the learning journey

documentation of the process of designing architectural concepts

mikala holme samsøe, visiting professorship "a view north" - changing architectural practice

the learning journey documentation of the process of designing architectural concepts

The Sto Foundation supports young people both financially and ideally during their craft or academic training in the construction sector. With the visiting professorship program at the Technical University of Munich (TUM), the Sto Foundation is directly promoting teaching in Germany for the first time with an educational initiative running until 2020. The program entitled "The Changing Shape of Architectural Practice: View North" focuses on social trends, pioneering teaching content as well as applied research and design practice. Visiting professors and lecturers from Nordic architecture offices and universities will introduce students at the TUM Department of Architecture to Scandinavian approaches in theory and practice.



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introduction

There may be many reasons why you have opened this book.

Maybe you are interested in the field of architectural teaching and pedagogics. How do other teachers of architecture teach? Maybe you are a student of architecture curious to see how other students work and represent their work, and thereby reflect your own studies.

This book displays and reflects a design process for a conceptual architectural design of a secondary school in Germany – made according to a Scandinavian pedagogical principle.

It is not a book about school architecture – on the contrary. It is a book about the process of designing architecture, which has significant relevance to society.

The work was done with master students of architecture during my three semesters holding the visiting professorship of the Sto-Foundation at the Technical University of Munich named: A view North - changing architectural practice.

The aim of the professorship was to introduce a Scandinavian perspective in the teaching culture at a German university, focusing on issues such as methods in design practice, gender as well as opening up for new business fields in architecture.

To me, the complex of issues boils down to the question of the relevance of architecture and architects in society. *In which ways can architecture and physical planning contribute to a (meaningful) development of society?*

First what is architecture? My former teacher, at the royal Danish Art Academy, School of Architecture in Copenhagen, expresses it poetically when he writes: "We change the world in order to be in it. We call changes in the physical surroundings architecture when they are shaped by intensions that go beyond the fulfilling of mere functional, technical and financial benefits; When what we build, succeeds in telling us about the people and cultures behind it, and in telling us about the world as they have perceived it."

Architecture touches us and enables things to happen. This is why in my experience it is helpful to emphasise what *architecture does*. When primarily talking about what it looks like we potentially reduce the actual impact of architecture.

A well functioning society has needs far beyond the pragmatic functional, technical and financial ones – also cultural, social and spiritual needs are decisive.

It is commonly known that people and organisations in Scandinavian countries in general have a high awareness of the potential in architecture and prioritise it. In contemporary practice in Denmark we for sure also speak about what architecture *looks like* - we would like the "Schönheit" too! – but maybe we even talk more about what architecture *enables us to do*:

This makes it easier - also to laymen - to understand why building is not only a matter of fulfilling pragmatic needs, but architecture has a potential that goes far beyond.



In which ways can architecture and physical planning contribute to a (meaningful) development of society today?

So how can architecture contribute to fulfilling the needs of society? An inspiring approach when one thinks of for instance the 32.8 billion Euro² need of investments in the German school buildings within the next years.

The fact that Germany is investing a large amount of money in building new and renovating existing schools with a narrow and one-side focus on financial support for either energy optimisation or whole day school care, has been criticised from architectural organisations³ and it made it obvious to me to deal with the potential of deliberately using architecture to renew schools in Germany in a multifaceted manner: It makes one dizzy to think about what school architecture potentially could do for the city, the people of the neighbourhood, the health, the learning impacts, the grey energy, the climate...

My aim was to support a reflection among the students about this complex matter in the teaching programme. In one semester it is of course not possible to seriously take it all into consideration. However it is possible to systematically make the students address a number of the contradictory demands simultaneously, and train them in methods which enables them to handle complexity and different voices.

Three classes of master students did – with minor modifications - the same architectural design task with an identical space programme. Each semester was an incremental refinement of the previous. The semester was structured in a number of individual tasks that step-by-step built on each other and lead to the final architectural proposal.

You can browse through the book and find the exact description of the tasks we did on the way, as well as see the warm-up exercises, which had a more pedagogical and also social purpose.

Take influence

The overall aim of the class was to prepare students for a work life where they potentially can take influence and engage themselves in formulating relevant and beautiful architectural answers to issues of society: But how to empower architectural students? It is for sure relevant to complement the classical architectural virtues and craft of architects. I would like to highlight two complementary aspects here:

Practicing Working Methods: Having an explicit language for how we do things, helps us to be understood by others and also to become better collaboration partners. It also helps us to move on when we are stuck.

As an example, one of the mottos, which seems to work well is: "Don't think, produce. Produce while you are thinking".

Creating a safe Environment for Experiment. Most students feel insecure and sometimes also lost – that is normal, but this can and should be reduced by showing trust and allowing for failure. Students worked individually on each of their projects, however a non-competitive atmosphere was systematically fostered. For instance students were encouraged through a weekly check-in routine that gives every individual a voice ("How are you doing?") to share, support - and take care of each other.

Working methodology

The book is structured in four chapters, each representing a working methodology that we practiced. The choice of methodology reflects the overall aim of educating architects that are able to contribute to a relevant development of society.

1. Exploring context

The students circled around the question of what the concept of "context" means and how this meaning influences the result of the architectural design work. Thus they were presented with several theoretical contradicting perceptions, each making use of a certain kind of working tools and design methods.

One idea of context is the philosophical idea of phenomenology and the related idea of genius loci⁴. Students were encouraged to make subjective sensuous descriptions of the spirit and the atmosphere of the place and of the architectural phenomenon that they sensed. They were asked to investigate what they sensed while experimenting with artful representation tools.

The other idea is that context is understood as a pragmatic and complex social reality.⁵ Client and demand-orientated feasibility studies were made and presented in front of an imaginary powerful female client. Pictograms, diagrams and numbers were taken into use to visualise the context analysis.

Students were forced in what sometimes feels like a sales situation, thus they were also asked to reflect on their own role and ethic questions when they try to convince a client

A third idea about context is the pedagogical philosophy behind the programme for the school. Students were at an early stage asked to reflect the Danish pedagogical philosophy by building 1:50 models of possible "ideal spaces": Space sequences that proactively support the pedagogical understanding of children, the role of the teacher, project-based work, learning and outreach to society.

Surprisingly, it was a new experience to – every single student – that an architectural proposal could also take its point of departure in the a small-scale idea of a space related to a pedagogical context. Instead of, for instance, taking the point of departure in a large-scale analysis of an urban context, which is a common way of working for many architects.

Looking at the different understandings of "context" sharpens the line of thinking and argumentation and allows for approaching an architectural task from different scales and contextual angles. Basically, students were thereby confronted with a corner stone of scientific tradition that a question has to be investigated from more than one perspective.

2. Warm-up

The ability to deliberately speed up the creative process was expressed through the warm-up exercises. Each day started with a warm-up of 20-40 minutes with a special task. It helped getting tuned and started and allowed students to test out methods to foster creative thinking and/ or production.

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The warm-ups were chosen in order to support our current issues in the class: In the beginning they had a social purpose: "Make a blind-drawing of your neighbour". Or an ideation purpose: "Do a walk-and-talk on site and discuss: related to the UN Sustainable Goals which potential do you see in the neighbourhood?" Or an overview-purpose: "Make a 1:10 layout-drawing of the final boards you are going to hand in".

Later the warm-up exercises drew attention to a relevant aspect in the design process: "Sketch the way a pupil takes to the main entrance of your building" or "sketch a significant space in the building". Or the warm-up had an aesthetic purpose encouraging everyone to test out a digital or analogue drawing technique: "Make the 1:500 site plan without knowing your final design".

The final warm-up took place one week before finalisation: Everyone was asked to hang the almost finalised project on the wall in a full scale draft print. Four to five people formed a group for giving feedback: "First, let your group *describe* what they see; secondly listen to the critique. The one being criticised is not allowed to say anything". This warm-up worked extremely well. Most often the intention and idea of the project is not understandable either to the observers, nor - in the worst case - to the author herself. Students paid more attention to the communicative and conceptual aspect of their concept.

The warm-ups introduced students to a number of working methods, which have the potential of being useful in various other situations as well. It makes students reflect on the How-question: How do I work and which method is relevant for what I or we would like to achieve? But in a wider perspective, why is it so important to reflect?

A number of schools of architecture in Germany, including the Technical University of Munich⁶, have a rising focus on enabling future architects to invent new business models, collaborate interdisciplinary and foster innovation.

This, we might call it the "creative innovation-world", has been desired by business school scholars and CEOs for two decades and has now become mainstream in business schools, however among architect it is not en vogue⁷.

It is a paradox that creative working methods supporting such efforts are taught intuitively in schools of architecture today. Working in an emerging praxis such as the architectural field, is automatically related to a practice of testing out, model-making dealing with complexity and uncertainty. Methods, which are also known and described in innovation theories⁸ and have proven to be useful also in non-creative organisations.

So far business schools have defined the vocabulary and the aesthetics (post-its and bold markers and Lego) of creativity and innovation. We have not yet found our own vocabulary and aesthetics in the architecture world.

The explicit warm-up exercises are a small contribution to reflect on the method we learn. It trains future architects in ideation and seeking an active collaboration with others and promoting an aesthetic approach also in the remote corners of the building and planning sector – or even outside this sector.

3. Reflection time

The ability to speed up and produce for sure is one important virtue when developing architecture. The ability to reflect practise is another important one.

This is why reflection time was systematically integrated in the programme as a methodology worth practicing deliberately:

The students and I spent one day a week together and every day started with a "Check-in": A 10-13 minute routine to get a feeling for how the group is doing. "Which question has been on your mind since last time? What surprised you this week?" In the afternoon, the check-out helped focusing on the insight gained or on new questions that arose.⁹

While doing this the students and I stood in a circle with an imaginary ball. The person who had the ball was allowed to speak. Everyone else was not allowed to say anything, which encourages brief and precise answers. It was a good and friendly moment of concentration and focus.

It is significant to follow how the degree of reflection rises week by week by the majority of the students. They learned from the precise observations of each other and they started digging deeper themselves.

The check-in also had a social function and worked as a possible place to make an announcement when one needed a bit of extra understanding and empathy. "I left my boyfriend and do not have a place to live now". This was the exception, but it explains quite well why the student was not working well and gave other students a chance to help looking for a place to stay.

When students show their vulnerability in relation to their studies and share possible ways to handle it - "I was stuck, but then I found this article by" - it resolves the competitive atmosphere and instead creates a safe environment to experiment.

A second tool for reflection is the beautiful sketchbook: The students kept a learning journal during the semester. They were asked to take at least four to eight minutes after our weekly day together and preferably at the end of every working day to jut down reflections to the following questions: What did I learn today? What did I not understand? What would I like to understand in the future?

The best students of course managed not to give answers – but started posing new questions.

The reflection time was a way for the students to frame and reframe the assignment and their own method several times. This is often referred to as "double-loop learning". ¹⁰ Thus the semester did not end with the final presentation of the architectural project, which is common practice. Instead we met one week later, when everyone had rested and cleaned up, and reflected the whole semester together by looking back with the help of the learning journals. This meeting was then the final check-out of the semester.

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4. Representation

The fourth working methodology we explicitly practiced is the representation of the project.

Students were encouraged to experiment with drawing and representation techniques and to try out something they had not tried out before. This seemed to motivate and to foster self-confidence. The risk is of course that the experiment fails, which unfortunately is also a risk for the professor (!) since the success of the teaching programme is also measured in the pictures on instagram and web afterwards.

Using a uniform representation technique is sometimes emphasised among colleagues as it allows the students to produce at a professional level if they have a predefined and pre-tested graphic template. This is true and I believe also a good learning exercise simply to copy and learn the craft. A uniform representation technique also contributes to making the content more comparable.

However, in this case the whole idea was to bring opposing ways of perceiving context together, prioritising them and using some of them as the driver for the architectural design. Students had to choose an adequate representation technique for the content of their proposal.

Maybe the architectural proposal was primarily a story about the ideal space for a pedagogical philosophy, or it was about saving grey energy and solving social problems, or maybe it was a subjective and atmospheric reading of the place. Each story potentially has a different audience and a different range of aesthetics expressions. The method of representation was regularly trained in the warm ups, having only short time it was obvious to try out analogue techniques. This inspired many students to combine digital and analogue later on.

Asking students to experiment however is not enough. It is necessary to push them to test out. Blue-prints in large formats are not inexpensive, thus it is understandable why many students see their semester work for the first time 1:1 printed on the day of handing it in. The pre-hand-in one week before the final hand-in is a good way to push for a test and adjustment before large boards are being printed.

It was absolutely ok to bring smaller and cheaper A3 prints, which are placed together to create a larger format.

Structure of the book

The book is structured around the four working methodologies, which we tested: *Exploring context* showing tasks in the beginning of the design process, *Warm-up* showing the short break-out in between, *Reflection* showing the check-in, learning journal etc. and *Representation*, showing a section of final proposals from all three semesters. Beforehand is a summary of the brief.

I have emphasised to show the tasks we did on the way in the full length as an invitation to try out something similar yourself. If you do so, I find it inspiring to hear from you and learn from your experience.

Mikala Holme Samsøe

1: Harlang, Christoffer, in: Fra Venezia til Palipsest in Arkitekten 07.2020 page 75. Translation by author

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^{2:} Scheller. H. et al (2017) KfW-Kommunalpanel 2017

^{3:} Symposium »Schulbau der Zukunft 20.7. 2017. Bund Deutscher Architekten BDA, Montag Stiftung Jugend, Gesellschaft und der Verband Bildung und Erziehung (VBE).

^{4:} Nordberg-Schulz, Christian, Genius Loci, Genius Loci. Landschaft. Lebensraum. Baukunst. Klett-Cotta, Stuttgart 1982

^{5:} Koolhaas, Rem, Delirious New York. The Monacelli Press 1978

^{6:} Such as for instance the SABRE project

^{7:} For instance, I hold an executive Master in Innovation and Leadership in Complex Systems from Copenhagen Business School / Aarhus University School of Pedagogics - and experience the resistance when mentioning this to fellow architects, studying innovation at a business school question classical virtues of our profession; serving society over (individual and global) business.

^{8:} Simon, Herbert. What we know about the creative Process, In: Kuhn, R.L (ed) Frontiers in creative an innovative management., Ballinger Publishing Company p3-22

^{9:} Darsøe, Lotte. The method of Checking in and out is inspired by Prof. Lotte Darsøe Ph.d, Aarhus University, Danish School of Pedagogics who practice this in the Executive Master programme I joined. In her research she deals with the pedagogic of innovation and how art-full process can support transformative learning.

