

research-by-design journal

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graduation plan

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	Hugo van Rossum
Student number	4840909

Studio		
Name / Theme	Public Building Graduation Studio	
Main mentor	Antonio Cantero	Project Design
Second mentor	Ger Warries	Technical Building Design
Third mentor	Sang Lee	Theory and Delineation
Argumentation of choice of the studio	The design of a public building reflects certain ideas of its architect about how society functions or should function, its actual use reflects how successful this assumption was. Since the social and demographic makeup of a society keeps evolving, as well as its habits and needs, the question arises how one might design a public building for a dynamic and pluralistic society. Seeing the building as an evolving organism, between permanence and temporality, is something that I would like to investigate for this studio. I'm also looking forward to researching the beautiful city of Copenhagen, which left a strong impression on me when I visited it some years ago.	

Graduation project		
Title of the graduation project	Public Domesticity	
Goal		
Location:	Copenhagen, Nørrebro	
The posed problem,	Urban Mosaic The urban mosaic of the Haraldsgade-kvarteret has its own distinct value, yet from the street-level human perspective this composition might be lost. A public building, reconciling the unmixed identities of the individual tiles, might prove to be a key to understanding the distinct value that the Haraldsgade-kvarteret proves to possess. Risk of Social Disconnect	
	The social composition of this district, which can be categorized as diverse and multicultural, is at risk of	

becoming internally separated. In part, this is due to the little interaction between the various social groups that live and work there. Lack of Social Density in Public Space the so-called *social density* can be seen as the underlying network of social interactions between individuals, dependent on the presence of others in public space (Gehl, 2011). Originally confined to the physical realm, social relations have shifted toward the virtual through mass media and online platforms. With faster travel, greater movement of goods and information, and expanding urban spaces, the density of small-scale social interactions in physical space has decreased. How might we design a social condenser for a diverse society to create spaces for interaction and belonging? research questions and Main question: How can an understanding of urban public space, both in the local and general sense, inform the design of a public building to facilitate interaction and a sense of belonging? SQ 1: How can the local architectural, social and historical dynamics of domesticity, privacy and publicity inform program and form of a social condenser? SQ 2: How can public space in architectural design densify the occurrence of social interactions? SQ 3: How can a public building through its program and form elicit a sense of belonging for a diverse population? design assignment in Reconciling domestic and public activities through three which these result. core themes; facilitating health, sociability and tolerance; creating integrated landscapes for each theme. 1. **food** - shared kitchen, vegetable store, d.i.y. restaurant, herb garden 2. mind - working, studying, collaborating, meditating, lecturing, reading, discussing 3. **body** - play, sports, balance, power, creativity By researching how these different public spaces interact as a hybrid, instead of designing them in isolation or as 'pure' typologies, new configurations can be created.

Hugo van Rossum

19.06.25

Public Building MSc3/MSc4

The design should project an image of publicity and interaction to its exterior. Not unlike high-tech architecture from the 1970s, the inside-out approach to architecture makes the interior the message. The public space, as the interface between building program, should simultaneously be designed as a destination by itself. Open 24/7, it acts as an extension of the street, vertically densifying the social interactions that it facilitates.

The resulting social condenser can be a physical platform concentrating various social moments by being accessible, open for diversity and meaningful to a pluralistic society. It is where these differences come together, that an initially neutral space is transformed into a meaningful public space.

Process

Method description

To produce a design that can answer the research questions, the following methods are used, both for the completed design process leading up to P2, as well as the process to be followed for P4/P5. They include (1) reviewing relevant materials, (2) applying and testing of theories, and (3) experimenting and evaluating through assemblage and designing extremes.

- (1) The foundation for the Research and Design process is made through reading about and analyzing:
 - relevant architectural theories. Examples include:
 - Henri Lefebvre's spontaneous street theatre
 - Jan Gehl's resultant activities
 - o Herman Hertzberger's *spaces of shared interest*
 - reference projects pertaining to my research questions
 - the local context. Examples include:
 - Archival material
 - Local policy context
 - History of use and occupation
- (2) Applying and testing of theories. This includes, for example, reviewing critical literature on these theories, as well as projects that are influenced by these theories. for example: how do Hertzberger's *structuralist* buildings hold up nowadays? What do the critics say of Henri Lefebvre's *spontaneous street theatre*?
- (3) Experimenting and evaluating through assemblage and designing extremes. This deals with the "What If...?" questions. By designing extremes like "what if learning were a space?", or "what if all circulation were on the exterior?", their effect can be tested, and insights can be gained. Additionally, by assembling references that have achieved certain design goals, the reason behind their success can be understood.

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Literature and general practical references

Gehl, J. (2011). Life between buildings: Using public space (6th ed.). Island Press.

Hertzberger, H. (2014). Architectuur en structuralisme: speelruimte en spelregels.

Koolhaas, R. (1995). The generic city. The Monacelli Press.

Lefebvre, H. (2003). The Urban Revolution. Minneapolis, USA: University of Minnesota Press. (Original work published 1970)

Tschumi, B. (1978). The Manhattan Transcripts. Academy Editions.

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)?

My project, facilitating interaction between strangers through designing with public space, is a specific instance of an ongoing research effort at BK and the Public Building studio, investigating how we can create social cities in a changing world. By finding new ways in which the social structure of a building can be designed, in my case through inspirations from urban design and the inclusion of domestic activities in the urban realm, this graduation project could contribute to this body of research and projects.

- Additionally, through the re-interpretation of high-tech architecture from a sustainability perspective, new insights could be gained in the field of flexibility and resource conservation.
- 2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

In the larger social framework, my project aims to address the societal trend of more diverse societies, both culturally and politically. If these differences do not interact, these societies might become increasingly polarized. Interaction between those who normally would not meet is something that contributes to tolerance and understanding, both in small scale interactions, as well as in the global context. Even though architecture cannot these issues by itself, it can be a contributing force.

Furthermore, the recontextualization of domestic activities into the public realm gives those with small apartments, or difficult home circumstances, a 'third place' for studying, socializing, working and eating. Acknowledging that public and domestic, intimate and social do not need to be separated by rigid borders can give way to new ways of living together.

process documentation Q1

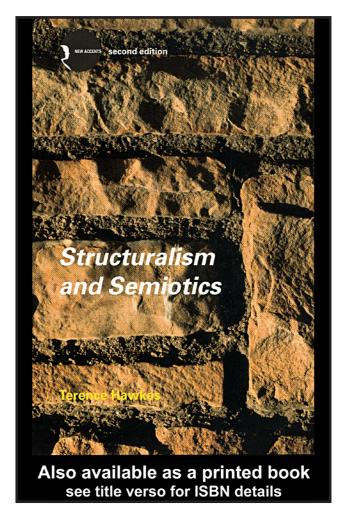
<u>week 1.2</u> 09.09 - 15.09

FIRST READINGS + IMPRESSIONS

Trying to get a first understanding of both the subject, as well as the context, I made a map of my impressions of the site (see next page). Here, my perception of the context through google maps and internet resources in general lead to this outcome. I drew and wrote what I noticed, through the various scales of the site.

Secondly, I started to read on some subjects that I found interesting - the themes of **semiotics** (I had read The Name Of The Rose by Umberto Eco in the summer break) and **structuralism** (Hertzberger always fascinated me). The texts I read gave me a conviction that these approaches to architecture and linguistics might be fruitful when designing a public building.

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Hawkes, T. (1977). <u>Structuralism & Semiotics</u>. Univ of California Press.



Architecture and Structuralism
Herman Hertzberger, 2015

UMBERTO ECO

Italian semiotician Umberto Eco (b. 1932) is a thinker of great versatility, whose interests span from the mediaeval world of aesthetic theory to contemporary debates about semiology, and whose publications address topics as diverse as the aesthetics of Thomas Aquinas and the sociology of jeans. He is also well known for his fictional writing which is informed by his academic work.

As a semiotician Eco address a middle and the semiodic in Eco address and the semiodic in Eco address a middle and the semiodic in Eco address and the semi

As a semiotician Eco adopts a middle ground with regard to language, and avoids an understanding of language as either univocal or deferring to infinite meaning. He therefore develops a model of an 'ideal' reader alert to the possibilities of language, if not to the infinite possibilities of language. Eco bases his semiotic theory on codes. He draws the distinction between specific and general codes, where specific codes refer to the language codes of particular languages, while general codes refer to the structure of language as a whole. At the same time he stresses that codes must be viewed within their cultural context. Thus he introduces a certain flexibility and a temporal dimension to an otherwise heavily structural understanding of language.

cultural context. Inus he introduces a certain hexibility and a temporal dimension to an otherwise heavily structural understanding of language.

In his article 'Function and Sign: Semiotics of Architecture' Eco applies his general semiotic theory to the question of architecture and the built environment. Architecture, Eco notes, presents a special case as it is often intended to be primarily functional and not to to be communicative. Nonetheless, architecture does function as a form of mass communication. Eco draws the distinction between the denotative and the connotative. He therefore distinguishes between the primary function—architecture as functional object—and the secondary function—architecture as symbolic object. He notes that in both categories there is potential for 'losses, recoveries and substitutions'. Eco concludes that architects must design structures for 'variable primary functions and open secondary functions'.

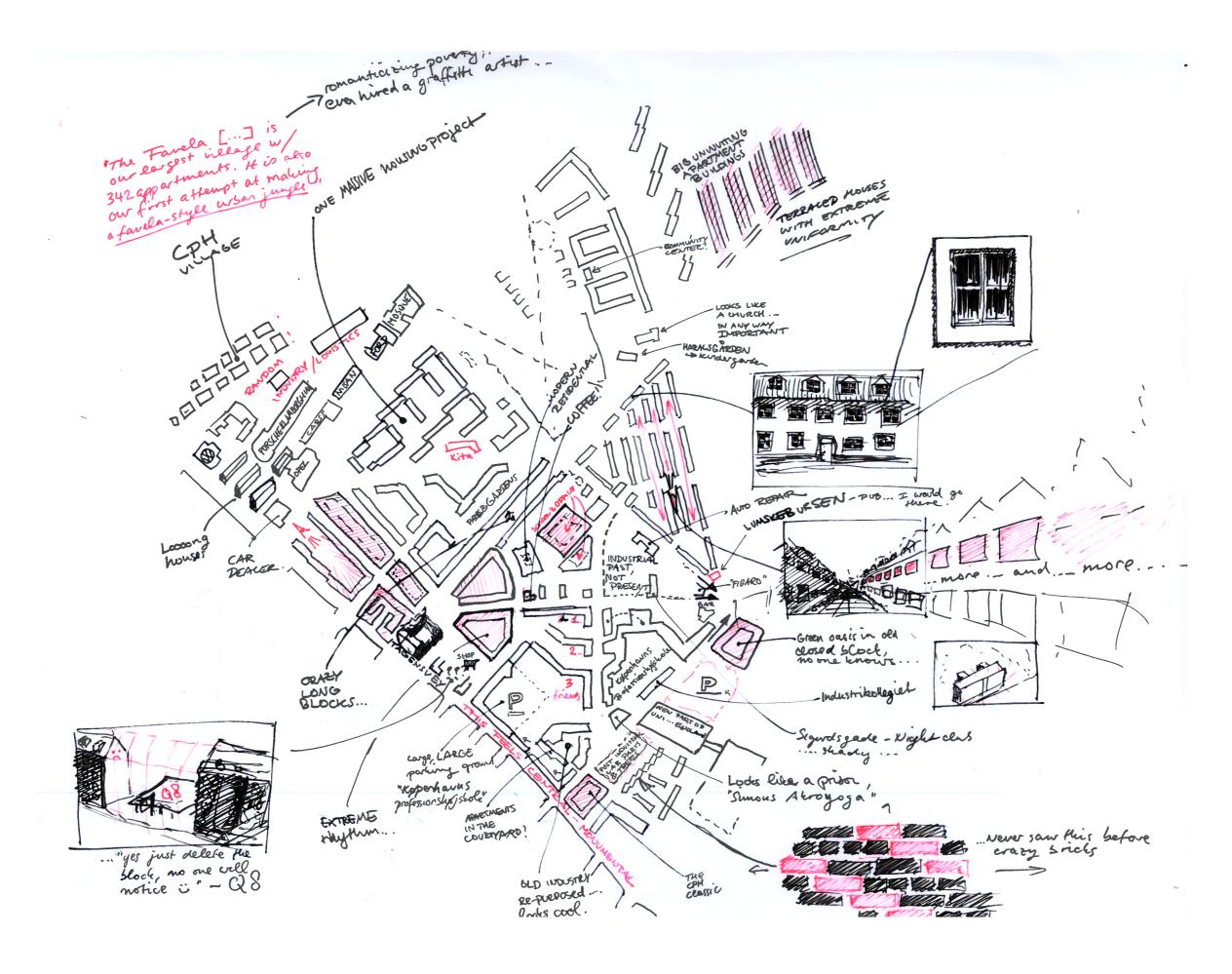
In the extract 'How an Exposition Exposes Itself' Eco applies this theory to the context of the 1967 Expo World Fair. Such expositions, Eco observes, present extreme examples, in that the primary function of the pavilions is minimized while their secondary function is exaggerated. The pavilions serve less as functional buildings than as symbols of the values of their national culture.

FUNCTION AND SIGN: THE SEMIOTICS OF ARCHITECTURE

SEMIOTICS AND ARCHITECTURE

If semiotics, beyond being the science of recognized systems of signs, is really to be a science studying *all* cultural phenomena *as if* they were systems of signs—on the hypothesis that all cultural phenomena *are*, in reality, systems of signs, or that culture can

Eco, U. (1986). <u>function and sign: the semiotics of architecture</u>



19.06.25

<u>week 1.3</u> 16.09 - 22.09

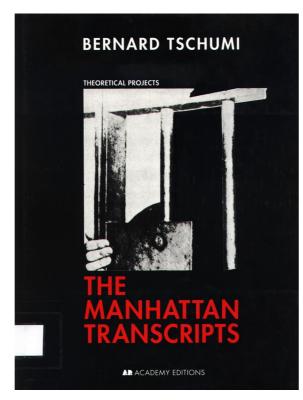
PSYCHOGEOGRAPHICAL MAP

The main assignment for this week was a draft for the psychogeographical map, due in week 1.5. Through experimentation by cutting up a map of the area, we ordered the tiles to create a new city. Fields of similarity were formed, based on specific themes, like 'unexpected encounters' or 'car-topia.'

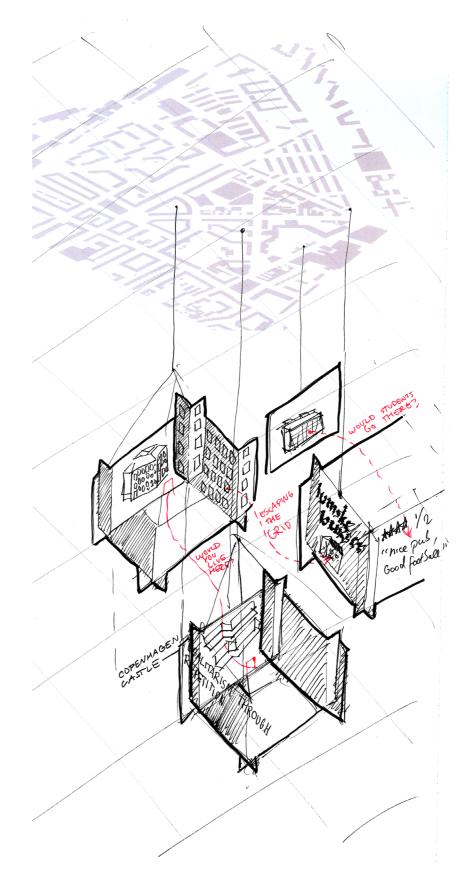
I read the text 'The Generic City' by Rem Koolhaas, gaining his understanding of how the contemporary city is developing. Additionally, I made an attempt to understand The Manhattan Transcripts by Bernard Tschumi, because his way of researching the connection between social behaviour and physical space fascinated me.



the Generic City
Rem Koolhaas, 1995, The Monacelli Press



<u>The Manhattan Transcripts</u>
Bernard Tschumi, 1981, Academy Editions



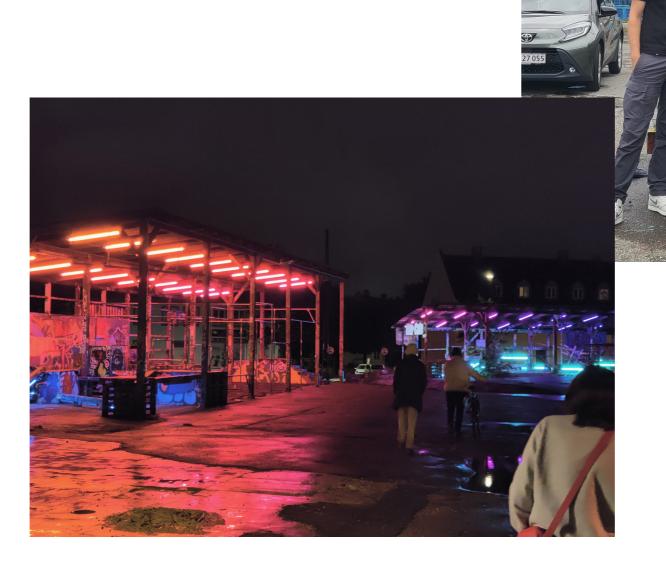
BRAINSTORMING FOR 'THE PAPER CITY'

<u>week 1.4</u> 23.09 - 29.09

EXCURSION TO COPENHAGEN

On our site visit, both the historical city center and the site area were visited and researched. Through interviews on-site, insights were gained about the social context.

