

THE AI UNIVERSITY

A place to collaborate in AI
with AI

complex



projects

2022-2023

COMPLEX PROJECTS

**Berlin studio
AR3CP100**

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Berlin studio

Bodies & Buildings Berlin



The AI University project is a pivotal initiative in a world deeply integrated with artificial intelligence (AI). More than an academic institution, AI University is a dynamic hub uniting practitioners, computer scientists, various scholars, and the public. This collaborative space is dedicated to developing and examining ethical and socially accepted AI, especially crucial as AI's influence and popularity surge.

AI University provides an inclusive platform for dialogue, debate, and cooperation on AI's impact and potential risks, fostering a culture of learning and joint development. As we enter an era of collaboration between humans and machines, initiating understanding and cooperation is vital.

By creating a space where all voices are heard, AI University paves the way for a future where AI is not only technologically advanced but also ethically responsible and socially embraced. With AI University as the catalyst, we can envision a future where AI is a positive, contributing force for everyone's well-being, genuinely serving humanity. Let's embrace this opportunity to collaboratively learn, develop, and build a beneficial AI-driven world.

Reflection

Graduation project

01 Relation between research & design

In the research, there is the question of how the design can encourage collaboration between the users. This means how the building can support people to be more in contact with each other physically. Whether it is chit-chatting, discussing, or a meeting, all are done with the purpose of helping the process of creating ethically socially accepted AIs.

The research, therefore, delves into several aspects of how and where people interact on a campus, in a building, or space. So, on three different scales of spaces, a designer can influence to a certain extent how and if people using that space to interact with each other.

In one example, a study was conducted on the effects of ambient noise in a company's office. This affects the willingness to wear headphones, and someone is more approachable without headphones than with. A more spatial element is how the hallway or so-called pathways through a building are designed. Are there enough places where people can get coffee or sit?

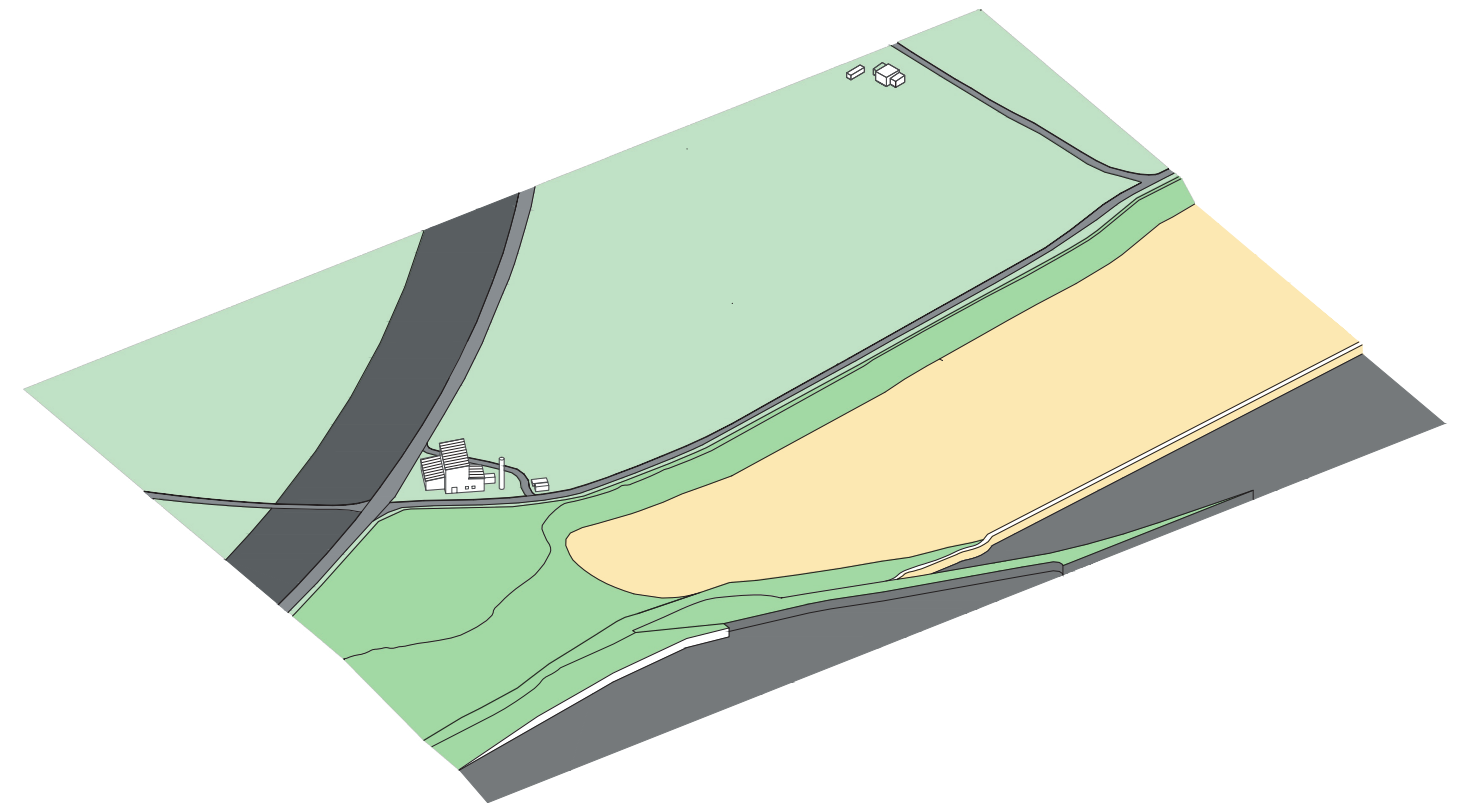
By paying attention to such elements in a building, a designer can stimulate interaction between the users of that specific building.

