Carnegie Mellon University

School of Architecture
College of Fine Arts, CFA 201
Carnegie Mellon University
Pittsburgh, PA 15213

Water flowing through a distribution weir on a foggara, an irrigation system developed approximately 3000 BCE in the Near East region.

48314C/48614C: Reclaiming Hydroculture
Water, Infrastructure, and Architecture's Environmental Redress
Units: 9
Instructor: Zaid Kashef Alghata

The ancient origins of architecture can be traced back to the geolocation of water supplies; these commonly accompanied the establishment of human settlements. As pressures of dwindling natural resources and territorial conflict mounted, colonies formed in areas where water supplies were not readily available, propelling the invention of systems that moved water across long distances. From 11th century foggaras in West Asia and North Africa to the mechanized systems of the 19th century, water supplies largely determined settlements' lifespans along with the cultures that flourished and decayed in them.

This seminar investigates how transient civilizations transformed their way of living and building, making significant technological advances in water infrastructure and leaving monumental public projects behind. The seminar aims to further understand the close relationship between architecture and the water systems it plugs into.

Students will be introduced to texts from various disciplines. Individual research will be submitted in two parts: an oral presentation for mid-term, to be developed into a final paper. Students will develop their topic around the following question: How can reclaiming hydroculture assist architecture in its environmental redress?