



## CRITICAL ECOLOGIES

... the eyes of all future generations are upon you.<sup>1</sup>

Since the 1960's, environmental science has formed the central part of ecological discourse in architecture. It has been the primary force behind the work of various leaders in the ecological design community (Addington, Fisk, Foster, McDonough, Dunster, Knowles). Gravity and the second law of thermodynamics set the stage for disseminating an array of scientific principles. Energy is plotted. Solar angles are graphed. Gravitational forces are registered. Thermal flows are demarcated. Comfort is mapped. These science-based principles are fundamental to producing new green technologies and various shades of green in the plans and sections of our buildings. And the science behind the environment continues to prosper.<sup>2</sup> Patents for new green technologies are abound. Services like LEED and IgCC are but two of a dozen certification systems for buildings. Evidence of such is well documented and marketed. But are new manufacturing methods and certification systems enough? According to urban theorist Dolores Hayden, not even a hundred-million new (zero carbon) houses could make the U.S. sustainable. So what can we do, or better, what's the real problem?

In the last two decades an interdisciplinary movement has emerged in ecological discourse distinct from environmental science. Urban Ecocriticism is loosely defined as the study of the mutual constructing relationship between culture and the environment.<sup>3</sup> Emerging from literary and cultural studies, urban ecocriticism defines the role that the natural environment plays in the *imagination* of a cultural community. It examines how the concept of "nature" is defined, what values are assigned to it or denied it, and why. It asks: why has ecology primarily produced mechanical or prescriptive methods in individual buildings in light of the possibilities for a vibrant exchange between ecology and urbanity? Why is there ambiguity over ecology's content and relationship with urbanism? Why hasn't the transformative phenomena of ecology had a greater effect on the production of urbanism and urban buildings? This lack of inventiveness is surprising for many ecocritics. This is especially true for those who entered the field believing that ecology and artistic creativity might together help develop new and alternative forms of sustainable urban living. Ecocritics do not deny the physics of the environment or the reality of environmental degradation. They are however exceedingly skeptical of the role and weight that environmental science alone has to diminish global warming. For ecocritics, environmental degradation is, in the end, not a scientific problem but a cultural one. In other words, computationally-based low-E double-skins, pv panels, and planted roofs are simply not up to the task of competing with the scale of earthly transformation resulting from the desire of so many to get behind the wheel of a \$45,000 SUV to save fifty cents at Wal-Mart.<sup>4</sup>

It is in this dialogic<sup>5</sup> space between science and culture that this studio will be situated and where complexity will be nurtured. A collection of essays in *The Nature of Cities* (Bennett, Teague, ed.) will serve as a research platform for cultivating a critical literacy of place. Each student will select an essay and derive their own site and program from it. Sample research topics include the suburban lawn, uncivilized nature, working landscapes, urban wilderness, environmental justice, urban fauna, simulacra of nature, and interiorized nature, to name a few. In this studio, sites and programs are open and experimental yet derivative (conceptually if not literally) from each essay subject. As a collection, these essays reminds us of our placement *within ecosystems* and the importance of this fact for understanding urban life. They provide the parameters that offer the ecological component often missing from cultural analyses of the city and the urban perspective often lacking in environmental approaches to contemporary culture. The objectives of this studio is to advance a series of "critical ecologies" in the context of understanding place as a *contested field* between physical and cultural forces. Students will be encouraged to program anew, in unconventional ways, that contribute to vital place-making... for generations to come.

<sup>1</sup> Greta Thundberg, UN Youth Climate Summit, New York, September 21, 2019.

<sup>2</sup> For example, see Mediated Matter Research Group, Neri Oxman of MIT Media Lab.

<sup>3</sup> See Michael Bennett and David Teague, *The Nature of Cities: Ecocriticism and Urban Environments*, Tucson: The University of Arizona Press, 1999.

<sup>4</sup> Take note that there's a direct correlation between the items on the shelf in Gastonia and the deforestation in Brazil and Indonesia.

<sup>5</sup> The dialogic concept comes from the Russian literary critic, Mikhail Bakhtin. It is when a word, discourse, language, meaning (or building) becomes deprived, relativized, and aware of competing definitions.