^{10:} Morgan, G. Images of Organizations, Sage 2006



semester programme

In which way can we as architects contribute to an aesthetic and sustainable development of our society? Together we use the following semester to explore the power of this overall question.

We achive this more specifically by looking into Scandinavian school architecture and pedagogical principals when doing a architectural proposal for a secondary school in Munich. The overall aim of the course is to prepare students for a work life where they potentially can take influence and engage themselves in formulating relevant and beautiful architectural answers to issues of society.

Content of the class:

In order to prepare a conceptual architectural design for a secondary school in Munich, which focuses on collaboration and sustainability, students are asked to reflect on the following questions: How can architecture enable learning? How do the spaces function? What is their relation to each other and to the surroundings? And how are they constructed?

They are introduced to different perceptions and theoretical approaches to what context is - and they practice how to transform context analysis into architecture. One part the context analysis is for instance conducting a short study based on the UN goals. The United Nations Sustainable Goals are a great example of a relevant context that a modern-day architect also has to reflect on in her or his work. During the semester students work individually on their proposal for a secondary school and in weekly exercises explore different kinds of context related to:

- societal context: United Nations Sustainable Goals.
- physical context: site in Munich,
- pedagogical context: studies of learning environments, especially in Scandinavia,
- genius loci context: the atmosphere of a place.

Methodical approach:

We meet once a week, do an exercise together every session, and gradually develop the new school's conceptual design. The class is carried out in a way to encourage students to get involved in the high-energy discussion, interaction and production. Once they decide to take part on the course, students are expected to work in a committed and inquisitive manner as well as actively participate in the discussions. We check-in together in the morning and check-out in the evening.

Students systematically learn practical methods related to the analysis and design process, as well as those related to the process of communication and presentation of the architectural proposal.

Each student keeps a learning journal to document the progress of intellectual thinking. The purpose of this is to prepare students to reflect on the methods they use, make them competent collaboration partners and to train them in presenting and representing ideas, so they can be understood.

Overall purpose:

Students reflect on what their projects are capable of doing, locally and globally and train the ability to clearly articulate this. Students are trained in transforming reflection and context analysis into a physical architectural proposal – space, function, material...



Goal for the semester:

- an architectural proposal for a secondary school
- a learning journal
- a number of beautiful sketches bounded in a book





UN Sustainable Goals

On September 25th 2015, countries adopted a set of goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years. For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society – and people like you.

The goals are also relevant for our build environment. It is a context of our time. It is the first time that the world society formulates joint goals based on the values of solidarity. The goals emphasise the fact that everything and everybody is connected in the world.

Beforehand

Bring one nice A4 bounded book with plenty of white pages. The book ist your Learning Journal and will follow you the entire semester and should be a nice one.

T ask

Prepare a pecha kucha presentation for your fellow students about one of the targets. Please coordinate your choice of target among class members so we cover all the 17 targets. Practice your presentation beforehand.

Your presentation should inform the audience about:

- What is the target?
- Why is it relevant to us as architects?
- What influence does it have on the build environment?

Format:

Pecha kucha: Prepare 20 power point slides of 20 seconds each (six minutes and 40 seconds in total). The format keeps presentations concise and fast-paced. Please adjust your presentation beforehand, so it is set to 20 sec per slide on a stick.

Learning target:

introduction to the UN Sustainable Goals

Practicing the ability to articulate (and plan) architecture in a larger perspective.



Based on the United Nations Sustainable Goals, which potential do you see in the site?



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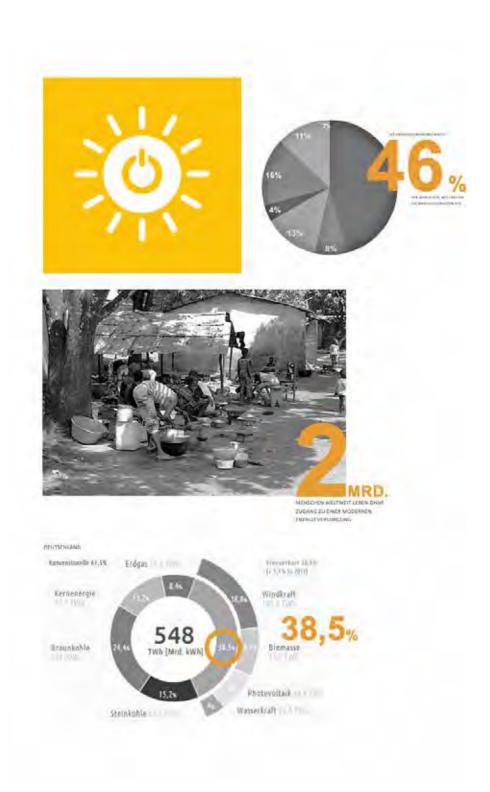


















feasibility study

66 You have a meeting with your client. In one week, investigate 8-10 design options and their M 10 consequences. Work systematically W 445 and do not fall in love.

feasibility study

You have a meeting with a client from the city. In one week.

They would like to know what to do with the school building in the future.

Should it stay or should it go? Or is it possible to extend the building? What to do?

Prepare options for the client in three groups.

Be objective. Give arguments.

Consult specialist you know (of).

It is not about being able to answer all questions – in certain cases it is also good to pose questions and frame problematic issues. Wherever you can: argue with numbers and facts – and do not forget to write where you got them from (scientific method).

Hand in:

1 X A3 binder horizontal per group

The papers should be loose and hanged on the wall.

Learning target:

Training the ability to:

- observe, analyse and reflect (a complex) context
- produce and choose in a focused way
- reflect on what the client needs

Methods:

diagrams, numbers, plans

digital and sketches by hand, as well as pictures to document

"Take your reader by the hand" and make it beautiful.

Illustrate what you say in fast sketches, diagrams...

Build up a story in your presentation.

language keywords and diagrams: German

How to do:

- Make a paper dummy of blank pages. Give each page a title and a rough idea of the context.
- 2. Split the tasks.
- 3. Make one or two persons the graphic designer/coordinator of your group.

Process and group work:

Work efficiently in your group. Meaning:

do not think - produce! Think while producing.

Present for each other. Do not say no.

Select and sharpen your analysis.

Split the tasks and agree on goals and deadlines.



context

feasibility study

Investigate the following scenarios:

Scenario A: complete demolition

- Amount of waste? Dimensions? Weight? How many trucks?
 Please estimate and represent these quantities graphically.
- Time? Rough schedule from demolition to new construction
- Relation to UN goals / strategic goals of society?
- Possible development on the property (see also plan B)

Scenario B: partly demolition and extension

- Large:
- preserve slaps and columns restructuring floor plan, new facade
- Medium:
- preserve slaps and columns, new facade and additional construction
- Small:
- preserve and renew the facade, restructuring floor plan

Visualize – diagrammatically – the small/medium/large design variants.

- Which questions are posed in each of them:

 Constructive topics and questions?
- Load-bearing walls? / Possibility of building on the roof? / Climate? / Energy?...

Keep the facts of the space programme in mind. How does it fit in with the requirements of the school?

Scenario C: maintenance and renovation

Create digital plans / sections, floor plan / facade for the whole class. List and display the qualities of the existing building (e.g. use parts of the context analysis model).

Set up variants with corresponding arguments pros and cons:

- Received with a change in floor plan
- Receipt with new building addition (where, how many sqm?)
- Think for example in design strategies such as in Tabula Plena*:
 superstructure / mat / monolith / composite / envelope / shape / stitching / frame/skin/ partition/ threshold

Document everything with facts from the room programme. How does it fit in with the requirements of a school?

A general rule:

It is not a question of answering all questions in full, but rather encircling a lot more topics and questions. However, statements should be checked for plausibility.

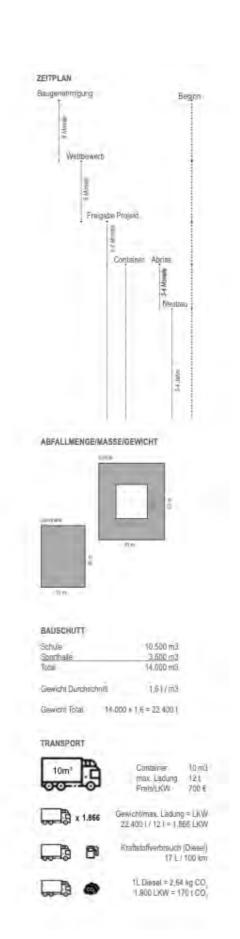
Please no (long) texts, but much more diagrams, plans, sections, sketches, topped with titles, sub lines and numbers.

^{*} Bryony Roberts (ed.) Tabula Plena, Forms of Urban Preservation, Lars Müller Publishers, 2016

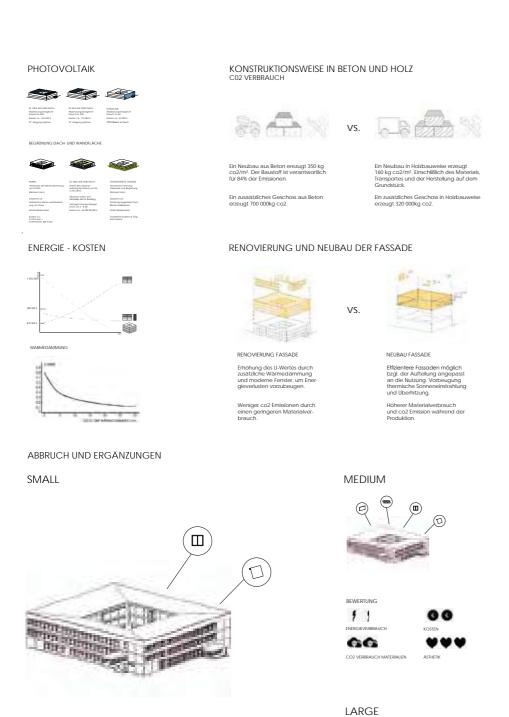
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It is not about being able to answer all questions — in certain cases it is also good to pose questions and frame problematic issues.

Where ever you can: argue with numbers and facts - and do not forget to write where you got them from.



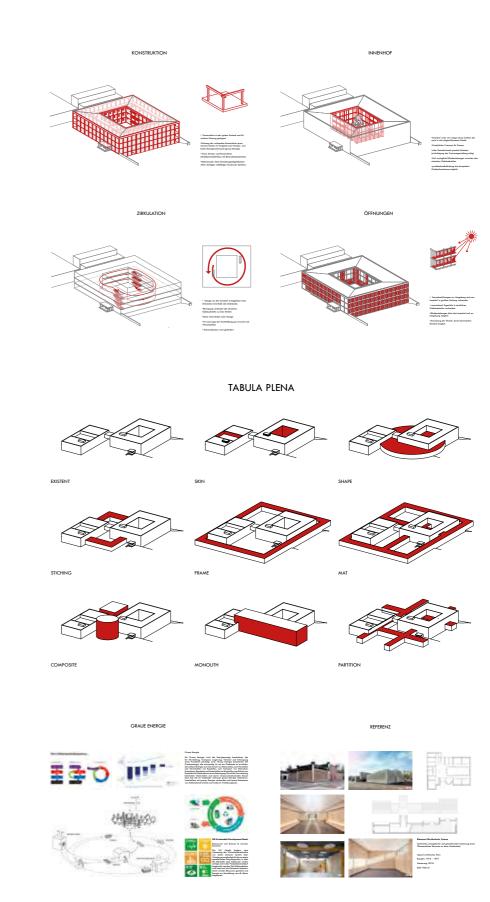




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ÄSTHETIK

BEWERTUNG



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BEWERTUNG

ENERGIEVERBRAUCH

CO2 VERBRAUCH MATERIALIEN



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Take your reader by the hand and make it beautiful.



site analysis

Based on our work with different perceptions of context, you will make an analysis of the location in Sendling. Visit the site in Sendling in pairs. Choose a partner who is not necessarily your best friend, but choose someone who is good at something you are not good at. Tell the person what it is, if you already know.

The result of the task is an analysis of the site, keeping the program and the goals of the UN in mind.

While describing the genius loci of the place, this task should automatically make you start thinking about an overall concept for your building and give you an approach to how to deal with the site and the volumes on the site. In other words: you slowly begin to turn the analysis into an architectural proposal.

How to do:

The visit consists of several steps:

I. First make a walk-and-talk for approximately 25 minutes: Based on the UN Sustainable Goals, what potential do you see in this site?

II. Start with a more detailed registration. Do diagrams. Document, take pictures and make sketches (see the analysis guide). Remember to take pictures that can help to "tell your story" as well as overall pictures to register the place.

III. If you want to experience the site on your own, stay longer afterwards.

IV. Back home: start analysing separately, but stay in contact with your site buddy.

Hand in:

Consultation on your work October 30th

Hand in: Tuesday, November 6th

Pin up together: Hang up your plans before 9.00 a.m.

Hang your presentation on the walls next to the person you went with to Sendling.

A good analysis is the first step in making an architectural proposal.

Methods:

diagrams, plans, sections, analog and digital sketches and pictures

A4 - if you need more space, choose another DIN format (A3, A2, A1).

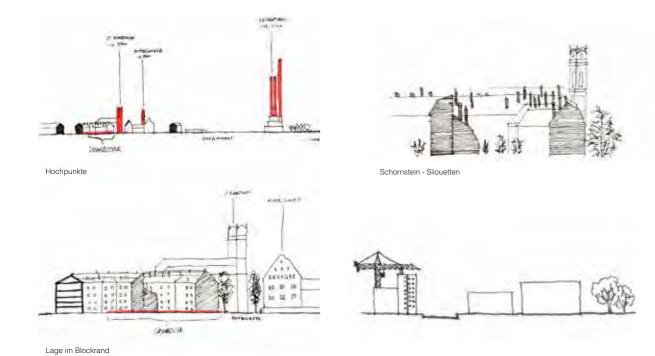
"Take your reader by the hand" and make it beautiful.

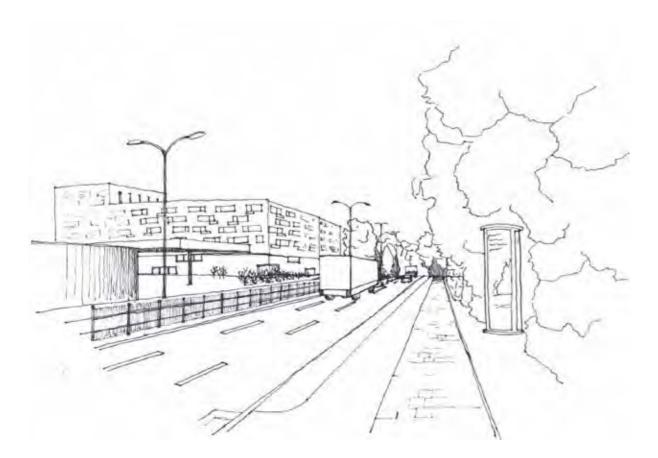
Think about which techniques you would like to try out.

