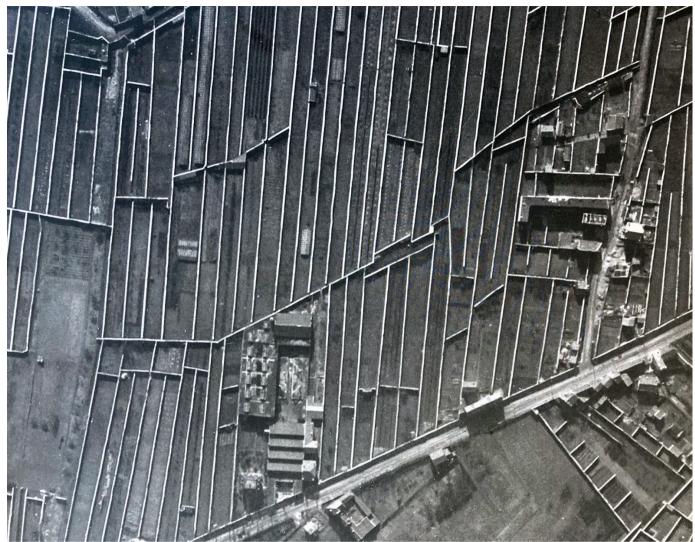
Arch 586 2022 Architectural Theory and History IV Architecture / Infrastructure / Territory: Agri-Scapes Clare Lyster



Fruit Walls on the periphery of Paris, circa mid 19th C.

Overview

The Seminar explores the geo-spatial imprint of contemporary material, metabolic and socio-technical flows on the city to advance disciplinary thought on how systems shape territory. Focus this semester is on agricultural systems and their associated logistical infrastructures.

The modern city perfected the separation and isolation of production and consumption. Nowhere is this more prescient than in agricultural production, which since WW2 has become industrialized and specialized to the point that we are completely decoupled from where our food comes from. Agriculture is an externality. Since the mid 1980s numerous grassroots initiatives such as "slow food" and "farm to table" began to shift the public's perception of agriculture toward healthier and more sustainable networks. However, today agriculture remains an abstraction amplified by COVID disruptions (supply chains have been impacted by the pandemic), increasing urban populations (too many people to feed), climate change (less resources available due to global warming), carbon emissions (agriculture is a high producer of CO2), waste (inefficient circulation of food) and depleting soil quality (over farming) etc. Clearly, there is an opportunity for architecture to rethink the spatial formats of agriculture and their adjacencies within the city, not to solve agricultural problems but to leverage them for new urban and domestic scenarios.

The relationship between architecture and agricultural territory is a well-studied space in the discipline, with many of the great designers of the 20th century investing in the design of productive adjacencies between city and hinterland. Today new technologies such as robotics, and automation in livestock and crop farming is transforming what the farm is and where it is located, from vast interiors of greenhouses, to floating cow farms, and from vertical urban agriculture to domestic hydroponic production. Moreover, these new agri-scapes in our cities and suburbs are catalysts for the design of new spaces in the city that can integrate food production and natural resources with other cultural programs. Agriculture is no longer completely external but is increasingly integrated into the everyday.

Structure

The seminar is structured along three sequences: research, theory and speculation. Readings in the first two weeks explore the agency of systems thinking in urban discourse and in Anthropocene studies more broadly to provide the meta context for the exploration. This is followed by readings that detail a range of agricultural territories and the emergence of technology in contemporary production augmented with analysis of significant agricultural case studies (historical and contemporary). Theory and analysis are then applied toward speculative fictions that explore the future of agriculture in the city delivered as a drawing and a short text. How the futures are combined collectively (a zine, a mural, a graphic novel, or a movie) will be determined later in the seminar.

Case Studies

Case studies and agricultural categories will be provided in a separate document and discussed during the first day of class. The following areas of research are envisioned:

- 1. Rewilding
- 2. High-Tech Greenhouse Production
- 3. Marine Agriculture (Kelp /Seaweed / Algae)
- 4. Modular / Cellular
- 5. Vertical Farming (Hydroponic and Aeroponic/ Rooftop)
- 6. Local / Community (Allotment Gardens / Small Farming)

Other Food Waste Foraging

Methodology

The seminar is not just an exploration of agricultural systems but more significantly deploys agriculture as an alibi to explore an expanded practice for architecture in the metabolic flows of the contemporary city. Moreover, it posits that theory is an instrumental catalyst for design thinking rather than a standalone form of knowledge that can be synthesized with research (analysis) and applied to design.