Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-BK@tudelft.nl</u>), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Aneesh Nandi
Student number	5237769

Studio		
Name / Theme	Interiors Buildings Cities - Palace	
Main mentor	Sam De Vocht	Architecture
Second mentor	Sereh Mandias	Research
Argumentation of choice of the studio	Research, drawing, theory and modelling overlap into a complex whole at Interiors Buildings Cities. What is also apparent is the rigour demanded by the chair, creating work that is 'resolved at all scales. I am drawn to both aspects. I see them as a challenge to engage with architecture beyond the quotidian 'problem- solving' approach that is taught in architecture schools and reinforced by practice.	

Title of the graduation	Grappling with the Future bank: creating a 'legible' bank
project	
Goal	
Location:	Brussels
The posed problem,	This graduation studio project takes on an architectural competition organized by the National bank of Belgium. This is an enormous public institution (90000sqm) in the middle of the city, with certain spaces of significant value like the daylit bank hall, which is also largely true to its original finishes. In the brief, the NBB challenges the designers taking part in the competition to not only provide for their new workspace requirements, but also address the public via a 'social plinth'.
research questions and	Analysis: Understanding the existing conditions through a detailed study of the building, its history, its qualities, and flaws. Reuse: How can parts of the building be reused in their existing or slightly modified state, ranging from the building structure itself to removable elements such as the windows?
design assignment in which these result.	Proposal: what is the intervention required to address the issues identified in the first stage + the competition brief, keeping in mind the principle of the economy of means.
1	ean central bank, and subject to transformations in the financial- nal Bank of Belgium (NBB) has lost a lot of its defining features as a

banking sector, the National Bank of Belgium (NBB) has lost a lot of its defining features as a national bank (such as vaults for storing gold and the minting press; all of its secure storage spaces have been/ are being shifted to other facilities). (NBB, 2020) As such, the NBB in 2025 would primarily function as an office building for its 1500 office and research staff. The

architectural competition brief for the National bank of Belgium, which forms the basis of the IBC studio's brief, proposes a redevelopment of this precinct in line with this new role.

The project is seen as an opportunity to intervene in a large public institution that plays a significant representative role in the city, country, and continent. It attempts to create an open and democratic building that is organized around a heart of public program. It integrates itself with the city on one hand, while creating efficient workspaces on the other.

Apart from dealing with questions of what it means to be a future bank (IBC, 2021), this studio brief is seen as an opportunity to investigate the future of existing workspaces. It draws on the readings provided in the studio to speculate an ideal future for the north-european office building -- which has been in a state of flux for a while; accelerated by the ongoing pandemic.

At a practical level, the proposal subtracts sub-optimal parts of the building and replaces them with an insert that negotiates with different programs, routes, levels, and conditions. The identity and architectural qualities of this insert are questions that I intend to investigate in detail in the upcoming semester.

Process

Method description

Research, drawing, theory and modelling overlap into a complex whole at Interiors Buildings Cities. The design process is ingrained in the way the studio is structured: through studies in modelmaking of canonical precedents to conceptual stands on the architectural meaning of social plinth; to collective research on the Bank and its surroundings – all of which lead up to the individual projects.

For this, I revert to using precedent research, model making and drawing analysis to develop strategies to deal with urban and architectural issues I identify with the structure through my research in its working and history.

The studio also involves writing as a means of understanding one's design decisions as well as for processing and finding links between information that one encounters while researching diverse topics. The 'Project Journal', an integral part of the studio's working culture, is a constant work-in-progress process of documentation and thinking.

Put together, this process of looking carefully and understanding what exists is critical for me to formulate a design proposal that avoids being a frivolous or 'bold' architectural statement but instead attempts to create a harmonious, restrained intervention. This intervention necessarily stems from practical issues such as access to vertical circulation or lack of cohesion between floor plates. While addressing these immediate concerns, it looks to answer broader questions about the National bank as a catalyst for change.

Literature and general practical preference

To return to the key issue of workplace design, the following paragraphs first look at the historical development and identify issues with the key protagonist: the inflexible office.

