

composed of testimonies that live beyond the atlas of wonders begins to take shape through fragments. The three directors of *Anthropocene* had previously worked together on the same themes. Photographer Edward Burtynsky traveled the world observing changes in landscapes due to industrial work and manufacturing to realize *Manufactured Landscapes* (2006) directed by Jennifer Baichwal. Burtynsky and Baichwal later directed the documentary *Watermark* (2013), which shows how the essential element for human existence has been used, while at the same time being wasted. Like *Anthropocene*, the narrative unfolds through a bold journey, from China to Bangladesh, from the United States to India, showing us how human action has been capable of exploiting the presence of water, but also the greed that has depleted its value to the detriment of some areas of the world. *Anthropocene* is the latest work by Burtynsky and Baichwal together with Nicholas de Pencier, previously producer, representing the completion of the trilogy of documentaries, devoted to the impact of human activities on our planet.

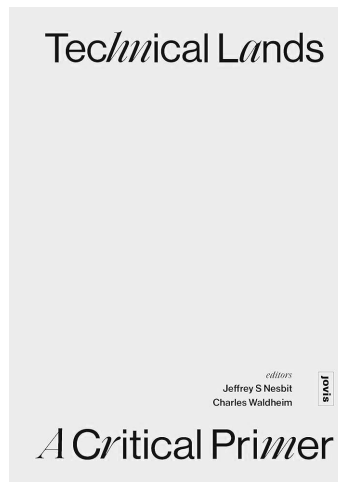
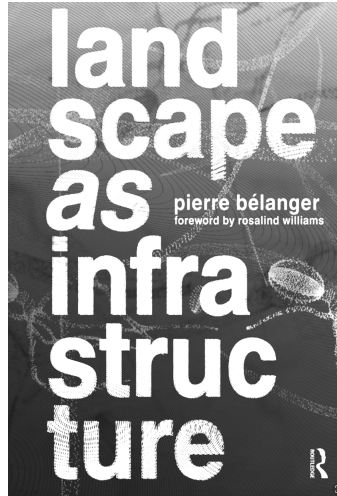
Laying within the fragile intersection of art and science, the trilogy shows how humans have marked territories with strong inequalities: the advantage of one area has always led to the impoverishment and condemnation of a second one. As the final chapter, *Anthropocene* seems like a dystopian feature about the dark side of prosperity, started from consumerism and the reckless consumption of Earth's resources. The film serves as a stark reminder of the urgent need to acknowledge and address the destructive forces at play in our quest for dominance.

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Pierre Bélanger, *Landscape as Infrastructure: A Base Primer*, Routledge, 2017, 508 pp.

Paperback: € 63,50 - ISBN 9781138643925

Jeffrey S. Nesbit, Charles Waldheim, *Technical Lands: A Critical Primer*, Jovis, 2023, 252 pp. Paperback: € 32,00 - ISBN 9783868597042



How do infrastructures and technicalities articulate (and perhaps confuse) our conventional understanding of land(scape)? How do they act as a reframing of nature, through culture, value and capital? What implications does this hold in

a so-called regime of modernity? According to the planetary urbanization hypothesis, geographical spaces have become so interconnected that nature has transformed into what Jason Moore defines as “cheap nature” through power dynamics, wealth distribution, and labor. Hence, making its way is a “capitalism in nature” indicating that nature is now intricately woven into the economic circuits of capital. Right after Modernism, some scholars acknowledge this epistemic shift by recognizing the value of nature as an object of design and so nature becomes landscape and urban design recognizes landscape through the discipline of “landscape urbanism.” Especially following a post-structuralist perspective, there have been attempts to discuss these positions looking progressively at nature as a device.

Landscape as Infrastructure: A Base Primer, curated by Pierre Bélanger in 2017 and *Technical Lands: A Critical Primer*, edited by Jeffrey S. Nesbit and Charles Waldheim in 2023 present themselves as two examples of this reconceptualization. While *Landscape as Infrastructure* stands among the earliest works in the tradition of Landscape Urbanism, arguably acting as one of its manifestos, *Technical Lands* seeks to deliver a critical re-reading of the idea, encouraging dialogue with more recent literatures and presenting some forms of what have been defined as operational landscapes. This connection between the two volumes is reflected in their subtitles, which strongly suggest, despite an obvious six-year gap, a discernible continuity, if not an enhancement of the theory. Together, they reach the intent to grasp the metabolic interactions within the dynamics of a planetary urbanization.