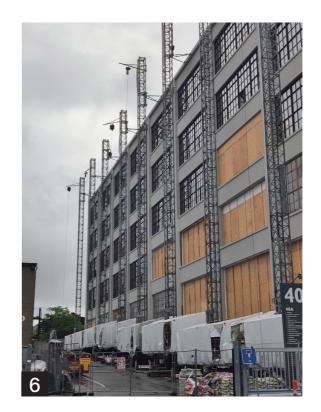
The image of Copenhagen as a modern utopia of equality and prosperity was partially challenged, mainly by our experiences in the suburbs where the site areas are located.



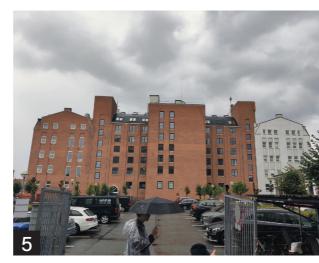


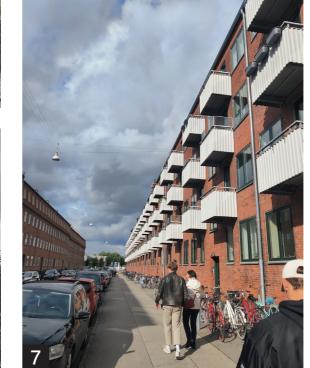












1 - Grundtvigs Kirke, a famous example of the rich tradition of brick architecture in Copenhagen.2 - Frederiks Kirke, neoclassical church in the

center of the city.

Simon from Bolsjefabrikken. 4 - Transformer building, next to site area. Appropriated through graffitti.

3 - Conducting interviews on site, here with

5 - Former Lauritz Knudsen factory.

6 - another angle of the Lauritz Knudsen factory, currently being renovated.

7 - housing developments in the site area, characterized by repetition and uniformity.

<u>week 1.5</u> 30.09 - 06.10

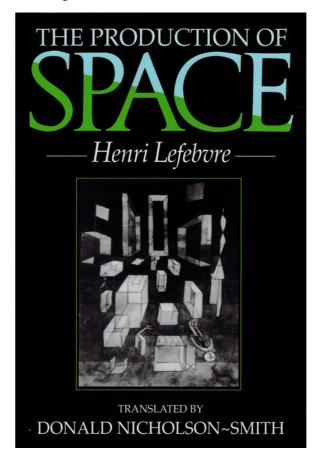
READING // FINISHING MAP PROCESSING EXURSION FINDINGS

After having returned from the excursion, my main efforts were focused towards the group effort of the psychogeographical map. We implemented our findings from the excursion and finalized its graphics.

Additionally, I started reading the heavy texts of 'The Production of Space' and 'The Urban Revolution' by Henri Lefebvre, being interested in the connection between social life and physical space.

Finally, I read some documents by the municipalty of Copenhagen about their policy regarding public space and architecture, revising my research ambitions partially towards those goals.

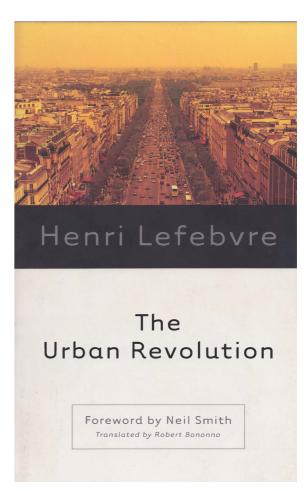
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Lefebvre, H. (1992). <u>the Production of Space</u>. Wiley-Blackwell. (Original work published 1974)



co-create copenhagen, vision for 2025 technical and environmental administration, City of Copenhagen, 2015

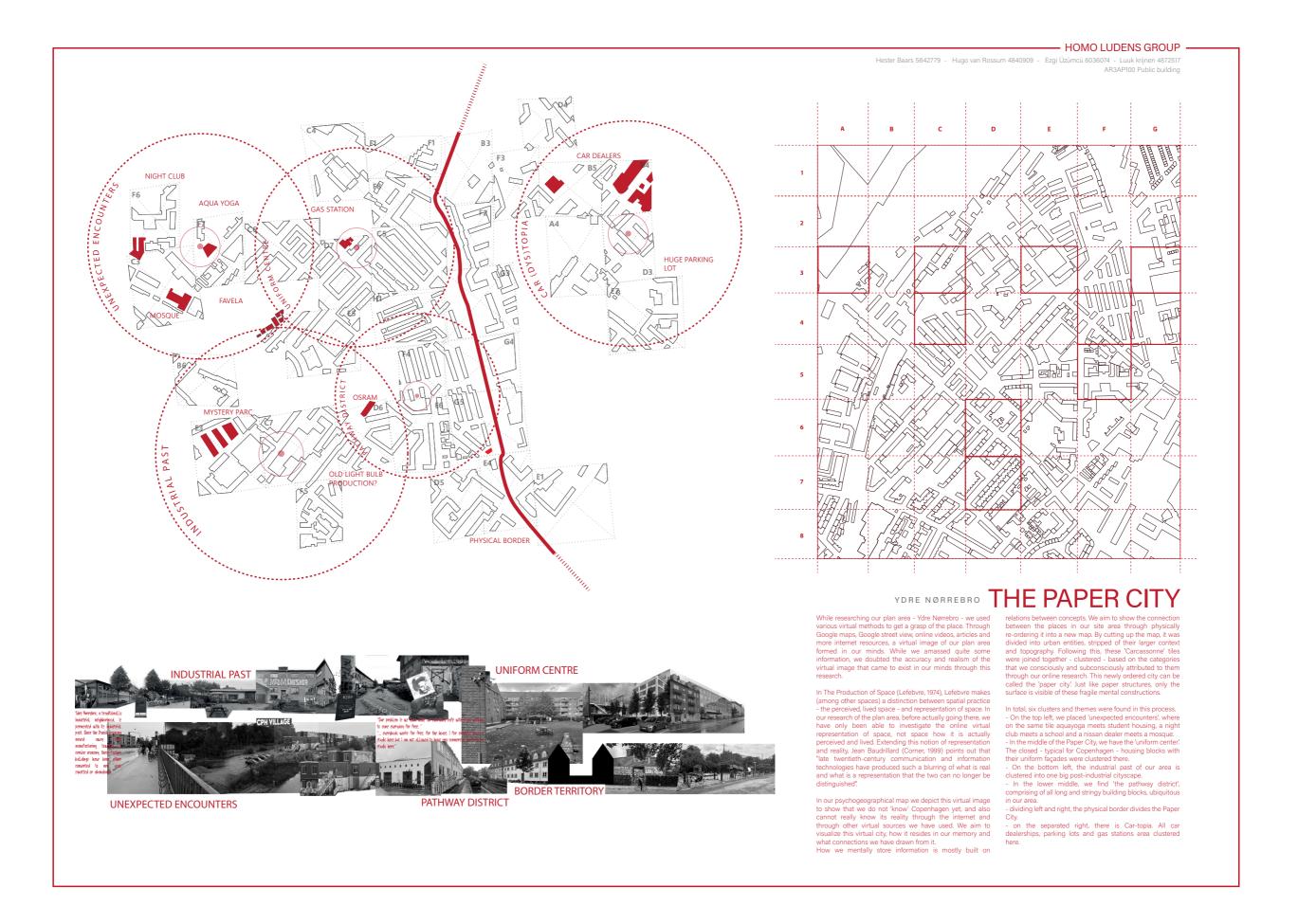


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Lefebvre, H. (2003). <u>The Urban Revolution</u>. Minneapolis, USA: University of Minnesota Press. (Original work published 1970)



architecture policy for copenhagen 2017-2025
Technology and Environment Department,
The City of Copenhagen, 2017

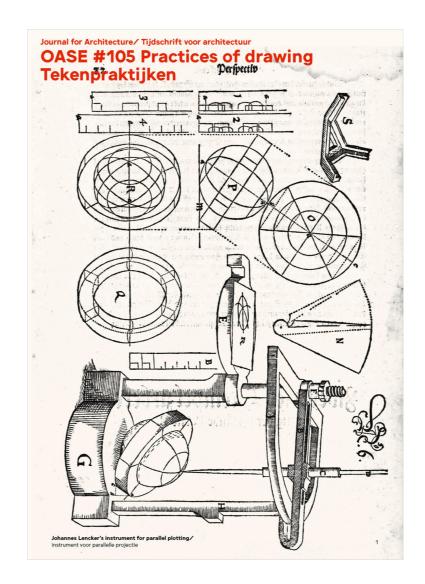


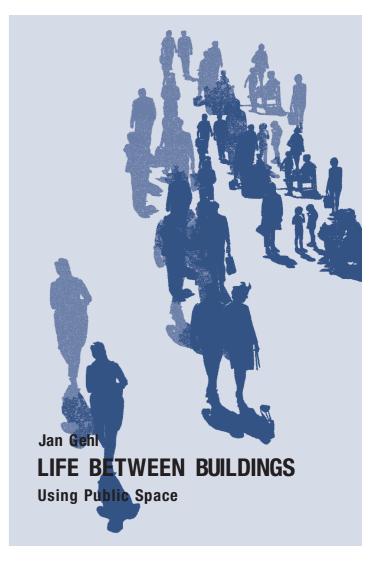
<u>week 1.6</u> 07.10 - 13.10

READING // PREPARING GROUP PRESENTATION BRAINSTORMING FOR ASSIGNMENT

Again, a large part of my time went towards the group effort of making the site-visit pinup presentation (first poster on next page). More group work on friday was done, brainstorming for the upcoming TD model assingment.

Regarding my personal research, I looked more into drawing techniques, reading the OASE #105 magazine about 'practices of drawing'. Additionally, I read partially 'Life Between Buildings' by Jan Gehl about the functioning and meaning of public space.





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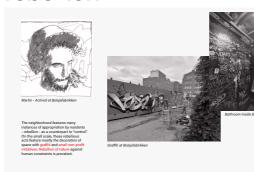


Ezgi Üzümcü Hester Baars Hugo van Rossun

control



rebellion





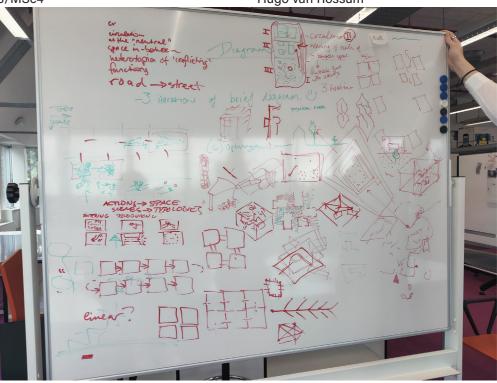












BRAINSTORM MODEL TD ASSIGNMENT

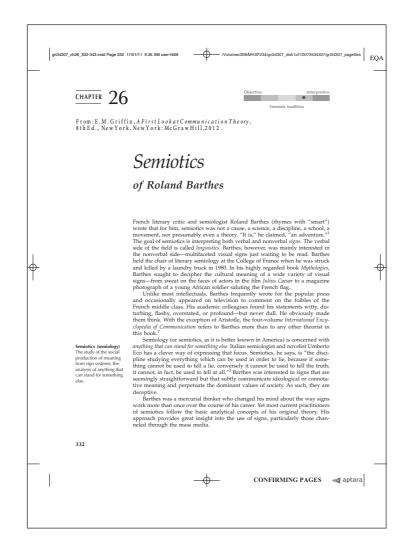


<u>week 1.7</u> 14.10 - 20.10

SOCIAL RESEARCH // CREATING MODEL

Regarding my personal research, this week was more focussed on reading texts about society on the larger scale, for example by partially reading 'The Society of the Spectacle' by Guy Debord. Additionally, I continued my research on semiotics, by reading a paper explaining the semiotics of Roland Barthes.

The group work consisted of building the model for the TD assignment. Due to sub-optimal group communication, we did not have enough time to make the model as nice as we had intended, but the feedback was very valuable.



Griffin, E.M, Semiotics of Roland Barthes

91st ACSA INTERNATIONAL CONFERENCE • HELSINKI • JULY 27-30, 2003 23

The Revolutionary (Re)Vision of Modern Architecture: Rem Koolhaas, from Surrealism to the Structuralist Activity

FRANCES HSU
Georgia Institute of Technology

This paper locates in Delirious New York strategies of theoretical and critical production. It examines implementation of conceptual, pictorial and textus techniques associated with surrealism and structuralism in the work and how such procedures were ultimatel used to expose the irrational side of modern archite ture, its claims to pragmatrian, rationalism and objectiv tyr—aspects which can be grouped under the tern schlichkeit.

Delirious New York attempted to address the problem of meaning in the city and the notion of architecture as a language³ Biographical aspects related to the viewpoint I elaborate are outlined, an analysis of the principles and intentions of the book are made and certain critical issues are identified. Interpretations are referred to as they arise from those frameworks the book originally addressed.

Koolhaas's ambition was to devise "a theory, practice, strategy and ethic" based on the programs and ideologies that had produced Manhattan.¹ His tactic was to reveal the unconscious of architecture. The Surrealist paranoid-critical method conceived by Salvador Dali would legitimize the "discovery" of the unconscious dimension of Manhattan as the flip side of the Modern Movement. Not only would Koolhaas establish Manhattan as a form of modern architecture while addressing postmodern concern with type, narrative and symbol. While Delirious New Yorkis a work of history on the vernacular architecture Manhattan it is also the affectation of paranoia and delirium, using Dali's method of working with the unconscious to ground his work in the framework of the critical avant-garde.

Pcm is basically the systematic encouragement of the mind's power to look at one thing and see another and the ability to give meaning to those perceptions. Think

of Dali's paintings that read as double images. Koolhaas subjects Manhattan to the Dalinian gaze to find the city a reflection of his desire. He derives his notions of retroaction and Manhattan from the rhetoric of pcm. With the identification of Le Corbusier as the personification of modern architecture he manifests the conjunction between the Surrealist's revolutionary project and the architect who declared "architecture or revolution" through Structuralism, the revolution of poetic language. Koolhaas posits the architect as poet and modern architecture as a poetis subject.

that viewed the structure of language as a reflection of the structure of the unconscious, as he assembles his paranoid visions with a structuralist logic to achieve multiple, alternative readings of history. Just as linguist tic theory decoupled the basic dual relationship be tween a word an object where the former stood somehow for the latter, so is Koolhaas's Manhattan multiple bipolar structure, a language of relations and opposites based on the common denominator of metaphor. Delirious New York presents the city between 1840 and 1940 as a fiction constructed from an amalga mation of historical fragments set in new combinations Manhattan is a model of surreality into which various lineages are inscribed and other discourses are introduced through structuralist logic. The work is a kaleido scopic constellation in which everything seems to lead to something else that leads in turn to the next thing. The goal is to multiply not diminish associations and categories. The interplay between components is predominant characteristic. Just as in the studies or language which distinguish between the history and the system of a language, so can we differentiat between the history related by Delirious New York and the way in which the discourse is formulated. For mulated. For

