoscope projects or Doxiadis's plans for a steady state for urbanization), one can no longer claim to possess such magic formulas. If for no other reason, nature's own constant flux defies definitive prescriptions for the appropriate type or limits of human interventions. Of course, one could still argue that even if we accept that "appropriate human intervention" cannot be defined in absolute terms, designers still can and must assume the responsibility to protect our collective biological whole by moderating the impact on it. Indeed, this is a direction supported by ecologists, who more or less consent that "slow rates of change in ecosystems are 'more natural', and therefore more desirable than fast rates" (Worster 1993: 141). Following that logic, design too could focus its objectives on tempering the impact of human production. And indeed, this philosophy of moderation is the direction toward which much current practice in green architecture or ecological design has been moving.

However reassuring such reconciliatory tactics may appear, they end up triggering more questions and doubts once one looks at the way their criteria and priorities are defined. Even if we made the big assumption that global society could coordinate its efforts in an equitable manner, should it protect nature by managing its resources for human use? Or should it be less hubristic, and nurse it as a fragile entity or as natural beauty? Or is it impossible to save nature unless humanity radically challenges the impulse to perpetuate growth? For strategies that turn the protection of nature to a managerial task of sustaining the dominant productivist/accumulation ethic – following in the footsteps of the United Nations' development agendas, the Brundtland Commission for the environment, all the way to current proclamations for sustainable design as a "win-win situation" where "you make money and save the planet too" – one question is for how long, given that there have seldom been human societies that sustained their organization, institutions, and economic patterns for more than a few centuries (Worster 1993: 134)? For approaches that assign current human knowledge with the task of correcting the previous harm it inflicted on nature, how different are these approaches from hubristic views of humans as masters of nature, except in the reverse (Harvey 1998: 328)? Conversely, for approaches that pose much more uncomfortable questions about our mode of living and ask for a radical restructuring of our societies and their economics – following the lead of a line of thinkers from Ernst Friedrich Schumacher to Vandana Shiva – one question that keeps reappearing is that of how their radicalism can guard against corruption by dominant forms of power. And as for those strategies that diametrically oppose anthropocentrism in favor of eco-centric approaches, to what extent should they also include, as part of their

assessment of ecological processes, the transformative actions of human beings during the past few centuries (*ibid.*)?

The purported multiplicity and comprehensiveness of several current sustainability strategies that claim to account for environmental-plus-social-plus-economic factors may be one way to bypass the above questions, but it does not make them go away. However smooth, such impossibly general, simplified (and technocratic) narratives of holism do not address how behind manifestations of human “respect” or “partnerships” with nature, specific priorities can be contested, their presuppositions can be conflicting, and their beneficiaries can be divided, not to mention that particular desires can be filtered through political agendas or media tactics. Consider for example how easily the notorious Brundtland Report, which advanced the cause of “sustainable development” in the 1980s for “our common future,” cast the world’s poor as agents of environmental destruction. Once the analysis of environmental problems placed the emphasis on deforestation and desertification (rather than industrial pollution), the conclusion was that “[p]overty reduces people’s capacity to use resources in a sustainable manner; it intensifies pressure on the environment.” This is how economic development was cast as the savior of global environment (Sachs 1992: 26–37). The uneven dynamics in environmental strategies can be identified not only in geopolitics but also in interdisciplinary partnerships: sustainable development’s alleged balancing of economics and ecology often assumes the utilitarian and the economic take precedence over the ethical and the cultural (see for example, Esteva 1997: 6–25, or Pyla 2008: 14–17).