Therefore, the research provided a toolbox as a conclusion of the study. This toolbox is given form in the AI university through several ways. The project is designed in such a way that, depending on individual needs, the building provides an optimal climate on a room scale (workspace).

The research shows that to stimulate interaction among users of a space, the collective, the answers can be found by providing and designing for the individual. Therefore, the design integrates the ability to offer each user their own customized climate in temperature. This is one of the solutions where the individual is stimulated to collaborate and be more open for interaction with others to achieve more collective collaboration.

To answer the needs of the public that raises questions about how it is implemented or why such things are deployed in society, the AI university doesn't only focus on the developers of AI, such as students, researchers, or employees of AI companies. It also offers space for visitors to see and experience how AIs are implemented in society and shows, in an exhibition form, the crucial information about what AI actually is.

LOCATION
An empty grassfield laying between the industry and Tempelhof berlin.



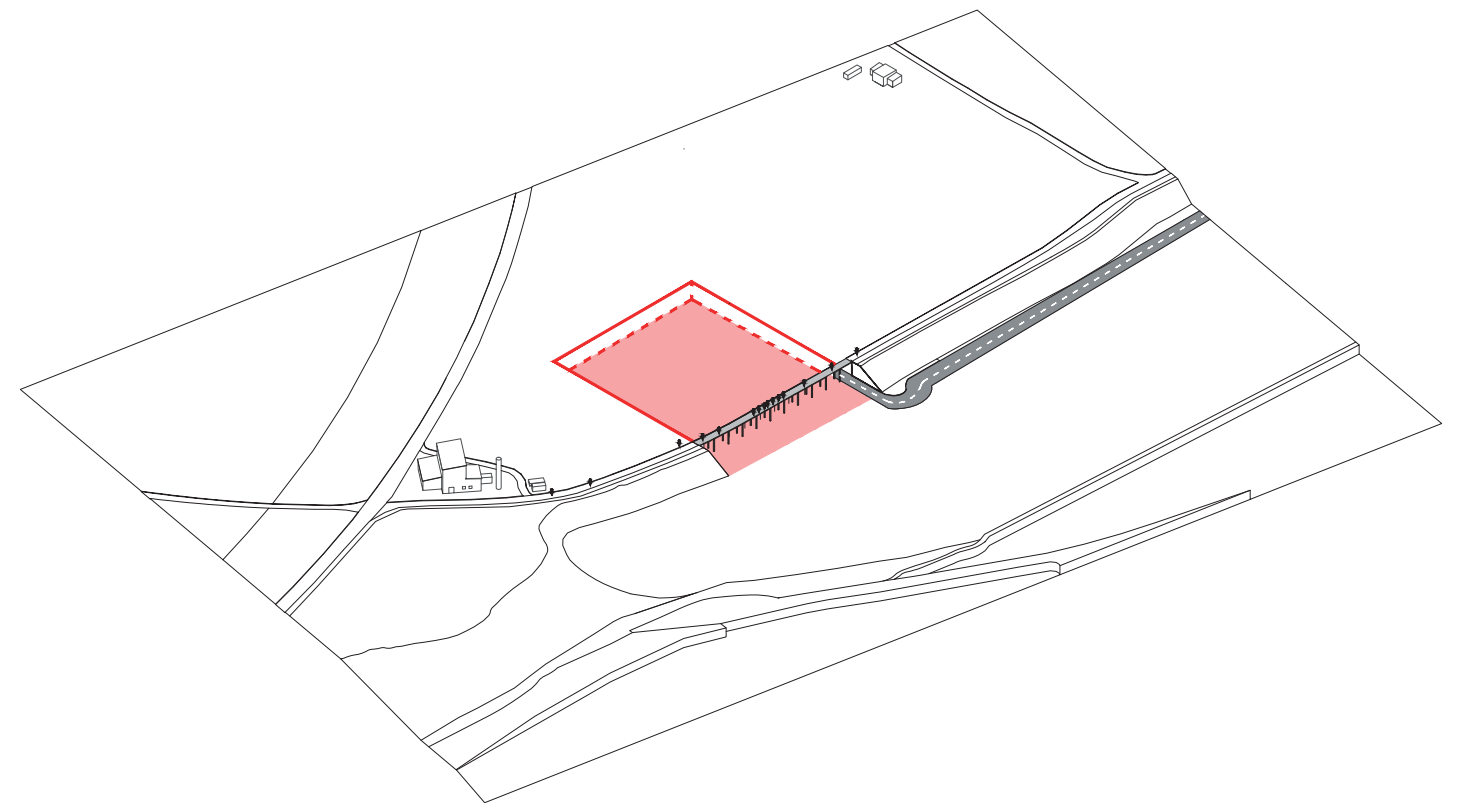
02 Relation between graduation topic and research topic

The graduation studio Complex Projects focuses primarily on the building. The building provides shelter for its users and also creates space, light, and comfort for people to live and work in. The building is designed within a specific time period and context. It caters to users who need specific requirements of the building. These requirements can relate to measurements (human scale for the heights and widths of a door, room, or entrance), movements, comfort, experience, safety, security, etc.

