

NATURE BENEATH ARCHITECTURE

Exploring the Earth's depths to foster ecologically-aware design



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KEYWORDS

earth shaping
living soil
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ABSTRACT

In spite of a rising awareness of the power of architecture to *shape the Earth* (BIG 2020; Mastenbroek et al. 2021), the growth of the *anthropogenic crust* (Colomina and Wigley 2016) seems unstoppable, to the point where humans have been referred to as a 'weapon of mass extinction' (Till 2023).

The foundation of any act of architectural design on the recognition of soil as a living agent and aggregate (Bava et al. 2021; Vogt et al. 2020), as an *intelligent thickness* (Pileri 2022), is more urgent than ever. In this sense, it is fundamental to look at the soil as the seat of the interrelations between man and nature (ELC 2000), as the ecosystemic core of our planet, whose depth is the guardian of our history, our culture (Occhiuto 2021) and our very hope for survival. Knowledge of both the horizontal deep geological sediments and the pedosphere as an irreplaceable interface of cyclical exchange between the atmosphere and the biosphere (Henry 2023) must be the basis of an ecologically-aware design approach. '*C'est la mer qui rend la Terre ronde*': architecture is part of the processes of the world as a common, perpetual, ever-changing construction (TVK 2021). Diving into the depths of the Earth, the article explores the strong spatial, ecological and cul-

tural link between the underground strata from which building materials derive and the processes of spatial transformation for the extractive industry serving the urban fabric. These processes, now significantly reduced in Europe, are elsewhere far from over. As Morton (2007) argues, 'post-industrial' landscape is only a 'recent illusion'.

This highlights the importance of understanding soil depth as the seat of the systemic relationships underlying any process of spatial and environmental transformation (Pavia 2018), the comprehension of which is at the core of an ecologically-aware design approach for sustainable territorial development projects.

Bava, H. et al.(2021). *Sols vivants: Socles de la nature en ville*. Agence Ter /BIG(2020). *Formgiving*. Taschen /Colomina, B., & Wigley, M.(2022). *Are we human? Notes on an archeology of design*. Lars Müller Publishers /EC(2000). *European Landscape Convention* /Henry, P.(2023). *Des tracés aux traces, pour un urbanisme des sols*. Apogée Editions /Mastenbroek, B. et al.(2021). *Dig it! Building bound to the ground*. Taschen /Morton, T.(2007). *Ecology without nature*. HUP /Occhiuto, R.(2021). "What the Ground Says..." *Sustainability*, 2021 /Pavia, R. (2019). *Tra suolo e clima*. Donzelli editore /Pileri, P.(2022). *L'intelligenza del suolo*. Altreconomia /Till, J.(2023). "Architecture criticism against the climate clock". *Architectural Review*, 2023 /TVK(2021). *La terre est une architecture*. Spector Books /Vogt, G. et al.(2020). *Mutation und Morphose. Landschaft als Aggregat*. Lars Müller Publishers

What is the limit to the power of architecture to shape the Earth?
Why should architectural projects acknowledge and include soil as a living agent?
How to foster an ecologically-aware design approach?



Entrance to the underground limestone quarry of 'Lanaye Inferieure' (BE) /Chiara Caravello, 2022

architecture unlocks
nature