Learning target:

The ability to train:

- to observe, analyse and reflect on the context,
- to produce and choose in a focused way,
- to transform the context analysis into an architectural potential.









ZUGÄNGE GRUNDSTÜCK

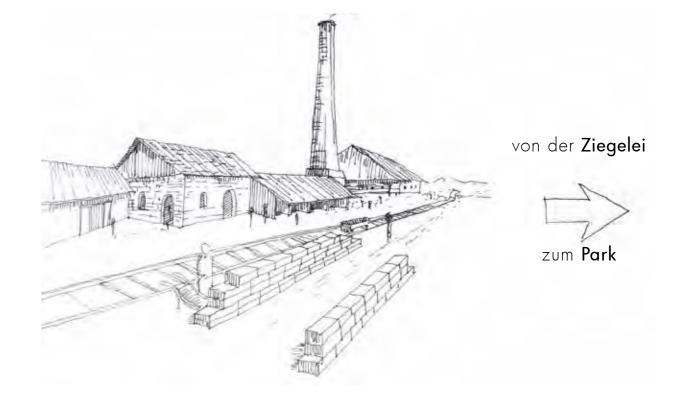
- Zugänge durch Torerestliches Grundstück durch Zaun geschützt
 - Zugänge hauptsächlich im
 Osten, vereinzelt im Westen
- Zugänge versteckt durch Bäume

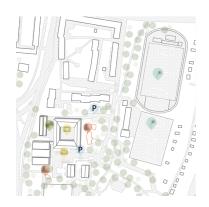












SCHULHOF

vier wesentliche Bereiche des Schulhofs: gepflasterte Wege Bereiche mit Spielgeräte unterschiedlichen Sitzflächen Innenhof im Schulgebäude
 gepflasterter Bereich Stellplatz für PKW/ Fahrrad
 Sportplatz von Schule genutzt













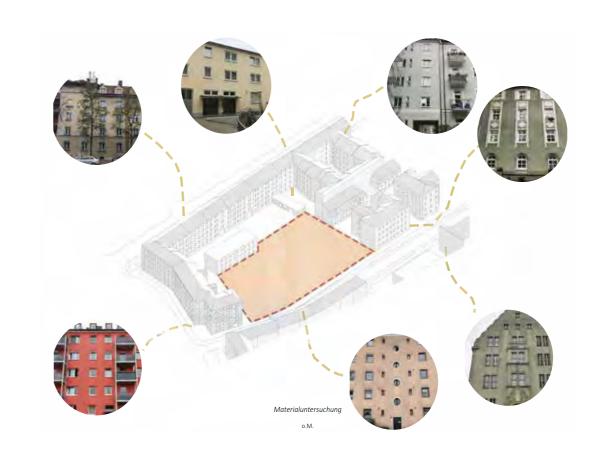












genius loci

· Maria Probst Realschule St. Korbinian Schomstein-Wald lunenhof AUSBLICK Unterschiedlich geneinte Sattel-

What is the atmosphere and the spacial structure of the place?

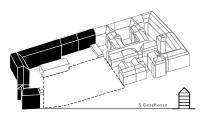
Make a subjective description of your perception of the spirit of the place. Experiment with artful representation tools.

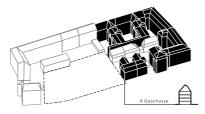
Blick d. Wackersberger Str. 24

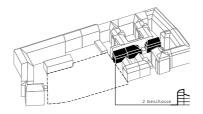
und Mansarddächer sind mit,

eine schnelle Orientierung

hohen Schornsteinen bestückt. Hochpunkte im Bild erlauben









BODENBELAG Historischer Pflasterbelag (Welhen- & Schappenhager Verhand) trifft medernen Gussaphalt Straße.







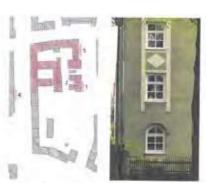




Reiher Silvery Verhion

INNENHOF FASSADEN

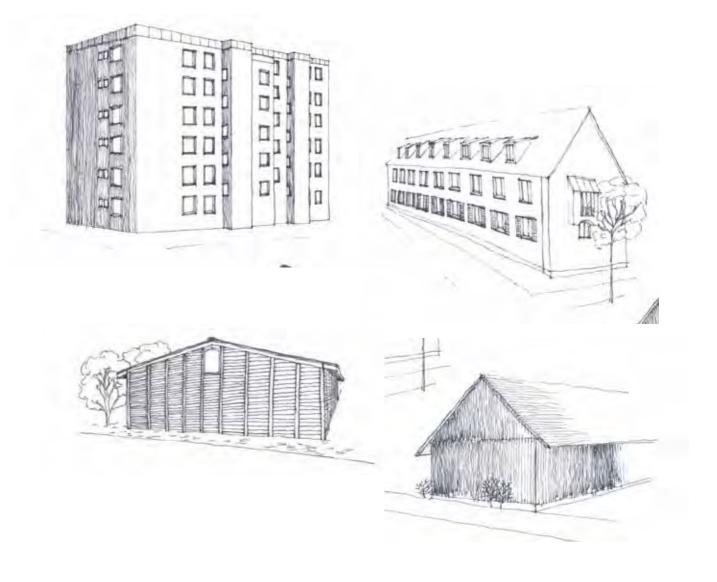
Die dem Baugrundsrick rugsweiden Finnsaleri aus den voer Jahren, werden dannk Eingange, Bailsose und Troppenhäuser aufgelockset. Die strenge Assellaung der Feispier und die unterschiefelliche Estrbigkeit dechen beswir.











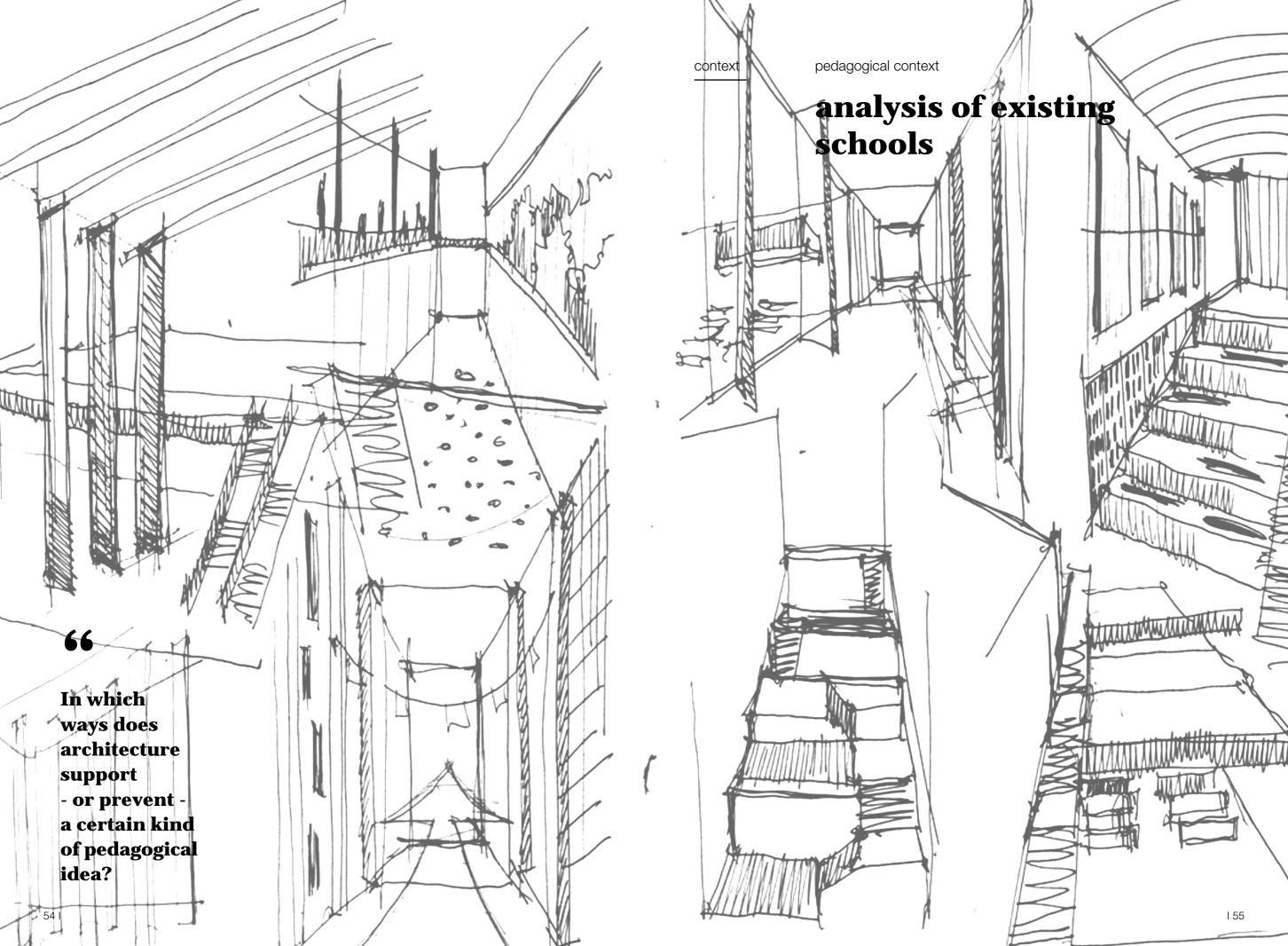
ALTERNDE FASSADEN

in three Trefe, dem Desail und der Farbgehung, schaffen die Fassiden eine füsturische Annosphäre, die von Beuten uns eine voer Jahren gebrocken wird.









analysis of existing schools

In order to get inspiration for how to transform a pedagogical concept into architecture that supports the idea of pedagogy, we will study a number of school buildings. Analyse one of the following schools group wise.

The analysis is primarily made in diagrammatic sketches (simplified plans, sections and maybe an isometry). You may supplement with pictures (modified as diagrams).

Hand in

Pecha kucha: each group has six minutes for two projects = 360 seconds = 36 slides, each 10 seconds. Do not use internet material only. Produce your own diagrams to reflect. Make a lot. Pick the best one to get a coherent analysis/story.

Add a describing headline to each picture or diagram. Combine picture and diagram. Each slide should be self-explaining, and beautiful and inspiring to look at.

Analysis method:

First: Make a classical architectural analysis of the school which contains the following aspects: Leave out aspects if they are not relevant for your school.

functions, hierarchies – open-closed, inside-outside, entrance, circulation, movement, relations to surroundings, place, materials, scale and proportions, construction, formal geometry, rhythm, contrast, ...

Secondly: Use this analysis as a starting point also to reflect the following different contexts of the school. Always use the findings in your architectural analysis as arguments for your findings. Choose relevant findings and put it into diagrams.

Context: of the place - genius loci

- What is the physical relation between the building and its physical surroundings?
- perception, atmosphere

Context as social/political/financial... context:

- Why is this school build at that time?
- What does it show architecturally?
- How is a child being perceived?

Context of learning

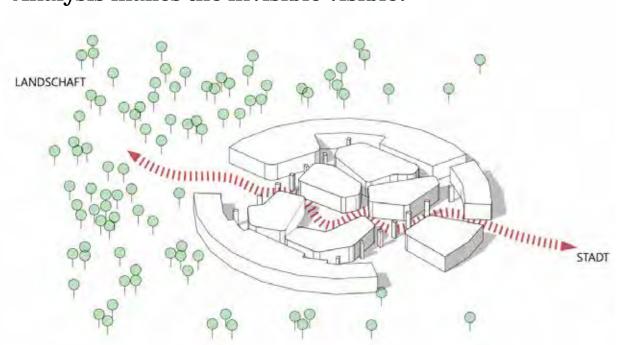
- What is the pedagogical idea? (Please do not spend much time on research in this if it is difficult to find information, instead observe and argue for your assumptions.)
- In which ways does the organisation of spaces and programme support or prevent certain kinds of life?

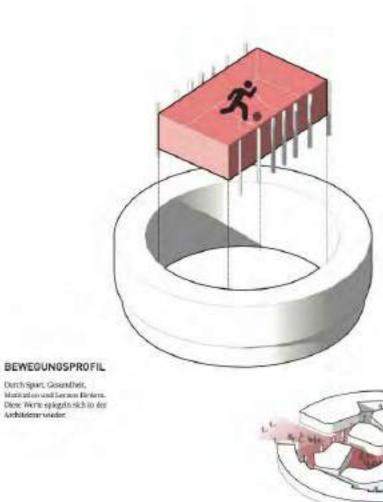
Learning target:

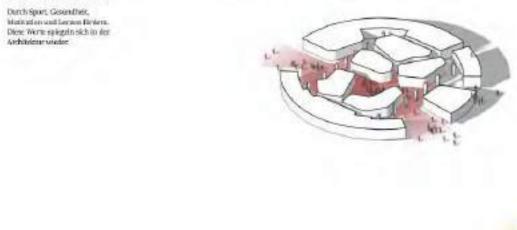
- training analytical and representation skills
- gaining functional Inspiration for how to give shape to spaces for learning
- practicing group collaboration
- training the ability to represent and present the essence of an idea in a beautiful and inspiring way

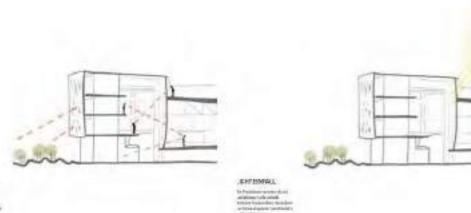
66

Analysis makes the invisible visible!





