Outline for a First-Year Undergraduate Lecture Course

In the last decades, histories of architecture have made a global turn. Now is the moment for architectural history’s global warming turn. If modern architecture is normally understood to have originated in Europe, so does global warming, with the Industrial Revolution igniting both. This lecture course is a reading of the history of architecture since 1800 through the lens of humankind’s increasing ecological footprint.

Image: Steelworks, from Tony Garnier, Une cité industrielle: Étude pour la construction des villes (Paris, 1917)
Course Description:

If modern architecture is normally understood to have originated in Europe, so does global warming, with the Industrial Revolution igniting both. This course will concentrate on the connections between modern architecture and global warming from 1800 until the present. The first semester will cover 1800-1940, the second 1940-present, taking the beginning of the Industrial Revolution and the Great Acceleration as the respective points of departure. It is a reading of the recent history of architecture through the lens of humankind’s increasing ecological footprint.

The Industrial Revolution started in Great Britain, spilled over to the European continent, and spread to North America and the rest of the world. Modern architecture followed a similar pattern of diffusion. In the process of industrialization, Europeans have coerced their colonial subjects to become modern, with modern architecture as both a product and expression of this imposed modernization.

In a comparable way, there is also a correlation between the Great Acceleration and the rapid dissemination of the International Style after the Second World War, which both happened on a global scale, and forced the same colonies — eventually former colonies — to comply with the norms and standards of the so-called developed, modern, Western world. Simultaneously, through their colonial experiences Western architects became aware of climate as a design factor, both in the encounter with the challenges of producing modern architecture in hot arid, and hot humid conditions, and in the discovery of vernacular traditions as inspiration for building in extreme weather conditions.

This course is not intended as a blame game, no matter how much modern architecture, building activities, and geo-engineering have contributed to today’s ecological crisis. The aim is to outline a history of global warming which could help us to understand how we have ended up here. But it will inevitably raise ethical and political questions what to think of architecture, in the knowledge that it is simultaneously a means to make our world a better place and detrimental to the planet’s future.

During two semesters this course will present and discuss many of the same projects and events which are essential in conventional histories of architecture, but from a different vantage point, assessing their environmental impact, and their impact on thinking about the environment. In addition, the course will foreground architects, buildings, projects and ideas that have been overlooked or marginalized in these conventional histories and deserve a more prominent place for their environmental significance.

In addition to offering new interpretations of canonical modern architecture, a global warming history will also amend the canon, by highlighting what is commonly omitted from general histories, ranging from the geological inspirations of Henri Hobson Richardson to the bioregionalism of Patrick Geddes; from Otto Koenigsberger’s studies of tropical architecture to Ken Yeang’s bioclimatic skyscrapers; from Kenzo Tange and Frei Otto’s Arctic project to Troppo’s regionally responsive architecture, from the New Alchemists’ Arks, to Diller & Scofidio’s Blur Building.
As these examples indicate, the course will certainly not (un)cover completely novel material; rather it will synthesize the available research in the field of architectural history and publications pertaining to climate change into a comprehensive history. This synthesis will be presented chronologically, with architects’ attitudes towards nature and technology as two central themes.