Landscape as Infrastructure dismantles any romanticized view of the landscape: it should not be looked at as a setting, instead being reduced to nothing more than infrastructure. As a collection of essays spanning more than a decade, this

volume brings together ten texts exploring how the emergence of ecology and the revival of geography are radically reconfiguring the understanding and shaping of environments, unfolding the visible systems, invisible processes, and indivisible scales constituting the infrastructure that supports contemporary urban life. Keeping practitioners, policymakers, students, and educators as its audience, the book reinterprets the infrastructural turn in urban studies as an operative tool for design. Highlighting the need to break free from conventional limitations, its approach emphasizes an usage of landscape natural connections with ecology, engineering and geography. This transformative approach requires a complete review of large-scale planning and a new view of the fine surfaces, promoting both a reshaping of existing urban infrastructures and the installation of new ones. The starting point is a discussion about some of the 400,000 sites listed in the report *Recycling America's Land* (USCM 2006) – airports, harbors, roads, sewers, bridges, embankments, dams, energy corridors, terminals and treatment plants – all of them in a state of advanced decay due to lack of maintenance, a legacy of the modern industry, ultimately resulting as “failures and accidents instead of a proper design.” (p. 211) For instance, the challenges faced by a landfill site in Niagara Falls, New York, and a landfill demolition site in Toronto, Ontario, shed light on the imperative to incorporate water management, waste, food, transport, and energy considerations when planning the operations. Any design of food production and energy networks then would necessitate an interpretation of the interconnected flow of waste streams and the cycle of raw material input. It is a shift in perspective, requiring landfills, farms, fishing and storage areas, as well as sorting facilities, to be conceived with their interdependencies in mind. Likewise, motorway networks, sewerage systems, and

subdivisions demand an integrated design that acknowledges their environmental impact. Exploring the underlying nature of infrastructure as an invisible instrument of state power, the texts offer a perspective on the role of central powers for growth and development at different levels of understanding. The analysis of the ecological processes underlying such transformations opens up a reinterpretation of territorial powers and, in some contexts, suggests resistances to countervailing dominant forces. Overall, the volume proposes new perspectives on state and citizenship through lighter approaches in terms of engineering and planning, as well as more flexible infrastructures. In this context, landscape emerges not only as a model of thought, but also as a means of intervention, where the existing political entity can undergo a transformation through an emerging ecological one. In Belanger’s perspective, ecology reveals itself as a “constructed ground” (p. 226) built upon the interaction of hydrology, geology, biomass, and climate. Here, the importance of water and river basins emerges as a structuring system, guiding the trajectory of the built landscape. This perspective transforms the project into a telescopic process, capable of assimilating different time scales of intervention. Within this telescopic view, design extends at different layers, becoming an infrastructural orchestration of surface systems, material volumes, logistics implementation: this concurs into a reorganization of territories that transcend man made borders as well as the evolution of soil transformations, the identification of synergies between different land uses and the recognition of mutual influences between different agencies. By embracing this global approach, the project transcends traditional notions of temporal and spatial constraints, becoming a dynamic and responsive intervention that navigates through the complexities of built ecology. This perspective

aligns with the evolving paradigms in landscape design, moving away from static and aesthetic representations to embrace the multifaceted dimensions of performative effects, thus reshaping the discourse on landscape planning and design. The form of design here proposed steers clearly of historical emphasis on over-engineering and over-design, offering alternative directions without excessive reliance on intensive practices. On the other hand, landscape is often perceived as everything except for roads and buildings, a conceptualization that played a significant role in shaping the definition of “urban,” which is getting more and more blurry, both in concept and in execution. The expansion of the urban scale dissolves the boundaries between city and countryside, meshing their distinctions as external areas adopt an urban character. Landscape is hence “operational,” acting in the construction of vast urban transnational territories that aim to serve the “urban.” As such, landscapes become sites of extraction, extensive agriculture and ancillary infrastructures that connect these systems to the city: it is not the urban that inhabits the landscape, but the landscape that gravitates around the urban. These are the focus of Technical Lands, a concept that the book seeks to explore according to various perspectives, including economic, cultural, legal, and aesthetic ones. The underlying idea is to challenge the common perception that these areas are peripheral to urban studies, though often perceived as distant or marginal in relation to what might be defined as “the urban,” are not necessarily wild or remote places, at least not anymore. Indeed, they install an intertwining relationship with cities that feeds on co-production and codependency. To do so, it is necessary – as Peter Galison explains in the first chapter – to go back to the shift from Newtonian physics to relativity: while Newton affirmed that space and

time make up the fixed stage upon which the events of the perceivable world take place on, Einstein proposed an alternative with the theory of relativity, which states that space and time are not fixed coordinates. Following this parallelism, we could easily argue that land is not a fixed stage upon which we act, instead being relative to human activities and needs, as continuously demonstrated by recurrent events such as desertification and deglaciation, historically driven by human actions which mine the fragile equilibrium of the Earth.