As our buildings become more integrated with technical solutions and information, the design still needs to fulfill the needs of its users. In this context, the user can be seen as the body - the body of a human being that moves, experiences, feels, and hears the building. All these aspects can be translated into data from the bodies, which can then be used as information for design. Therefore, the studio's topic is "Bodies and Buildings".

In relation to the research topic of this graduation, there is a close connection between the use of bodies within a building. The research delves into how the design (the building) can encourage its users (the bodies) to collaborate with each other. This is achieved through specific design elements, both spatially and technically. In this context, the users' demands are the data with which the building is designed. In the design proposal, actual data isn't used, but the design offers the possibility to meet the needs of the user. The next step for such a design graduation should involve integrating real data on movement, user preference, and comfort measurements.

THE PLOT
Pushed into the ground, the building plot creates space to connect the industry and attract people from the Tempelhof field.



03 research method and approach in relation to graduation studio

The Complex Building studio emphasizes researching data, references, and studying different scales of the context of the building. In the initial part of the graduation, two interviews were conducted. The first was with a computer scientist to understand the needs of AI developers. The second was with architect Jacob van Rijs of MVRDV to comprehend the intricacies of designing a university building, a 'complex project', and to delve into the challenges of accommodating diverse users like computer scientists or start-ups within a single building.