Office buildings and organizational change (Duffy, 1980) displays key moments in the historical development of the office typology through a few, specific precedents. In Corporate towers and symbolic capital (Dovey, 1992) the author uses advertisements to explain how symbolic capital -- the 'symbolic, aesthetic, or mythological aura' that surrounds office towers -- is deployed for this purpose. Through a series of categories: external image, location, foyer, view, interiors ..., the author illustrates how this 'aura' is created through a combination of skin-deep architecture and creative copywriting, all to disguise the capital-making machine that is the actual structure. In all of this, going a step ahead than Francis Duffy, Kim Dovey holds architects not just marginalised but complicit. He concludes with a call to action, asking

architects and designers to design better cities for the future and not fall prey to 'lucrative selfdenial'. (p. 187, Dovey, 1992)

In the European context, the development of the actual workspace coalesces into variations of a repeated deep-plan floorplate, typically around 15-20m, arranged in large vertical or horizontal structures. (Meel, 2000) This is an evolved version of even deeper buildings in the past: the Osram building by Waltern Henn, built in 1965, a 'canonical' precedent studied in the studio, is a perfect example of this. This architecture is an outcome of advancements made in technology over the course of the 20th century to allow lighting, ventilation, circulation and other services at this scale. (Duffy, 1980)

The inflexible deep-plan and its associations with the emergence of neo-liberalism and notions of flexibility (in the British context) are studied in The political economy of flexibility. (Thomas, 2019) The author refers to Francis Duffy / DEGW's research into envisaging the office building as a series of temporal layers: shell, services, scenery, sets -- that can adapt to changing needs and uses. It explicitly establishes a 50 year lifetime for the actual building shell. in Obsolescence: An Architectural History (Abramson, 2016) the benchmark preceding this norm is seen to be anything from a few decades to a few years -- buildings torn down and replaced at their prime to serve newer requirements that challenged the constraints of their rigid construction in some form or another.

In today's world, office space is increasingly becoming less relevant or desirable. As an architect faced with a design challenge to redevelop a structure that includes a fair amount of unused/ empty office space, this is especially relevant. In the UK, the problem of excess office space necessitated policy intervention. 'Office-to-resi' regulations of 2014 allowed developers to convert this space into apartments to be able to recover their investments. While it sounds like a good idea in theory, it has had mixed outcomes: very little attention is paid to how the units work. Small apartments are carved out of deep plan buildings, some remain windowless and unventilated. (Park, 2018)

This example paints a picture of the world we're headed in at the behest of financial forces at the helm. The inflexible office resists attempts to use it for any other purpose than commercial; necessitating heavy interventions to convert them. Even then, the outcome falls short of being ideal. Demolition and replacement seems to be the de-facto solution, and is indeed the fate that awaits most of these buildings. This is an obvious concern seen in the context of the enormous weight the construction industry puts on the plant's resources and climate.

The downward trend of office space demand is compounded by the ongoing pandemic, and some voices herald an imminent commercial real estate bubble-burst (Colombo, 2020). Faced with this reality, the deep-plan office has to adapt -- just to live out its expected 50 year lifespan, or perish. This paradoxical outcome of 'flexible' design as rigid, inflexible spaces -- is seen as a central concern of this research direction. The ubiquity of this type of architecture highlights the need to study and review strategies to ameliorate this condition.

Architects such as Aldo Rossi and Herman Hertzberger address issues of flexibility in their writing. The former studied historic buildings that outlasted functions they were made for, and highlights how their transformation allows 'maximum functional freedom'. (Rossi, 1970) The latter talks about 'polyvalence' as a quality that allows spaces to be interpreted and used in different ways (Hertzberger, 2014) This is particularly important when one looks at the rapid changes that offices are expected to undertake post-pandemic (Davis, 2021), going as far as live-work hybrids. (Bochinska & Katz, 2020)

Another aspect brought on by the sheer scale of the NBB's site and program is the degree to which the open spaces within it are accessible. Looking at precedents like the Economist

building by Peter and Allison Smithson, or the India Habitat Centre by Joseph Stein, suggest an alternative where the city is brought into the site, blurring the edges in between them. In the IHC, the building gives back to the city by interspersing public programs like auditoria, restaurants, halls, and galleries. The result is a diverse environment for both the office workers and the public. (Bahga & Raheja, 2019) Aldo van Eyck and Piet Blom talk about the reflexive relationship between the building and city, and propose multiple strategies. (Jaschke, 2008).

To summarize, the research and design investigate the typological possibilities and advantageous functional adjacencies of an ideal office building. It would take the existing building as the starting point and preserve as much as possible. The 'new' parts would thus perhaps not only be able to be adapted for other uses -- rendering the structure useful for much longer, but also have to contain a lively mix of functions and activities that interact with the city around and within it, by taking advantage of the polyvalence/ multiplicity baked into its architecture. This does not have to mean an endless cycle of heavy construction interventions; kinetic, temporary interventions could be employed against the structure to allow new possibilities and meanings. (Mehrotra, 2008) It would try to extract key lessons from case studies and precedents and be applicable for both new-build and reuse of existing structures.