GUY DEBORD

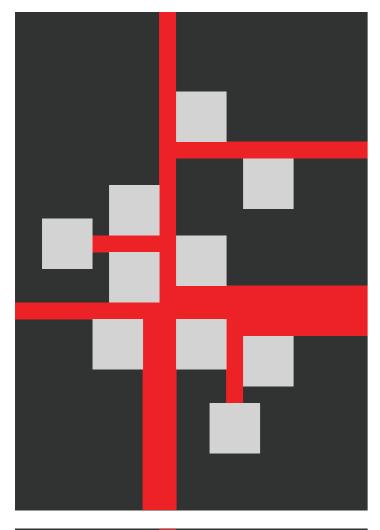
THE SOCIETY OF THE SPECTACLE

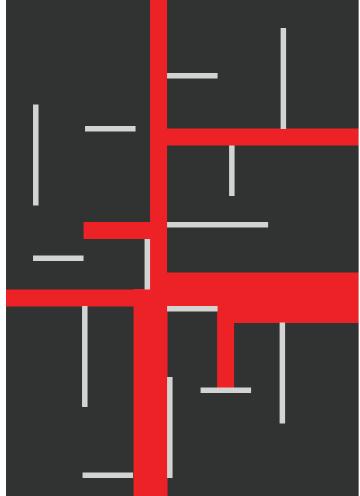
Translated and annotated by Ken Knabb

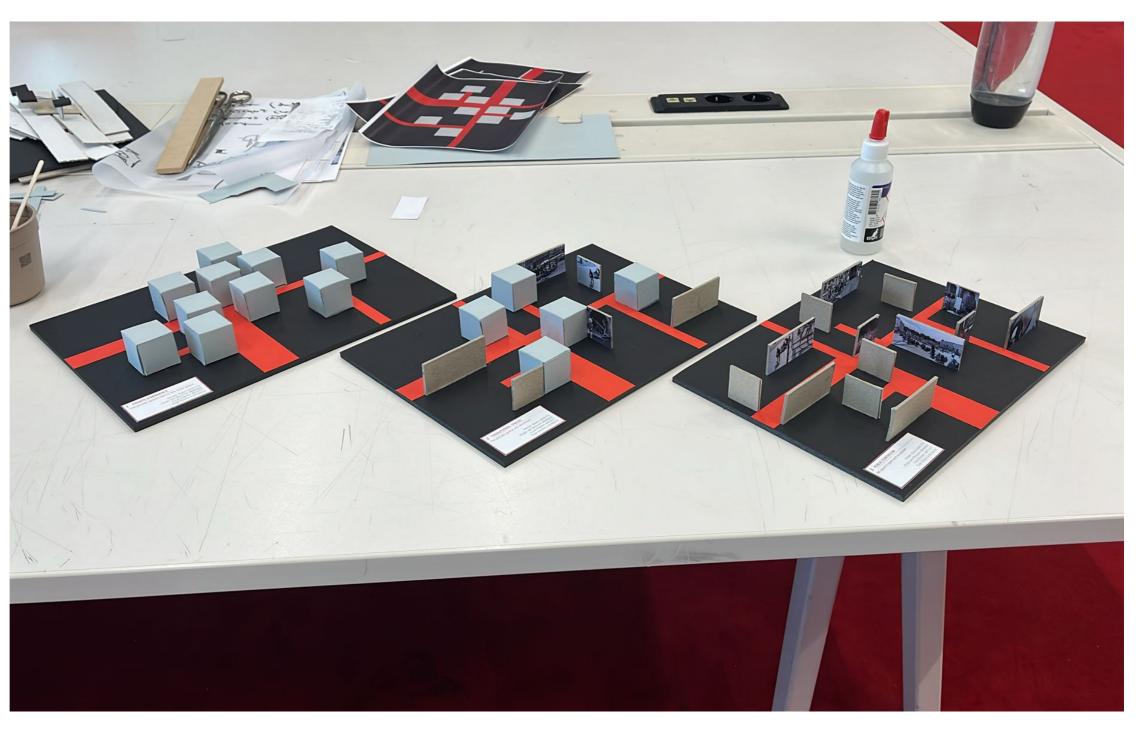
Debord, G., The Society of the Spectacle

Hsu, F., The Revolutionary (Re)Vision of Modern Architecture: Rem Koolhaas, from Surrealism to the Structuralist Activity

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<u>week 1.8</u> 21.10 - 27.10

HISTORICAL RESEARCH // TEXT ON HYBRIDITY

Firstly, I did quite a lot of research on the historical context of the site, since I had the feeing that I had spent too much time on the large scale, in the world of abstract concepts. These historical findings, consisting of maps and images, were crucial in developing my concept for the P1 presentation later on.

Secondly, I looked more into the concept of hybridity in preparation for the assignment of writing my own definition of the subject. Public Building MSc3/MSc4 Hugo van Rossum 19.06.25

total hybridity

TD assignment 4 Hugo van Rossum 4840909 23..10.24

The apartment, the theater

For an understanding of hybridity, let's first consider a function that is often deemed as singular, as inseparable into smaller parts. The residential unit, perceived as one 'function', can be divided into activities like sleeping, preparing meals, studying, relaxing, procreation, socializing and more. These different activities are linked according to social constructs into one unit, one sphere of privacy and utility, able to be reproduced. Why is this not considered a hybrid? Another example: the theatre in its classical form. While ostensibly serving one function (the display of theatre to a public), it can be subdivided into changing rooms, a bar, the stage, the management's office, restrooms and others depending on the specific instance of that typology. Why is this building not considered a hybrid?

The difference to hybridity is that these physically separated actions (who dresses in the bar, or does bookkeeping on stage?) need each other to **fulfill a greater use**. The function of theater needs its constitutive activities, and they in turn derive their necessity and legitimacy from the 'greater function'. It could be concluded that the greater function in its significance outclasses its constituents, a Hobbesian *body politic*.

Mixed use

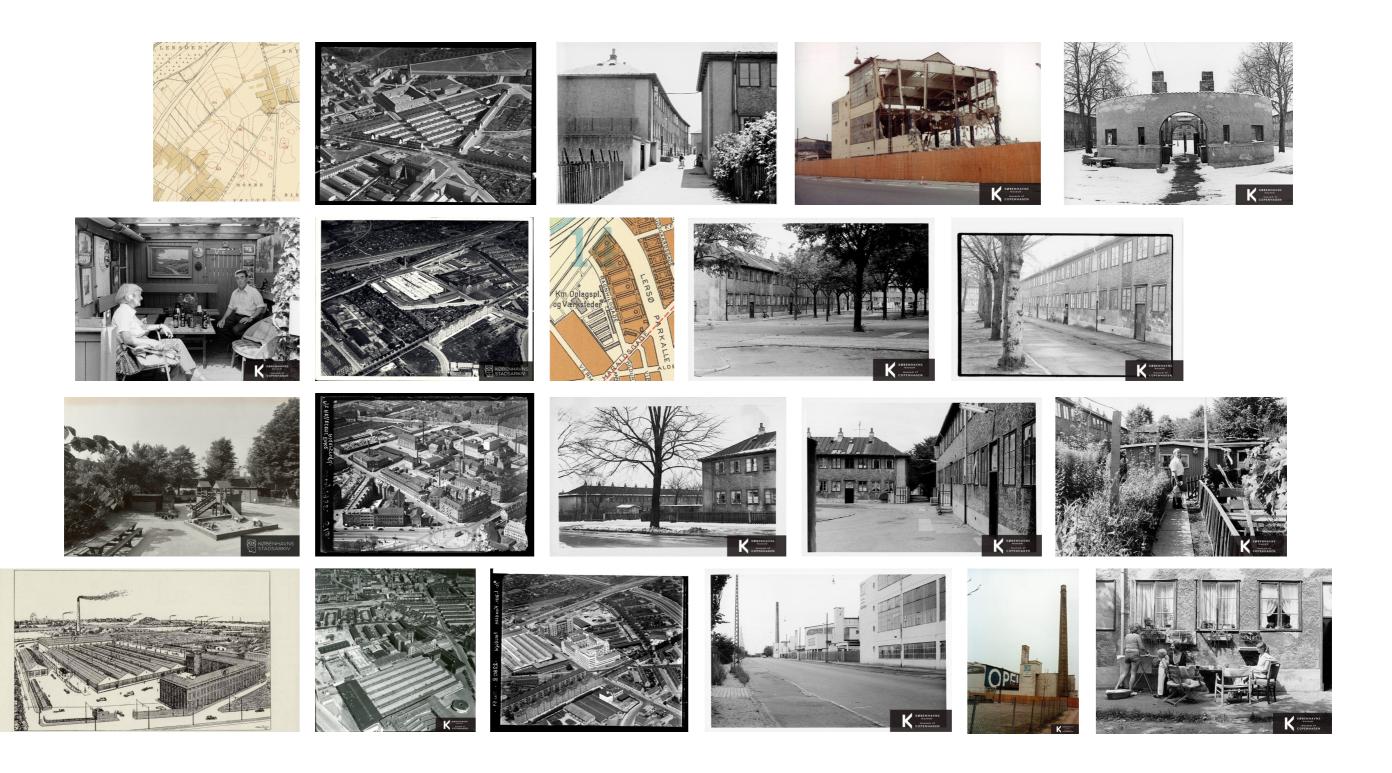
The opposite to the theatre is the contemporary mixed use development. Its stacking, linking or otherwise joining of different functions does primarily happen because of external factors and the resulting utilitarian benefit of mixing uses. A lack of available urban space to build, or risk calculations that prefer a spread of revenue sources can give rise such an accumulation of differing functions. The internal benefit of mixing these functions (if there is any) is small compared to the meaning and utility of the functions as isolated entities.

Hybridity

What then, is hybridity? It is an **egalitarian relation** between the individual unique functions in their own right, and the 'whole' as their assembly. This 'whole', the hybrid building, both derives its meaning and utility from the agglomeration of its constitutive functions, as well as adding a direction and coherence to them. It is a bilateral relationship between a collective and the individual parts that make it up, mutually benefitting their utility and meaning. An example is the library at Rentemestervej in Copenhagen that we visited during our excursion. Consisting of individually useful and meaningful functions like a café, a library, study spaces and bookable meeting rooms, the entire ensemble, the 'whole' emerged as a new center point for the area, communicating openness, togetherness and inclusivity through its architecture. The differences between the individual functions increases their meaning - exactly because they are **not** the same. Juxtaposing a café, a public library and a graphic art workshop makes the café a place for the artists to meet up and share their insights, and the graphic art workshop a place where artistic inspirations from the library can be materialized.

In the definition of hybridity, I like to go one step further to declare a need for 'total hybridity'. While hybridity as just described is an egalitarian relation between assembly and function, what is additionally needed is the celebration of the heterogeneity of its users. Similarly extracting meaning from their differences, a total hybrid communicates a sense of inclusivity and openness to all potential users, as well as giving them a chance to create the meaning of it by themselves through an indeterminancy in how the building is perceived and used.

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<u>week 1.9</u> 28.10 - 03.11

PREPARING P1 PRESENTATION // FINDING REFERENCES

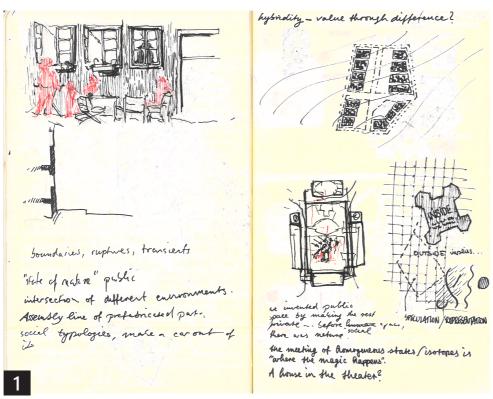
As the date for the P1 presentation grew closer, I looked for some references that appeal to me. These largely consist of metabolist and high-tech architecture, as well as an example from industrial complexes (bottom image). The style of these projects, emphasizing technical functionality and and seeing the inner workings of a builings as *signs* to communicate their utility, was an inspiration for the visualizations that I made for my P1 presentation. Creating a framework (interior urbanism) for these social processes to take place in inspires me.

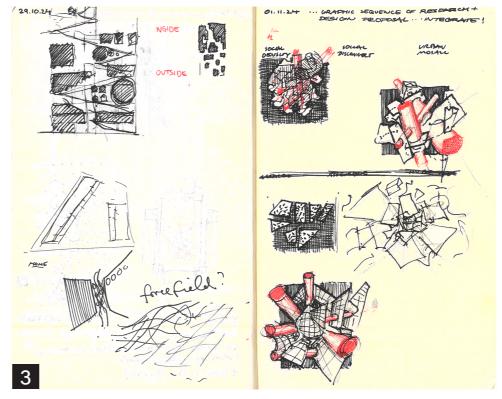


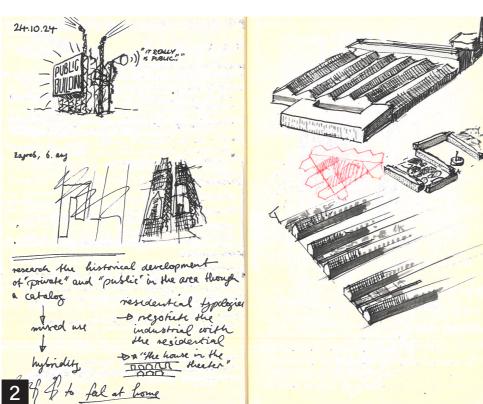


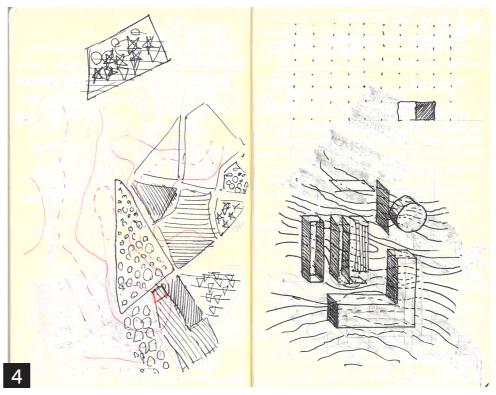












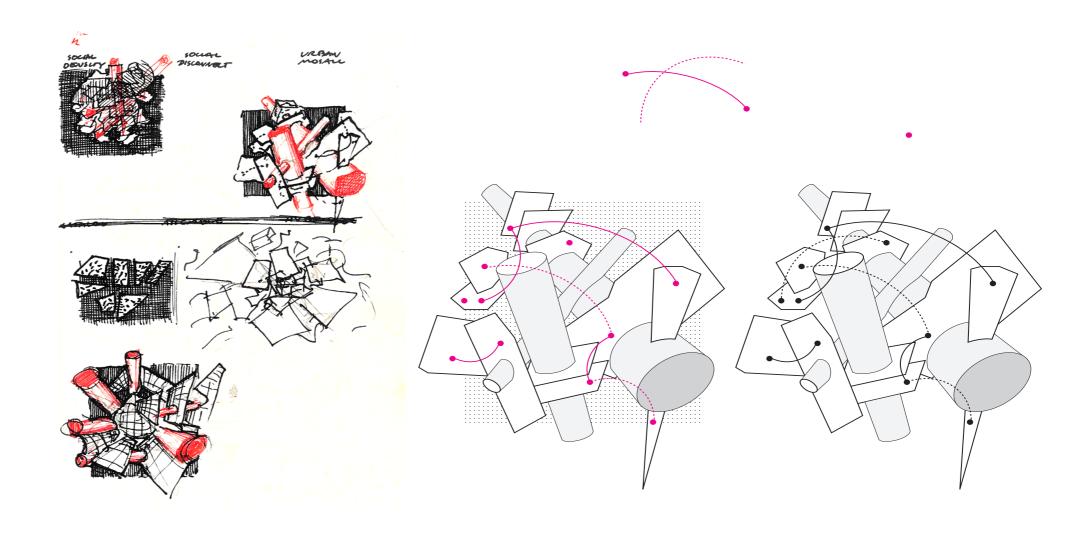
- 1 sketches researching the notion of private and public, site-specific and more in general
- 2 what communicates 'public'? Also, inventory of urban 'islands' in the area

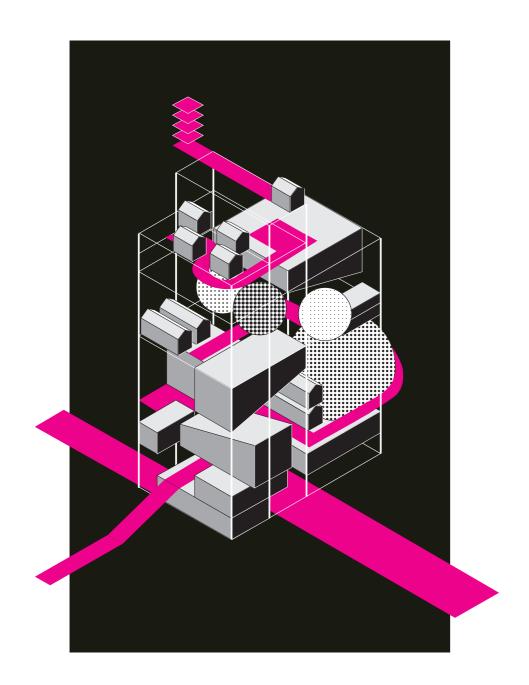
- 3 first sketch for the section diagram (see P1 presentation), sketching the 'assembly of islands'
- 4 mapping the area

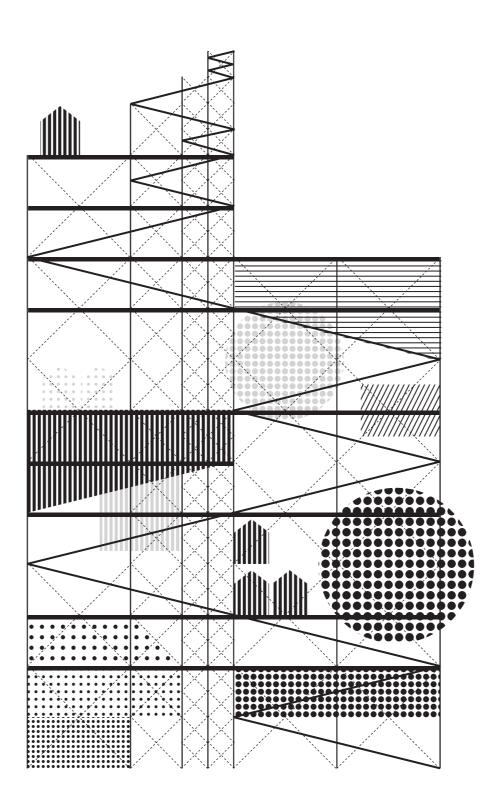
<u>week 1.10</u> 04.11 - 10.11

P1 PRESENTATION

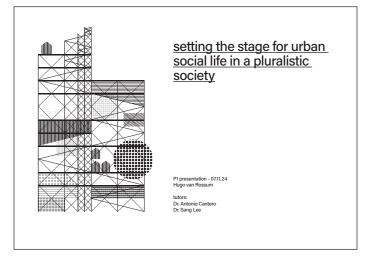
On the right, the sketching process can be seen, in which I made the diagram which elaborates on my idea of merging different urban entities, generating social density and interactions between strangers.

