

As the city expands physically from the centre outwards and at the same time invisibly contracts through the growing dominance of digital communication the question of where an appropriate location is to ground buildings grows. The global Covid-19 pandemic has also brought into question the future relationship between working and living and challenged the traditional autonomy between the two activities. Therefore as we continue to speculate upon the potential of the European city we draw our attention to the places of change, the fringes of the traditional centre, the sub-centres, the ring-roads, the outer edges of the transport network. These locations are often challenged by noise pollution, connectivity, lack of coherent urban structuring and are neglected by city authorities and imbued with negative associations by citizens. And yet they have the potential to be transformed and given renewed value.

In previous semesters we have investigated the potential of buildings as infrastructures or intelligent ruins; spatial structures that facilitate use, that can be designed for an unknown future. This semester we wish to renew our focus on this theme, of buildings which are useful, suitable, usable and re-usable and with a strong physical identity. Buildings which have an expression of an economy of means and an economy of energy. Buildings that support ideas of a social sustainability and act as carriers of culture and guardians of cultural continuity and collective space. We may call these 'Transformational Buildings', highly flexible shells that provide for a multitude of possible uses in which living is at the heart. To design such buildings it is necessary to define its core values - its essence, as an urban figure and spatial experience.

The assignment this semester is to invent new structures on a number of sites in and around the city and periphery of Munich. These new buildings will be developed, either through the manipulation of existing prefabricated structural systems or through more bespoke, site specific structures, but always with an eye towards sustainability, towards environmental and structural efficiency. We ask you to think in both the short and the long term, to identify through structural expression and material choice an appropriate character that is not only flexible but also strong and open for adaptation and appropriation. The task will require you to not only specify and demonstrate the initial use of the building but also reveal and illustrate a second and third future use. You will have to think both from the present to the future but also from the future back to the present. While the use and occupation may change the architectural figure remains durable and firm. As Rafael Moneo writes "If architecture is established with firmness it will remain open to new interventions which prolong the life of the building indefinitely... The life of buildings is supported by its architecture, by the durability of its most characteristic formal means. Although it seems paradoxical it is this durability which makes change perceptible. Respect for architectonic identity is what makes change possible, what guarantees its life."

## Studio Krucker Bates Transformational Buildings Architecture at the fringe and for the future



## Calendar

### Week 1

13th/14th April

Introduction to the Semester by Studio Krucker Bates

Introduction to exercises one and two

### Week 2

20th/21st April

Assistant tutorials

Introduction to exercise three

### Week 3

27th/28th April

Assistant tutorials (exercises one, two and three)

### Week 4

3rd – 5th May

Lecture by Bruno Krucker, 11.30 am – online

Pin Up 1 with SB and BK (exercises one, two and three)

Introduction to exercise four

### Week 5

11th/12th May

Assistant tutorials (exercises three and four)

### Week 6

17th – 19th May

Lecture by Stephen Bates, 11.30 am – online

Pin Up 2 with SB and BK (exercises three and four)

Introduction to exercises five and six

### Week 7

25th/26th May

Pentecost – tutorial voluntary

### Week 8

31st May/1st June

Assistant tutorials (five and six)

### Week 9

7th – 9th June

Lecture by Bruno Krucker, 11.30 am – online

Pin Up 3 with SB and BK (exercises five and six)

Introduction to exercise seven

### Week 10

15th/16th June

Assistant tutorials (exercise seven)

### Week 11

21st – 23rd June

Lecture by Stephen Bates, 11.30 am – online

Pin Up 4 with SB and BK (exercise seven)

### Week 12

29th/30th June

Assistant tutorials (all exercises)

### Week 13

6th/7th July

Assistant tutorials (all exercises)

### Week 14

13th July

Final review with SB, BK and guest critic

## Production list

### Exercise one: The Lives of Buildings

In this first exercise we wish to draw your attention and observation to the lives that buildings embody. Originally built for a specific use many buildings outlive that use, either through intention or sometimes accident, their structure and sometimes their facades are often adapted and modified to support a new, second or even third use. However, visiting such buildings long after their original purpose has become obsolete, the atmosphere remains charged with the traces of past occupation. It is as if the residue of the past always remains and as the various uses are laid over the last a layered complexity becomes evident. As we develop an increased sensibility towards an adaptive re-use of buildings it is necessary to increase our awareness as designers of the subtle but ever-present tension between the structure and fabric of buildings and their allocated use over time. The task in this exercise will be to locate a building that becomes a case study that you will each present to the studio as a piece of research. It will be a building that you know and can gain access to and find information on and one that has already been transformed to a new use and one unintended at its inception. You will reveal the changes through drawings (the red and black line plan and section) and describe the atmosphere you find through photographs and verbal presentation. These case studies will become an important shared resource for the ongoing work of the studio in the semester.

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

### Exercise three: Urban strategy

This exercise requires you to make a 1:200 grey cardboard model of your given site and of the wider surrounding area. The model requires both accuracy and careful coordination and can be used as a tool to help develop a concept for your project. These 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 given building, you should make a model of the project at the same scale, to be placed precisely within the site. As the project develops this same model can be used to test the facades and roofs. While priority will be given to an extensive exploration of different pre-purposing 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 week two 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 relief and proportion of the facade through drawings and sketch models. You will then construct a model or 3D drawing of the complete building, 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 1:20, so that a more detailed understanding of material and proportion can be gained. 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 five 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, or 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 seven of the semester.

### Exercise two: Structure

The theme of transformational buildings encourages us to think of buildings as spatial infrastructures which facilitate use and that can be designed for an unknown future. The focus in this exercise is therefore towards physical structure and in particular the manipulation of existing prefabricated systems from industrial to domestic scale. Each group will be given an innovative and existing system and your task will be to research it and become familiar with the components, its opportunities, its limitations. The assignment in this exercise is to design a modest habitable structure using this system located in a courtyard of an urban block in Munich. You will need to be specific about the physical and spatial characteristics of the structure, how present it is within the experience of inhabitation, whether the structure is permanent or moveable, recyclable and in what way re-usable. You are required to make a physical model at 1:50 of the structure, (or upon prior agreement a digital 3D axonometric) and a 3D drawing of a typical joint at the scale of 1:20. This should be rendered to describe its materiality and grain. The design exercise is therefore a 'warm up' to the main design project and it may even serve as a prototype for the final design.

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

### Exercise four: Building organisation

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 or study drawings should be produced to investigate the internal spatial organisation of your project and the interconnection of different rooms and spaces. The models and drawings you explore 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 intended 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 three 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 as might encounter them moving through the spaces. These should be described by a series of 1:20 models or digital models in 2-4 positions, depending on the size of the project and group, made from card and paper. You will then photograph each 'small moment' model. 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 five of the semester.

### Final review

The final review in July will consider all the work produced during the semester. In addition, you will be asked to prepare a PDF presentation of your project. It is important that you are able to describe the development of your work accurately and precisely and include all models and drawings of your final project, the case study, 'small moments' and exterior image. In addition to the material you have already produced you are required to make a 1:200 site plan and plans and sections at 1:100 /1:50 /1:20