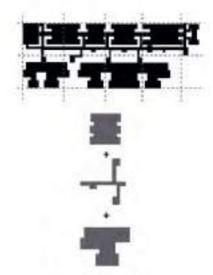








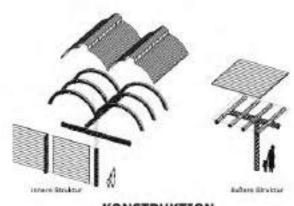
EPFL Lausanne, 1978



SOZIALER + POLITISCHER KONTEXT STRUKTUR







KONSTRUKTION





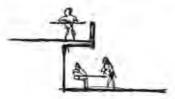


Architektonische Grundgedanken

Anthropologischer Strukturoliumus: Ireier Ausdruck und individuelle Interpretation Balance zwichen Rückzug und Offenheit Doppennutzung des Korndors

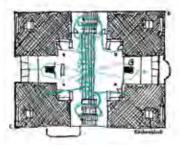


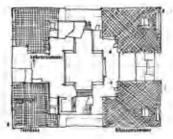




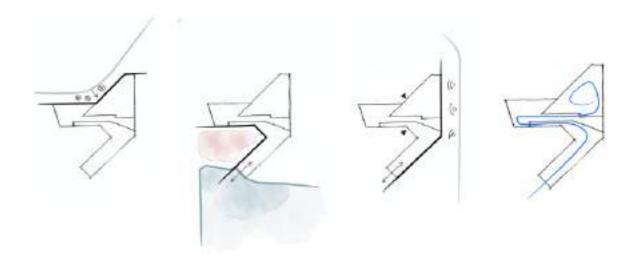


Micrachie + Übergänge Balance zwischen Offenheit + Privatheit





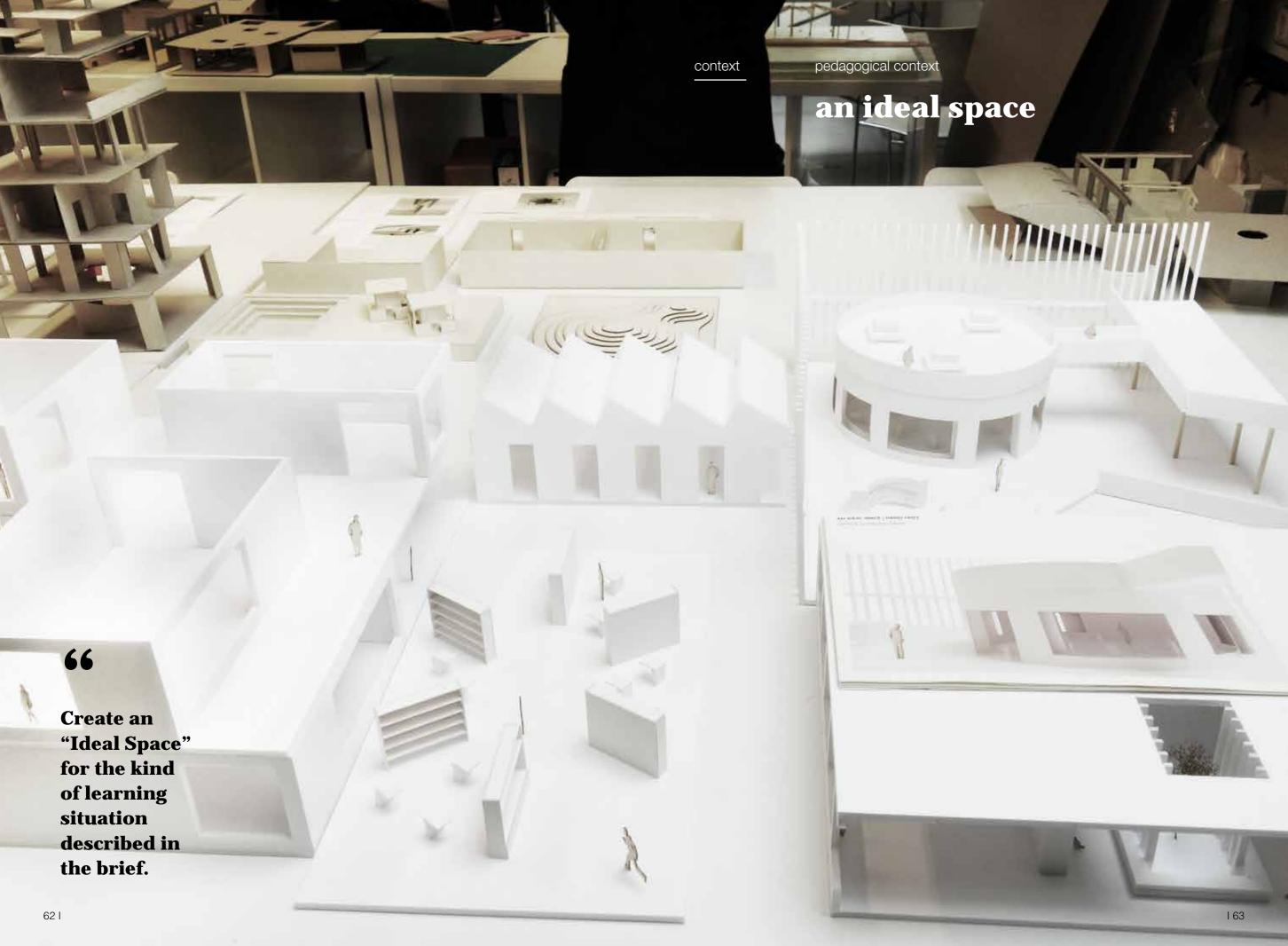








skole I sydhaven, jjw architects



an ideal space

Based on the pedagogical idea of the Münchner Gymnasium, create an Ideal Space for this kind of learning situation described in the brief.

The aim is to reflect in a fast way on how the context of a pedagogical approach influences architecture – and to generate specific spaces, space configurations and spacial connections.

Think of the space itself, starting from the small unit - maybe a "classroom", a "lab" - and think of the way the space is related to other spaces. Explore the ideal space in models on a scale of 1:50.

You can do abstract models to show dependencies and connections between spaces. You should however in any case do scale models to study specific spaces.

Think of the space and connections between spaces. Do not spend time on loose furniture! Unless for example tables are relevant to show in a reduced way.

Process - How to do:

Be productive. Make three models an hour, for two-three hours. If none of them are interesting enough, do it again!

Do not think too much - produce! Think while producing.

Your challenge is not to fall in love with one model too early and at the same time succeed in finalising an inspiring model appropriate to the pedagogical concept.

Learning target - training the ability to:

- transform context and function into space
- sketch architectural ideas in model while caring for the detail
- to speed up the sketching process.

Method:

model making in 1:50

Hand-in format:

- a) the model 1:50
- b) Bring all your models/sketches to document the process.
- photos of final model presented on A4
 Take pictures that show the idea of your model.
 You may consider to supplement with descriptive keywords or photo caption to be sure that your audience understand your idea.

you are

producing.

Make three



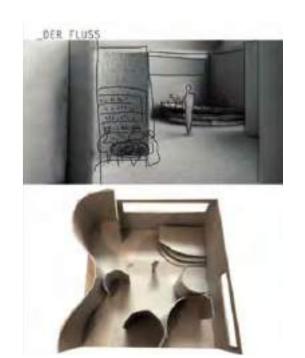




"Zwischen - RAUM"











66

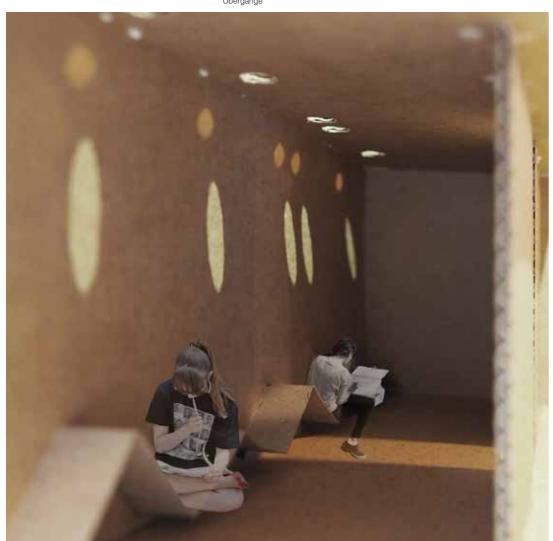
Work in different scales, try out several versions.







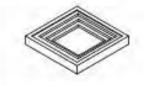






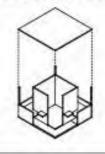
KONZEPT

Die Koexistenz von Privat und Gemeinschaftliche Flächen sollte im selben Raum eine Dualität erschaffen Die Monolithen stellen eine Private Sphäre dar, während eine gemeindschaftliche Fläche sich wie einen römisches Amphitheater daneben entfalltet. Das Ziel ist das dieser Teil des Raums mehrere Funktionen empfangen kann



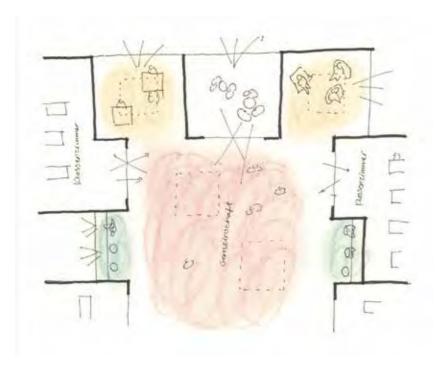
KONZEPT

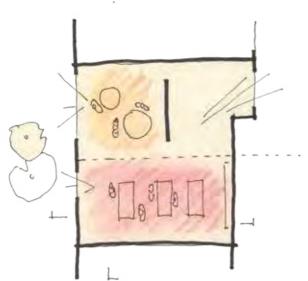
Der Raum ergebt sich auch durch seine Möbeln. Dieser selbstehende Monolith erschafft sich durch zwei verschiedene Schichten. Kinder finden auf die Sitzpläze eine persönlicherer Atmosphäre und können sich aber auch im Kern ganz Rückzie-hen um zu studieren.

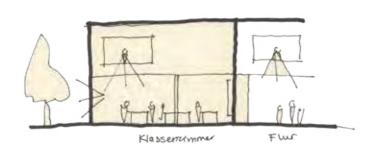




68 I















ÖFFNUNG



SCHWELLE



BLICKBEZUG



BEGEGNUNG

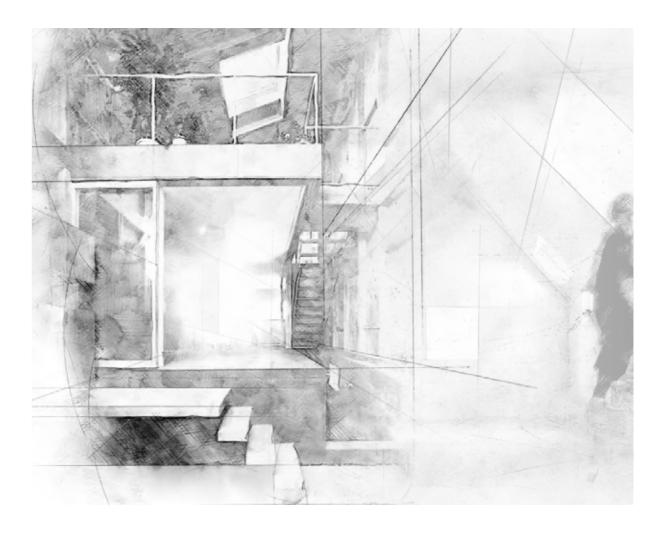


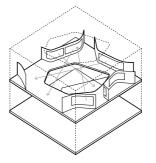
NISCHEN

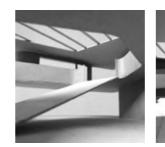


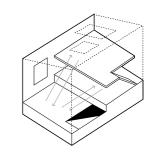
T.

DURCHLÄSSIGKEIT









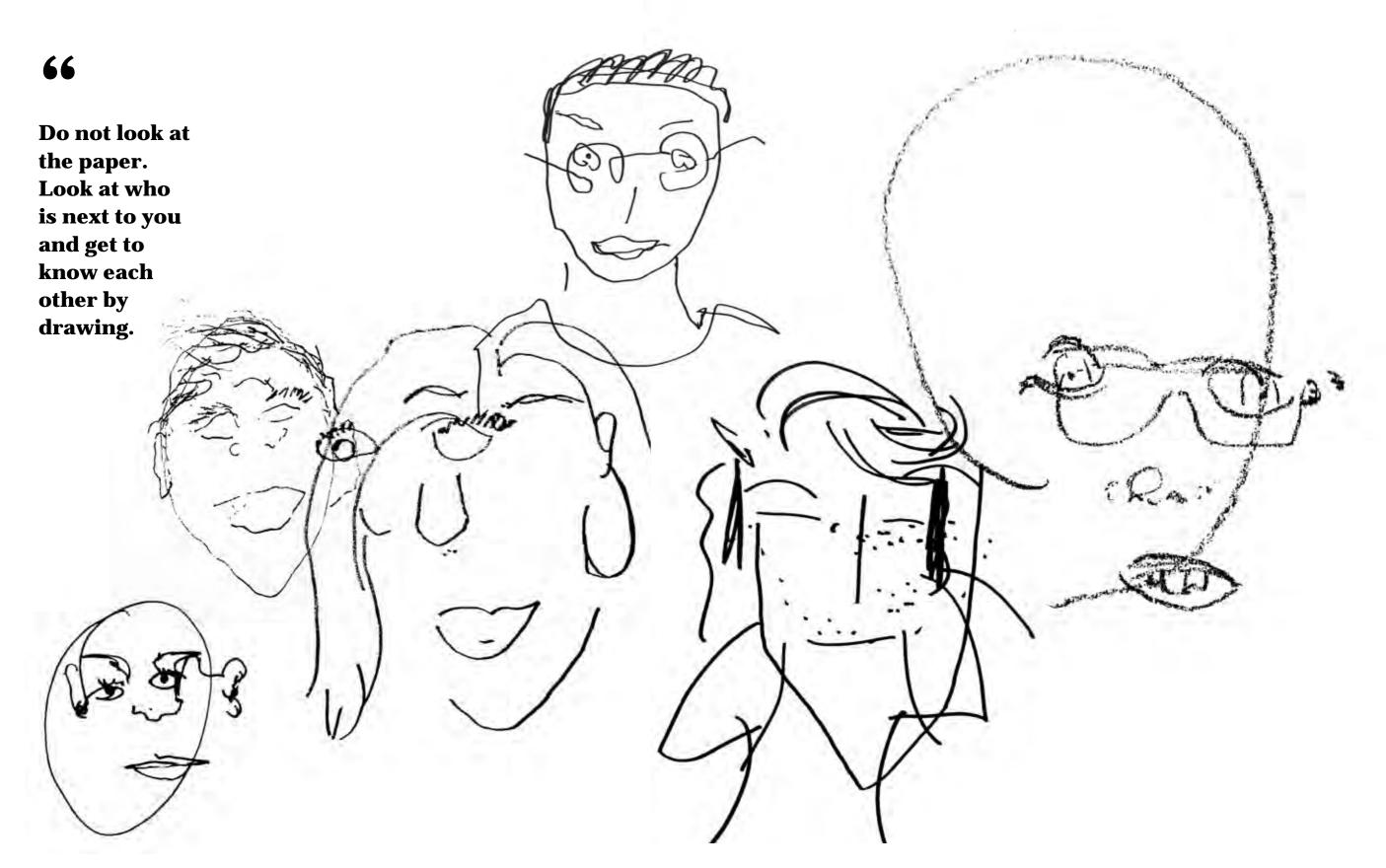








look at who is next to you



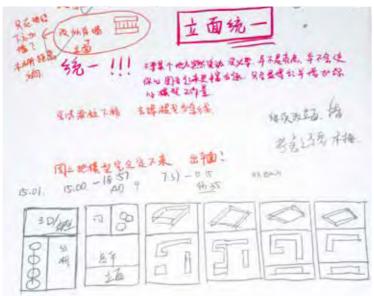
make a pre-layout

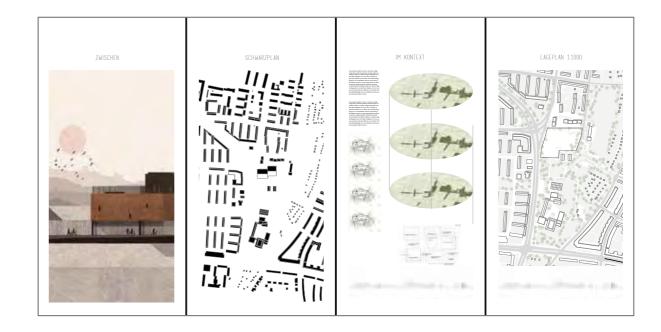
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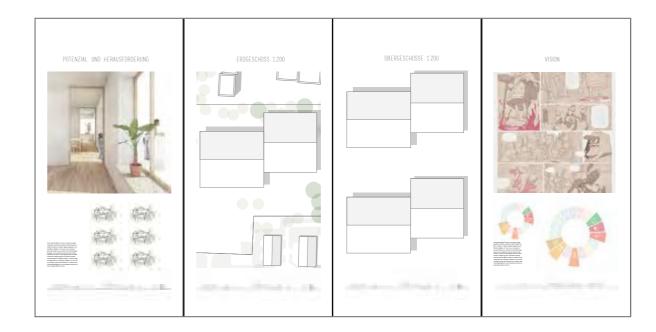
At the beginning of the semester:

Make a 1:10 drawing of the layout of the final boards you are going to hand in.