What the history of twentieth-century environmentalism has taught us very well is that if we can share common fears about the environment, common goals are neither obvious nor so easily agreed upon. This is obvious in the realm of design as well: let us take the example of architecture, where technical questions on energy consumption, materials, and building footprints are considered very important in lessening the impact of buildings on the environment; yet, should not questions of environmental and social justice be given analogous weight? Why are trends like adoptive reuse celebrated as sustainable because they combine the economy of resources with profitable business, when the consequences of gentrification are hardly taken into account? And why does design research and innovation that accumulates important data on environmentally sensitive construction materials and methods not also consider the ethical questions around the corporate ownership (and limited dissemination) of this knowledge?¹

This is precisely where the realm of architectural design gets confronted with not only the “shaky ground” of sustainable strategies mentioned earlier, but also the “oxymoron” of its rhetoric and the “fuzzy” logic of their interventions – to quote only a few of the critics (Sachs 1999: 71–90; Jarzombek 2003: 6–9). And this is where

sustainability is tossed around as an ethical framework, a managerial method, a governance mode, even a business model, without contemplating a most important predicament: now that sustainability has the added burden of no longer being at the margins, but at the hegemonic center of design concerns, the realm of design has the responsibility to vigilantly consider how this “magic word of consensus” came about, and how its goals, whatever they are, allow room for complexity and nuance. This is where history becomes central to the debate, because it can introduce critical angles from which to contemplate the ambiguities, limitations, and potentials of sustainability. Not only in a one-way direction, whereby history teaches lessons for today, paths to pursue, or traps to avoid. Rather, by critically interpreting earlier conceptions of nature, ecology, environment, and sustainability, history can lead to reconceptualizations of not only design tasks and priorities, but even the methods for history itself.²

This special issue tackles these possibilities for both design and its history by focusing on mid-twentieth-century architecture, which introduced dramatic reorientations of the design of the built environment against the background of unfolding global crises: the nuclear threat that fueled the emerging ambivalence toward modernization and industrialization; the processes of decolonization and nation-building along with the Cold War that constantly reshaped perceptions of a global “commons”; and later the oil crisis that introduced more ecological and political imperatives that transcended national borders: all these created the backdrop for unprecedented architectural experiments. In the long history of the alignments between social reformist visions in architecture and arguments for curbing industrial pollution or for preserving environmental “quality,” mid-twentieth-century architectural design stands out for the similarities it bears to today. Even if the radical effects of climate change, the melting of ice and greenhouse emissions make today’s global environmental problems seem unprecedented, there are many current realities rooted in 1950s thought: that era’s ambivalence toward the role of science and technocracy resonates with the debates on today’s “techno-optimism”; the alignment of design and ecology with money and the media echoes diversionary tactics of today’s market. And it is clear that it was the development frenzy of that era that led to current predicaments of globalization.

The four articles presented here give glimpses into the complex entanglement of mid-twentieth-century modern design with the history and politics of ecological concerns, to form important prehistories of what we came to understand today as sustainability. Although they cannot possibly sample the breadth of mid-twentieth-century design strategies, the articles expose important ways in which environmentalist causes shaped architectural attitudes to technocratic managerialism and mysticism; reformism and radicalism; consumerism and state control. Daniel Abramson’s article, “From Obsolescence to Sustainability, Back Again, and Beyond” returns us

