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ON TRACK TRAIN STATION FOR EVERYBODY

REFLECTION P4.0

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PROJECT DESCRIPTION

Berlin, a city characterized by its diversity, creativity, and resilience, stands as a vibrant hub with a rich history, influential club culture, with a prominent global position. The city's identity has been shaped by a series of transformative events, from its growth along the Spree in 1724 and the cities expansion with characteristic blocks in 1862, up to the significant impacts of World War II and the division imposed by the Berlin Wall in 1961. The subsequent reunification process led to redevelopment, urban planning, and the evolution of Berlin's dynamic, multicultural identity.

Aligned with this historical narrative, the city's spatial structure, public transportation network, and urban development have undergone continuous evolution. The Berlin railway network, dating back to 1846, has expanded and adapted to the city's growing needs, as evidenced by the i2030 expansion plans for railways (Start - i2030, 2023).

However, the evolution of train stations, integral to the city's transportation infrastructure, has taken a distinct turn. Once serving as waiting shelters, stations have transformed into commercial entities prioritizing profit and efficiency often at the expense of inclusivity. While the program focuses on becoming a symbolic gateway to the city, there is a growing sense of exclusion despite train stations being the daily crossroads for diverse populations.

In the spirit of Berlin's anarchistic character, which advocates a bottom-up approach to citymaking, this thesis proposes a radical departure from the conventional model of train stations. Instead of admitting to the profit-driven agenda of the state-owned railway operator, Deutsche Bahn, the thesis advocates for a user-centric architectural approach which will make it inclusive. By delving into the essential needs of Berlin's community, passengers, and commuters, the aim is to establish a harmonious balance between profit-driven objectives and the diverse requirements of the local population.

The thesis seeks inspiration from anarchism, a philosophy advocating for the absence of topdown authority. This departure from conventional architecture involves challenging the prevailing paradigm of "hostile architecture," marked by exclusionary designs, towards a more inclusive and versatile approach focused on liveability. Through the lens of anarchistic principles, the proposal aims to redefine the S-Bahn stations along the Berlin ring, offering a compelling vision for a more user-friendly, community-oriented, and progressive environment as prototype station.

This thesis proposes a prototype station for the current S-Bahn station at Frankfurter Allee, where the seamless integration of functionality and user experience becomes the focal point. The "Frankfurter Allee Locals Foundation", consisting of rotating local residents, jointly owns the rentable units added to the station's program. Some recommendations on how to design a prototype station for the S-Bahn ring in Berlin combining all flows with local identities are the outcome of the research through design.



APPROACH

Research approach

The Complex Projects graduation studio follows a methodological and structured approach to the design process. As an integral part of a complex and demanding design assignment, we learn how to process, organise and use a large amount of data.

In the first phase the city of Berlin is explored and researched. A direction for the graduation project was chosen rather quickly. The first task was to select a typology and form functional group set ups in which individual projects should fit into. Next, it was crucial to make preliminary choices regarding client, basic program, and possible locations for the site. In parallel the urban context is closely examined and a thesis topic emerged which became the foundation for the research.

All this research was concluded in the design brief. This finally formed the initial design assignment. The methodology for the design approach started with the concept phase. This entailed both spatial and programmatic concepts as well as look and feel of the project. Followed by the design phase, which was all about the development of functional and programmatic layout, integrated with structural solutions and materialisation. By also developing materialisation and detailing of the building the design should be completed for the P4 go/nogo presentation.

The structured approach to the design process which the studio follows made it very clear to me what I had to do to get from research to design. However, I struggled to make decisions and resolve uncertainties because I was inclined to explore various spatial options without committing to a specific one. I feared that selecting and developing a single option might hinder my ability to address my research question effectively. As the second phase progressed rapidly, I found myself making decisions based on the research I had conducted. This realization highlighted the importance of working through ideas to determine their viability.

