

“We need a general practitioner of planetary medicine.”

— James Lovelock

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THE LANDSCAPE PROJECT

EDITED BY

RICHARD J. WELLER & TATUM L. HANDS



ACKNOWLEDGMENTS

By gathering the landscape architecture faculty at the University of Pennsylvania Weitzman School of Design and asking them to write about their current interests, this book is something of an homage to the department from which the authors are drawn and which I have been fortunate enough to chair for the last decade. That good fortune is due in part to my predecessor, James Corner, who, together with the faculty, entrusted me with the leadership of the department back in 2013. The culture of the department has always been one dedicated to critically advancing landscape architecture, not only as a virtuous profession, but as an art and a craft. Implicit in that is also belief, romantic though it may seem, that the landscape project is something potentially world changing and the essayists, each in their own distinct way, extend that tradition here.

In doing so, this book maps out the breadth and ambition of what is meant by the project of landscape architecture today. This could have been done with a symposium and a different cast of characters but, as a way of thanking my colleagues for their support and their dedication to the department, I chose instead to make a book that showcases them as a teaching team. In this sense the book could just as well have been called “The Education of a Landscape Architect” for it highlights the range that any student entering this field should navigate in order to find *their* landscape project.

I hasten to add that in addition to the faculty featured in the book, there are other faculty and many part-time instructors who have ensured, and continue to ensure, that the Department of Landscape Architecture at the Weitzman School of Design is an exceptional place to study. They include Anthony Aiello, Craig Allchin, Kira Appelhans, Javier Arpa, James Bennett, Aaron Booher, Megan Born, Alexa Bosse, Molly Bourne, Bart Brands, Ryan Buckley, Greg Burrell, Stephanie Carlisle, Ed Confair, Muhan Cui, Dilip da Cunha, Colin Curley, Karolina Czaczek, Candace Damon, Anna

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Richard J. Weller
Philadelphia, April 2022

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THE LANDSCAPE PROJECT

Richard Weller

The word “project”—an individual or collaborative enterprise that is carefully planned to achieve a particular aim—is clear enough, but that muddy old word “landscape” requires some clarification. For the public, landscape is probably still associated with images of countryside or national parks. But it is also possible that since images of the earth are by now familiar, many would extend their idea of landscape to the marbled swirl of the whole planet as seen from space. Certainly, this iconic view of the whole earth turned cosmology on its head and profoundly changed our worldview – signifying at once a global economy and global ecology. But if landscape is something with which we want material agency, then, as we advise our students, it is best not to start with landscape as a picture or a sphere, but rather with what is right beneath one’s feet. And that there isn’t much to see down there is precisely the point. One has to research and imagine the cultural and biological history of this ground. One has to be humbled, but not incapacitated by its density and its deep time. But above all, the landscape architect has then to look up and answer the question, “What now?”

In its purest sense, etched into the surface of the earth, the landscape project of designing the ground is an art of orientation. It seeks to provide forms of continuity—or, as the case may be, discontinuity—between past, present, and future and to explicitly situate the human subject within certain representations of place. However, the institutionalization of *genius loci* as the desideratum of a profession that is tangled up in the chicanery of commercial development often results in the trivialization and



misappropriation of place. It is now routine for landscape architects to claim the creation of an authentic sense of place in their designs when in fact they have often produced little more than a cartoon, and one that is easily coopted by the very forces landscape architects like to say they are resisting through their work.

When recourse to place is championed as the authentic locus of resistance it has too often simplified its subject and underestimated its opposition. Critical Regionalism,¹ in the form of the architectural or landscape architectural project, could never seriously be expected to resist industrialization, suburbanization, and globalization. What could? But what these forces of change did not factor into their planetary spree was climate change. Climate change forces the reappraisal of the values, mechanisms, and processes by which modernity prevails, which in turn leads to a reevaluation of how we use and abuse land. As the climate crisis intensifies, the subject of landscape becomes more, not less, important and landscape architects find themselves on the right side of history.