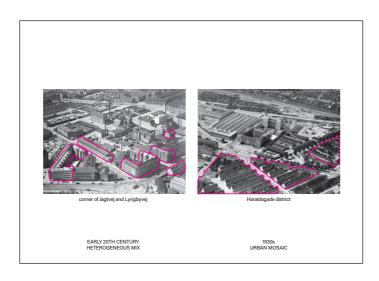


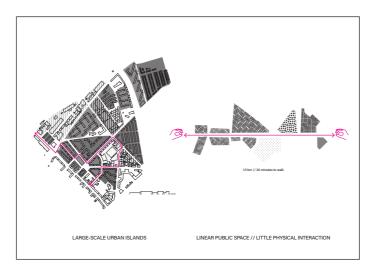


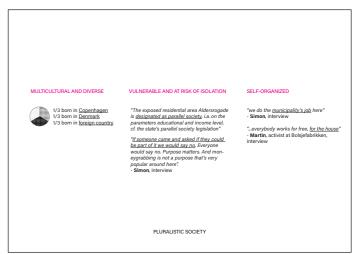


As discussed in the text for week 1.9, a high-tech, structural approach was chosen for the visualization of my concept. A spatial framework, 'holding together' these urban entities, can be much more permanent, since it differentiates between what can change (as a metaphor, the buildings in the street), and what is permanent (the street layout of the city)





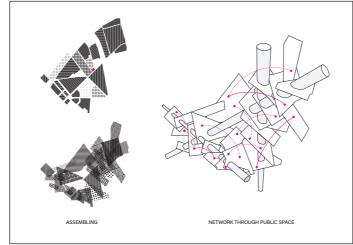


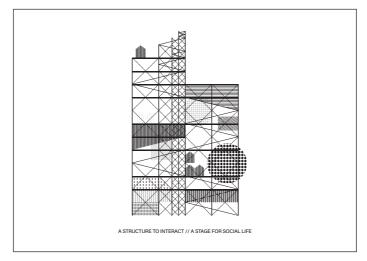


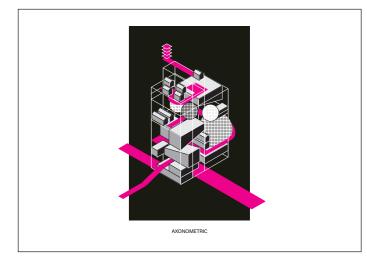
how might we design a <u>social condenser</u> for a <u>pluralistic society</u> to create spaces for <u>social interaction</u> and <u>belonging</u>? embrace differences and give them <u>a stage to interact</u>

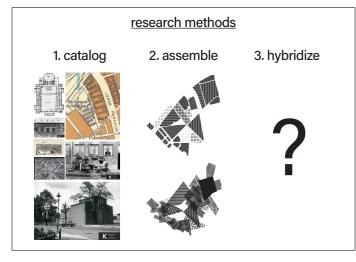
many people, many public spaces!

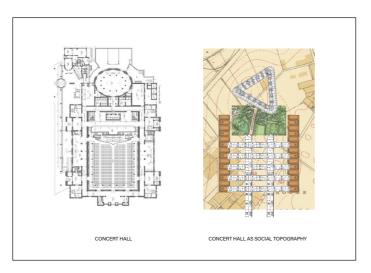
FROM PROBLEM TO PROPOSAL











process documentation Q2

week 2.1 11.11 - 17.11 LITERATURE RESEARCH

At P1, one of the main questions was about how I intend to implement public space as an architectural design element. Therefore, I read some articles on architectural theory from the magazine "Oase" about public space in the contemporary city, some interviews with architects whose work I value, and an article about the Centre Pompidou and its life.

These articles have brought me new knowlegde about designing public space in an architectural sense, which I use later on in the process.

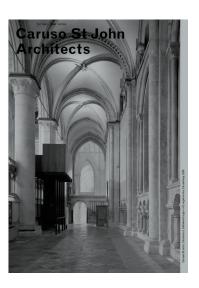




OASE #109, interview w/ Bruther architects

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Stéphanie en Alexandre



OASE #109, interview w/ Caruso St. John architects

Lieven De Cauter

The Capsule and the Network *Preliminary Notes* for a General Theory

The city itself is traditionally a military weapon, and it is a collective shield, a plate armour, an extension of the castle of our skin.

Marshall McLuhan

Technological capsularization

As McLuhan has pointed out, all media, as extensions of man, enhance speed in some way; the speed of Iravel, commerce, communication, information, transmission, etc. The speed of movement and the increase of flows and information brought about by the constant increase in technological media throughout history, has forced the human species, with its fragile body and sensitive nervous system, to look for protection devices. Apart from being extensions of man, most if not all media are capsules or have a capsular counterpart. The wheel, for instance, at least above a certain speed, requires capsular devices such as carriages, cars and coachwork. The word capsule comes from the Latin word capsa meaning box or container and capsa in its turn comes from capere meaning grasping, holding, keeping, in 'captivity', one might say. A capsule is a holder. A capsule is at holder and the state of the body, turning into an artificial environment. A capsule is a medium that has become an ambient. As a tribute to McLuhan the shortest possible definition would be: a capsule is a medium as environment. Speed and the defence against a hostile environment (for example air-pressure in the case of aeroplanes, or water in the case of boats, etc.) are

Speed and the defence against a hostile environment (for example air-pressure in the case of aeroplanes, or water in the case of boats, etc.) are transferred to a tool and make the passenger immobile, passive. In primitive, 'cold' machines like bikes, skis, roller skates and the like, man moves by becoming one with his tool. But in sophisticated 'hot' machines we transfer speed, activity and active defence against shocks to the device itself. This is capsularization. Students have pointed out to me that the motorbike contradicts my concept. To some extent it does: it is a high speed device with-out a capsule. But it is precisely this that makes the motorbike so damned dangerous and therefore adventurous, if not mythical. In the end the exception proves my point. Conclusion: the more mobile we become, the more immobile and capsular our behaviour: we are sedentary nomads (in the literal sense of sitting travellers).

De capsule en het netwerk Aantekeningen voor een algemene theorie

De stad zelf is traditioneel een militair wapen, en zij is een collectief schild, een ijzeren harnas, een verlengstuk van het kasteel onzer huid.

Technologische capsularisatie

Zoals McLuhan al duidelijk maakte, werken alle media op een of andere manier snelheidsverhogend: dit gleldt voor reizen, handel, communicatie, transmissie, enzovoort. De bewegingssnelheid en de toename van informatiestromen als gevolg van de constante groei van de technologie gedurende de geschiedenis, hebben de mens, met zijn kwetsbare lichaam en zijn overgevoelige zenuwstelsel, ertoe gedwongen beschermende maatregelen te nemen. Behalve een verlengstuk van de mens zijn de meeste, zo niet alle media een capsule of hebben ze een capsulaire tegenhanger. Het wiel bijvoorbeeld kan, tenminste boven een bepaalde snelheid, niet zonder een capsulaire extensie zoals een wagen, koetswerk, carrosserie. Het woord capsule komt van het Latijnse woord capsa, dat doos of container betekent, en capsa komt weer van capere, dat omvatten, vasthouden, bewaren betekent, in gevangenschap houden, zou men kunnen zeggen. Een capsule is een houder. Een capsule is een werktuig of een verlengstuk van het lichaam dat zich heeft ontwikkeld tot een kunstmatige omgeving die de vijandige externe omgeving buitensluit. Het is een medium dat omhulsel is geworden. Als eerbetoon aan McLuhan zou de kortste definitie als volgt kunnen luiden: een capsule is een medium als omgeving.

omgeving.

Snelheid en het verweer tegen een vijandige omgeving (bijvoorbeeld de luchtdruk in het geval van vijetuigen of het water in het geval van boten, enzovoorl worden verplaats naar een werktuig en maken de passagier immobiel, passief. Bij primitieve, 'koude' machines als fietsen, ski's, rolschaatsen en dergelijke, beweegt de mens door één te worden met zijn tuig. Maar in ontwikkelde, 'hete' machines verplaatsen we snelheid, activiteit en actief verweer tegen schokken naar het toestel zelf. Dit is capsularisatie. Studenten hebben mij erop gewezen dat de motorfiets mijn concept tegenspreekt. In zekere zin klopt dit: het is een voertuig voor hoge snelheden zonder capsule. Maar dit is dan ook exact waarom de zware motorfiets een zo verdomd gewaarlijk en daardoor avontuurlijk, zo niet mythisch vervoermiddel is. Uiteindelijk bevestigt de uitzondering de regel. Conclusie: hoe mobieler we worden, hoe meer capsulair ons gedrag; we zijn sedentaire

OASE #54, The Capsule and the Network, Lieven de Cauter



OASE #54, Capsulair Places, Tom **Avermaete**



5 Mircea Eliade, Das Heilige und das Projane (Hamburg: Rowohlt, 1957), 17.

ears. This happened to the

many-headed cultural monster

shut its doors for restoration in 1997, worn out by its own suc-cess. More than 150 million visi

tors had passed through it since

estoration took until last year.

From the outside Beaubourg

the participation of one of its original designers, Renzo Piano. Richard Rogers, the other half of the duo that won the competition

for the building to general aston-ishment in the seventies, took

his complaints to the media. He thought that the true character of the building had been seri-

Celibate Machine Centre Georges Pompi-

dou, Bernard Colenbrander

it opened in 1977, a number that

veelkoppige cultuurmonster dat in 1997, uitgewoond door het eigen succes, de deuren sloot voor restau-ratie. Meer dan 150 miljoen bezoekers waren langs-gekomen sinds de opening in 1977, een getal dat extreem was onderschat door de bedenkers van het mplex. De restauratie duurde tot vorig jaar. Van iten ziet Beaubourg er nog bijna hetzelfde uit als in het begin, maar het gebouw is vrij drastisch gereorganiseerd, met de medewerking en instemng van een van de oorspronkelijke ontwerpers. nzo Piano. De andere helft van het gelege duo dat in de jaren zeventig tot veler verrassing de competitie voor Beaubourg had gewonnen, Richard Rogers, beklaagde zich in de media. Hij meende dat het ware karakter van het gebouw ernstig bescha digd was geraakt. Hoe is dat karakter aan te duide Hoe kunnen we Beaubourg historisch plaatsen En wat is precies het effect van de restauratie? n de hele westerse wereld aandiende, was het de laatste plaats door lokale omstandigheden in de What is the place of Beaubourg At the time, the Centre that appeared throughout the Western world in the mid-eighties, and was a cultural pièce de résistance that was encouraged not least by local circumstances. The presidents of France concentrate a great deal on the clear. In the last half-century these Presidents, notably François Mitterand, have stood out as major producers of selffield of culture. Mitterand's predecessor Valérie Giscard d'Estaing behaved with consid-OASE #57, The Short but Intense Life of a

Een gebouw kan in twintig jaar tot op het bot ver-slijten. Het overkwam het Centre Pompidou, naar de locatie ook wel Centre Beaubourg genoemd, het

Het korte maar

een celibataire

Centre Georges

machine

Pompidou,

1977-1997

The Short but

Intense Life

of a Celibate

Centre Georges

Machine

Pompidou,

1977-1997

hevige leven van

Een stralende zon op zaterdagmorgen, 26 mei 2001 een bezoek aan Robin Hood Gardens, Londen Robin Hood 2001 Kolonisering Een tiidruimtemachine van beton van het moderne the-air' aangeduid - drongen zich twee indrukke tegelijkertijd op. Het directe effect ervan moet rgelijkbaar zijn met dat van een tijdrujmte over waar ik nu was beland. De eerste reden van verwondering was klip er klaar; het fenomenale uitzicht vanaf de geknikte galerii, dat ik kende van een eerder bezoek erg oude docks en industrieterreinen had zich het reusachtige high-tech-icoon genesteld van 'Nev Britain': de Millennium Dome. De tweede indruk v vervreemding was meer indirect, de impact groter. Het was de geur van curries die me over de betonnen galerij tegemoet waaide. Robin Hood Garden is klein India geworden; tweetalige medede Dirk van den Heuvel Robin Hood 2001 sion of alienation was more in rect, its impact greater. It was The Colonithe smell of curries that wafted sation of the A time and space towards me on these concrete machine in concrete
Once one has reached the highest gallery – which at the time
the architects optimistically Modern gual signs at the waste chute and further along the gallery saris waving in the breeze le little room for doubt. The change of use is com called a 'street-in-the-air' - one that of a time and space only is the Dome nearby, but cent Canary Wharf – after the initial setbacks and empty build ended up.
The first reason for wonder was as clear as day: the pheno menal view from the angled ings building has started agai 1990, had radically changed. on the drawing board. The gigatic construction cranes can be Amidst the cheerless ron cally deserted vestiges of the old docks and industrial land had settled the gigantic High-Tech

OASE #57, Robin Hood 2001 The Colonisation of the Modern, Dirk van den Heuvel



OASE #75, The Public, the Private and the Collective, Kristiaan Borret OASE #90, Social Space and Structuralism, Herman Hertzberger

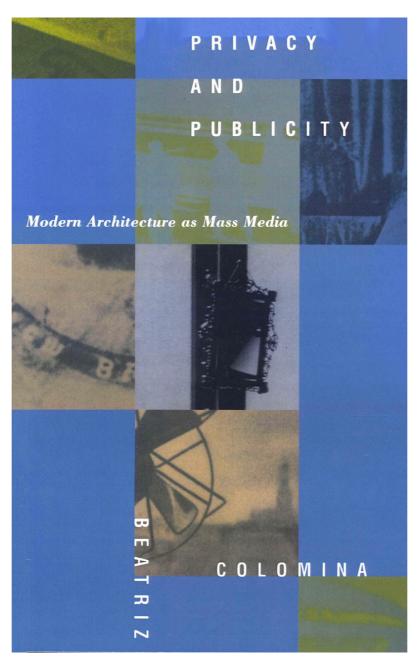
OASE #96, Design Your Kitchen versus Kitchen Design, Ruth Baumeister

<u>week 2.2</u> 18.11 - 24.11

MORE LITERATURE, CATEGORIZATION

This week, to add to the research about public space, I read a part of a book *Privacy and Publicity, modern architecture as mass media.* Colomina (1994) describes the concept of the public and the private, the social and the intimate, giving me new insights into these themes.

The article Spatial Reallocations between the Private and the Public Domain offered fascinating examples of spaces where domestic activities are recontextualized in a public setting, for example a laundry / café. To apply this new knowledge, I categorized three historical examples from the Haraldsgadekvarteret, according to the knowledge from both Colomina's book, as well as the articles that I had been reading



Colomina, B. (1994). *Privacy and publicity :* modern architecture as mass media



OASE #104, Spatial Reallocations between the Private and the Public Domain, Julia von Mende



private/public?

ownership sociability functional $\begin{array}{cccc} \mathsf{PRIVATE} & \longleftarrow & \mathsf{STATE} \\ \mathsf{SOCIAL} & \longleftarrow & \mathsf{INTIMATE} \\ \mathsf{PUBLIC} & \longleftarrow & \mathsf{DOMESTIC} \\ \mathsf{"EXTERIOR"} & \longleftarrow & \mathsf{"INTERIOR"} \end{array}$

users/owners

sociability

functional

spatial

 $\mathsf{PRIVATE} \leftrightarrow \mathsf{COLLECTIVE} \leftrightarrow \mathsf{STATE}$

 $\mathsf{SOCIAL} \; \longleftrightarrow \; \; \mathsf{INTIMATE}$

 ${\tt PUBLIC} \; \longleftrightarrow \; {\tt DOMESTIC}$

"EXTERIOR" ← "INTERIOR"

mediated by... mechanism

of difference

(1994, Colomina)

interaction between strangers.

"street theatre"/civility/"tolerated heterogeneity"

Jacobs, Sennett, Gehl, Lefebvre (urb. rev.)

interaction between strangers.

"street theatre"/civility/"tolerated heterogeneity"

Jacobs, Sennett, Gehl, Lefebvre (urb. rev.)

social conventions and market forces.