to a time just before the advent of sustainability in the US, to remind us how architectural design held the principles of expendability and obsolescence – rather than conservation and adoption – as inevitable paradigms. The comparison between two apparently oppositional, but almost synchronous paradigms of obsolescence and sustainability underlines the historicity of design's ethical imperatives and inevitable causes, and exposes their myths and contradictions. Grace Ong Yan's "Wrapped Aluminum Design at the Reynolds Metals Company: From Cold War Consumerism to the Age of Sustainability" offers another snapshot of historical moments just before and just after sustainability entered the scene, to contemplate other processes of reinvention that architectural design underwent. Focusing on the eventful history of aluminum wrapping, Ong Yan's article shows how the use of this product, which flourished in a Cold War context that celebrated consumerism, mass production, and disposal, was soon refashioned as eco-friendly, to tell an important story about the complex (and sometimes counterintuitive) ways in which sustainability strategies become intertwined with the logic of production, consumption, money, and political correctness. Jonathan Massey's "Buckminster Fuller's Reflexive Modernism" revisits a renowned figure of mid-twentieth-century ecological design strategies, to locate a moment when design concerns with the environment began to align themselves with state networks of centralized control. Exposing the technocratic nationalism hovering behind Buckminster Fuller's technical talk for resource distribution and economic optimization, the article alerts us to the shocking proximity between radical design claims and political power. In mapping countercultural efforts to grasp an "ecological totality," Simon Sadler's "Diagrams of Countercultural Architecture" unveils how the contemplation of the "whole" did not always mean the rationalized search for comprehensiveness (as in the case of Fuller), but it also aligned itself with a radical rethinking of the relationship of design to society and nature – a rethinking which opposed, rather than aligned itself with, consumerism, capitalism, and the state. Simultaneously, the article alerts us of the pitfalls of this alternative; namely, the tacit determinism of 1960s holistic philosophies.

Whether they speak of geodesic domes or diagrams of ecological order, or whether they contemplate adaptive reuse or "houses of ease," the mid-twentieth-century design strategies discussed in this special issue challenged mainstream modernist aesthetics and practices by taking a position on environmental predicaments of the time. Taken together, their histories offer important insights on the fine lines between ethical postures and political tactics; the entanglement of technocratic prescriptions and the media; the overlaps of mysticism and the market. What can all this mean today, when environmentalism is no longer at the margins of architectural debates? A great deal. Because the main problem today is that as environmentalism transforms itself "from a knowledge of opposition to a knowledge

of domination” it becomes, in Wolfgang Sachs’s words, “sanitized of its radical content and reshaped as expert neutral knowledge, until it can be wedded to the dominating worldview” (Sachs 1993: xv). Under these circumstances, contemplating those insights of mid-twentieth-century design is crucial to allowing space for asking the difficult questions, facing the contradictions, and considering all nuances.

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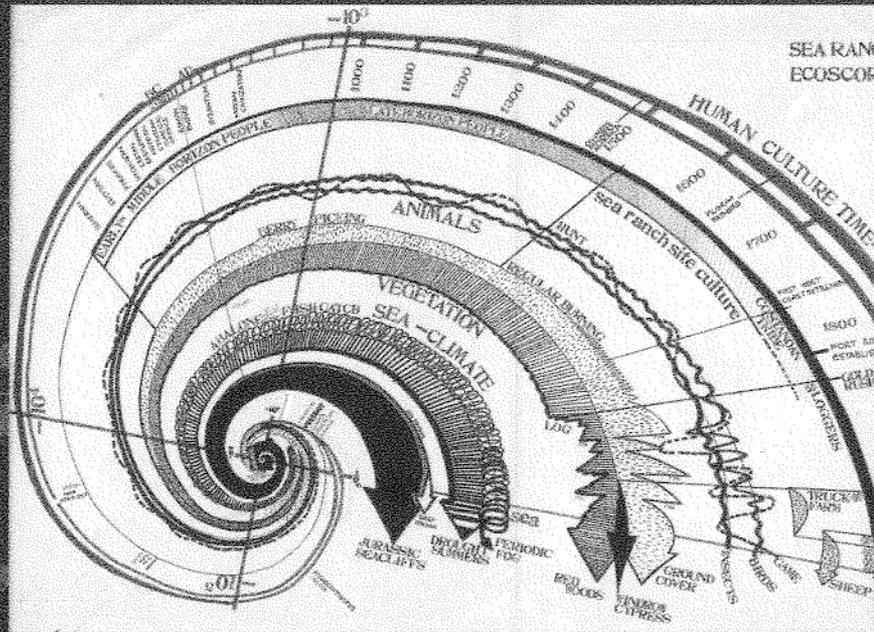
1. For an example of such a case, see Griffioen 2008.
2. For ways of reconceptualizing history itself, see for example, Gissen 2009.

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