Design, however, requires more than righteousness, especially if it aspires to the status of art. The challenge for the landscape project in the age of climate change is then less one of conjuring *genius loci*, aestheticizing its palimpsest and fitting in with a given context than it is one of undoing what has been done and redirecting socio-ecological flows. This is a project of connecting the specificity of a place to the broader metabolism of what earth system scientists now refer to as the “critical zone”—the thin bandwidth of all life sandwiched between magma below and ozone above.²

As the inspectors of the rocks solemnly prepare to hammer in the golden spike and formally declare the self-fulfilling prophecy of the Anthropocene, all our old ideas of landscape as paradisiacal, pastoral, or even sustainable are of little comfort. In the Anthropocene all the natures of yesteryear—nature as mother or other—are replaced by the earth system as a chaotic churn of hydrosphere, geosphere, biosphere, atmosphere, and technosphere. This landscape is not a mysterious other or passive backdrop, it is a lifeline to which we cling by our fingernails.

It is no mistake, then, that the aim of the dominant design paradigm of the times—resilience—is more or less to just hang on. Defined as the ability of a system to resist external and internal disturbances without changing its basic structure, as a design paradigm, resilience salvages what it can from its more aspirational predecessor, sustainability, while giving up on its naïve ideal of a utopia of equilibrium. Instead, resilience seeks to identify which parts of coupled socio-ecological systems need to change in order to preserve the integrity of the whole. In its conservative formulation resilience teaches us to live with the symptoms of warming skies and rising oceans – to adapt rather than mitigate their root causes. More radically, resilience teaches adaptation so as to buy time to work through the difficulty of mitigation, specifically time to learn how to live differently on a climate-changed earth without fossil fuels.

For the landscape project, what matters is that resilience theory moves the subject and medium of landscape from the background to the foreground. The landscape project of resilience encapsulates a paradigm shift from grey to green infrastructure, from centralized to decentralized systems, from engineering bulkheads that blithely resist change to so-called “nature-based solutions” that can absorb shock. Visually unimpressive though they may be when compared to great feats of 19th- and 20th-century engineering, nature-based solutions are more significant than they might at first appear. As signifiers of designing *with* rather than *against* nature (which not only serve specific human interests but also catalyze additional ecological processes), nature-based solutions represent a profound historical shift in how industrialized humans treat the earth and mark out their place within it.

The problem with nature-based solutions is, however, twofold: the first is semantic and the second material. Semantically, use of the word “nature” reinforces a dualistic worldview, contradicting the essential intention of the concept. It also trades on and plays into false constructs of nature as the redeemer and false images of nature as natural. The word “solution” is also problematic because it implies a quick fix, when in fact we know very little about designing ecosystems. For these reasons, nature-based solutions would be better branded as landscape-based *experiments*. Second, at the

project level, the material problem is that nature-based solutions tend to underestimate the power, volatility, and scale of the very nature they seek appeasement with.

Of course, it is difficult for designers to convince their clients to undertake mere “experiments” at an impactful scale when everyone involved in the chain of command responsible for public works wants low-cost, low-risk, quick fix trophies. Be that as it may, landscape architects must take some responsibility for educating their clients and advancing projects of greater ambition. They also must take responsibility for a general lack of design experimentation in both the academy and the profession. This lack of commitment to design novelty, material exploration, and technological innovation is replaced, I think, by an emphasis on illustrating an orthodoxy of righteousness bundled under the rubrics of sustainability, resilience, and equity. Instead of these complex topics being explored through critical lenses and the art and craft of design experimentation, too often they are reduced to slogans and attached to conventional forms.

Unfortunately, this is also the case with much recent work being done in the name of the Green New Deal. Although this work represents an important triangulation of environmentalism, decarbonization, and social justice, the academics and students with whom it is popular struggle to ground their political idealism in design propositions that are commensurate with the issues they say landscape architecture must now, as a priority, engage with.