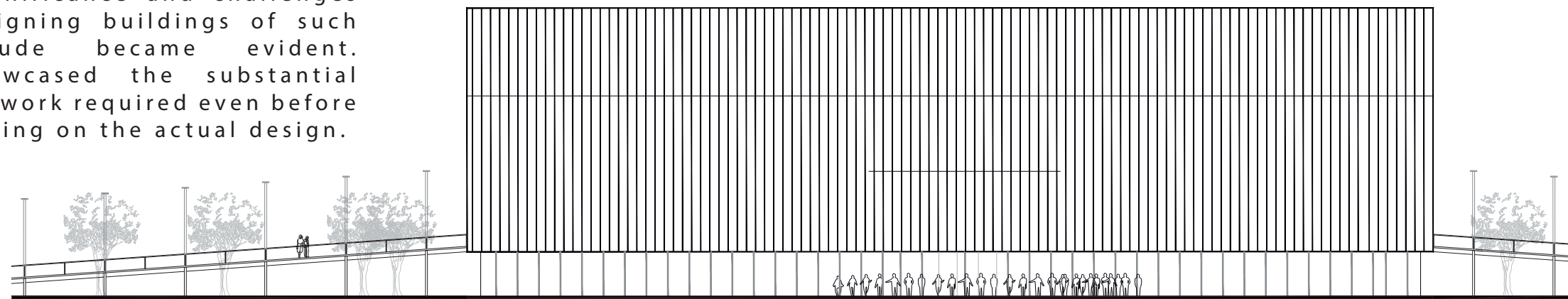
During the first research attempt, there wasn't a comprehensive exploration of the needs for the design/users. After the postponed P4, the research was restarted during the summer. This involved a thorough examination of books, documentaries, journals, and papers. The focus was not only on the topic of designing a university but also on understanding AI and its implications. Consequently, the design evolved and was refined based on the new research findings.

Through testing with physical models, drawings, and studying references, the design process was less structured than the research. However, the design

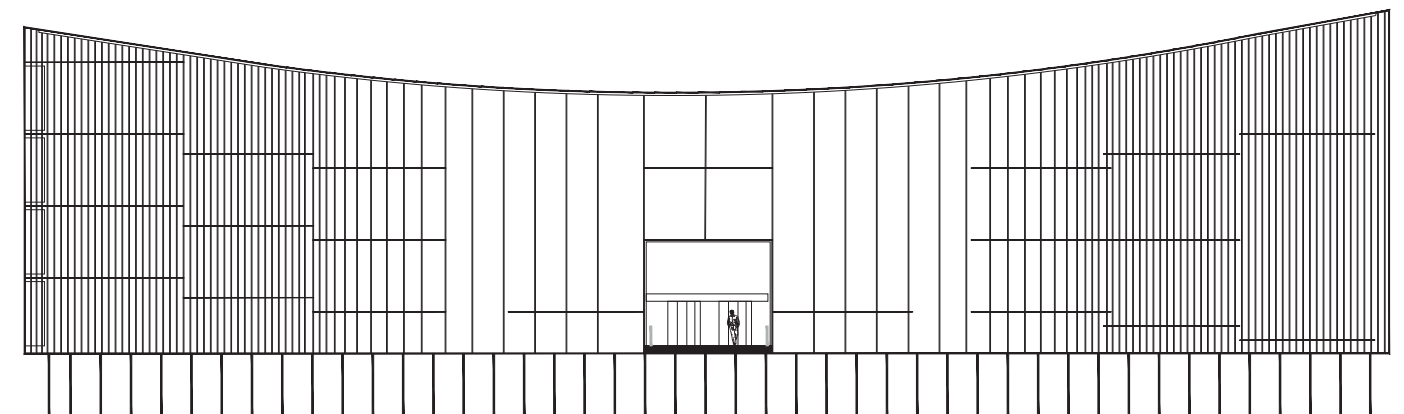
eventually addressed the primary research question. This studio elucidated the intricacies of designing a complex building and the methodologies that can be employed. During the tutoring sessions and lectures, the significance and challenges of designing buildings of such magnitude became evident. It showcased the substantial groundwork required even before embarking on the actual design.

The Complex Projects approach is just one of many ways to design large-scale structures. By leveraging data and conducting in-depth analyses across different scales, the design process becomes more structured, organized, and logical for both the designer and its context. Ultimately, the methodologies architects employ will significantly influence the environments we inhabit.

