



Designed Ecologies FS 2021 V02

The term "Designed Ecologies," originally coined by Kristina Hill and Kongjian Yu during their doctoral studies at the Harvard GSD in the early 1990s, seeks to promote a new kind of global nature aesthetic in landscape architecture. It actually combines two terms that were formerly in opposition to one another: "Design" comes from the Latin word *designare* which means "to mark out" and "to choose." The French further added to that term notions of purpose and project. Today, design represents a conceptual activity involving the formulation of novel ideas that are expressed in visible form, and carried out into concrete action. It is about capturing a condition as well as conceiving and enhancing further qualities through it.

"Ecology" is a term coined by the German scientist Ernst Haeckel in the mid 19th century. It is the study of interactions among organisms and their environment, in which biotic relationships between species are affected by the immediate abiotic environment. The word comes from the Greek *oikos* meaning "house," and the word *logia* meaning "the study of." Ecology is about the many "houses" of nature that are studied and designed by man. The combination of the two words into the term Designed Ecologies points to the practical applications of landscape ecology in conservation, restoration ecology in disturbed urban and industrial contexts, and natural resource management.

The positive idea behind designed ecology is to enable organisms and natural resources to be maintained through biophysical feedback mechanisms in a system that self-regulates and moderates human processes acting on both biotic and abiotic components. Designed ecology is meant to restore a semblance of natural equilibrium in areas that have often been depleted of their original natural habitat. It is an artificial restitution of nature that is very much in tune with the trends of our times and expresses our concern for the improvement of our environmental systems. The aesthetic question is therefore secondary to the effectiveness of the ecological "service" provided. In this sense, one can speak of a positivistic approach to design.

Pioneer countries such as the United States, Canada and China have been at the forefront of this new global trend in ecological design where the restoration of local biodiversity had the priority over established cultural factors. One of the first examples of designed ecology applied to landscape design is the competition for Downsview Park in Toronto.

It took place at the turn of the 21st century and teams such as OMA, Bernard Tschumi and Field Operations competed to design a new ecological park on the remains of an old NATO airbase. Today, the most interesting and proactive designed ecologies are coming from China and Singapore. The office Turenscape under the



Masterplan Downsview Park. In: Czerniak 2002



Qinhuangdao Red Ribbon Park in China, Turenscape. In: Saunders 2012

www.girot.arch.ethz.ch www.facebook.com/LandscapeArchitectureETHZurich leadership of Kongjian Yu in Beijing has proposed radically new forms of urban parks in China that can treat very polluted water and allow for a return to a certain form of nature on contaminated industrial sites. Although the new park forms have been controversial within traditional Chinese landscape circles, these exemplary projects have led to a significant design revolution in China where landscape architecture has embodied a "remaking" of nature, becoming one of the main national priorities and policies at the present time. In Singapore the new Bishang park by the Atelier Dreiseitl has converted an old stormwater culvert into a very successful "ecological" water park. But designed ecologies correspond to a "universal" language of nature and are for the most part detached from the cultural context of a given place. They do not seek inspiration from history or traditions of the past, but invent new forms of nature instead, breaking away from more traditional forms of aesthetics. Their starting point is to fight environmental fatalism, and to reverse the process of environmental deterioration and entropy found more often than not in terrain vagues, the industrial wasteland and other places of dejection. It represents a tipping point where landscape architecture is asked for the first time in history to almost entirely fabricate and reinvent nature.

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Paddy field - Shenyang Architectural University Campus in China, Turenscape. In: Saunders 2012

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