Although work done in the vein of the Green New Deal is at pains to distinguish itself from the mainstream profession (which is often naïvely and unfairly stereotyped as a sellout), the two do have something in common: both have a propensity for producing deceptively nice images of the future. Of course, design is and should be fundamentally optimistic, but this is not to be confused with fabricating false futures. On the one hand the mainstream profession continues to trade on a reactionary picturesque aesthetic of landscape as paradisiacal, and on the other the Green New Dealers tend to produce forms of soft propaganda where a switch is flicked to a post-fossil-fuel world in which diverse communities engage happily in what appears to be an almost medieval form of agrarian socialism.

Both of these fantasies appear virtuous: who could disagree with a greener, more just world? The problem is, however, that the high level of virtue is inversely proportional to the low level of design. And this is not to say paradise and utopia are not legitimate subjects; they are. It is, however, to insist that they be broached with a keener sense of history and more critical self-reflexivity so as to stay close to the complex and contradictory nature of the issues. For otherwise, as we defer to sweet nature in the case of the former and to an enlightened community in the case of the latter, in both cases landscape architects risk illustrating their own obsolescence.

This is also not to say landscape architecture hasn’t achieved anything in the last 50 years or so. On the contrary, the profession has more or less mastered the craft of making relatively high-quality public space in some cities. Furthermore, projects such as Fresh Kills by Field Operations in New York, Marti Franch’s Tudela-Culip restoration at Cap des Creus on the Costa Brava in Spain, Catherine Mosbach’s Louvre Lens Museum Park in France, Georges Descombes’s River Aire renaturation in Geneva, and larger projects such as the Emscher Landscape Park in Germany and both the Sand Motor and Room for the River in Holland, all point to expanded territory and subtle aesthetic advancements.

These exceptional works notwithstanding, it is troubling that in the half century since Ian McHarg published *Design with Nature* the profession’s reach remains limited and its level of engagement with big topics such as conservation, agriculture, industry, and, though to a lesser extent, urbanization, is lacking. For example, if we were to compare the collective works of landscape architecture from 1969 to today to what has been achieved by the global conservation community over the same period, then it is impossible for landscape architecture’s claims of stewardship to be taken seriously. This could, and I think probably will, change as climate change forces governments to return to spatial planning and landscape architects position themselves to take on this work.

In this regard, landscape architects need to build on, not capriciously dismiss, the ground gained by the discourse of landscape urbanism. The landscape urbanists (and here I count myself as one) not only agreed that

urbanization had to be directly confronted and engaged as the dominant force of the times, they also recognized that the most important visions of a new urbanism—the Garden City, the Modern City, and Broadacre City—were at root all *landscape* visions. They recognized that if we were to envision a 21st-century form of ecological urbanism, then new forms of high-performance landscape, and not only the city block, must serve as its basis. McHarg and others had of course previously held this hope and made this argument, but the landscape urbanists sought to coopt the forces of urbanization whereas McHarg's generation tended to make plans in spite of it. More than this, landscape urbanists also realized that an ecological urbanism could not just be a question of urban form, but must also bring the city's planetary supply chains within the purview of design. In this sense the work of systematically understanding the forces of urbanization and directing them toward more socially and ecologically just ends through the agency of the landscape project has only just begun and for landscape architecture to now turn away from urbanism, as it has of late, is a mistake of historical proportion.

Landscape architects should also come at urbanization from the other side and forge stronger relationships with the institutions directly engaged in global conservation. Landscape architects can learn from and contribute to large-scale conservation projects such as the Y2Y Conservation Initiative, a 2,000-mile landscape connectivity project stretching from the Yellowstone region in the United States to the Yukon Territory in Canada; the Great Green Wall across the African Sahel; and the Gondwana Link in southwestern Australia. There are hundreds of these landscape connectivity projects being undertaken worldwide today and landscape architects are rarely involved.