NORTH FACADE
A reaction to the urban scale of the tempelhoff field.

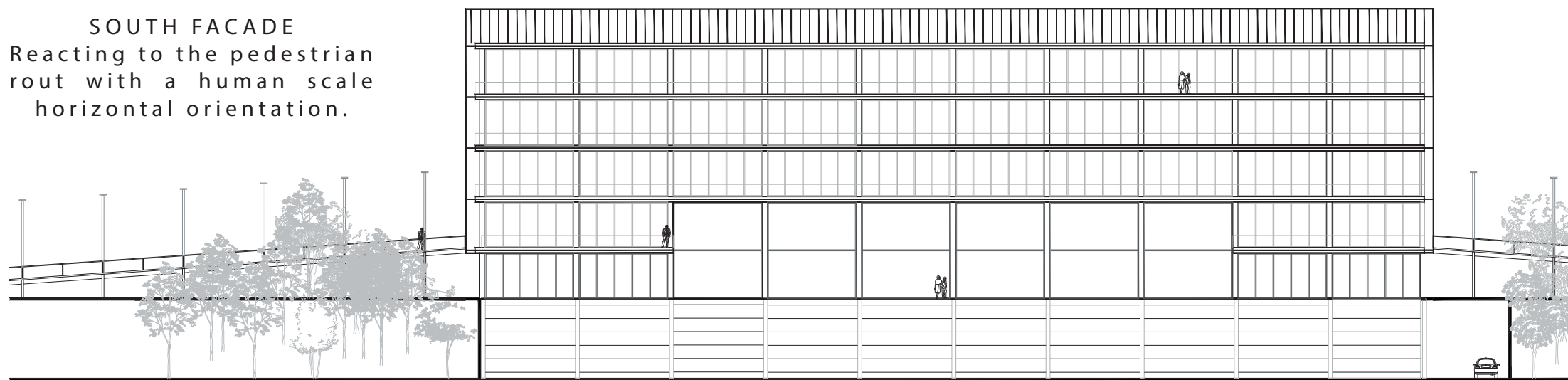


EAST FACADE
Opening up for welcoming its users and visitors



04 the projects wider social professional and scientific relevance

SOUTH FACADE
Reacting to the pedestrian
rout with a human scale
horizontal orientation.



The design attempts to address the types of spaces needed to guide the AI revolution constructively. Currently, an AI revolution is unfolding, as reported in newspapers, broadcasted on the news, and discussed on the radio. Socially, it's a significant topic, as many users are unaware of what AI is and its functions. This underscores the importance of designing a building that illustrates to society how these AIs are implemented and who is behind them, while also fostering discussions and inquiries.

From a professional perspective, this project has taught me a lot about how space can be organized to influence individual users. The project achieves this by encouraging collaboration, demonstrating how architects can affect such dynamics at an early stage and are also the designers of these spaces. It's crucial for architects to design buildings with their users in mind. In this project, the concept of stacking floors promotes increased eye contact among users. Such design decisions ensure the building serves its intended purpose. Of course, this approach reflects my perspective, but it's open to interpretation, and alternative solutions may arise.

The scientific relevance lies in the amalgamation of all the researched strategies to foster collaboration. This could be the foundation for more detailed research into one of the topics identified by the study, exploring how to stimulate collaboration among diverse users. Additionally, the initial phase of the research delves deeply into understanding AI and its implications for space. What shows the difficulty to the translation towards space of the topic AI.

05 ethical and dilemmas

The project aims to create spaces for the development of ethical and socially respected AIs. However, the topic of AI in relation to space is challenging to understand or design. AI itself can effectively assist in calculations, rendering, or other architectural aspects. On the other hand, its broader implications for space have not been extensively researched to date. While it impacts nearly all facets of life, it is something that cannot yet be associated with a specific space. For instance, religion is tied to sacred places like churches or mosques, work is linked to offices, and data is related to data centers. But what about AI? Will it influence how we design space, or is it merely an application that introduces extreme efficiency into the design process?

WEST FACADE
Opening up for the
connection with its
surrounding green.