In the end I think the approach did work, a prototype station for the S-Bahn ring in Berlin is designed. However, the research which was primarily centered on program, site, and client, left limited time to delve into other aspects. Looking back, I wish I had dedicated more time to exploring spatial changes that could have directly addressed user needs before diving into the design process. That would have helped in the decision-making process.

Feedback and implementation

Following the conclusion of the research phase at P2, feedback highlighted the importance of viewing fictional users as real individuals with genuine needs, prompting a shift in perspective towards user-centric design. Transitioning into the design phase at P2.5, initial concepts were well-received, yet further development was necessary, particularly concerning outdoor space and the integration of local identity into the design.

As the project progressed into P3, the focus shifted towards transitioning from concept to a design. Recognizing the need for a comprehensive proposal, efforts were directed towards developing a system rather than solely focusing on architectural elements. However, it became evident that the design required further refinement, particularly in a better explanation of the narrative and detailing the programmatic layout, including the integration of infrastructure and the building's relationship with its surroundings and modes of transport.

Critical feedback from my mentors underscored the importance of advancing the design beyond the implementation stage, emphasizing the need for detailed drawings that articulate the spatial organization and contextual integration of the project. Recognizing these areas for improvement, the period between P3 and P4 was dedicated to addressing these concerns and refining the design accordingly.

REFLECTION

The final reflection offers a critical assessment of the research and design processes undertaken. This reflective analysis delves into the effectiveness of the chosen approach, methodology, and decision-making, while also addressing key aspects such as the alignment between the project topic, master track, and program. Through self-reflection, I examined the reciprocal influence between research and design, the value and applicability of the methodology, and the academic and societal implications of my work.

Relation between the graduation project topic, the master track (A, U, BT, LA, MBE), and the master programme (MSc AUBS)

The studio topic is Bodies & Building Berlin. The Building as entity with its own space, light and shelter, will be the foundation on which to formulate the places for people to work and live in. The Building is rendered by a specific time and context, and is the result of bodies' requirements related to measurements, movements, comfort, experience, safety, security, etc. Bodies and Building, the specific and the generic, humans and objects. The city becomes a means of application of the research.

In this graduation project, my major challenge was how to design a prototype station for the S-Bahn ring in Berlin combining all flow with local identities. This relates to the studio topic because it focuses on a prototype station building in which a programme is added for all the different bodies that will use it. It focuses on the different ways the user uses and moves through the building.

The S-Bahn is a typical Berlin concept, making the project very local and relevant to that city.

The graduation project is part of the master track Architecture and the master programme MSc AUBS. Design research has been done and a design will be proposed for the prototype station hence the project relates to the master track and programme.

Influence research on design/ recommendations and influence of design/ recommendations on research

The research helped me set realistic but challenging ambitions and helped also in setting design principles to work with from the beginning of the design process. The location also gave me constraints to work with, like the dimensions of the site and entrances to consider.

Research had been done on different users and their needs. It proved difficult to design for all conflicting interests.

During the research I developed a program bar based on case studies, in hindsight these were not the best case studies to use for this project and it would have been better to look at projects with community initiatives and stations on a slightly more human scale for a user-centric design.

Assessing the value of the work process

Reflecting on my approach and methodology, I initially thought I would find the design phase most enjoyable, transitioning from research to conceptualization and finally to design. However, I acknowledge that I lingered on the concept phase longer than necessary, delaying the process of refining and finalizing designs. This resulted in a need for faster decisionmaking during the design development phase. The structured approach to the design process which the studio follows made my decisionmaking process more based on intuition rather than thorough analysis at that point, suggesting areas where a more systematic approach could have been beneficial.

Assessing the academic and societal value, scope and implication of the graduation project, including ethical aspects

The research holds significance for Berlin, as the thesis topic is tailored to the specific context of the city. However, it also extends its relevance beyond Berlin, encompassing a global scale and contributing to the broader objectives of the studio.