Closer to the scale of design as we know it, landscape architects can best turn to the way product designers and artists have of late taken to “designing with nature” but are doing so in a way that is liberated from the biological determinism this mantra has typically meant for landscape architecture since McHarg coined it in 1969.³ In the sense that nature knows best, McHarg was of course right to urge designing *with* nature rather than *against* it, but

if we take today's nature to be non-dualistic, amoral, impure, indeterminate, and, above all, technologically mediated, then today's designers in fields other than landscape architecture are taking a far more innovative approach to working with it. This means not only bio-mimicking nature's surficial forms but getting deeper into the microbiological nature of matter and its processes and connecting this to a landscape scale. It means designing *within* not just *with* nature. Nature as a thing is replaced by endosymbiosis as a process.

As opposed to just optimizing objects for mass production or crafting them from rarefied materials as signs of wealth and distinction, objects are today being prototyped as derivatives of and contributors to complicated ecological and socio-political processes over time. For example, a plastic bottle is not only a useful, cheap, and disposable thing, it is a multi-million-year event beginning in the Carboniferous and ending on the ocean floor with myriad, and mostly negative, consequences in between. If the bottle's lifecycle was factored into its design, its form and function in both the symbolic and ecological order of things would likely be different.⁴ Not only that, by considering objects relationally in the larger spatiotemporal scale of the earth system the focus of design intelligence shifts from the mere proliferation of objects to the redesign of systems.

For the landscape project this approach means three things. First, by appraising a site as a frame through which to foreground relationships between where I stand and the earth system as a whole, attention shifts from the usual repertoire of place-making and programming to instead explore the possibility of different materials and processes, and different forms and symbols. Second, we can no longer just rely on the old adage that landscapes get better over time. To engage the denatured conditions of the Anthropocene requires a more deliberate attempt to connect the microbiological admixture of materials at the site-specific scale to the macro-scale of the earth system. Third, the landscape project must critically question, not automatically seek to coalesce with its cultural context as has been its *raison d'être* under the aegis of achieving a sense of place.

Heretical as it may seem, it might well be that the human subject of design, the Anthropos, needs in the first instance to be *displaced*. Of course, this

broad historical and philosophical position needs in itself to be tuned to, and tempered by the specificity of any given place and squared with its ecology and the socio-political struggles of communities who are deeply embedded in places that have been betrayed by modernity. And, finally, designs should be approached as experiments in urban and social ecology that unfold and learn over time. In order to win space for greater experimentation, the norms as to what landscapes can look like and how they are expected to perform have to be challenged.

To look up from the ground and attempt to design a place should not be an act of arrogant human exceptionalism, elitism, or neocolonialism. The best design is always, to some degree, anti-design but this is also not to be confused with abandoning design. Design is a promethean gift and responsibility. If only by degree it distinguishes humans from other living things who actively shape their worlds. It further distinguishes landscape architecture from the many other denominations of the sciences and the arts that also study the landscape of contemporary culture. Together with those disciplines, we have much to learn about how urban ecosystems and the earth system can coexist. Conceptualizing and designing this symbiosis is the landscape project to which this compilation of essays by the landscape architecture faculty at the University of Pennsylvania Weitzman School of Design is directed.

1. See Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance" in L. Appignanesi (ed.), *Postmodernism* (London: Institute of Contemporary Arts, 1986).
2. For an introduction to the scientific project of the Critical Zone in relation to the National Science Foundation Critical Zone Observatories in the United States see: <https://www.czen.org>. For an appreciation of the way in which the scientific definition and study of the critical zone in the sciences meets with the arts and humanities see: Bruno Latour & Peter Weibel (eds), *Critical Zones: The Science and Politics of Landing on Earth* (The Center for Art and Media & MIT Press, 2020).
3. See, for example, Paola Antonelli & Ala Tannir (eds), *Broken Nature: XXIII Triennale di Milano* (Rizzoli, 2019); Andrea Lipps, et al. (eds), *Nature: Collaborations in Design* (Cooper Hewitt, Smithsonian Design Museum, 2019); and Kathryn B. Hiesinger (ed.), *Designs for Different Futures* (Yale University Press, 2019).
4. For a fuller description of the full lifecycle of a plastic bottle see: "The Bottle as Hero" in David Farrier, Footprints: *In Search of Future Fossils* (Harper Collins, 2020), 89–115.