

Landscape and Infrastructure FS 2020 V07

The term infrastructure is an Americanism that finds its origins in mid-19th century French civil engineering, which was used to designate works such as tunnels, bridges, culverts, walls and earthworks needed for the foundations of a railway line. The word *infra* signifies “from below” in Latin, and the word “structure” is derived from the Latin *structura*, for which the verb *struere* means to “construct.” It became used by the American military in the 20th century to define the underlying foundation of a system, more particularly the permanent installations required for military operations. After the Second World War and especially in reaction to the Cold War, the term spread as NATO in-house jargon to Europe through the Marshall Plan, and came to designate the public works for a country or a state and the human resources, buildings and equipment needed to bring stability to a region. It is interesting to note that the term infrastructure appears in the English language for the first time in the Concise Oxford Dictionary, published as recently as the 1980s, which is to say, the term is actually quite new.

We shall look at three aspects of infrastructure and their relationship (or lack thereof) to landscape. The first aspect corresponds to the massive civil engineering artefacts that have arisen and left indelible traces on the territory. In general, the impact of infrastructure on the landscape has been tremendous – Switzerland has not been spared by this phenomenon. The fact is that since the 1950s so many Swiss roads have been built, that put together they could span the circumference of the earth not once but twice. The second aspect corresponds to the side effects of infrastructure projects on the environment. A good example is the development of the NEAT tunnel project in Switzerland and the landscape projects that ensued from out of the rubble produced by the works. More generally, to tackle the side effects of infrastructure projects on the environment, landscape projects have been replaced by environmental engineering projects whose task has been to “renature” the environment with the intent of restoring it back to its original condition, which is a contradiction in terms. The third aspect is about the positive reuse of infrastructure as a landscape projects per se, probably the most famous example of its kind is the High Line landscape promenade in Manhattan, but there are countless other examples like the Beltline in Atlanta, the Parc Mistral in Grenoble, and the Cheonggycheon River in Seoul where disused and modified infrastructure becomes part of an entirely new urban vision.

One could say that contrary to the well known examples of the 19th century, including Lenné’s shaded avenues in Berlin, Alphand’s planted boulevards in Paris, and Olmsted’s Emerald Necklace in Boston, little if nothing has been done in terms of integrating landscape architecture into contemporary infrastructure projects.



Highway overpasses in Atlanta, Georgia.



Recultivation of a limestone quarry in Plettenberg, Germany.

This has become a priority in some schools such as Harvard's Graduate School of Design, which just recently created a new concentration in Landscape Infrastructure. There have been countless ecological measures done to compensate for the impact of a project on the environment, but this doesn't necessarily mean that this kind of remedial work has been integrated as part of a broader qualitative vision. The fact that the term infrastructure is indeed so recent speaks for itself. It was born out of military determination and urgency, and this does not make the dialogue between engineers and landscape architects any easier. The next step would indeed be to marry the term landscape with the term infrastructure in the hope of a more moderate and balanced future.

© Christophe Girot 2020



High Line, New York. Photo: Christophe Girot.



American infrastructure.

Literature:

Bélanger, Pierre: Is Landscape Infrastructure?. In: Gareth, Doherty; Waldheim, Charles: Is Landscape...? Essays on the Identity of Landscape, New York 2016, pp. 190-227.

Easterling, Keller: Extrastatecraft: The Power of Infrastructure Space, London 2014.

Sijmons, Dirk: Landscape and Energy - Designing Transition, Rotterdam 2014.

Waldheim, Charles; Czerniak, Julia et al.: Landscape Infrastructure: Case Studies by SWA, Basel 2011.

Waldheim, Charles (Ed.): The Landscape Urbanism Reader, New York 2006.

Williams, Rosalind: Cultural Origins and Environmental Implications of Large Technological Systems. In: Science in Context, Volume 6, Cambridge 1993, pp. 377-403.

Conference: „Landscape Infrastructure“, Harvard GSD, March 23-24, 2012:
www.gsd.harvard.edu/#/events/landscape-infrastructure.html

<https://www.youtube.com/user/TheHarvardGSD>
(search: Landscape Infrastructure Conference)