- -> where do we work?
- -> where do we sleep? -> where do we socialize?
- physical location of actions, like preparing food, doing the laundry,

hygiene, learning, working, shopping, ...

mation. 'the unspeakable'

to <u>see</u> the exterior, seeing is shelter.

no influence from interior. (Vienna Ringstrasse)

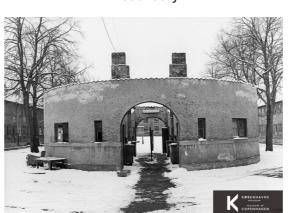
'true self' 'what we think'

'what we say' visual.

social functional spatial (intimate)
DOMESTIC
EXTERIOR

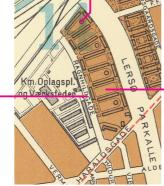


(social) DOMESTIC boundary



SOCIAL (public) INTERIOR



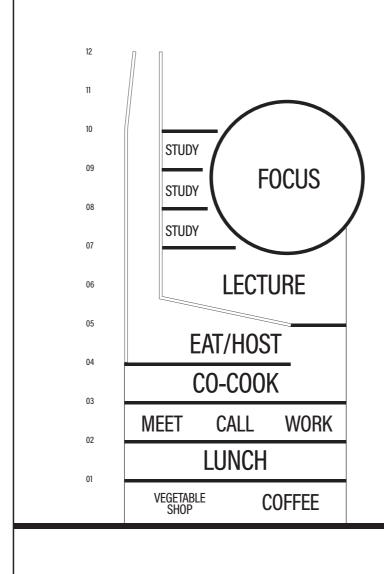


<u>week 2.3</u> 25.11 - 01.12 **APPLICATION OF THEORY**

To bring the readings into practice, I started to create the program for my design. Partially due to the OASE #104 article I read last week, I decided to pursue domesticity as a main source of program. I analyzed (through real estate websites) what residential floor plans look like in the Haraldsgade kwarteret, and connected them to public activities that supplement them. The concept of 'system of activities' came to exist, resulting in a kind of flexibility that otherwise would be harder to obtain in a building.

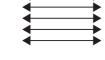


'looking up, vertical public space'



social relations









SOLITARY

AGGREGATE / CO-PRESENCE

INTERACTION

ENGAGEMENT





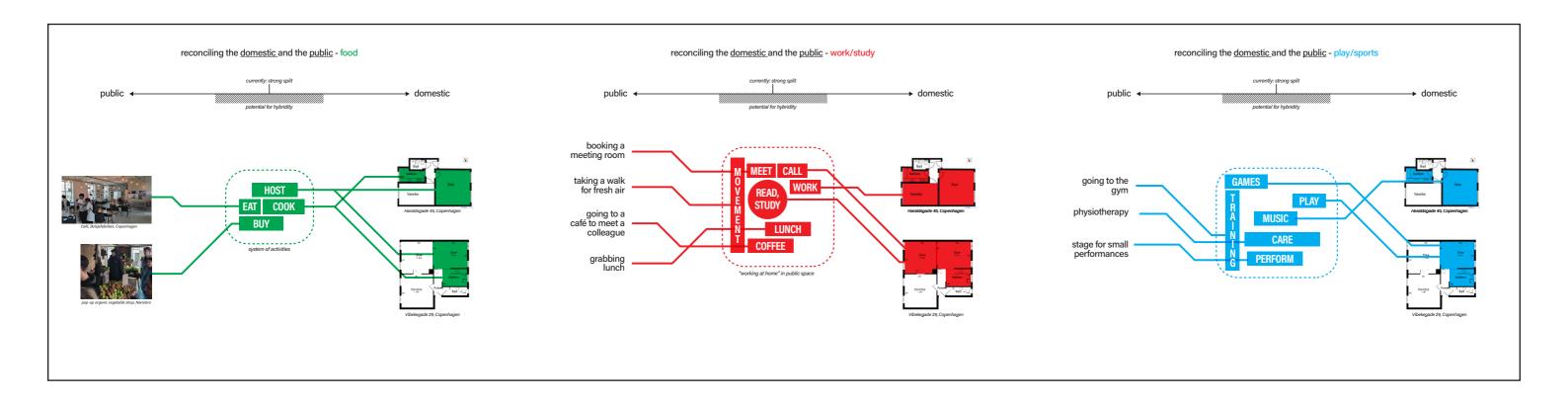


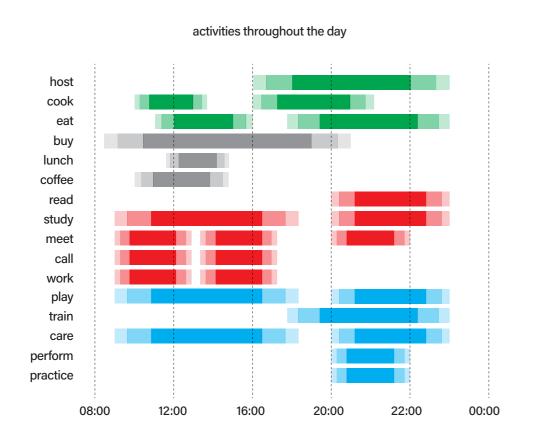


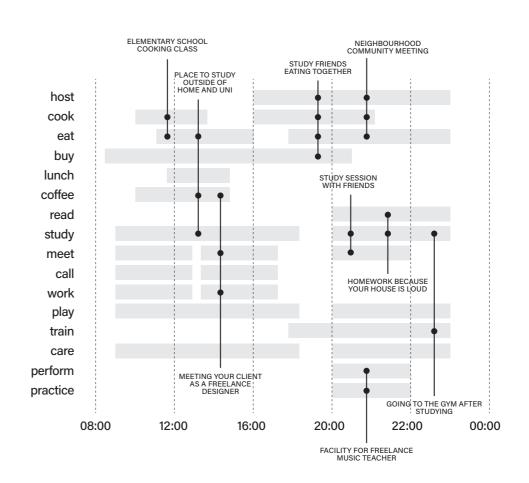












week 2.4 02.12 - 08.12

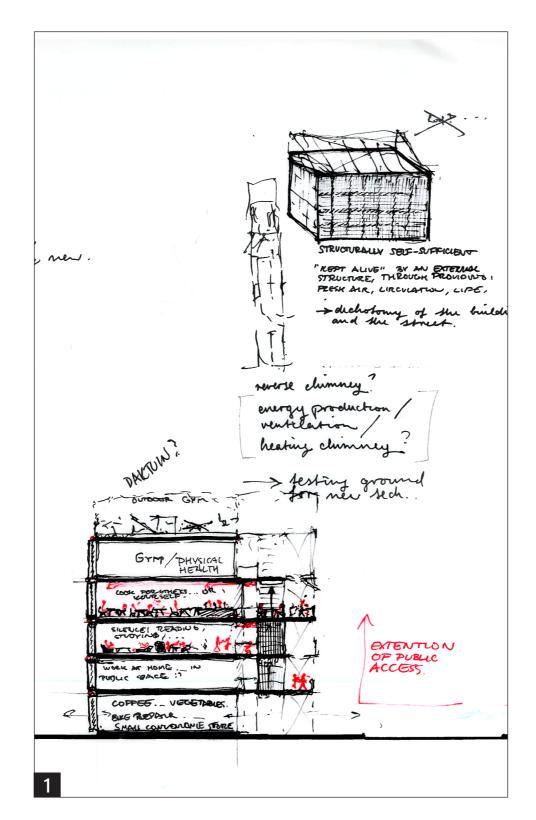
FIRST DESIGN SKETCHES

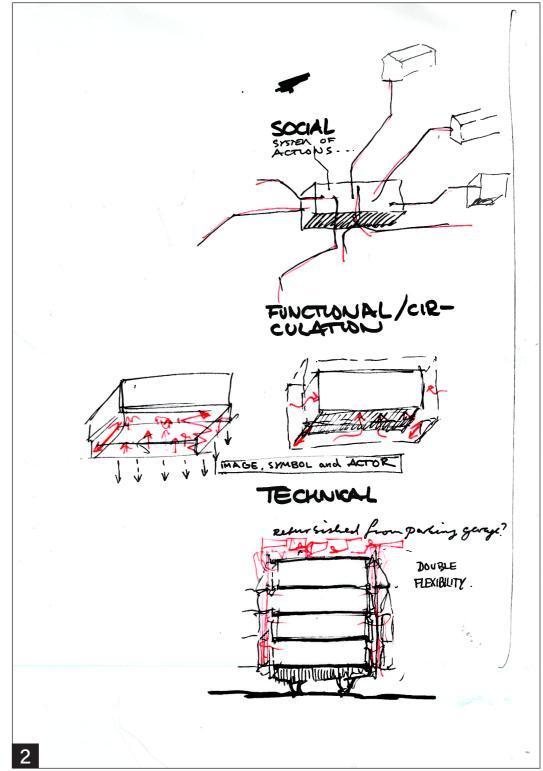
Continuing from previous week, where I made a start on the program, this week I started to find a design that could house my program.

Being inspired by 1970s high tech architecture in its ability to create highly flexible floor plans (sketch #2), I adopted some of its inside-out principles.

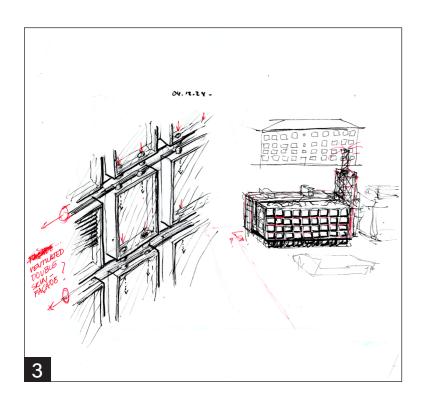
In sketch #4, the principle of an exterior vertical street is first drawing, a principle that undergoes a transformational process until P2. A first sketch of a section (sketch #1) shows the functionality of an exterior street.

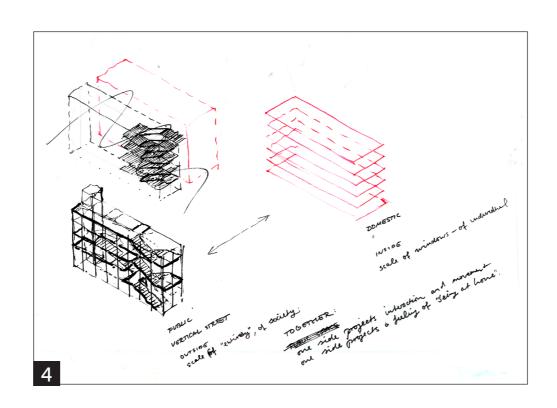
In sketch #5, the massing of the design is explored, switching from a tower (as was still the case in week 2.3), the decision was made for an elongated volume, alongside Haraldsgade.

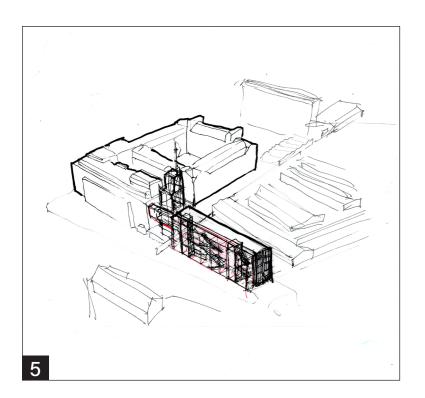


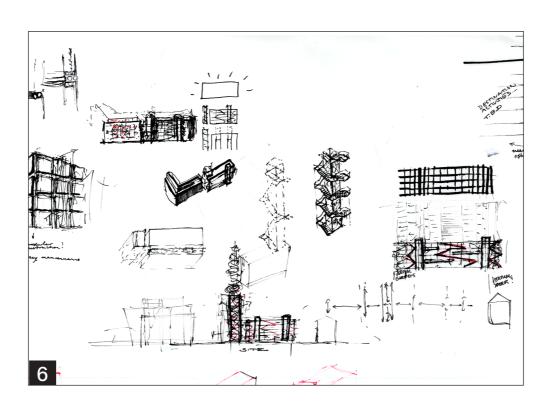


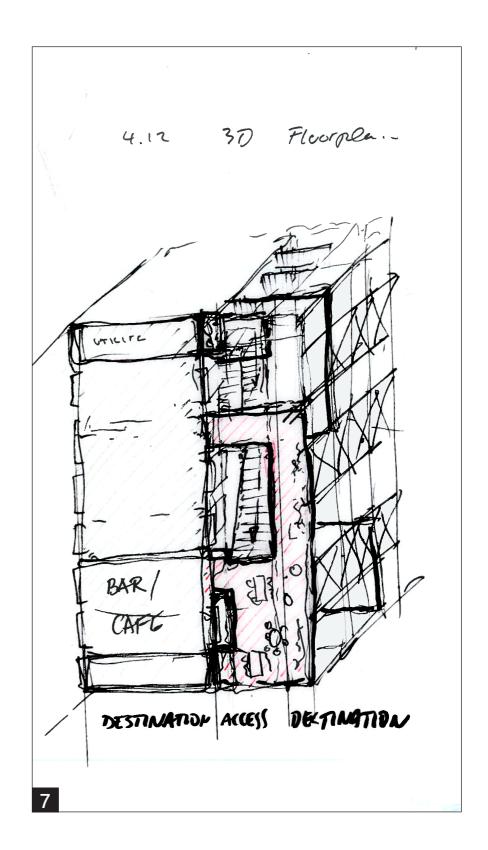
Public Building MSc3/MSc4 Hugo van Rossum 19.06.25











week 2.5 09.12 - 15.12

DISTRIBUTED PLUGINS

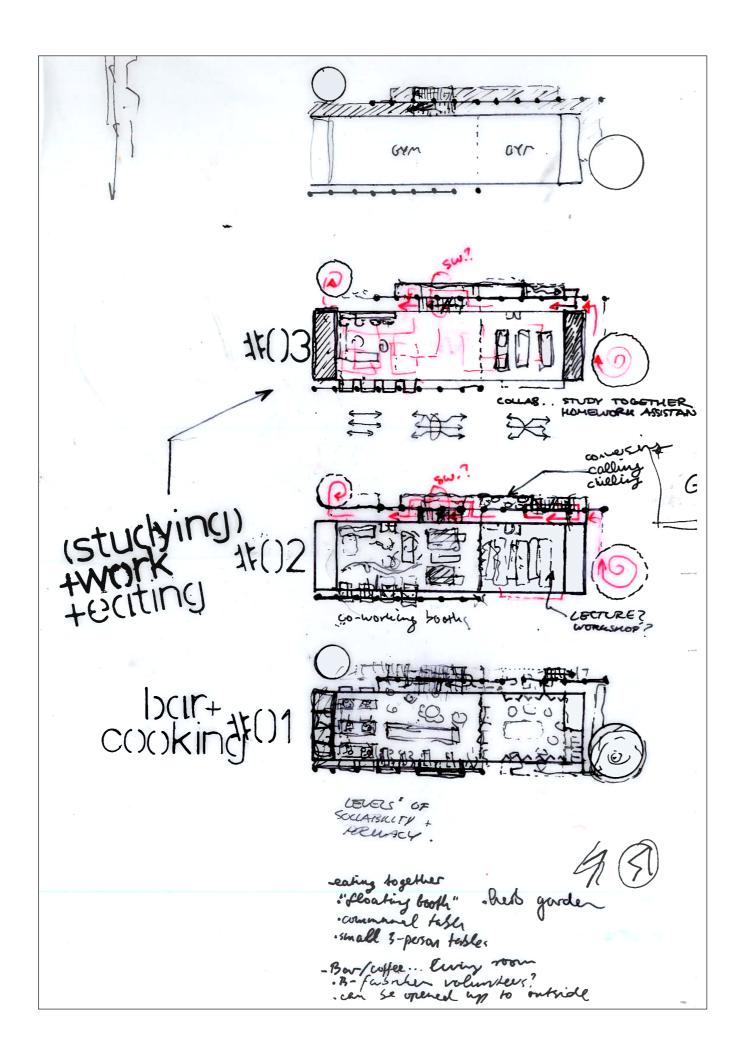
The concept of the inside-out building is further continued in this version, where the plugins are rather monofunctional. There is one for ventilation, one for emergency staircases, one for the vertical street...

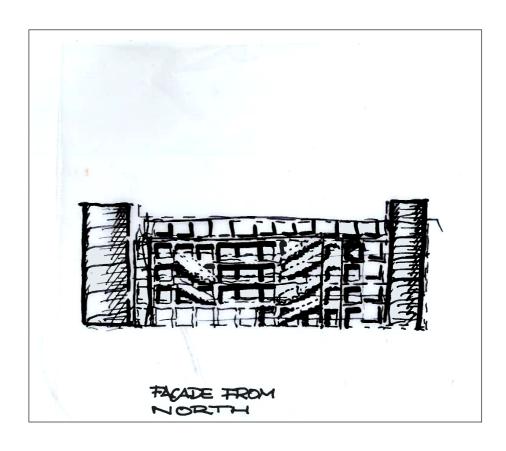
Here, for the first time, the street is seen as a screen, a façade, different from the scaffolding that emerged in week 2.4.

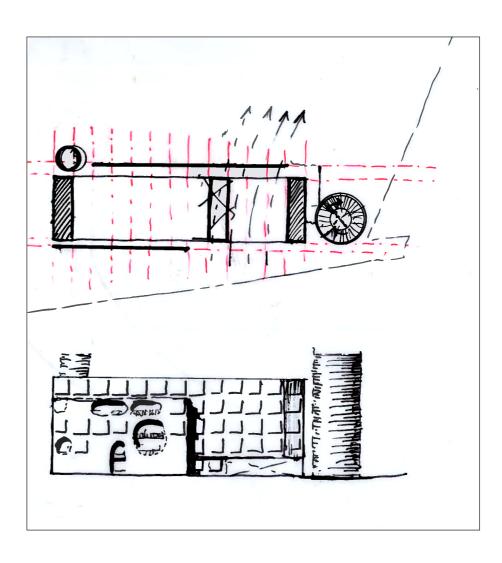
First floor plans are explored, using the benefits of externalized building services in order to create free-flowing floor plans.