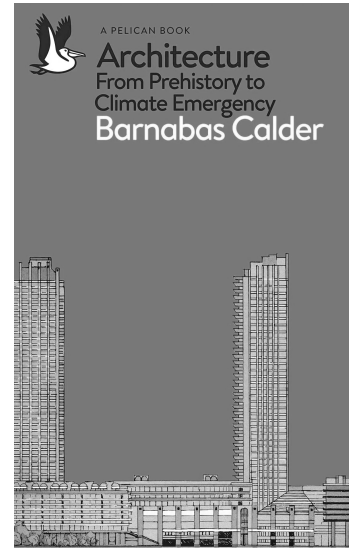
The technical lands are also the result of jurisdictional action, a theorization of places where global practices of knowledge and aesthetics converge to concretely transform the physical geography of the territory. These landscapes indicate a variety of sites with special legal status, especially in relation to the non-human world. They show a diverse nomenclature and include exclusion sites, administration, regulation, demilitarized zones, space bases, and sites of extractive industries and military bases, to name but a few.

A prime example of this is the Waste Isolation Pilot Plant (WIPP), located approximately thirty miles northeast of Carlsbad, New Mexico. Purposefully crafted, WIPP serves as the ultimate repository for nuclear weapons industry byproducts, housing materials tainted with plutonium and transuranic elements. Its core role is to safely contain and isolate radioactive waste until it ceases to be a threat. Beyond technical intricacies, understanding WIPP requires navigating a complex legal landscape made out of regulations that govern its every aspect. Moreover, lands become technical even through the complex mechanism of systems that allow their exploration, visualization and comprehension, such as GIS (Geographical Information System) or remote sensing and satellite views. *Technical lands*, epitomized by sites like WIPP, the 1848 Union Stockyards in Chicago,

the Detention Prison-Building built in the Abandoned Mine Lands of Appalachia, and all these operations exert a transient influence on their environs. Outflows, smokestacks, and buried materials undergo transformations affecting soil, groundwater, and wetlands. These radioactive domains instigate environmental changes necessitating extended chronologies, often surpassing the scale of a single human lifetime. What all these examples bring to light – just like all the other parts of the book – is how areas designated as human exclusion zones emerge as sanctuaries for the non-human, ushering in a new classification of lands: and that absence is even more present in the pictures here collected where every form of life appears even by mistake. The reflections presented in both volumes converge towards a functional definition: as the scope of infrastructure expands from local to state, from national to international, they emerge increasingly as technicalities. A kind of extension of influence is projected onto the planet, outlining the *anthropocene* as the recognition of our transforming of the sea, the atmosphere and the earth into technical entities, lines and infrastructure, with increasingly obvious consequences. Treating nature as an object means a transition from its ornamental role to an active one, where it functions as a contributing device to human life, parallel to artificial constructs. Infrastructures have entered current urban planning discourse as a strategy that supports territory's progress towards achieving environmental conservation, sustainable development and urban resilience. These kinds of infrastructures are not merely understood as machines of supply and transmission but as elements made of folds, temporalities, ecologies characterized by inherent fragilities, dispositifs which act through a different set of action.

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Barnabas Calder, *Architecture. From Prehistory to Climate Emergency*. Penguin, 2021, 547 pp. Paperback: € 18,52 - ISBN 9780141978208



Architecture. From Prehistory to Climate Emergency by Barnabas Calder begins with an insightful observation, namely that “the construction and running of buildings are currently responsible for 39% of all human greenhouse gas emission.” (p. XI)

This sentence works both as a *memento* and as a *leitmotiv* of a text whose alternative title could be: *Architecture Reduced Under the General Concept of Energy*.

The underlying intentions of the author are highlighted immediately, in an introduction that admits the will to instill a different thought about why we create buildings and give consistency to our urban projects. In the first chapter the author's tone expresses a certain concern for the future, which becomes more enthusiastic and optimistic in the last part of the book: here, he tries to raise a sense of responsibility within the building sector that frequently does not do enough to move towards