The growing demand for housing is creating incessant pressure within European cities and a need to develop unused space or re-use existing structures within city centres. the Inner-city fabric provides opportunities, but also requires a sensitive approach to the need for privacy and daylight and creative ideas in plan and section. Projects located within the historic inner city are often muted or invisible from the street, not revealing their complexity, extent or spatial richness. Often only a limited facade expression is possible in relation to their scale. Accessed through passageways, courtyards or directly off the street these projects unfold to reveal their scale and it is only from the inside that they can be fully perceived. The interior elevations are often the primary public face of the project. They are primarily experienced as 'inner worlds' and it is interesting to consider what this means for their architectural identity.

This semester we shall explore how a residential development could be organized within an historic urban block. We wish to propose scenarios that offer characterful daylight and special moments of communal engagement, and the motivation to create a collection of fine rooms and interior spaces is at the centre of our thinking. We shall be considering the interfaces between the very public character of urban space and the much more private domestic space. The role of a courtyard or multiple courtyards, stairways and landings act as catalysts around which a community may thrive. Our task is to offer insights into how to make architecture that is dignified and humane in scale, rooted in place and metropolitan in character - with a confident and powerful presence. We are interested in developing plans that are open to appropriation, where the thresholds between ownerships are blurred or can be changed over time. This may mean that plans have multiple 'front' or 'back' doors, work with level changes and create interesting labyrinths in which dwelling can unfold.

The assignment is to design a 'future-proofed' building for living and working within an existing urban block in the stone city of Regensburg. One of Germany's oldest cities founded by the Romans in 179 AD. The city is characterised by the green sandstone quarried from nearby Ihrlerstein and used in many buildings including the Stone Bridge - a material imported to Munich and used for the Münchner Residenz, Alte Pinakothek and the Neue Pinakothek. In keeping with this past tradition, we wish to further develop the use of solid and enduring materials for the primary structure and cladding for new buildings in the city as an investigation toward more sustainable and low energy construction strategies.

Studio Krucker Bates Embracing space Inner-city living in Regensburg





Our semester commences with a field trip to Sardinia to investigate the ancient tradition of Romanesque churches on the island. We will observe their strictly ordered proportions and the way their geometry is adjusted to the ground and site constraints. We will also visit the houses of the Italian architect Alberto Ponis from 1960 onwards. Inspired by the natural landscape and by the island's ancient traditions, Ponis inserts his houses with great sensitivity into locations dominated by majestic granite boulders. The houses are accessed by 'old ways' or paths that often unfold further into the interior. We are interested in this robustness, the way buildings come to rest in the ground, working at many levels to form intimate enclosures, passively cooled and of their place.

Stephen Bates and Bruno Krucker, September 2023

Week 1 17th October 2023

Introduction to the Semester by Studio Krucker Bates, Tuesday 11.00am (R 2380) Introduction to exercises one and two

Week 2

22th – 25th October

Excursion to Sardinia

Week 3 $30^{th}/31^{st}$ October

Assistant tutorials (exercises one and two) Introduction to exercise three*

Week 4 6th/7th November

Assistant tutorials (exercises one, two and three)

Week 5 13th/14th November

Lecture by Bruno Krucker, Monday 11.30am Pin up 1 with SB and BK (exercises one, two and three) Introduction to exercise four*

Week 6 20th/21st November

Assistant tutorials (exercises three and four)

Week 7 27th/28th November

Lecture by Stephen Bates, Monday 11.30am Pin up 2 with SB and BK (exercises three and four) Introduction to exercises five and six*

Week 8 4th/5th December

Assistant tutorials (exercises five and six)

Week 9 11th/12th December

Lecture by Stephen Bates, Monday 11.30am Pin up 3 with SB and BK (exercises five and six) Introduction to exercise seven*

Week 10 18th/19th December

No assistant tutorials

Week 11/12 21st December 2023 – 6th January 2024

Christmas holidays

Week 13 8th/9th January

Assistant tutorials (exercise seven)