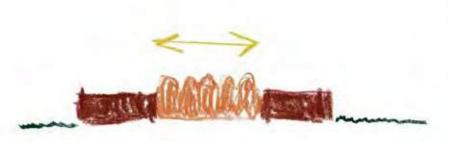
in the spirit of...

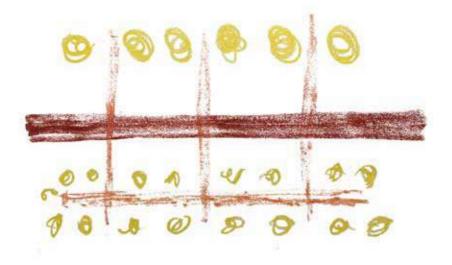
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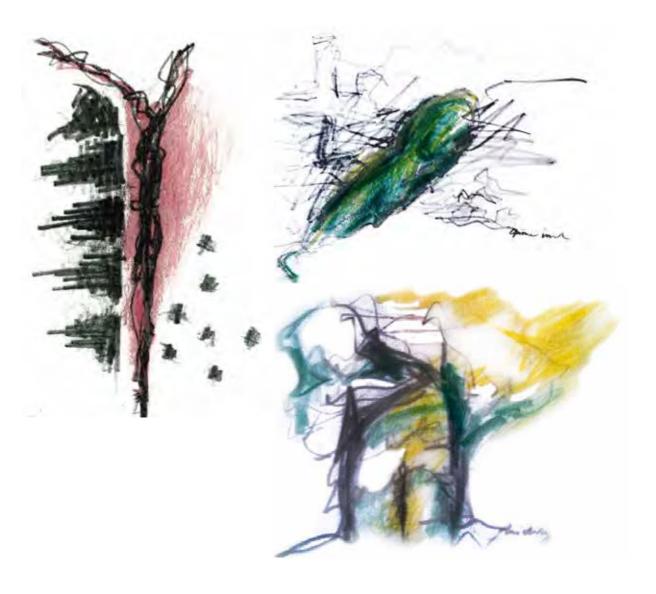
The day starts!

Take parts of your analysis of the existing school buildings and try making the sketch again. This time in the spirit of an architect who inspires you...

Use an analogue technique.





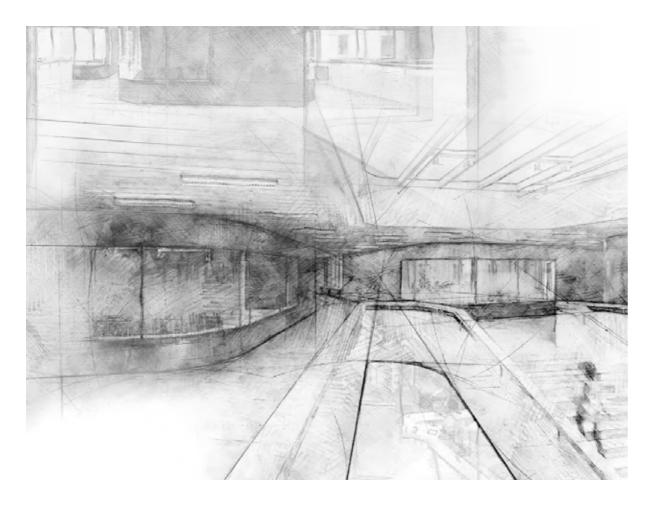


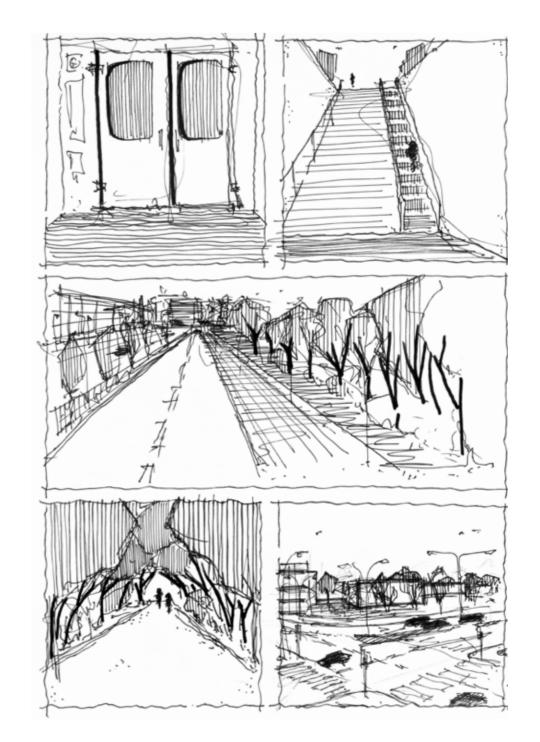


the way to your building

66

Imagine you are approaching your school.

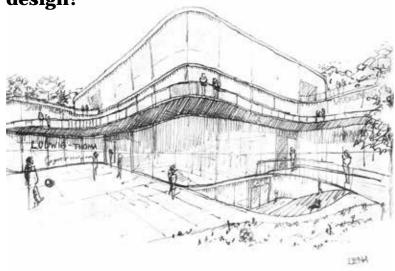


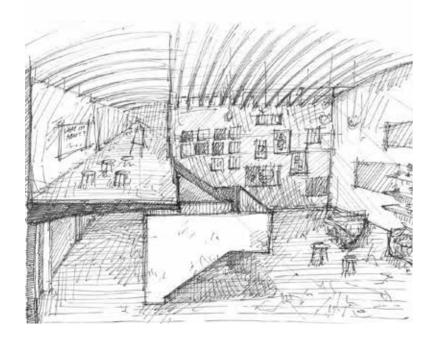


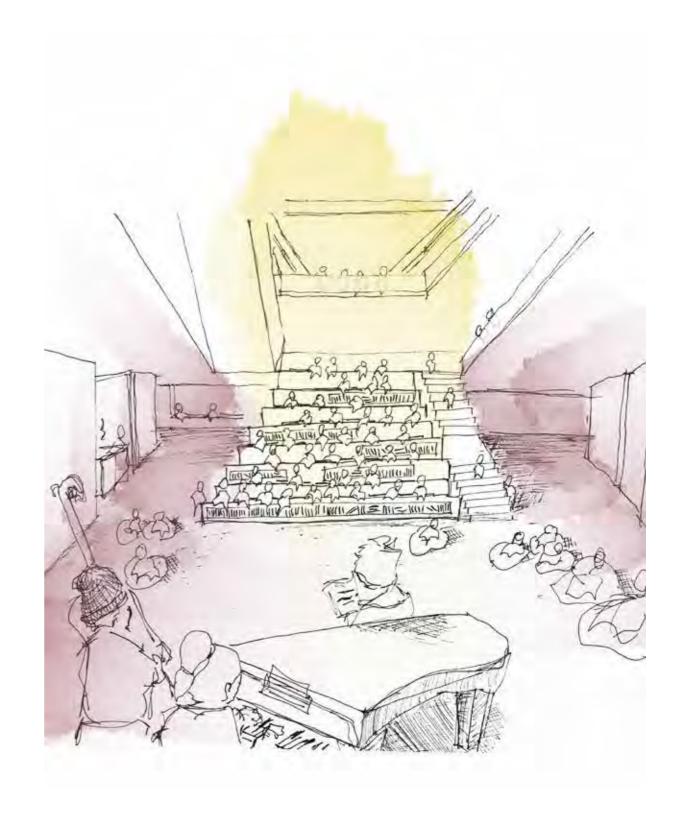
a significant space in your building

66

Which room in your building could define your future design?







the design concept on a napkin

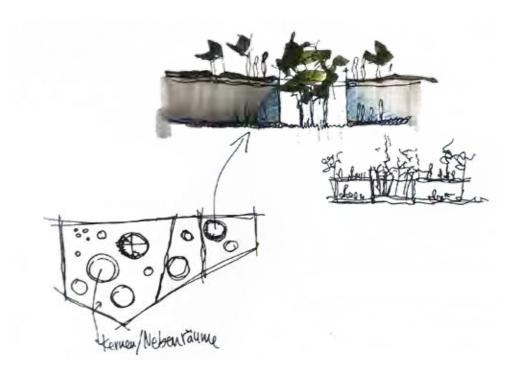
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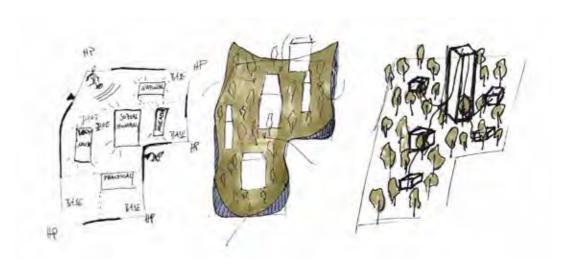
Make a quick sketch of your design concept.

If you are not sure about the concept yet, make a drawing of a possible concept anyway.











