
Aalborg, Denmark: 'City In Between:' New Paradigms for Global Suburbanization



INTRODUCTION

"A significant challenge for sustainable urban growth is retrofitting existing post-war suburban developments. Low residential densities, strong functional zoning, poor transport connectivity, long distances from the city center, and low concentrations of educational facilities, leisure and retail opportunities often lead to social exclusion, high per capita resource consumption, and generally poorer access to the goods, services, and experiences that are available to those living within the urban core. This fall, a joint design collaboration in Aalborg, with active participation from Aalborg Municipality, Aalborg University, Columbia University and local partners in the Aalborg area, will take on the challenge of how to create more socially, environmentally, and economically sustainable suburban communities."

(from the Studio Framework proposed by Aalborg University)

This studio emphasizes collaborative multi-disciplinary thinking about the future of urban environments. It will explore intersections between urban built and natural environments and social capital. The core didactic focus is a shift from an object-based approach to design, to a systems-based knowledge of our changing environments and values. This approach is supported by the international and multidisciplinary studio faculty and participants.

The studio framework encourages a critical investigation and re-interpretation of suburban lifestyles in mid-size cities; and the increasing roles of mobility and access as facilitators of sustainable urban form and lifestyle. The studio offers flexibility in the various lenses through which participants can examine the challenges of sustainable urbanization. The specificities of the studio site will be used as a foundation for developing design proposals that can address sustainability challenges faced world-over in post-war peri-urban typologies.

EXPLORING THE CITY IN BETWEEN

The studio site is **Eastern Aalborg** which serves as an interesting example of an urban typology sited between open landscape and a densified urban core. Although it is a transition zone between the built and natural environment, it is not seamless such that the built environment tends toward enclaves. In this sense, Eastern Aalborg is a "**City In Between**" and will serve as an exploratory location around which the studio will nucleate ideas and concepts on the strategic development of the sustainable suburb.

The studio will explore spatial and programmatic constellations for the "City In Between." It will consider multiple definitions of "in-between," some of which describe the physical attributes of city suburbs, and some of which describe the transition states that cities and our global society are universally undergoing. Examples of lenses through which this question will be explored include "**in-between**" the following:

- **low density and high density urban development**
- conventional, **centralized infrastructure** solutions and local **distributed infrastructure** solutions
- **traditional energy** dependence and newer **innovative energy** alternatives (biogas, wind, solar)
- **local economic** opportunities and **global economic** opportunities
- realms of **physical infrastructure** and **digital infrastructure**
- attributes of a **consumptive society** and attributes of a **sustainable society**
- **qualification-driven** paradigms of education and **knowledge-based** paradigms of education

Research, case study analysis, and specific programmatic and spatial design proposals will be critical components of the studio approach. Within a larger context, this studio will contribute to national and international debate on strategic development of the sustainable suburb, speculating about questions such as:

- How can we cater to a "**suburban lifestyle**" without imposing norms of city design while creating new functional typologies (of public space, linkages, businesses, transit, density).*
- How can **landscape** become a structuring element in the **cityscape**?*
- How can suburban development strategies contribute in general to paradigms of **sustainable urbanization**?*

STUDIO SITE

Context: With its 21,000 inhabitants, 14,000 jobs and 11,000 students, Eastern Aalborg today is a suburban "City In Between" within the larger Aalborg region of 126,000. The area has extensive international connections involving knowledge industry components such as Aalborg University, global business links, and a large population living in the area who have non-Danish ethnic origins. While its modern origins are as a conventional suburb that lacks cohesion in its fabric; it is transforming to an important center around knowledge-based development, especially with new public transport linkages between the airport and university. The site presents a unique opportunity over time to create strong synergies between new large investments and increased sustenance of the suburb. At the same time, the nearby Aalborg port (the "Greenland Port") promises to see a new era of growth based on emerging shipping channels in the Arctic caused by melting of the ice cover together with increased access to natural resources in Greenland caused by glacial melt.