Public Building MSc3/MSc4 Hugo van Rossum 19.06.25









week 2.6 16.12 - 22.12

THE SWITCHBOARD

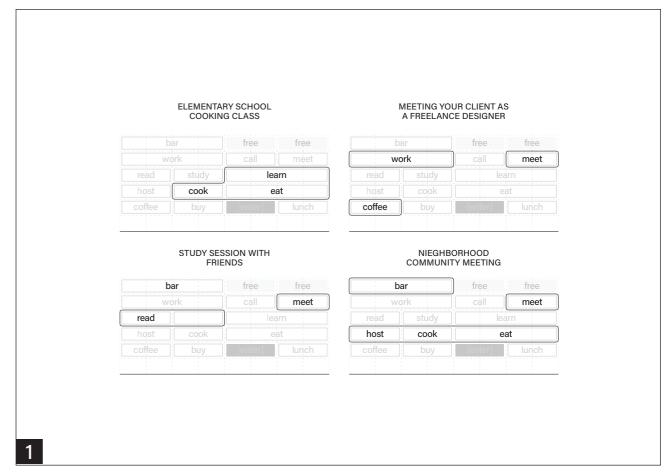
The switch is made, compared to previous versions, that the vertical street is the dominant part of the ensemble, and that the floors are essentially plugged into the street. This marks a shift from references like the Centre Pompidou, where the floors were obviously the 'served' parts of the ensemble, in which the 'servant' spaces are plugged.

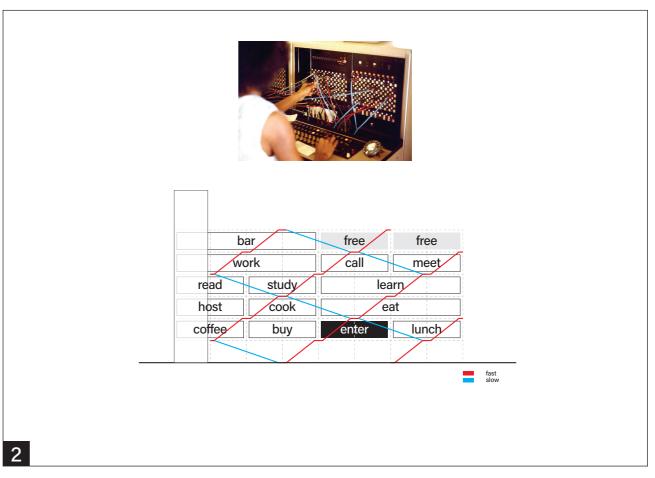
Additionally, the concept of the 'switchboard' is applied (sketch #2), where only by linking and sequencing different modules, a functionality greater than the sum of its parts is created.

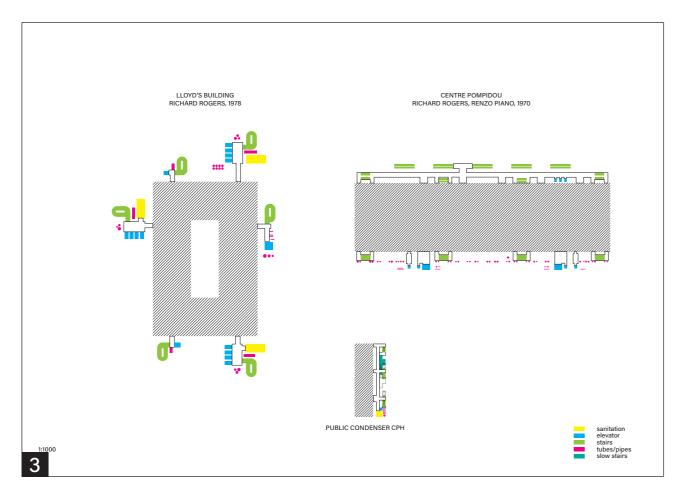
References like the Centre Pompidou and the LLoyd's Building (diagram #3) are used to compare dimensions, footprints and plug-in design.

The vertical street as a design assignment is expanded on in diagram #6, outlining the five criteria that the vertical street should achieve.

Public Building MSc3/MSc4 Hugo van Rossum 19.06.25

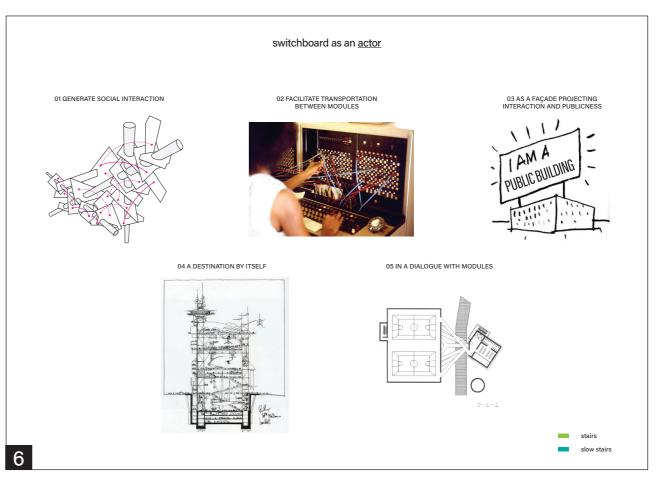








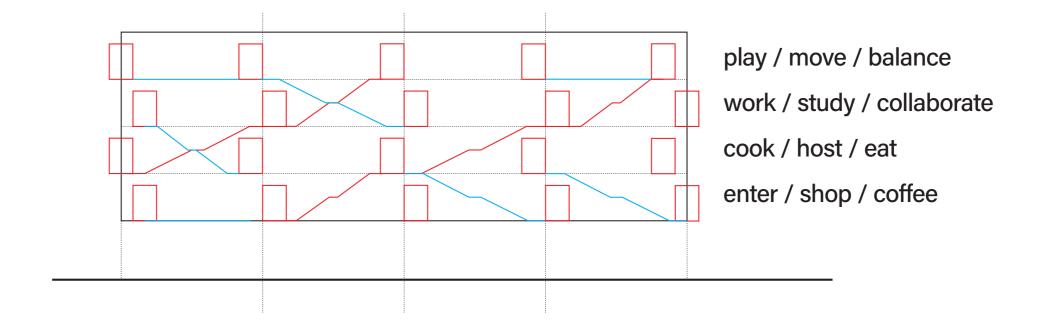


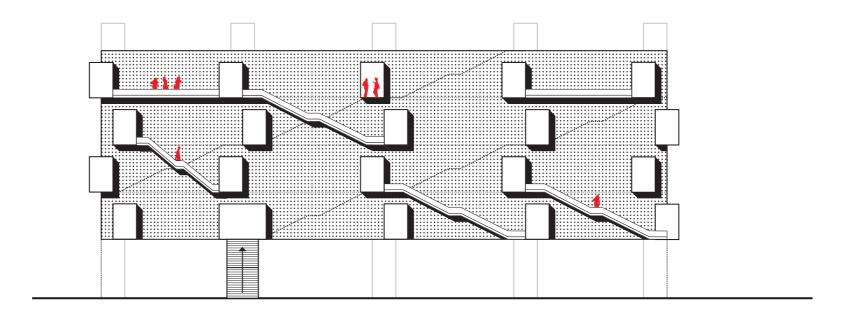


week 2.7 06.01 - 12.01

ELABORATIONS

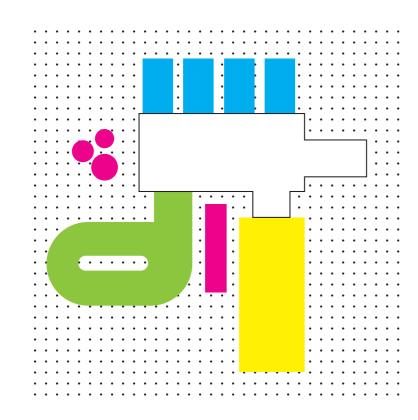
The combination of functional floors and a connecting switchboard is further elaborated, with façade studies and more in-depth diagrammatic floor plans. At the end of this week, I made the choice to elongate the vertical street, extending it almost over the street.

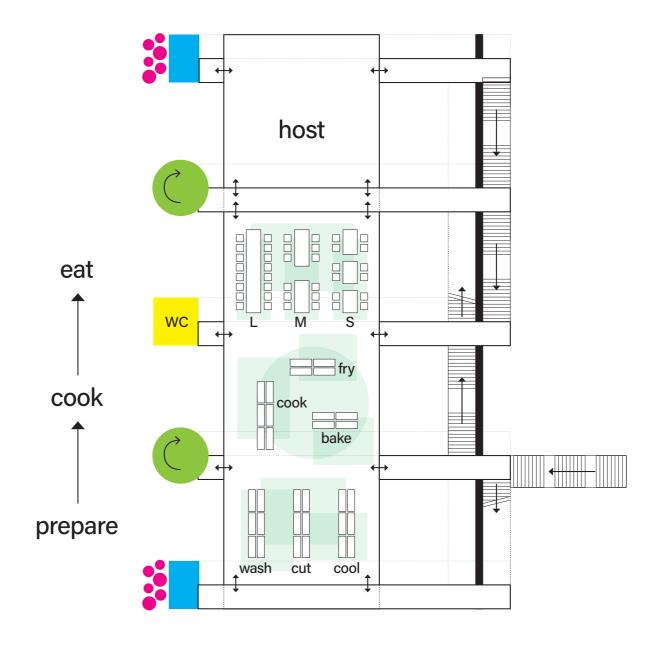




LLOYD'S BUILDING RICHARD ROGERS, 1978

PLUG-IN, 1:250



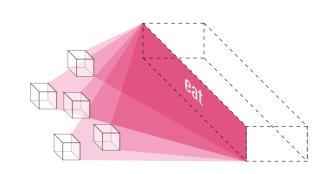




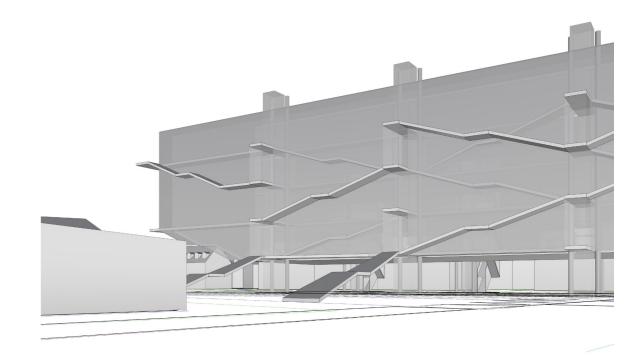
week 2.8 13.01 - 19.01

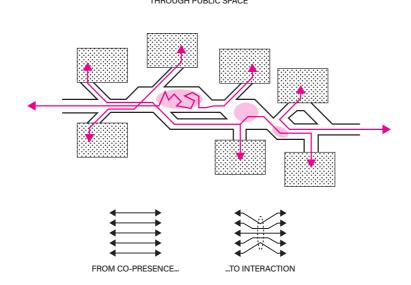
P2 PREPARATIONS

Further elaborating the concept into materials for the P2, some design choices were made. The plug-ins are given shape, partially inspired by the staircases of the Lloyd's building by RIchard Rogers. The vertical street is now a collection of ramps, yet this is to be elaborated further on in the process. These ramps could be of various dimensions, be designed to facilitate certain outdoor activities.

