Graduation plan architecture

Personal information

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Studio

Theme: Complex Projects - Chicago studio
Teachers: Darryl Ronald, Tanner Merkeley
Argumentation of choice of studio: I am interested in the combination of different scales. Getting to focus on both urban and architectural design and on the versatile design brief the studio provides. Also, the case of Chicago drew my attention as the US is a country of extremes, always leaving the challenge of the connection between these extremes. It seemed a fitting studio for me.

Title

Title of the graduation project: Mid-City Central: a new perspective on airport-centered communities in the 21st century

Product

Problem statement: Chicago: where the skyscraper was born. The city used to be at the foreground of innovative development and have an innovative attitude towards urbanism. In the last years however, the city has been slowly deteriorating. Growing segregation causes great quality differences in the different neighborhoods. The lack of infrastructure and variety in transportation speeds in the outskirts of Chicago makes these parts of the city very car-dependent and loop-oriented. For the non-Chicagoan Chicago equals the Loop (the downtown area of Chicago) and nothing more. The challenge facing urban planning is the need to organize coexistence in the city in such a way that it is possible to live in the outskirts of the city without the need for long-distance mobility; especially by car. Rather than the city adapting to the means of travel, the mode of transport should adapt to the city’s infrastructural needs.
The Midway Airport area is an excellent example of the car-dependent and loop-oriented neighborhoods of Chicago. There is little connection between the airport and its surroundings, causing it to be an island within the suburbs. The airport is characterized by its strict square boundary and abrupt transition from airport to residences. Despite their close proximity, the airport and its neighboring dwellings do not benefit from each other’s presence. The balance between private outdoor space and public outdoor space between buildings at the fringes of the airport is key to the development of attractive urban neighborhoods and an increase in interaction and connection between the two. Currently, this balance is somewhat lost and is in need of reconfiguration in order to revive the airport area.

The current model of housing in the Midway Airport area is very homogeneous, attracting a small and unilateral audience. The citizens of the area are content with their way of life, but there is little interaction between the dwellings and the airport. Two streets away from the airport, you wouldn’t even know it was there, if it wasn’t for the noise of planes flying over. Amenities and services are not within walking distance, forcing a car-dependent way of life upon the community whereas it may not be desirable for all. In such a context, my thesis will research and attempt to understand the vital sociocultural relationship between the airport and the community. By learning from previous examples, it will arrive at a new model of single-family housing and a series of design strategies by which one could blur the boundaries between the two worlds: new ways of dwelling in 2015 where airport and residence can be mutually beneficial.

Research question
How can housing for the middle class blue collar society be re-evaluated and redesigned as a part of the urban connection between airport, suburbs and the rest of the city?

Design assignment
The project is located at the fringe of Midway Airport Chicago, the suburbia-based domestic flights oriented airport. The main intention of this project will be to create synergy between the local suburban community and the global airport community within the larger urban fabric of Chicago, through a new model of single-family housing and a series of design strategies that could eventually become an alternative model or approach to the issue of airport-related dwelling.

Process

Method description
The thesis will be based on a strong theoretical framework that will be gained by doing intensive research, mapping and site analysis. The research will consist of two parts. The first aim will be to understand suburbanization as an American phenomenon and to look into innovative alternatives to the popular type of single-family dwelling. The second part will consist of understanding the attraction of airports and other airport-related public functions to non-airport users and the intensity of use of public community functions in proximity to airports. Through a number of case studies I will also analyze the various approaches to residential development in close proximity to airports in different countries and contexts. Site analysis and mapping will also play a very important role in shaping my design strategies. Moreover, 3D modelling, both physically and digitally, will provide visual insights and variable studies into possible design solutions.
LITERATURE

Over the course of my thesis I will be referring to the following articles, books and websites:

ON SUBURBAN DEVELOPMENT


ON THEORETICAL AIRPORT-CENTERED URBAN MODELS

Reflection

RELEVANCE

I believe that my project could have a life beyond pure academic work, and could eventually join the current debate about airport-centered development in larger cities. I hope to use the time available to me here at Complex Projects to come up with a viable and practical alternative to the current model of suburban dwelling in the proximity of Midway Airport Chicago and develop a model suitable to be applied to similar airport-residential relationships.

TIME PLANNING

01.09.14 - 14.09.14: Reading up on research done in previous years by Complex Projects Chicago studios and undertaking initial research.

15.09.14 - 28.09.14: Research: Initial readings and analysis within Efficiency group of the Midway Airport area.


13.10.14 - 26.10.14: Chicago site visit: mapping, data collection, interviews, photographs, workshops, lectures.

27.10.14 - 02.11.14: **P1 Presentation**: presenting initial research, conclusions and introduction to the site. Framing the project goal, research goals and personal interests and fascinations.

2.11.14 - 23.11.14: Research: understanding urban planning strategies. Scenario planning and vision collages on Midway Airport area future development.


05.01.15 - 18.01.15: **P2 Presentation**: Drawing conclusions from Research, site analysis and mapping along with initial sketches and diagrams.

19.01.15 - 01.02.15: Design exploration, and development of housing typologies.

09.02.15 - 22.02.15: Design exploration, development of design strategies, and focus on technical issues and details. Finishing theoretical research.

02.03.15 - 13.03.15: **P3 Presentation**: Presentation of sketches, plans and sections and overall design strategies.

14.03.15 - 05.04.15: Development of design. Detailing Overall scheme, along with detailed plans, and physical models.

06.04.15 - 10.05.15: Design detailing: Plans, sections, elevations, axonometrics, as well as physical models.

11.05.15 - 22.05.15: **P4 Presentation**: Presentation of final scheme. Detailed Plans, sections, elevations and architectural details.

23.05.15 - 28.06.15: Finalizing material for final P5 presentation.

29.06.15 - 03.07.15: P5 Presentation: Preparation for final presentation.

ATTENTION

Since my project deals with the issue of housing in close proximity to an airport, it will become important for me to explore different possibilities of construction and materials (uses, costs, etc.) in terms of acoustics, under guidance of my building technology mentor, Hubert van der Meel.