Design Considerations: Core site-specific issues studio participants will be encouraged to address within the larger framework of the studio include redefining building/ infrastructure typologies to respond to considerations such as the following:

Sustainable Habitat. *Retrofitting existing building stock, new building stock, urban greening, new potentials for multifunctional meeting places, and the transformative role of social media in habitats.*

Sustainable Campus. *Overcoming spatial divides between “town and gown” activating/engaging local resources (start-ups); mediating the expanding presence of the University in general; enhancing physical access the University (local to global scales - from bicycles to metro to airport) and access to University as center of knowledge integrated with local start-ups/ businesses and commerce.*

Sustainable Mobility. *Developing infrastructure as linkage between “enclaves” currently existing within the site context; promoting sustainable growth of the region.*

Sustainable Ecosystems. *Remediating the built environment in response to climate resilience; impacts of new hospital and university expansions; integration into nature and urban ecology.*

Sustainable Businesses. *Enhancing green technologies, integration of nature as within business development, logistics, and mobility; speculating on future of the port and the shipping industry together with reclamation of industrial brownfield areas adjacent to port.*

These concerns are further assessed through the sustainable capital they can be associated with - be it social, intellectual, physical, natural or production capital.

STUDIO ORGANIZATION

Urban Ecology Studio: This year's studio is the eighth in a series that explores collaboration between GSAPP Architecture students and SEAS Civil Engineering students. It has shifted in the past two years to include students at the Ph.D level in a joint GSAPP Urban Planning and SEAS Civil Engineering program sponsored by the National Science Foundation. This year six Ph.D students will work with eight M.Arch / AAD students on the Aalborg project. The Architecture students will have primary responsibility for a building scale proposal; and the PH/D students for advanced environmental research. Both come together in the programming assumptions. Concurrent with the studio at GSAPP will be a studio at the University of Aalborg exploring the same questions. It is anticipated that exchange will continue throughout the semester and that the work of both sides will come together in an exhibition and publication in Aalborg at the end.

Week 1 and 2: Research. What is the "City In Between"? (Individual Work) An initial research phase on the various possible interpretations of the “City in Between” will set the theoretical framework for the design studio. Every student will prepare global comparative case studies that contribute to the studio’s collective knowledge and address the “City in Between”. The above list of “in betweens” serves as a reference, but students will be encouraged to challenge/expand it.

Site Speculation, Trip Preparation. (Teamwork) Based on overlapping interests and topics, teams will be formed to redirect and synthesize the individual case study research that will be presented by the students upon arrival in Denmark. The 5 sites in Aalborg will be introduced and case studies based design speculations will be part of the matrix development. Studio participants will be encouraged to outline specific areas of interest in teams, through speculative questions concerning the future of sustainable suburbs in general, and to develop and present site-specific design speculations addressing the same.

Week 3: Site Workshop. (Site Visit) The Workshop will be held in Aalborg between Saturday, September 22 and Saturday, September 29. Schedule is to be provided by Aalborg University.

Week 4 and Beyond: Program and Spatial Design. Intensive research will begin by **PhD students** on programmatic potentials related to specific Site Workshop findings and recommendations. They will begin to explore areas of mutual interest with the architecture students, such that "design teams" begin to emerge. After the site workshop **Architecture students** will begin to developing design proposals that can range from infrastructural strategies to detailed architectural proposals for one or more of the **five sites**, to be determined during the Site Visit Workshop.

SUPPORTING RESOURCES

At Columbia, with support of the National Science Foundation, PhD students at the Columbia School of Engineering and Applied Sciences (SEAS) and the GSAPP Planning Program will work in collaboration with GSAPP architecture students in resourcing scientific and technical expertise for the design strategies. At Columbia's Earth Institute, the Urban Design Lab (UDL) will provide coordination and resources.

SITE VISIT LOGISTICS

As noted above, the site visit to Aalborg will leave NYC on **Friday Evening, September 21**; and return from Aalborg on **Saturday, September 29**. Air flight tickets and lodging will be provided by the Aalborg partners; participants will be responsible for expenses related to food. Subsidy for the studio is provided by the European Community Erasmus Mundus Program; the University of Aalborg; and the Columbia University GSAPP. Financial constraints make it necessary to limit the architecture student participants to eight. **IN ORDER TO COMPLETE THE AIRFLIGHT BOOKING WITHOUT DELAY, IT IS IMPERATIVE ARCHITECTURE STUDENT PARTICIPANTS BRING SCAN COPIES TO THE FIRST STUDIO MEETING ON FRIDAY, SEPTEMBER 7.**