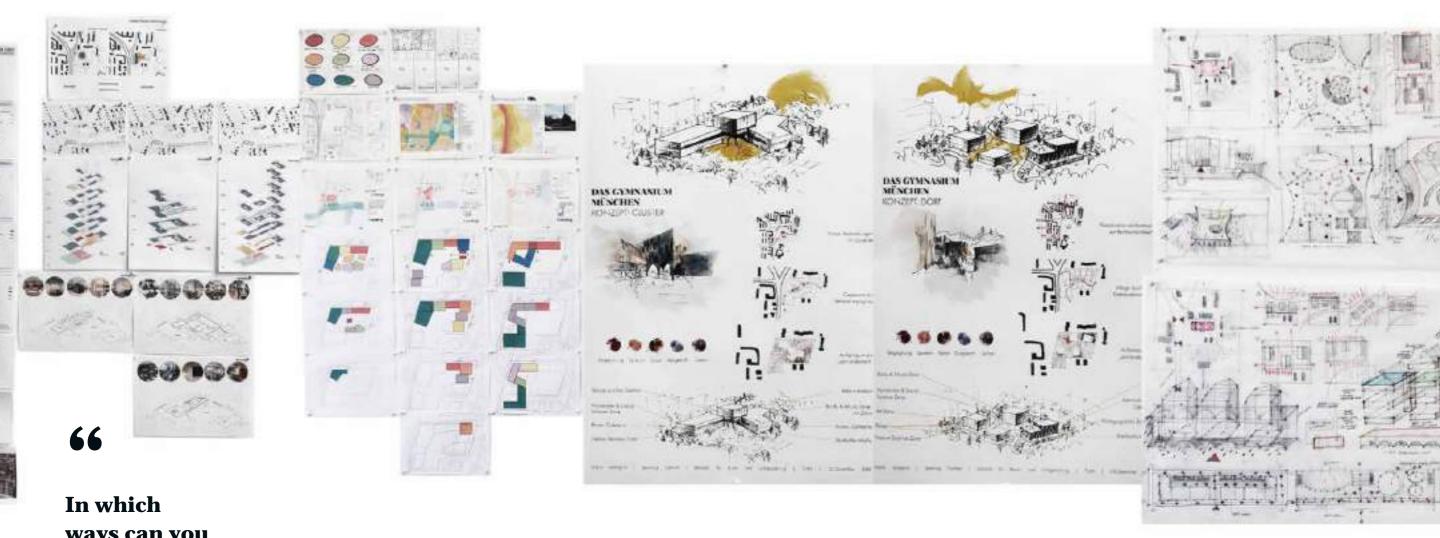


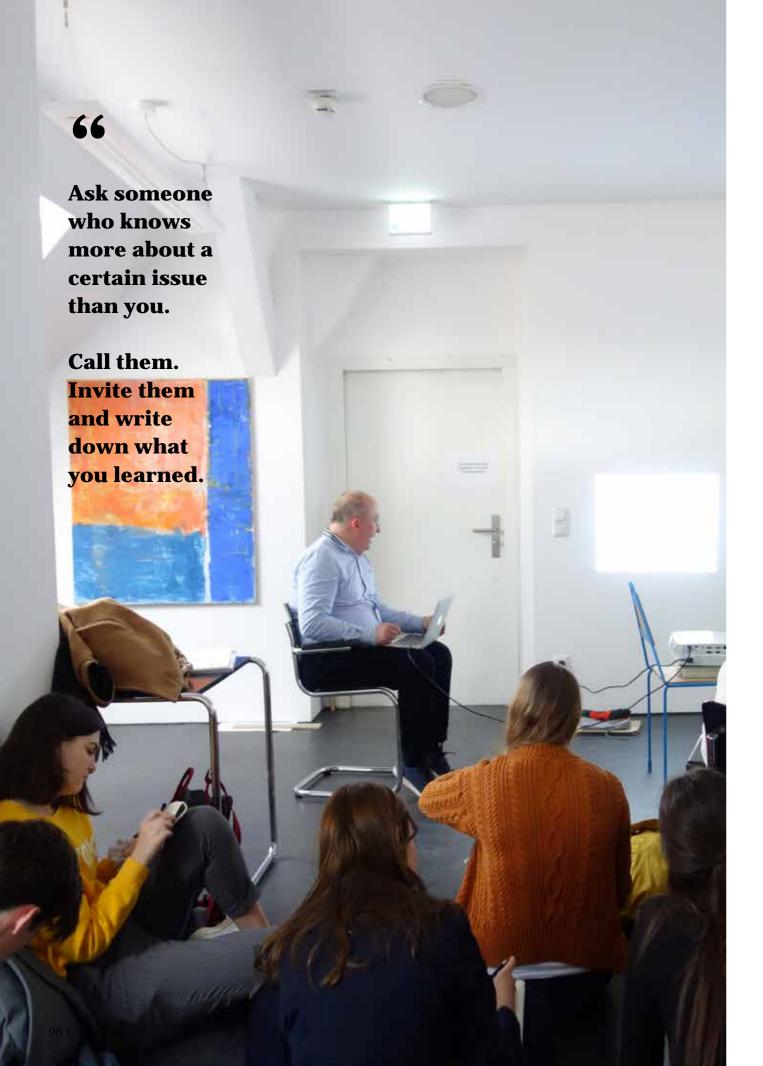
midterm critic one

66



midterm critic two





asking experts

Vertrag 4/18 & K

We fin in Bedand? - Josian als inhibath of follow, Cadalphis

- buthreth Bestand

Benefing dia Bestandan! Vert durch to Denhade

10 Metans ist clear tingenhand - Bogh, vorshift, Hydry

Chair von Vertig - Edell von Bestand, substanceholdend, allestan, verenisal

Chair von Vertig - Edell von Bestand, substanceholdend, allestan, verenisal

Cadandaffrey - den Schade wield Caugen? 3 June Wiere, 3 Allstelle veruch mell

Cadandaffrey: Tage? Schaule word veryngeled anythere sollen siellen

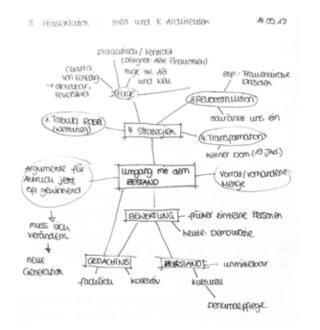
Cadandaffrey: Tabula Base?

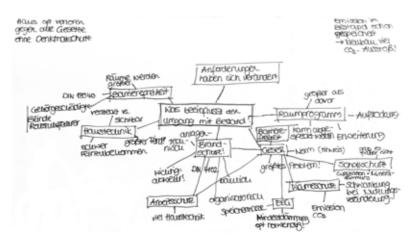
Temperature? Tabula Base?

Energenyer. (eache Unstalle torn, Bestalde.)

Energenyer. (eache Unstalle torn, Bestalde.)

Maustellunde.), Beneze ferbeit





Students give each other feedback one week before the final hand in.

Diagrams, drawings and models have to speak for themselves.
Let your group describe what they see.
The one being criticised is not allowed to say anything.
Only listen.

pre-hand in – describe what you see





9

10

11

12

15

16

17

18

19

20

warte nicht aufs REFLEKTIEREN.

architektur sollte immer ÖFFENTLICH zugänglich sein.

finde einen maßstab zwischen UTOPIE und REALITÄT.

starte nicht mit der antwort sondern mit einer GROßEN FRAGE.

wir denken nicht nur an realität wir MACHEN REALITÄT.

suche ALTERNATIVEN zum standart.

respektiere den standart, denn sonst wäre er es nicht.

recherchiere, höre zu, verstehe...und erkenne den nötigen Wandel.

kritisiere jedes detail deines entwurfs, bis es nichts mehr zu kritisieren gibt.

beachte den KONTEXT im detail oder ignoriere ihn GEKONNT.

was wünscht sich der BAUHERR | die BAUHERRIN - NICHT ICH.

mache deinen entwurfsweg plausibel und nachvollziehbar.

der BESTAND ist die zukunft.

mach das konzept FLEXIBEL - es soll auch in 50 jahren ATTRAKTIV sein.

bewege dich minimal 45 minuten am TAG DRAUßEN.

habe MUT ZUR LÜCKE.

wo ist das POTENTIAL?

wo sind die DEFIZITE?

deine WEGE zum ENTWURF:

STÄDTEBAU > konzept? > entwurf

KONZEPT > städtebau? > entwurf

städtebau > ENTWURF < konzept erweitere dein handwerkzeug.

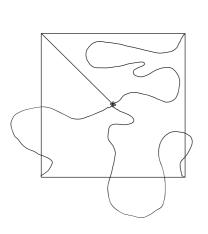
kombiniere ABSTRAKT und DETAIL.

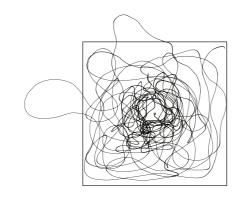
erzähle dem zuhörrer (d)eine GESCHICHTE.

den sand nicht in den kopf stecken - FRAG DEINE FREUNDE!

bedenke jederzeit die UN GOALS.

SPARE RESSOURCEN!!! ... und geld.





spaghetti im kopf. dein weg zum glück.

ORGANISATION 0.8 COFFEE +

PROJECT THINKING SHOWER+

CREAKFAST

PROJECT SKETCHING + FRODUCING.

BREAK + LUNCH

DUILDING MODELS

GO FOR A WALK

PROJECT DEAWINGS

WRITE TO-00-LIST

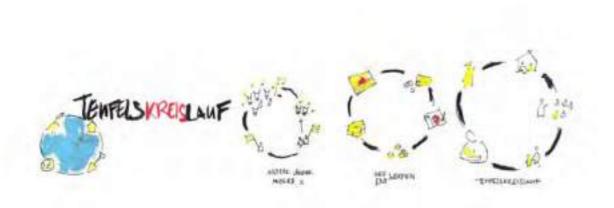
FUN'S GRANGER PROFORMS! :

VERLIEBEN.