Production list

Exercise one: Cast

In this first exercise we ask you to begin looking carefully at the way stone buildings are put together, who they are joined and weathered, how surface finishes are determined to enhance appearance or use. You should first select a stone building (or a part of one) in Regensburg you find relevant and interesting. You then make a model made from Styrofoam modelling foam (supplied by the Chair) using a Hot Wire Foam Cutter and sandpaper. The base of each model must be a minimum of 50mm thick. The final model will be painted an off-white/grey to an NBS colour stipulated by the assistants. The model will show the bringing together of stone elements on the facade, their proportion and size, the way an opening occurs. The extent of each model will be discussed and agreed with the assistants before the final models are made. The experimentation of this modelling technique will be useful as you will be required to make the same model to show your own project later in the semester. A lecture will be given early in the semester from David Kohn, London on the use of stone in contemporary construction.

Exercise two: Survey

A study trip by the island of Sardinia will take place in the second week of the semester. This will include a number of visits to the Romanesque churches Each of the 9 churches will be surveyed by the studio working as a team and under the guidance of an individual group. That group will then be responsible for preparing a carefully drawn plan at 1:100 and to agreed graphic guidelines. Ceiling heights are required to be added to the plan. The exercise will give us the opportunity to test out the dimensions of walls in relation to space and learn from their scale, apportioning and relationship between each other. An introduction to this exercise will be given in the first week of the semester together with a lecture by Markus Stolz.

Exercise three: Urban strategy

This exercise requires you to make a 1:100 block model of your site and of the wider surrounding area in foamboard and grey card. The model will be produced as a group work and requires both accuracy and careful coordination, so that each site model can be seen as a cluster formed by the models produced by all the groups in the studio. The model can then be used as a tool to help develop a concept for your project. Painted foamboard study models should explore the scale and form of the building and its relationship with the immediate context. Having established the formal character of the urban massing, you should make a grey card version of the project to be placed precisely within the site model. 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.

An introduction to this exercise will be given in

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 foamboard and thick card, with a focus on the detail of the facades at 1:100. One area of detail of the building should be made at a scale of 1:25 (using Styrofoam model technique from exercise 1) 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: Small moments

This exercise is intended to allow you to present some of the special situations that you have developed in your design: 'small moments' which reveal the special qualities of your project. These should be described by a series of 1:20 models (we are expecting between 2 and 4 models, depending on the size of the project and group) made from foamboard and other materials, including coloured paper and precisely detailed models of objects. You will then photograph each 'small moment' model – no Photoshop allowed! 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 7 of the semester.

Exercise seven: Image

With the knowledge acquired and the intention you have established for your project, you are now asked to produce one image of the project within its context. The drawing should be constructed 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 the image should convey the atmosphere and character of the project within the city fabric. An introduction to this exercise will be given in week 9 of the semester.

Final review

The final review in early February 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 1:100, 1:50 and 1:25, the case study, 'small moments' and exterior image. In addition

Week 14 15th/16th January

Lecture by Bruno Krucker, Monday 11.30am Pin up 4 with SB and BK (all exercises)

Week 15 22nd/23rd January

Assistant tutorials (all exercises)

Week 16 29th/30th January

Assistant tutorials (all exercises)

Week 17 5th/6th February

Final review with Stephen Bates, Bruno Krucker and guest critic

TUM Studio Krucker Bates

* digital event (italic font)

week 3 of the semester.

Exercise four: Building organization

At this stage in the development of your project we ask you to study the internal organisation of your building at a larger scale. Study models at a scale of 1:50 should be produced in white foam board to investigate the internal spatial organisation of your project and the interconnection of different rooms and spaces. These models are not intended to be 'complete', but as tools for studying the relationship between floors and across space. An 'open' approach to the rooms and their projected use should direct your thinking in terms of internal planning. The position 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 5 of the semester.

to the material you have already produced you are required to present a 1:200 site plan and plans and sections at 1:100.

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