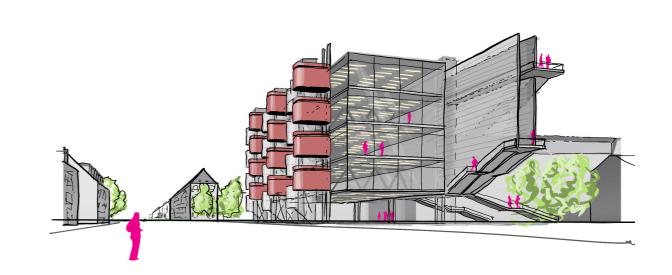


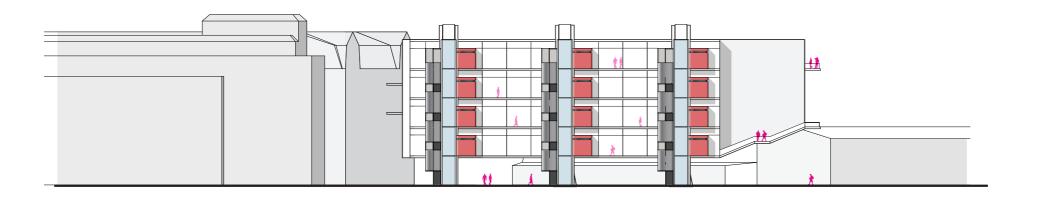
PROJECT DOMESTIC ACTIVITIES TO PUBLIC SPHERE

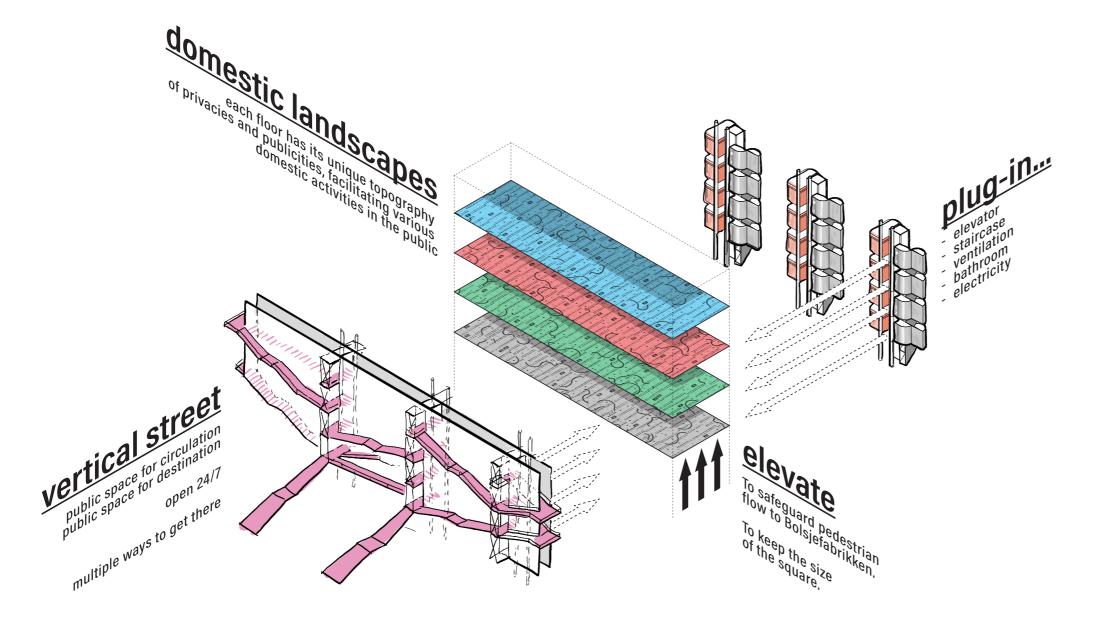


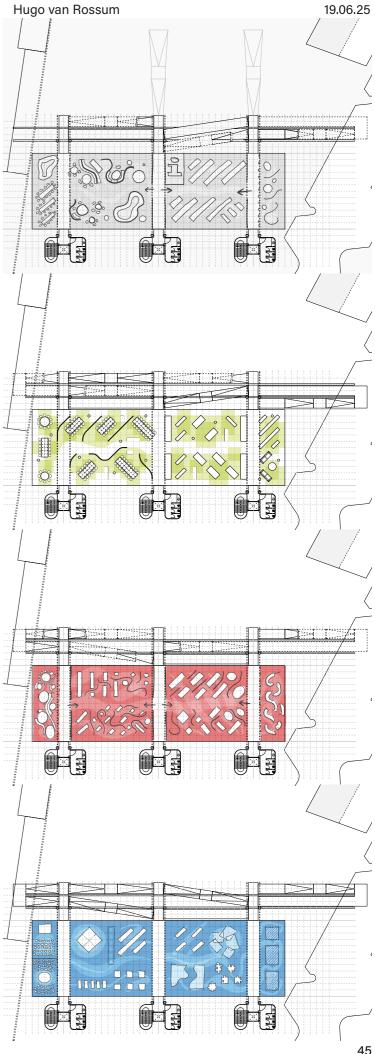


FACILITATE INTERACTION

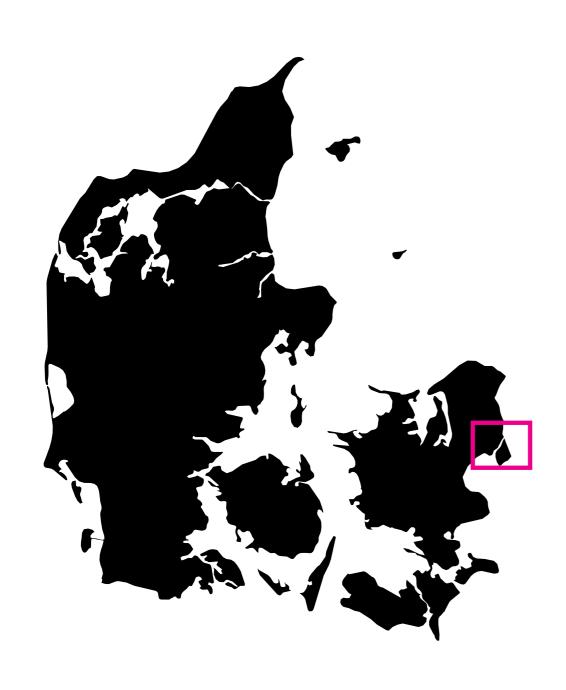








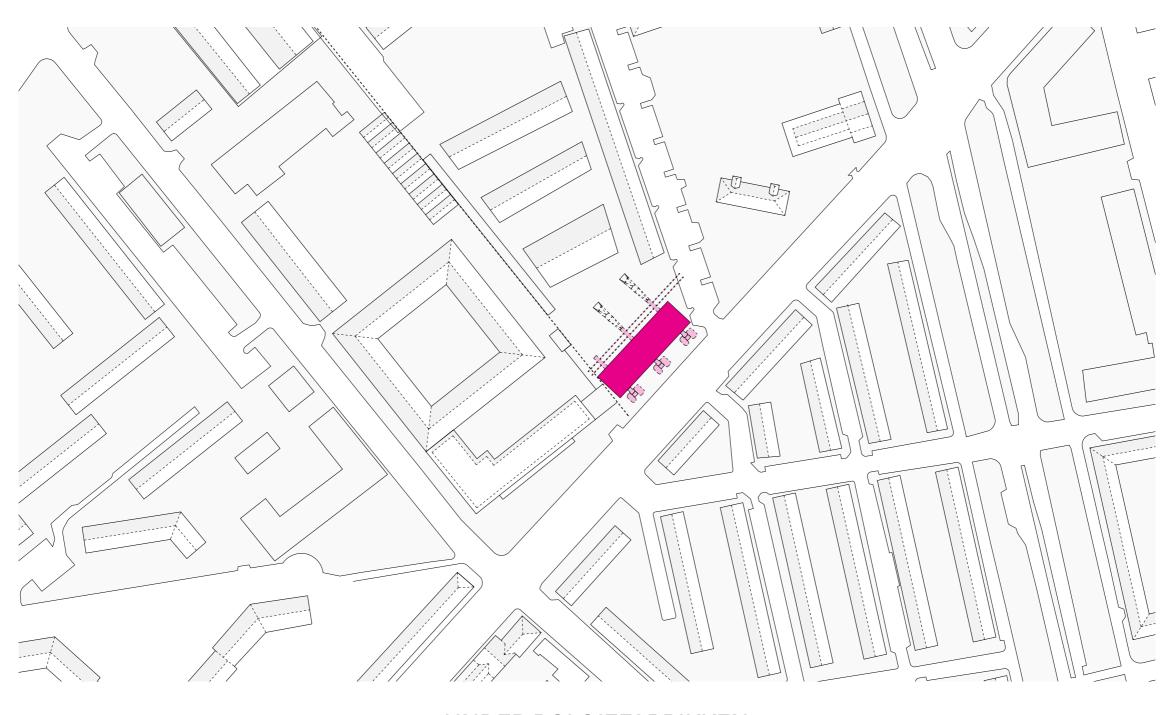
P2 design proposal



MAINLAND DENMARK



YDRE NØRREBRO // COPENHAGEN



UNDER BOLSJEFABRIKKEN
INTERSECTION HARALDSGADE + RAGNHILDGADE

qualitative brief

Public Building MSc3/MSc4 Hugo van Rossum 19.06.25

1. FOR WHOM DO I DESIGN THE PUBLIC CONDENSER?

Especially in Ydre Nørrebro, there is a very **diverse population**, at risk of living completely parallel to each other. For those people, the muslim community, the students, the large families, those who are just starting out... My public building, through a design that facilitates a wide array of activities, caters to the need of those that need or want more or different spaces to lead their lives than their domestic space currently is able to provide.

2. WHAT IS THE ROLE IN THE COPENHAGEN SOCIETAL CONTEXT?

Functionally, it may serve a different purpose, depending on how far one is living from the public condenser. For those in the close vicinity, it is a second living room. A place to study, invite friends, perhaps cook a meal with the local book club. For those further away, it serves a more traditional public service: it provides flexible working spaces, a vegetable store and physical care facilities.

Conceptually, it might be an example in how we can live together in a diverse society, how public space can be a facilitator of interaction.

3. HOW IS IT HYBRID?

Being inspired by urban public space, this public condenser uses the concept of public space as a **facilitator of interaction between people who normally would not meet**. Just as Henri Lefebvre describes the street as a place for 'spontaneous street theatre', linking various functional zones through (vertical) public space creates a building, where the overall functionality exceeds the sum of its parts.

4. KEY SUSTAINABILITY AND FUTURE-PROOFING MEASURES?

Through a systematic design philosophy, the building elements, like façade panels, can easily be **prefabricated**. This makes them more easy to disassemble when their lifespan has ended, and increases the resources in sustainability research that can be expended per element.

By using plug-ins to externalize building services and circulation, as popularized by the high-tech architects of the 1970s, the floors are essentially free and exceptionally flexible to adaptation. Additionally, the building appliances in the plug-ins can be easily refitted or modified, depending on changing needs.

5. HOW DO NEIGHBOURHOOD AND SITE INFORM THE BRIEF?

By researching the **history of domestic spaces in Ydre Nørrebro**, new types of using public space came to light. These inspirations are used to create a unique program, combining domestic and public activities into a new hybrid.

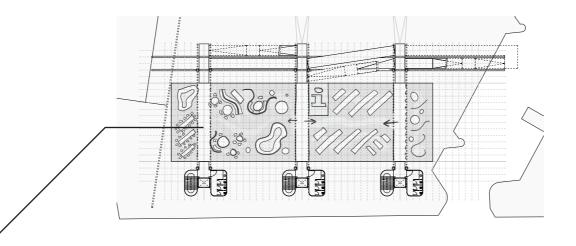
Additionally, the neighborhood of Ydre Nørrebro is home to many artists, as well as sustainable food pop-ups. By **giving these initiatives a home**, the design becomes socially anchored in the neighborhood.

3. HOW DOES MY DESIGN ENHANCE HEALTHINESS?

The vertical street, as the place for primary circulation, as well as a destination by itself, is traversed by foot. It is designed as a place that invites to be explored, therefore encouraging movement. Additionally, it is seen as a functional extension to the interior spaces. When studying there, the vertical street presents itself as the place to take a walk to de-stress or simply to get some fresh air.

Additionally, interaction between strangers, existing in a public and social place, is good for mental health.

quantitative brief



01 / entrance + welcome 900 m² total, 22% external

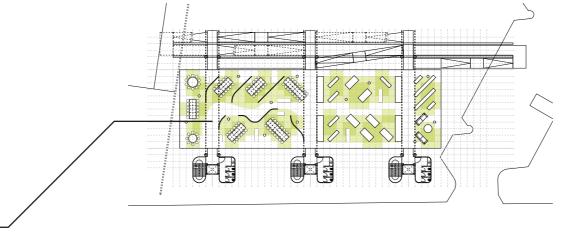
from left to right:

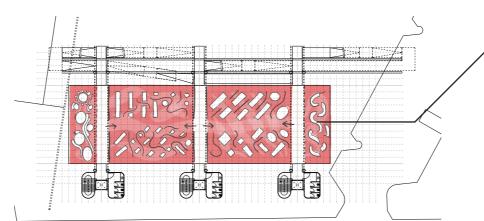
lunchroom café + lounge info desk farmer's market local artist's exposition

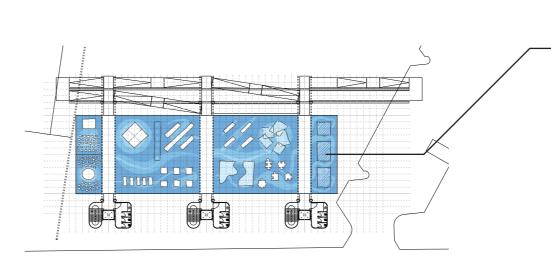
02 / food + hosting 900 m² total, 22% external

from left to right:

tables kitchen herb garden lounge







03 / study + work 900 m² total, 22% external

from left to right:

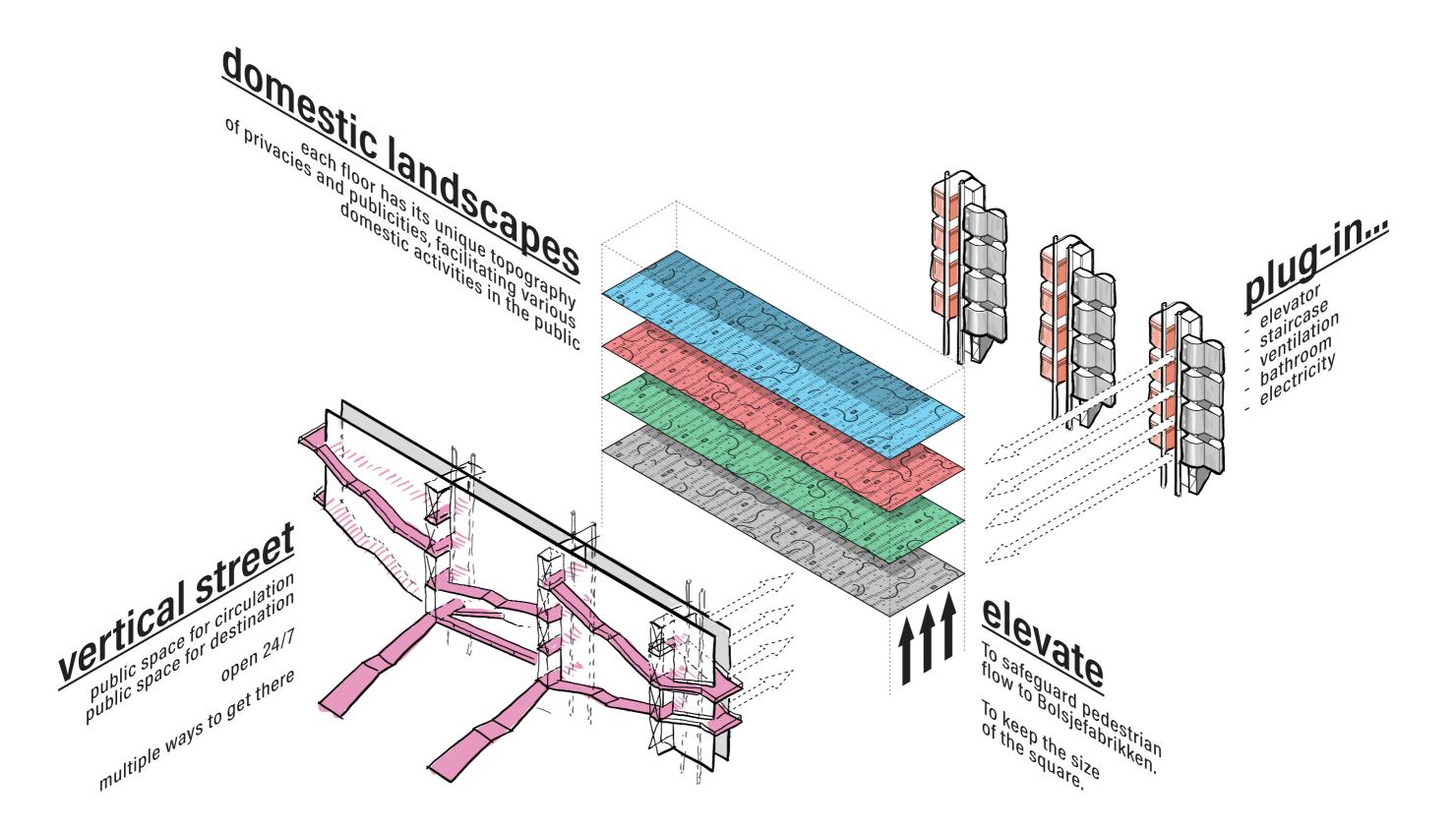
break room quiet study (co-)working silent reading

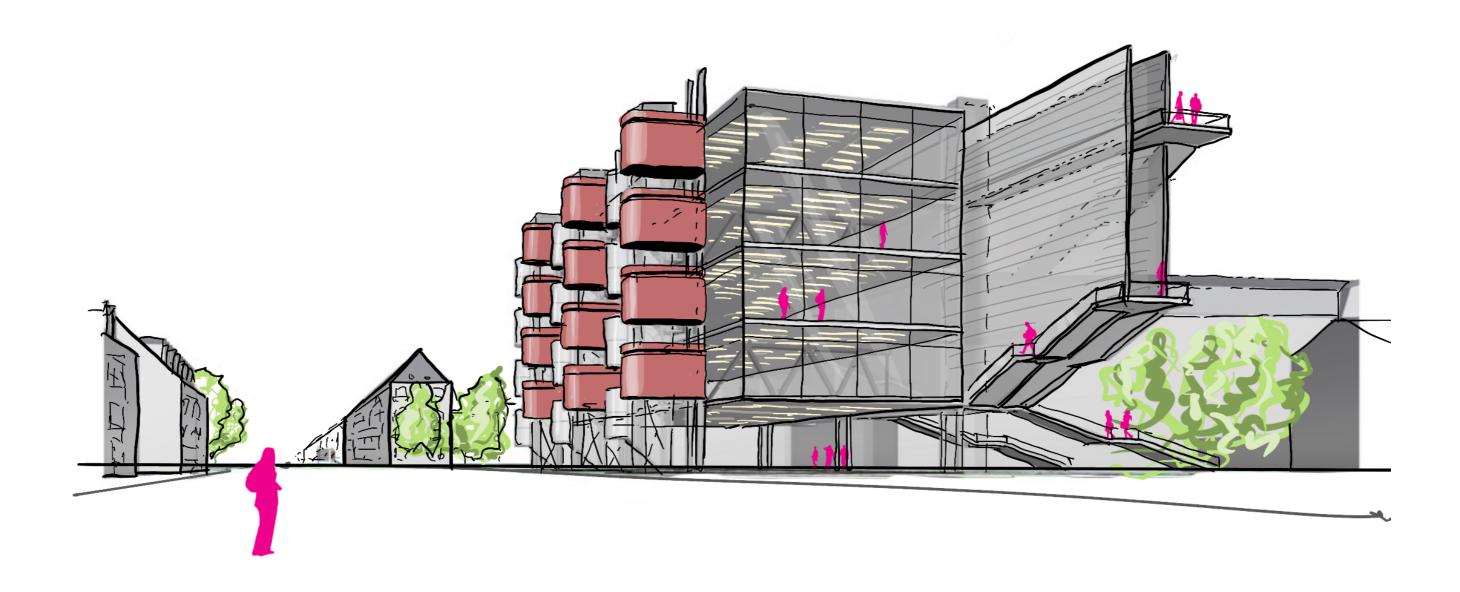
04 / sports + play 900 m² total, 22% external

from left to right:

perform gym play care

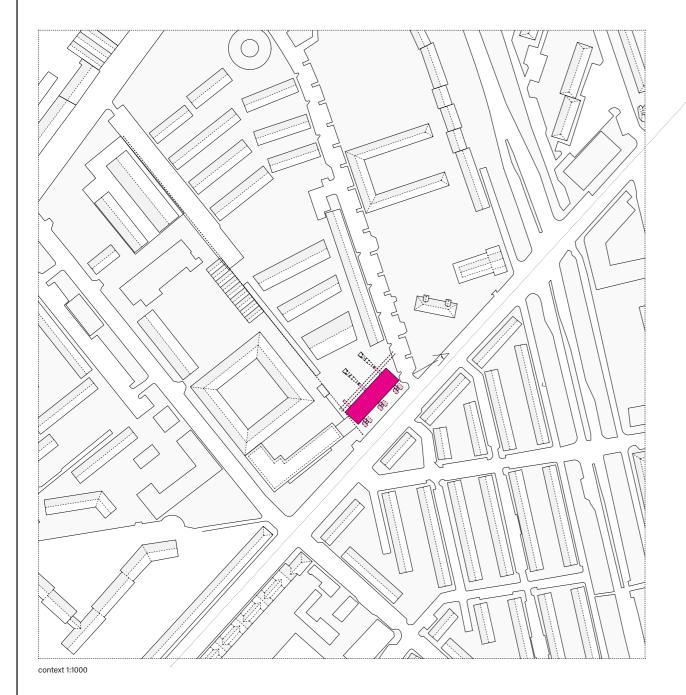
design principles





P2 posters

public domesticity // context

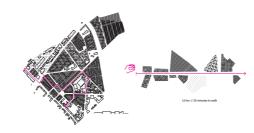


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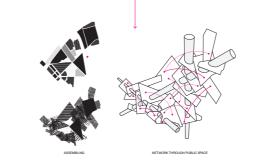




urban patches



ow density of information



interaction through public space

how might we design a <u>social condenser</u> for a <u>pluralistic society</u> to create spaces for <u>social interaction</u> and <u>belonging</u>?

