Permanence has been the foundation of most of our teaching and perhaps of our individual architectural practices to date but this semester's theme 'leaving no trace' stands as a counterpoint to this position. It provokes us to confront our preconceptions as to how to build sustainably and sits comfortably within the broad investigation of the teaching studio towards a sustainable architecture, engaging with the very real emergency condition of the Anthropocene.

Leaving no trace is about the ecological footprint of architecture, it means touching the ground lightly. The architecture of the so-called Dark Ages (early Middle Ages 5th-10th centuries AD) was primarily in wooden construction and as such there is almost no evidence left to archaeologists investigating their formation. Leaving no trace is about time, short, medium, long term. It offers an alternative perspective on how to 'build to last'. It acknowledges that some materials have a working life and then need replacing, re-covering, re-newing. Leaving no trace means using an economy of means. Leaving no trace is about the use of organic unprocessed material. It is a timely provocation to the process-led and highly unsustainable condition of the global construction industry. We are reminded of Walter Segal's self-build method which was based on traditional timber construction methods modified to use standard modern materials. The need for wet trades such as bricklaying and plastering is avoided, resulting in a light-weight method which can be built with minimal experience and is ecologically sound. The roofs tended to be flat with many layers of roofing felt, allowing the creation of grass-covered roofs. Foundations are minimal, often just paving slabs, the strength coming from the geometry of their construction. Leaving no trace can mean transient or transitional. That means questioning the idea of permanent solutions for fixed problems and instead thinking of tolerant strategies that can be designed for an unknown future or one of constant change and evolution.

The studio will work on various locations within the newly built first phase and soon to be built second phase residential development at Freiham Nord, an area west of the centre of Munich. We will consider three strategies for intervention; fringe spaces, densification of existing space and meanwhile use. Some projects may be proposed on sites where edges of development can be reinforced with fringe development, like tassels on a carpet edge, establishing transitional structures between the city and the landscape. Other projects may be located in the found space between things, within courtyards, as extensions to what already exists, or on unsuitable sites for mainstream housing bringing densification by adding small scale buildings intelligently. In recognition of the long timeframes for developing new residential areas and regeneration projects a strategy of meanwhile uses can gain ‘quick wins’ on the site to engage the community, to bring immediate use and act as testbeds for future ideas, creating a sense of ownership and identity. The third strategy is therefore about temporary use with a strong emphasis towards the communal and transient.

Through these projects the studio will explore lightweight, dry-trade construction providing new buildings as gifts to the already planned development which are ‘stitched into’ the residential structure, defining boundaries better and clarifying ownership as well as introducing a much-needed supply of alternative housing.
TUM  Studio Krucker Bates

Calendar

Week 1
16th April 2024
Introduction to the Semester by Studio Krucker Bates, Tuesday 11.00am (R 2380)
Introduction to exercises one and two*

Week 2
22nd/23rd April
Assistant tutorials (exercises one and two)
Introduction to exercise three*

Week 3
29th April/1st May
Excursion to Zurich

Week 4
6th/7th May
Lecture by Bruno Krucker, 11.30 am – present HS 0360
Pin Up 1 with BK, SB (exercises one, two, three) – present Room 2380
Introduction to exercise four*

Week 5
13th/14th May
Assistant tutorials (exercise three and four)

Week 6
20th/21st May
Pentecost – tutorial voluntary

Week 7
27th/28th May
Lecture by Stephen Bates, 11.30 am – present HS 0360
Pin Up 2 with BK, SB (exercises three and four) – present Room 2380
Introduction to exercises five and six*

Week 8
3rd/4th June
Assistant tutorials (exercises five and six)

Week 9
10th/11th June
Lecture by Bruno Krucker, 11.30 am – present HS 0360
Pin up 3 with SB and BK (exercises five and six) – introduction to exercise seven*

Week 10
17th/18th June
Assistant tutorials (five, six, seven)

Week 11
24th/25th June
BA 4.2am on Excursion
Assistant tutorials (exercises six and seven)

Week 12
1st/2nd July
Lecture by Stephen Bates, 11.30 am – via zoom link
Pin Up 4 with BK, SB (exercises six and seven) – via zoom link

Week 13
8th/9th July
Assistant tutorials (all exercises)

11th July
Hand in models

Week 14
15th/16th July
Final presentation with Stephen Bates, Bruno Krucker and guest critic – present Room 2380

Production list

Exercise one: Site
In this first exercise, we ask you to visit Freiham Nord and carefully examine your given site. Analyse its qualities, understand it in relation to the wider development and masterplan, make careful observations and record these with field notes and selected photographs. This includes researching the background of the edge of city site and the proposed developments of Phase 1 and 2. You will then make a model at the scale of 1:500 using grey card for the base and surface and hot wire cut styrofoam for any buildings that occur (or will occur on the site). Model materials will be supplied by the Chair. The base of each model must be a minimum of 50mm thick. The building blocks will be painted a warm grey to an NBS colour specified by the assistants. An introduction to this exercise will be given in week 1 of the semester.