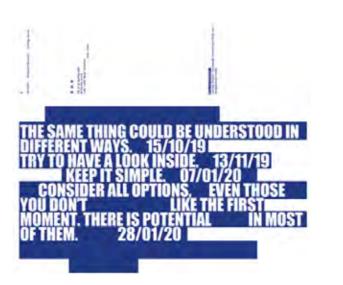
BREAK + SPORT

FO NEXT DAY

104 I



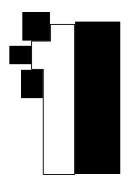








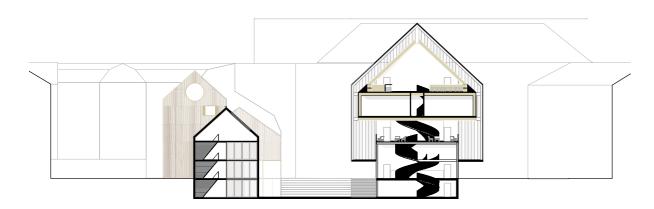




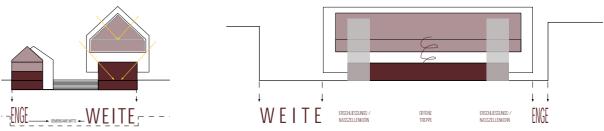




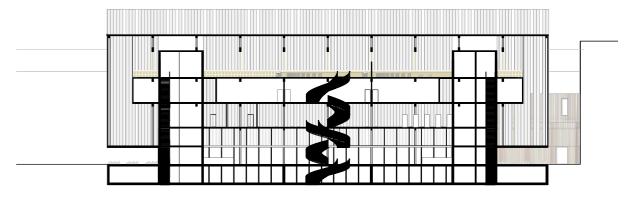


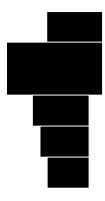








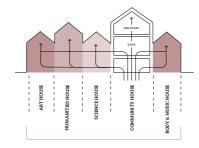














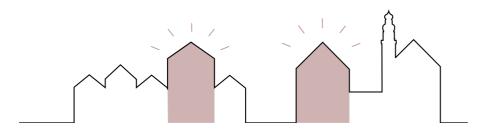






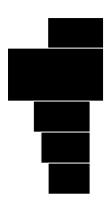


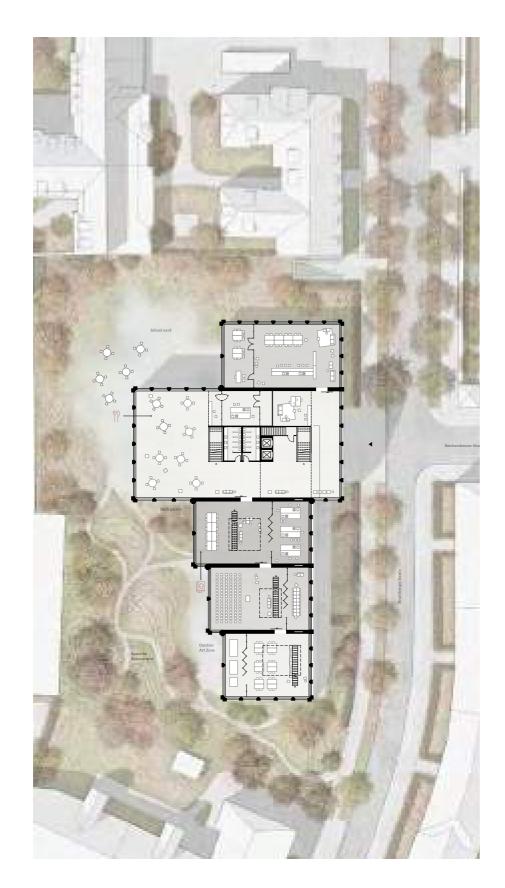


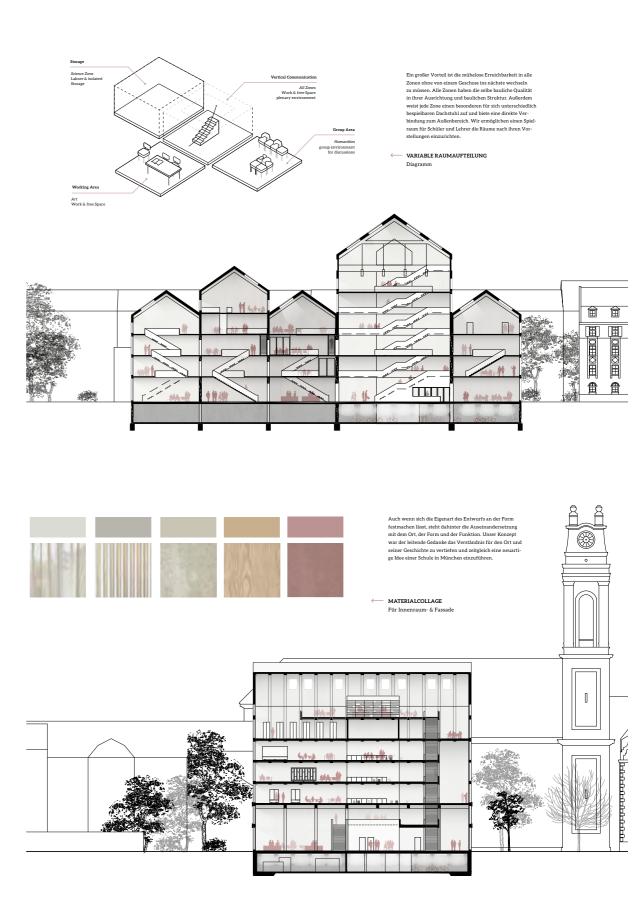


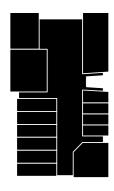


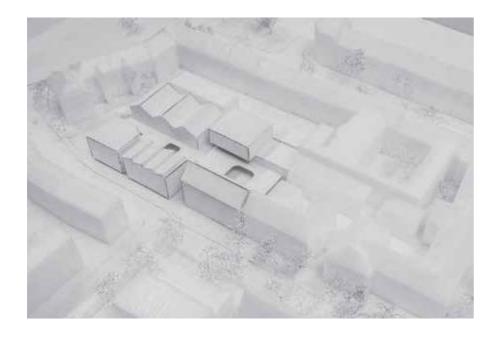
112 I l 113









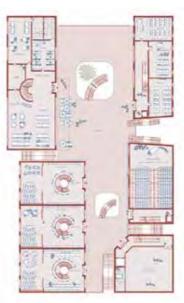


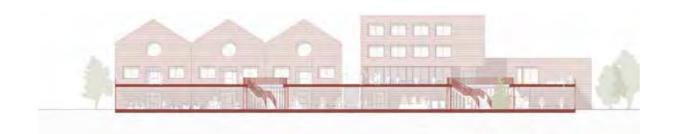














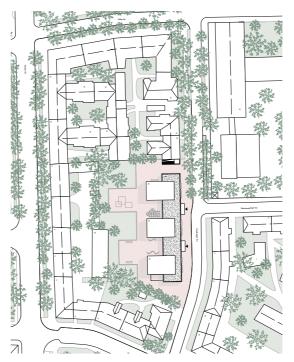
116 l



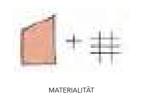


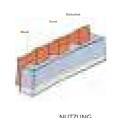










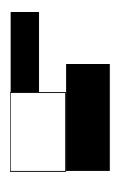


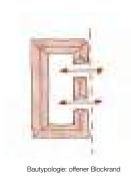




118 I

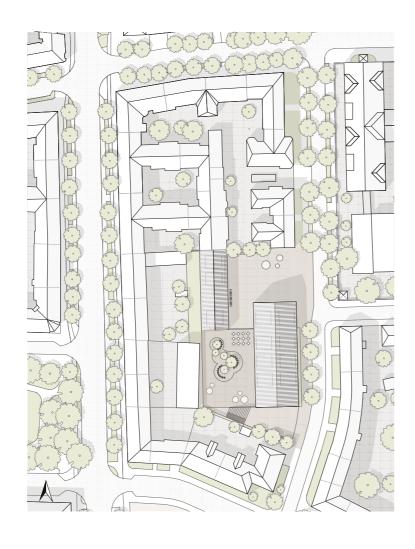
julia schmitt

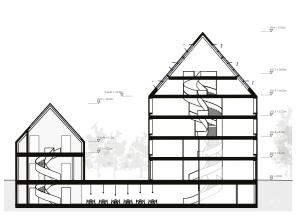


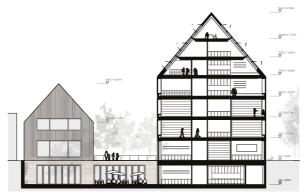


1

Vorherrschende Dachform: Satteldach

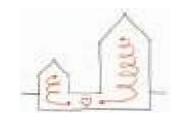




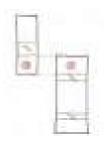


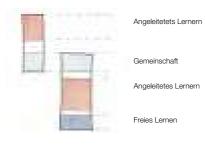


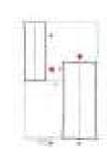




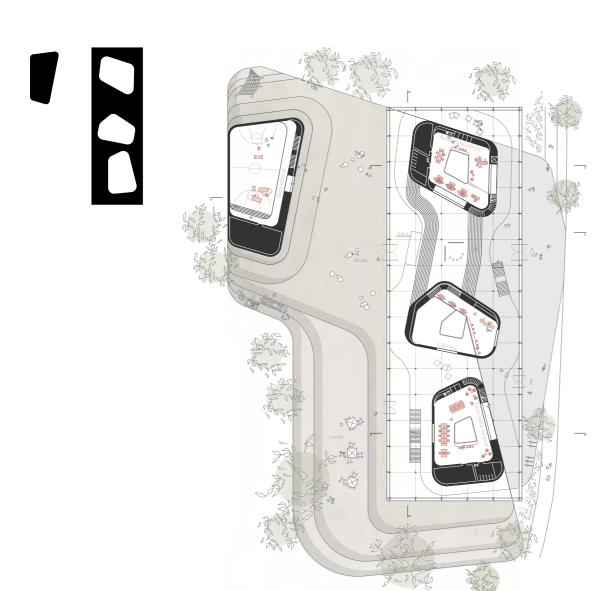


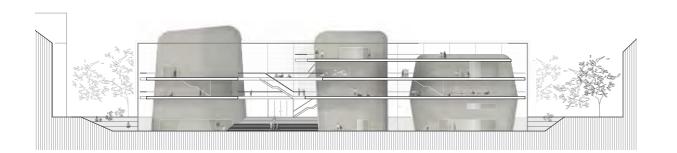




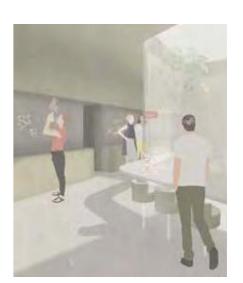


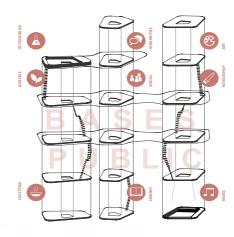


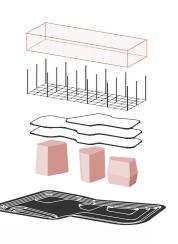




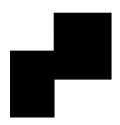


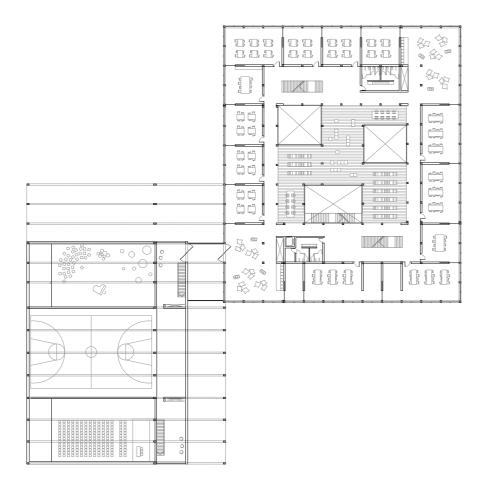


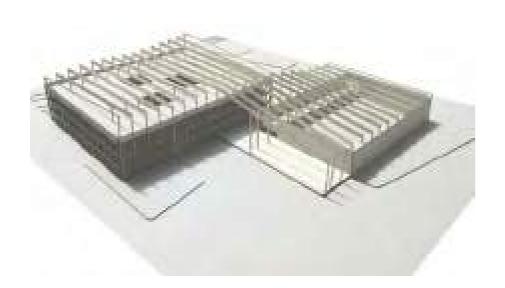


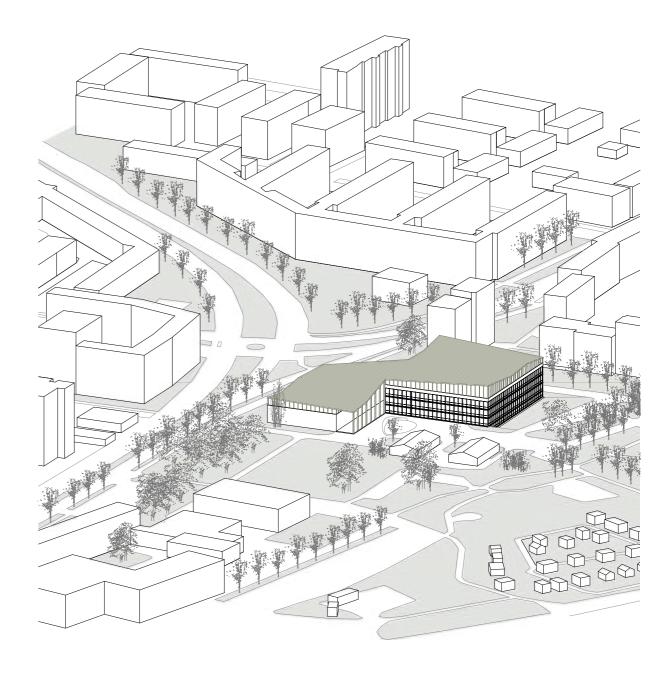


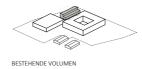






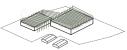


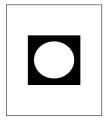


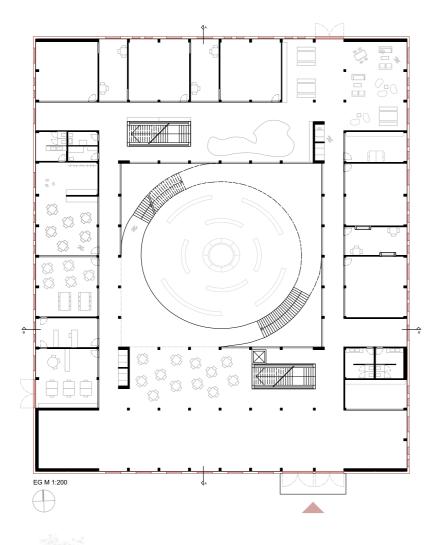


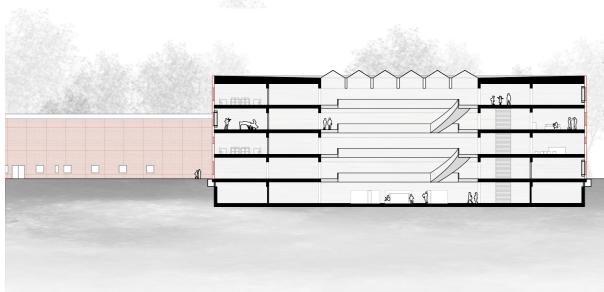














Saubere Energie

Fläche 880 m2 Ertrag gesamtes Jahr 99.000 kV



Maßnahmen zum Klimaschutz

Erneuerung Fenster besserer U-Wert weniger Wärmeverluste

Neue Heizung, Wärmepumpe möglich Medium Erdreich unter LIG Innenhof



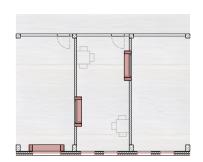
Leben am Land

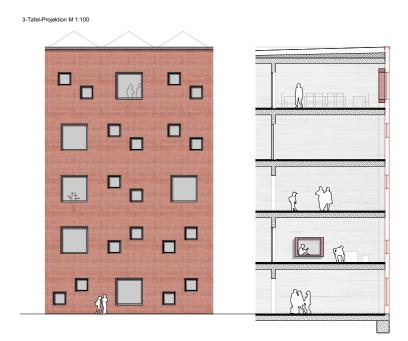
Versiegelung stoppen Schon versiegelte Fläche über-/unterbauen

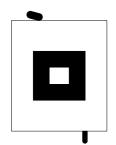
Freiflächen freihalten

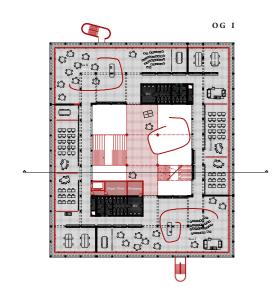












Rückbau

Das Gebäude wird im Zuge des Rückbaues auf den Rohbauzustand rückgeführt. Die Sanitäranlagen bleiben dabei jedoch gänzlich erhalten.

Subtraktion

Um im gegebenen Volumen deutlich mehr nutzbare Flächen zu genereieren werden bestehende Treppen entfernt. Dadurch gelingt es mehr als 800m² zusätzlich nutzbare Fläche zu generieren.

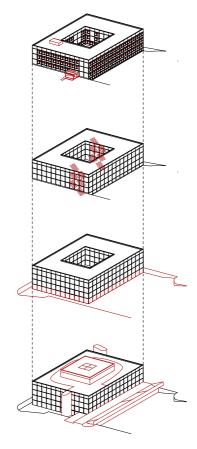
Das Sousterrain wird zur Bodenkante abgegraben um eine Nutzung des weiten Gartens zu ermöglichen.

Südseitig wird das Untergeschoss freigelegt um die Qualität der Innenräume zu verhassern

Addition

Der Innenhof wird zu einem multifunktionalen Atrium inkl. Erschließung umfunktioniert.

Skulpturale Fluchttreppen die gliedern die einst monorhythmischen Fassaden. Im Osten öffnet ein weiter Anbau die Schule zum Garten.











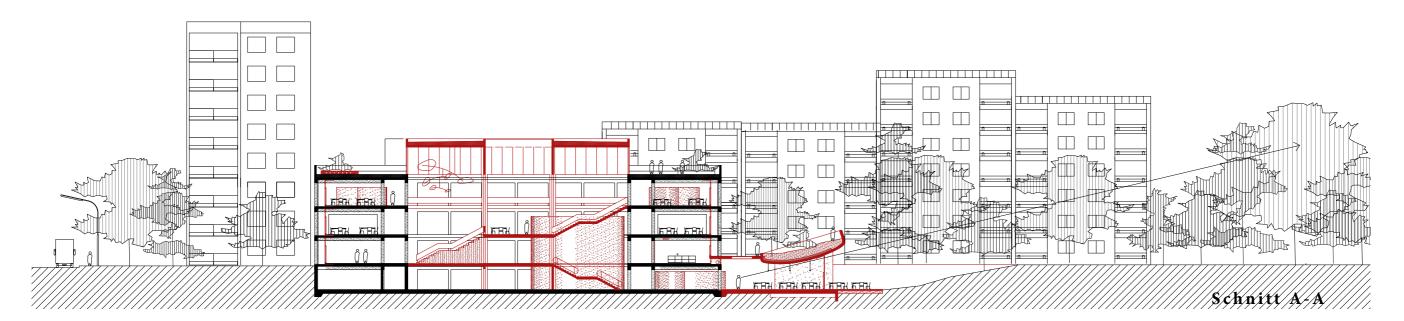
Bestand aus 60er Jahren - grey E Funktionalität, Flexibiltät durch Raster

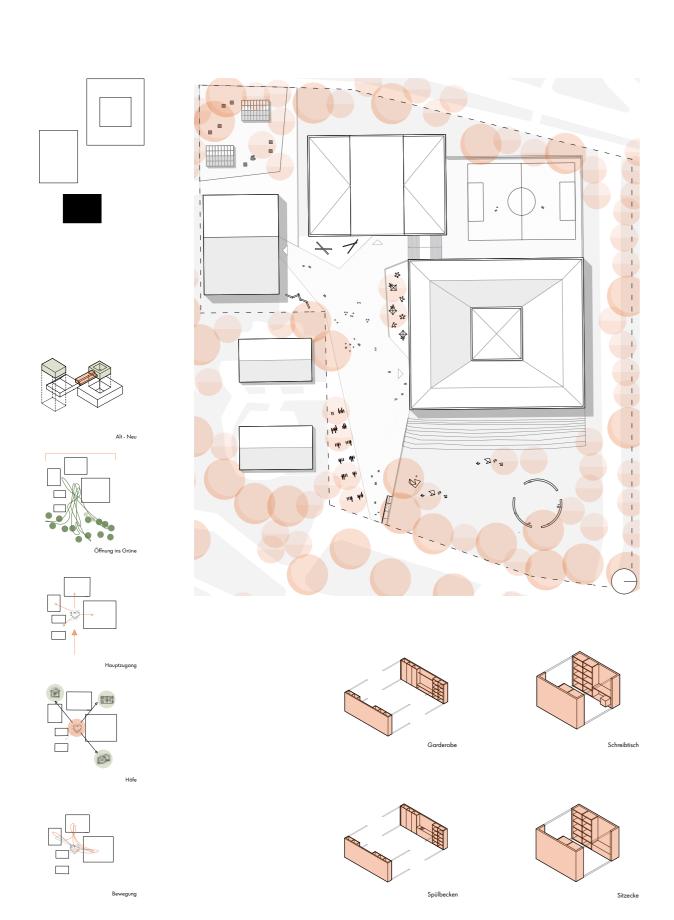
Oeuvre Jean Arp 20-60er Jahre

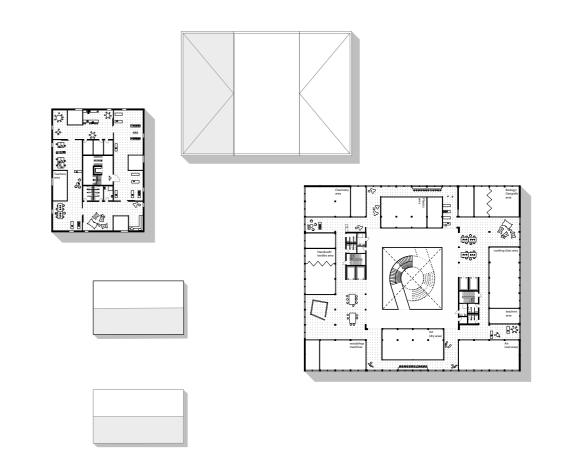
Emotion,

Form im meist ortogonalen Feld

Umbau Strategie 2019
Vereinigung beider Qualitäten,



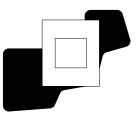


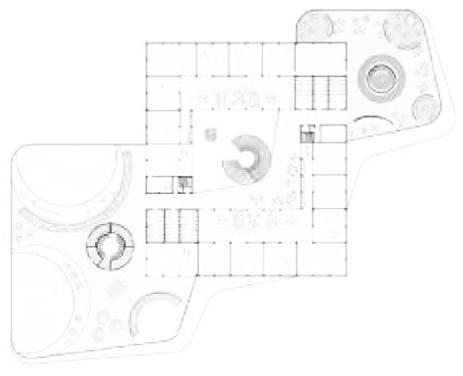


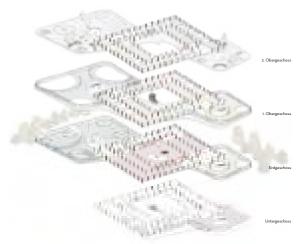


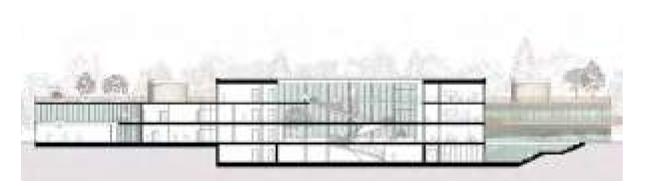


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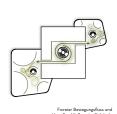




