

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: Architecture track

Personal information	
Name	Rafael Bauler Theiss
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Studio		
Name / Theme	Complex Projects	
Main mentor	Hrvoje Smidihen	Architecture
Second mentor	TBC	
Third mentor	Maruli Heijman	Architecture
Argumentation of choice of the studio	Large-scale project and programmatic complexity (e.g., public building); learning of methodology and process; practice-related approach.	

Graduation project	
Title of the graduation project	Sustainable Parliament for Germany.
Goal	
Location:	Berlin´s Federal Ribbon, Germany.
The posed problem,	<p>Since the dawn of civilization, the architecture of power has been a means to symbolize societies´ beliefs. The parliament building is itself a great example. It has been used to project to nations images, associations, messages, ideals. These buildings often embody a sense of oppression, intimidation, security, and protection. The Reichstag building in Berlin symbolized the German Unification in 1871; the National Congress in Brasilia symbolized the country´s economic progress in the 1950s; the European Parliament in Strasbourg symbolized the openness and democracy of the newly created European Union in the 1990s.</p> <p>If we believe that our buildings shape us, as Winston Churchill once said, what parliament our we seeking for? What comes next?</p> <p>The ambition of this project is to reflect on the powerful symbolism of the parliament as a tool for an emergent and extremely relevant global challenge: climate crisis.</p>
research questions and	<p>How does sustainability affect the architecture of power?</p> <p>How to express sustainability symbolically and physically in a parliament building?</p>

<p>design assignment in which these result.</p>	<p>The Sustainable Parliament for Germany is a building with a gross area about 15.000m². Located in Berlin, on a square between the Chancellery building and the Paul-Löbe-Haus - on the Federal Ribbon. The client is the Bundesrat, the Upper House of Germany's legislative system. Bundesrat represents the sixteen Federal States of Germany, with a number of 69 members.</p> <p>The new building aims to enhance the representativeness of the institution by addressing Germany's positioning towards climate crisis. Bundesrat can be seen as a symbol to represent the goal of achieving greenhouse gas neutrality by 2045 - made by the Federal Climate Act of 2021.</p> <p>The building must be a physical materialization of environmental awareness and activism. Circularity, embodied energy, urban ecology, energy efficiency, and climate design are core topics that will guide the design decisions.</p>
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Process

Method description

Research is divided into two groups: program research and design brief research.

Research on the program aims to investigate the evolution of the specific building throughout history, thus developing an investigation theme, research question and project ambition. A framework provided by the studio is the analysis of the transformation of parliament building through three key historical periods: agrarian, industrial, and information. This research is carried out by analyzing drawings, mainly plans, and by comparing and identifying patterns and changes that are associated with the given time of society in relation to technology.

The design brief research is based on three categories: client, program, and site. In the case of program, the goal is to create a benchmark of information to enable crossing the results and to identify patterns, collect key aspects and parameters of spaces and flows. In the case of client, the research will investigate the client's reputation, tasks, and structure. In the case of site, the research is carried out at four different scales, investigating topics involving morphology, natural systems, transportation, historical evolution, and ecology. Each of these three categories of the design brief will have defined ambitions resulted from the research – these ambitions are connected to the main project ambition and research question, which ensures the connection of the two researches. A matrix of research conclusions and ambitions will serve as guideline for the design scenarios and following design process.

Literature and general practical preference

Literature:

Sudjic, D. (2005). The edifice complex : how the rich and powerful shape the world. Allen Lane.

XML. (2016). Parliament (1st ed.). XML.

Deplazes, A. (2018). Constructing Architecture (4th ed.). Birkhäuser.

Rogers, R. (2005). Cities for a small planet (1st ed.). Faber and Faber.

Cheshire, D. (2016). Building revolutions: applying the circular economy to the built environment. RIBA Publishing.

Kristinsson, J. (2012). Integrated sustainable design (1st ed.). Delft Digital Press.

Project:

London City Hall / Foster + Partners

Welsh Parliament / Rogers Stirk Harbour + Partners

European Parliament in Strasbourg / Architecture Studio

Scottish Parliament / Enric Miralles

Valletta Parliament / Renzo Piano Building Workshop

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

Studio keywords: Bodies and buildings; Digital Culture.

Architecture track keywords: Technical, social, and spatial challenges.

MSc AUBS keywords: Built environment; multi-disciplinary.

The project addresses the climate crisis as the bigger picture and reflects on the importance of architecture as a contributor to the built environment, and as a symbol of representation and influence – that goes beyond construction but also human behavior. This ambition puts sustainability on the front seat regarding the way we build and perceive architecture. The parliament as a building itself will not only answer sustainability through technical solutions but through the understanding of the bodies and the program of the parliament. The result is a narrative and research that coherently connects studio, master track, and master programme, whilst making each one fundamentally important as a part of the whole.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The consequences of climate crisis result in a chain reaction effect that goes from extreme weather conditions and natural disasters, to access of primary resources such as food and water, besides putting in risk life on earth for future generations. By addressing architecture of power as a driving force for the way we build and shape behavior, our responsibility as architects becomes even larger, exceeding technical and spatial solutions to reflect on the symbolical power of architecture of governmental buildings.

The relevance to the scientific framework is that although climate crisis – as well as the contribution of the built environment - and architecture of power are familiar topics, there is still substantially research to explore in regard of their intersection.