Exercise two: Case Study
The second exercise is intended to bring intelligence and research to your work. Each group will be assigned a case study project which you are required to research and prepare presentation material. You will need to understand the background to the project, how it came about, who it was for and understand its social content. You will also explore the construction and method of assembly of the building, showing its details and materiality. We are not only engaging with architectural design but also exploring ways of making buildings and spaces accommodating diverse uses within a building, in particular addressing ideas of lightweight construction and so ask yourself, how does the building touch the ground lightly? How does it leave little or no trace? You will be required to present your assigned case study to the studio with case study, drawings (including a site plan, typical floor plan, and section) so that the knowledge you have collected may be shared by the whole studio. You will also make a grey card model at a scale of 1:500, and one typical detail model at a scale of 1:25 describing the construction, materials, and spatial concept. An introduction to this exercise will be given in week 1 of the semester.

Exercise three: Atmosphere
At this early stage of the semester, we now ask you to speculate upon the likely atmosphere of your project. Without complete information but just your instinct and model materials we ask you to make a model of an interior at the scale of 1:25. The model will reveal your first thoughts about ‘light-touch living’ after all there is no universal of what this means, you need to provide a personal definition of what this means to the character of space, the sense of material. The model will therefore describe an intention for the architectural, constructional and structural aspects of the domestic setting. It may not feel obviously domestic for example, more open to use, more ambiguous. The model will be made from a combination of materials including foamboard, coloured paper and other materials and textures as you see are necessary. You will then photograph it and present it only as a photograph at A3 size. Great care should be given to the making of the model in order to express the atmosphere that you are seeking to achieve.

An introduction to this exercise will be given in week 2 of the semester.

Exercise four: Urban/organisation strategy
Now we ask you to develop an urban and building organisation strategy of your project. You will work at different scales in this exercise, at 1:500 and 1:50. Using the site model you prepared in Exercise 1 you will test the massing and location of your project. While priority will be given to an extensive exploration of different massing options, you will be expected to produce drawings in the form of sketches and schematic plans, sections, elevations.

Alongside that, gaining a greater understanding of the character of your project from exercise 2 and 3, you will make study models at a scale of 1:50 in white foam board to investigate the internal spatial organisation of your project and the interconnection of different rooms and spaces. You should be able to define a structural and spatial strategy for your project with these models together with sketches and drawings in plan and section. An ‘open’ approach to the rooms and their projected use should direct your thinking in terms of internal planning. The positioning of doors and windows, the spatial possibilities for linking spaces and moving through them, large and small spaces with varying ceiling heights should be carefully considered. An introduction to this exercise will be given in week 4 of the semester.

Exercise five: Facade
With the knowledge you now have, you will investigate the design of the facades of your project in greater detail. Studies should be made of the ‘inner’ and the ‘outer’ aspects of the project, so that a particular relationship between the two can be established. Following these studies, you will construct a model of the complete building in hambord and thick card, with a focus on the detail of the facades at 1:50. One area of detail of the building should be made at a scale of 1:25 so that a deeper understanding of materials and junctions can be established. The manner in which this model is made, and the techniques employed to give detail and texture should be considered very carefully. An introduction to this exercise will be given in week 7 of the semester.

Exercise six: Special moments
This exercise focuses on presenting key spatial situations within your building. These special moments are intended to highlight the distinctive qualities of the project. Each moment is represented as an image (we ask you to submit up to five). This image is made either digitally or from the careful photography of a model, but either technique must be carried out with precision and detail. Great care should be taken to express the atmosphere of different moments of the project. An introduction to this exercise will be given in week 7 of the semester.

Exercise seven: Image
This exercise is intended to show your project in its context. The drawing is made from carefully made photographs and/or models, set up using 3D modelling and light rendering. The view should be taken at eye level and all vertical lines should be precisely vertical – wide angles or distorted views are not acceptable. A high standard of composition and technique is expected and remember that the image should convey the atmosphere and character of the project within the urban fabric. It may not be the focus of the image for example but may be presented as part of a new background, to landscape or to suburban life. An introduction to this exercise will be given in week 9 of the semester.

Final review
The final review in early July will consider all the work produced during the semester. In addition, you will be asked to prepare a PowerPoint presentation of your project. It is important that you are able to describe the development of your work accurately and precisely and include models of your final project at 1:50, 1:50 and 1:25, the case study, ‘atmosphere’ and exterior image. In addition to the material, you have already produced you are required to present a 1:200 site plan describing the ground conditions around your project.

* digital event (italic font)