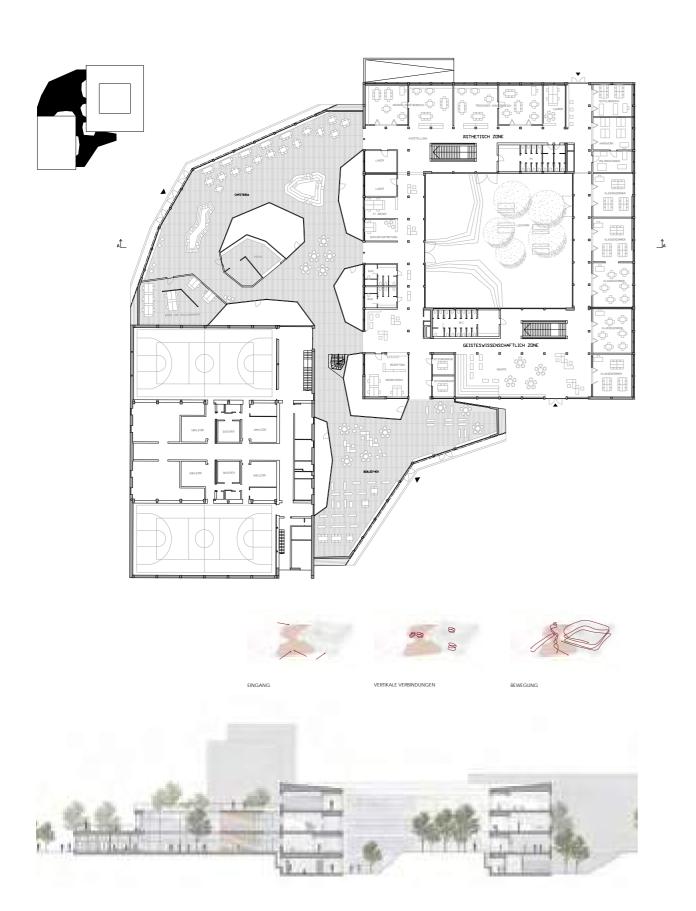


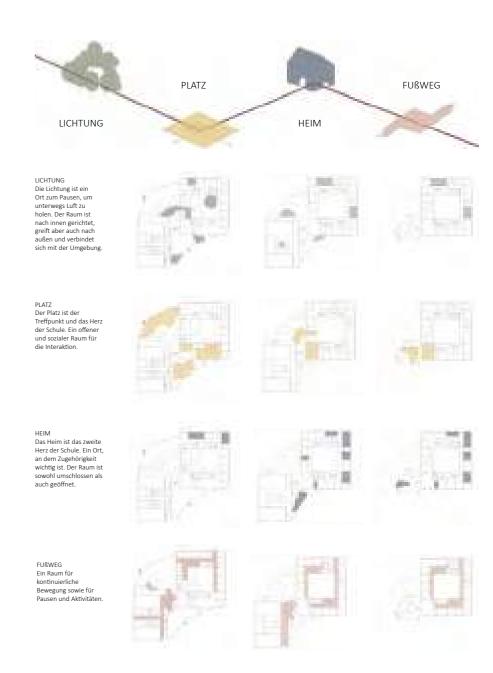






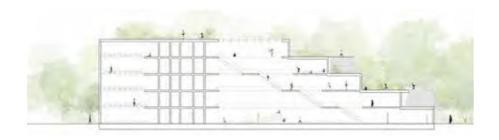
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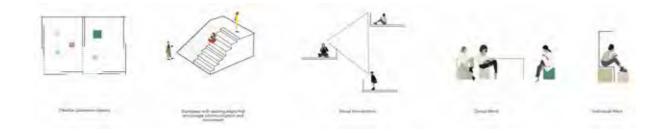








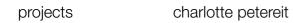


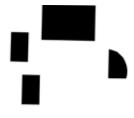




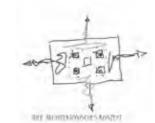




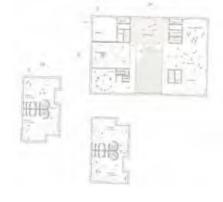






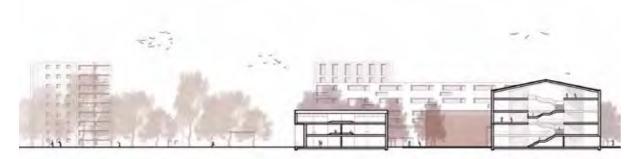




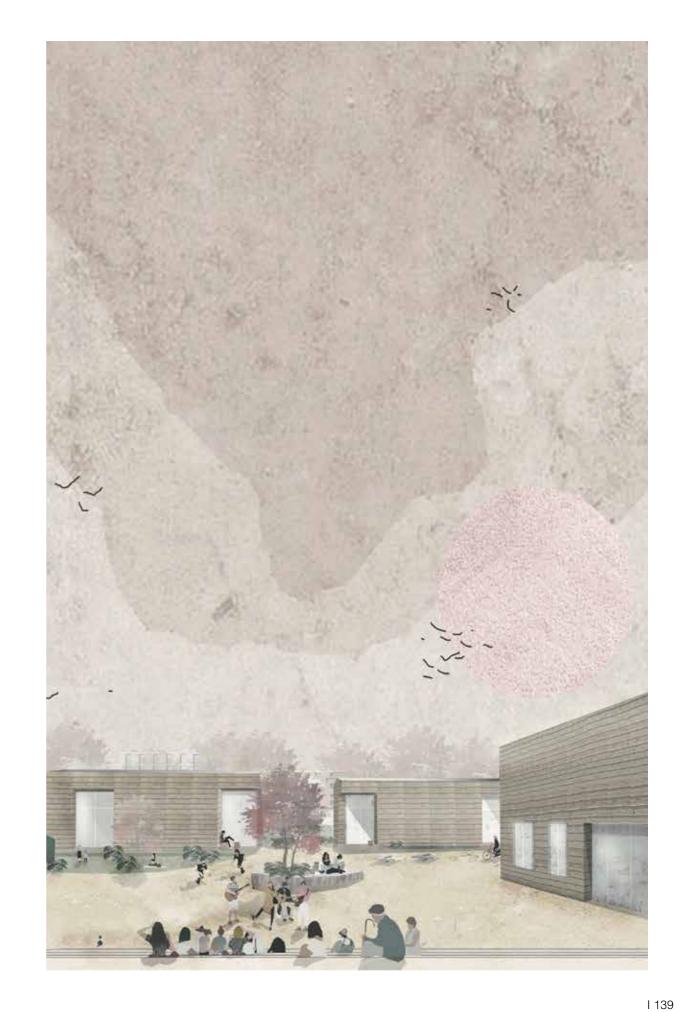




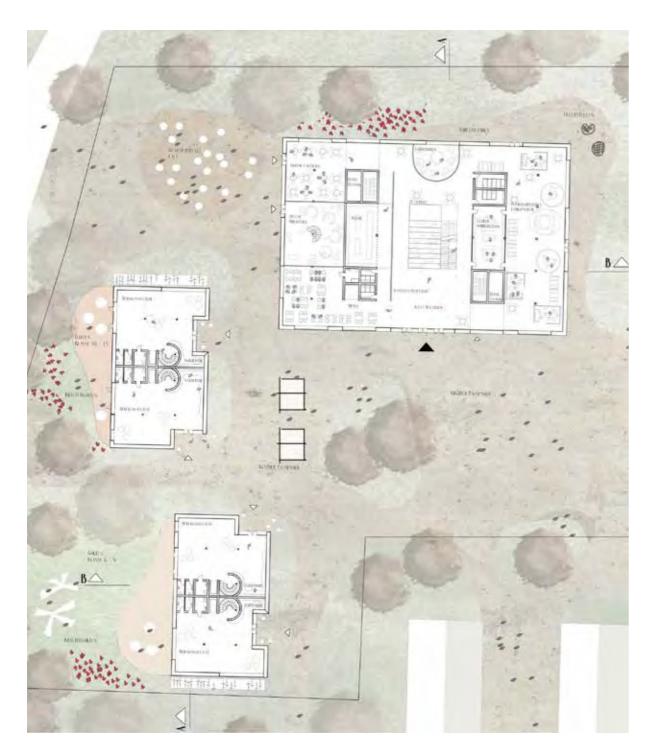






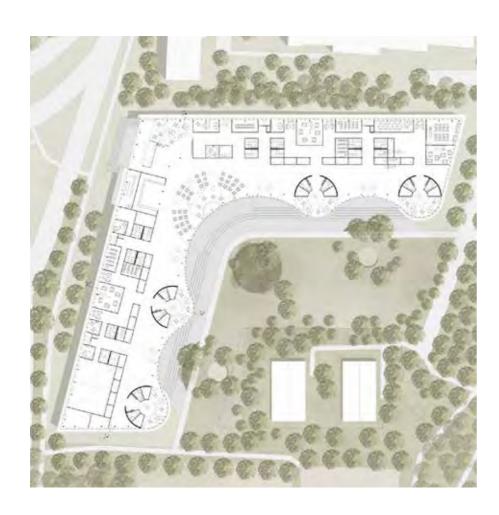






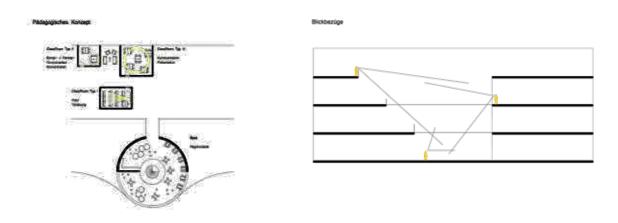


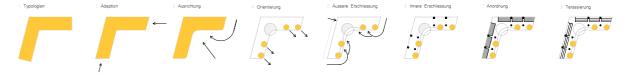










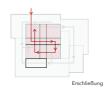


















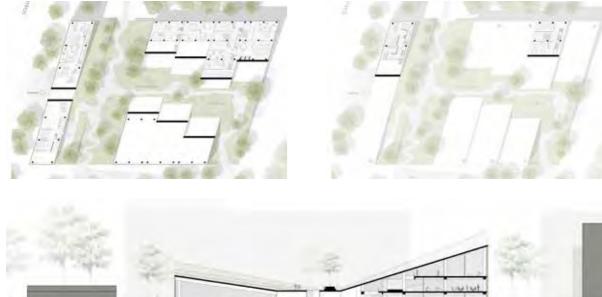


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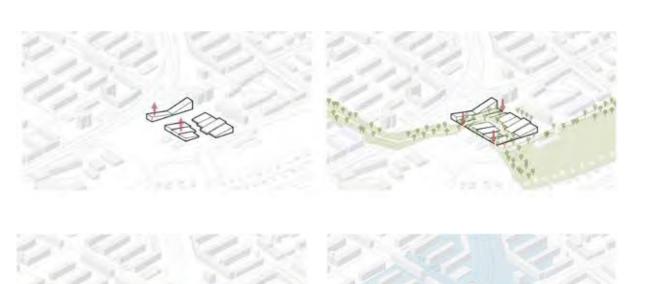










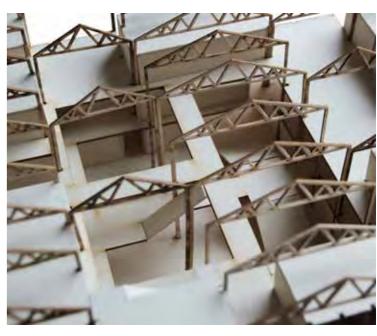






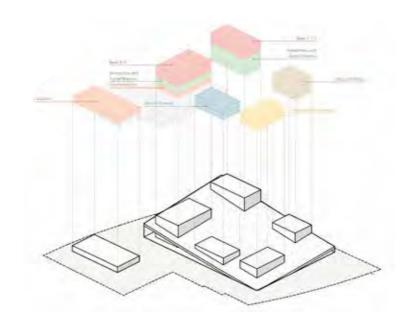


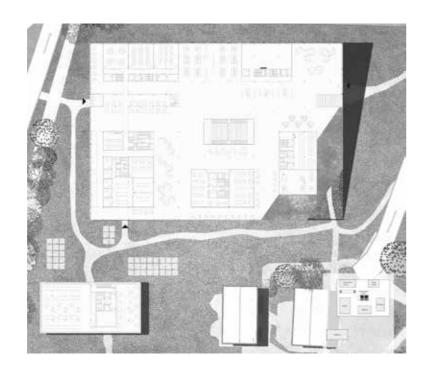




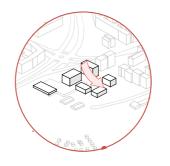








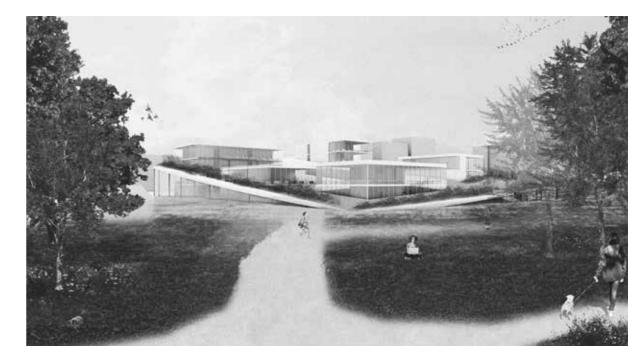












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