- Abramson, D. M. (2016). *Obsolescence: An architectural history*. The University of Chicago Press.
- Bahga, S., & Raheja, G. (2019). A study of regional assertions in the architecture of Delhi from the 1970s to the present. *Buildings*, 9(5), 108. https://doi.org/10.3390/buildings9050108
- Colombo, J. (2020). Why the US Commercial real estate bubble is about to burst. Forbes. https://www.forbes.com/sites/jessecolombo/2020/04/30/why-the-us-commercial-realestate-bubble-is-about-to-burst/
- Cortés, J., & Moneo, R. (1976). *Comentarios sobre dibujos de 20 arquitectos actuales*. Universidad Politécnica de Cataluña.

Davis, D. (2021, June 3). 5 models for the post-pandemic workplace. *Harvard Business Review*. https://hbr.org/2021/06/5-models-for-the-post-pandemic-workplace

- Dharia, N. (2014). Artifacts and artifices of the global: Practices of us architects in India's national capital region. *The Global South*, *8*(2), 49. https://doi.org/10.2979/globalsouth.8.2.49
- Dovey, K. (1992). Corporate Towers and Symbolic Capital. *Environment and Planning B: Planning and Design*, *19*, *2*, 173–188.
- Duffy, F. (1980). Office buildings and organisational change. In *Buildings and Society*. Routledge.
- Gohaud, E., & Baek, S. (2017). What is a Korean officetel? Case study on bundang new town. *Frontiers of Architectural Research*, 6(2), 261–271. https://doi.org/10.1016/j.foar.2017.04.001

Hertzberger, H. (2014). Polyvalence: The competence of form and space with regard to different interpretations: polyvalence: the competence of form and space with regard to

different interpretations. *Architectural Design*, *84*(5), 106–113. https://doi.org/10.1002/ad.1816

- Jaschke, K. (2008). City is House and House is City: Aldo van Eyck, Piet Blom and the Architecture of Homecoming. In *Intimate Metropolis: Urban Subjects in the Modern City* (pp. 175–194). Routledge.
- Katz, D., & Bochinska, U. (2020). *If you worked here, you'd be home: The case for live-work buildings*. Work Design Magazine. https://www.workdesign.com/2020/09/the-case-for-live-work-buildings/
- Meel, J. van. (2000). *The European office: Office design and national context*. 010 Publishers.
- Mehrotra, R. (2008). Negotiating the static and kinetic cities: The emergent urbanism of mumbai. In A. Huyssen (Ed.), *Other Cities, Other Worlds* (pp. 205–218). Duke University Press. https://doi.org/10.1215/9780822389361-009
- Park, J. (2018). *A new low in office-to-residential conversions*. Building Design. https://www.bdonline.co.uk/opinion/a-new-low-in-office-to-residential-conversions-/5095069.article
- Public service contract: Multidisciplinary engineering office for the renovation and restoration of the national bank of belgium. (2021). National Bank of Belgium.

Rossi, A. (1970). Due progetti.

Rossi, A. (1982). *The architecture of the city*. MIT Press.

Studio Manual. (2021). Chair Interiors Buildings Cities, TU Delft.

Thomas, A. (2019). The Political Economy of Flexibility: Deregulation and the Transformation of Corporate Space in the Post-War City of London. In *Neoliberalism: An architectural project*. Pittsburgh University Press.

Reflection

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

1.

The MSc. Architecture course at TU Delft aims to teach students to "...design as a means to deal with the technical, social and spatial challenges in the Built environment". The project situates itself in today's precarious reality: both in terms of the responsibility of architecture as a trade in the face of the Anthropocene; and as a means of being a solution to the myriad practical issues affecting real-world organizations with regards to the buildings they inhabit.

2.

IBC teaches one the ways of paying close attention to detail and conducting thorough research. (A design attitude/ process) The studio attempts to create designers who can deal with design challenges that go beyond the scope of the brief – in this case, a national bank. While it asks questions about sustainability, reuse, adaptability, representation, and power... centred around the architectural output, all of which qualify as relevant topics of research in their own right; perhaps the relevance of the work is more in the rigor and concerns that shapes it, moulding the designer's abilities in the process.

The graduation project and studio emphasise on the role of an architect as an interpreter as well as creator; harnessing our ability to understand wide-ranging themes and concerns and synthesising them into a coherent project. The specific research outcomes of the process would be instructive for me personally, and also to future students; as concrete outcomes of a thorough design process – as I have learnt from MSc. Architecture students who have graduated before me.

On a personal note: as a mid-career architect, this course and studio is an opportunity for me to develop new, richer ways of conducting design investigation and resolution; which would shape the modus operandi of my future architectural practice.