The research delves into crucial aspects of universal accessibility and safety in train stations, advocating for a delicate equilibrium between seamless transitions, cleanliness, safety, and comfort. It extends its focus to ensure inclusivity for international visitors, considering barriers, as well as addressing the needs of individuals with varying abilities and homelessness.

Recognizing the significance of aligning train stations with Berlin's evolving demographic and

cultural landscape, the study questions current strategies and explores potential new elements to guide the design towards sustainability and efficient public transportation. Essentially, this research contributes to the dynamic role of train stations in shaping urban environments and fostering inclusive, safe, and welcoming public spaces and at the same time helping to make Berlin "car-free".

With urban growth impacting cities globally, the need for adaptable train station designs is emphasized, reflecting the research's broader relevance beyond Berlin. The studio's thematic focus on "Body Building Berlin" complements this, accentuating the importance of designing for human needs and experiences to enhance community health and well-being.

Europe's commitment to sustainability is evident in initiatives such as the low-car city movement. The thesis aligns with these goals, offering design solutions that promote environmental sustainability and align with the broader European vision for green urban futures. The thesis aligns with the evolving priorities of Europe, which is increasingly recognizing that a well-connected train system will be a central element of its future transport ecosystem.

Assessing the transferability of the project results

The results of my project offer insights for others through the following considerations and recommendations:

 Besides the key spaces of a train station (Station hall, back-of house areas, offices, services, platforms and tracks), integrating a small-scale system for local businesses to rent can enhance community engagement and support local economies.

In addition, it is important to look not only at the programme but also the organisation of a train station, and representation of locals versus the railway operator.

- The needs of passengers, commuters, locals, and staff should be prioritized in the design process which ensures inclusivity and user-centricity, catering to a diverse range of users.
- Implementing systems that foster a sense of ownership and responsibility among users towards the building promotes sustainability and community involvement in maintaining the infrastructure.
- Leveraging the identity, history and character of the surrounding district in the design of



Figure 1: Widest range of users, as portrayed during research phase

buildings, especially stations as they serve as a gateway to the local environment, enriching the user experience and fostering a sense of place.

The scalability and implementation of these strategies may vary depending on the size of the project and context. Encouraging architects to prioritize human-centered design principles in the development of train stations and other infrastructure facilitates the creation of inclusive and adaptable spaces that cater to the widest range of users and their needs.

Recommendation further investigation

In this project, my goal was to ensure the inclusiveness of all possible user groups of the station. I also aimed to achieve cleanliness, safety, and comfort. Besides incorporating sightlines to enable people to keep an eye on each other throughout the day, further research could explore how architecture can enhance the sense of safety at a station, especially considering that homeless people often use the station as an immediate shelter.

To be honest, I personally don't always feel at ease when homeless people are at the station late at night when I have to wait for my train by myself. Architecture cannot influence the unpredictable behaviour that homeless people may exhibit, especially when alcohol and/or drugs are involved. Although a simple solution could be to close the station at night or add security gates, we also don't want to deprive these individuals from taking shelter in the station (especially in the winter). A research worthwhile the effort could come up with ideas that might be imbedded in the architecture of the station.

Feasibility in society today

Given that this thesis project is fictitious, I recognize that significant adjustments are needed in railway operators' policies. It can provide value when railway operators consider the vision of this thesis and involving local representatives while formulating policies. While train travel will be promoted for the sake of sustainability, it will also continue to align with goals of efficiency and profitability.

FINAL PHASE

The final phase of the graduation period will focus on postproduction, and only small design changes are possible. Next to the presentation, a physical scale model and visuals will be done.

BIBLIOGRAPHICAL REFERENCES

Research data:

Start - i2030. (2023, 24 oktober). i2030. https://www. i2030.de/

Figure 1: Made by Autor

All pictures on the chapter pages are by Berlin photographer Anton Hangschlitt, specialised in railway stations.