Main question: How can an understanding of urban public space, both in the local and general sense, inform the design of a public building to facilitate interaction and a sense of belonging?

- SQ 1: How can the local architectural, social and historical dynamics of domesticity, privacy and publicity inform program and form of a social condenser?
- SQ 2: How can public space in architectural design densify the occurrence of social interactions?
- SQ 3: How can a public building through its program and form elicit a sense of belonging for a diverse population?







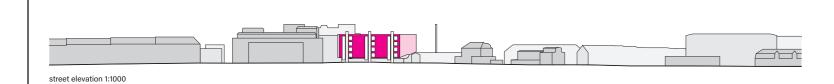
social context

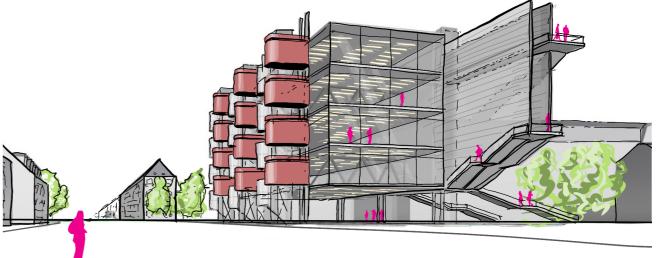


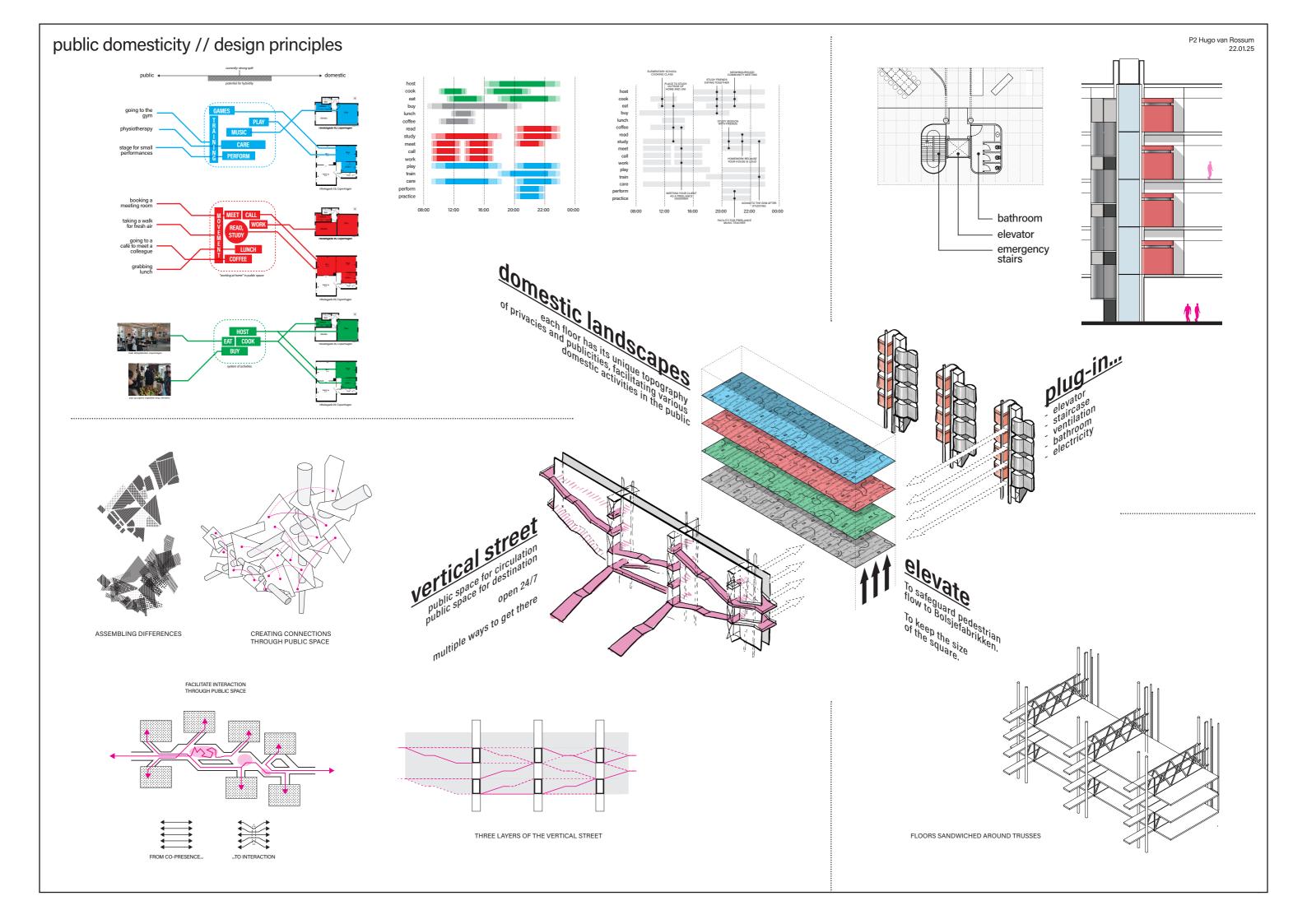
blic domesticity?



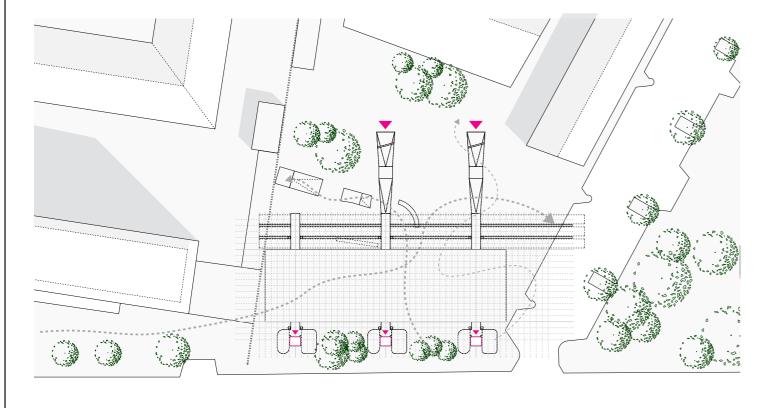
"to live is to be at home everywhere" La riappropriazione della città, Ugo La Pietra, 1977

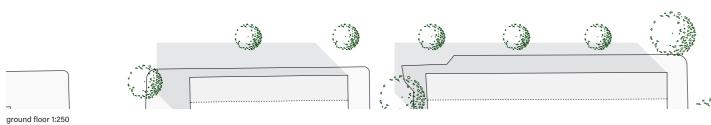


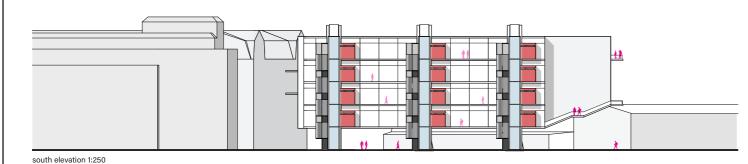


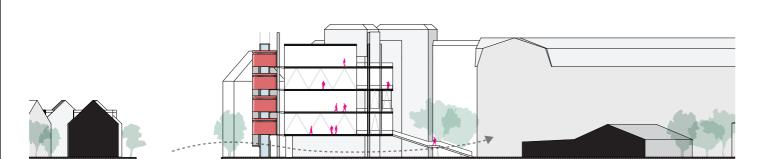


public domesticity // plans

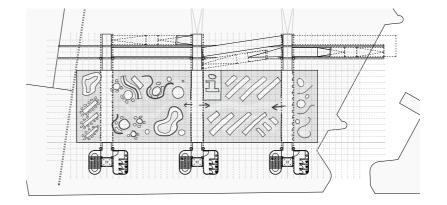


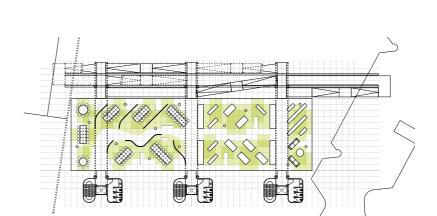


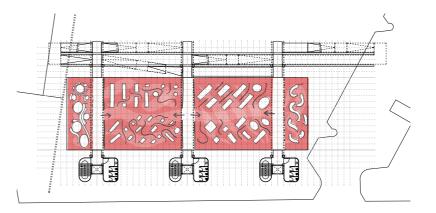


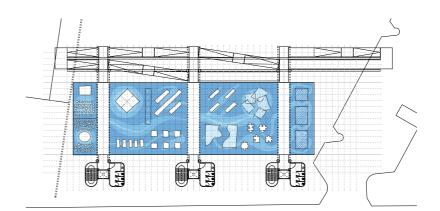


section AA 1:250









01 / entrance + welcome

900 m2 total, 22% external

from left to right:

lunchroom café + lounge info desk farmer's market local artist's exposition

02 / food + hosting 900 m2 total, 22% external

from left to right:

tables kitchen herb garden lounge

various privacies / sizes stove / storage / sink / prep

03 / study + work 900 m2 total, 22% external

from left to right:

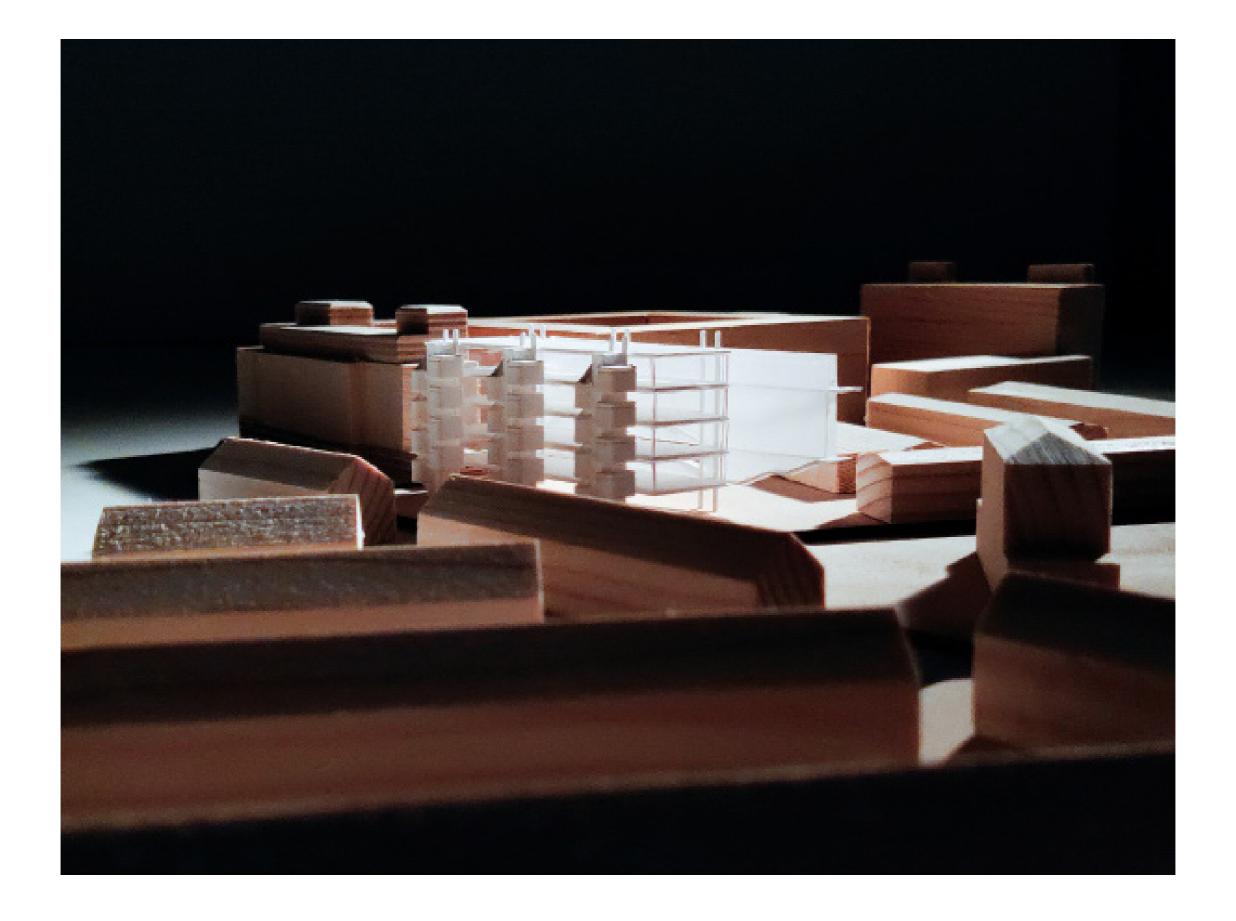
coffee machine various privacies / sizes break room quiet study (co-)working larger tables for gatherings cozy reading nooks

04 / sports + play 900 m2 total, 22% external

from left to right:

unilateral and bilateral setting various sports typologies through the ages // games physiotherapist / mental health







process documentation P2 -> P4

<u>week 3.1</u> 10.02 - 16.02

writings + first TBD session

in the time after P2, I took the time to do some writing experiments, researching the idea of places that can be domesticated. In these fictive scenarios, surreal situations unfold in which I developed new ways of looking at public spaces.

Additionally, I took a first step in outlining my ambitions concerning sustainability. Concepts like timber beams, active façades, free floor plans and prefabrication emerged as themes that could make my design more flexible and sustainable

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theater of the everyday

short story 2 Hugo van Rossum 4840909 12.02.25

construction

Maybe they were just the first ones to take a good look. In the crowded and congested city center, no building got more space than it absolutely needed. As the city had been walled for a long time, every square meter within those walls was used as efficiently as possible. When the construction of the theater was decreed by the mayor about 150 years ago, the demolition of the existing buildings was conducted in the most careful way. By only demolishing what was absolutely necessary to construct the theater, the little resources that were available were conserved and public outcry over the the houses that were lost was minimized. Behind the elaborate neoclassical façade was a cramped floor plan, designed to have as much theater for the least square meters possible.

discoverv

150 years later, when they looked behind the red curtain marking the back end of the stage, the first thing they saw was a wall of lights. Framing those lights was a façade of a typical 19th century apartment building, frozen in time, yet still in good shape. The workers that unveiled this surprise presumed that they had found an forgotten piece of decor, left behind the curtain to be cleaned up later. But that didn't explain the lights - or the movement illuminated by them, hidden behind windows that had not seen a wash in more than a century. Only then they realized that the theater stage had been built in a long-forgotten courtyard, placing the back of the stage right next to the chronically light-deprived back facades of this fivestory building. To save money, the builders had suspended a heavy red curtain in front of what was the back of that worker's flat, planning to fill the windows later with bricks. Throughout time, the residents forgot to miss the lost sunlight on the back of their apartment and the builders forgot the task that they had postponed. For 150 years, the only thing separating the apartments and the theater stage had been a heavy red curtain, blocking the memory of each other's existence, mediating their mutual privacy.

The right thing would have been to revert to the situation as it had been - to build a proper wall, offset from the back façade of the apartments to let in some light. This would ideally solve the precarious situation, yet that naturally would take significant time and resources. Foundations would have to be made, the roof would have to be rebuilt. Continuing the ethos of postponing the work, the theater kept on hosting its performances.

stage fright

Through the destruction of the red membrane, the theater and apartment building were now joined. From the theater's perspective, the apartment building had been transformed into a Roman *Scaenae Frons*, the façade of the building that in Roman theater design would be the backdrop to the performance. In ancient theaters, the *Scaenae Frons* hosted supporting functions for the theaters like dressing rooms, whereas here, the *Scaenae Frons* was inhabited by people that were, up until now, unrelated to the theater. It was distracting. The display of domesticity as a backdrop in the theater made the dwellers actors - not by choice, but by chance. Through the context of the stage, ordinary activities like watering the plants (that did not grow well in the artificial lighting of the theater), drinking a coffee, doing laundry... they all became domestic spectacles.

Those who lived in the apartments that broadcasted their daily lives to the spectators quickly got fed up with the status quo. They were used to having windows towards the busy city streets, yet the directed attention that they got

from the theater was getting too much for their sense of privacy. Within the walls of their domestic space, now visually accessible by those wishing to see a performance, the residents developed an acute case of stage fright. At first, they could not explain it to themselves. Had their apartment not been exposed to the turbulent city street, allowing many more people to watch their interior spaces, much exceeding the amount of spectators that the theater was able to attract? The difference was the deliberation with which the interior spaces of the apartment were viewed. The people in the street were in constant motion, unwilling to pay attention to a specific window in a sea of many, their gaze was set on the moving multiplicity of the windows - the spectacle of constant change was what kept them content and too busy to perceive the window as an isolated entity. The other side, the directed spectators of the theater, had their mind on nothing but the performance of the voluntary and involuntary actors.

<u>exhibitionism</u>

The original residents started to move out. Those who replaced them as tenants were more inclined to enjoy performing how they lived their lives. They did their best to be at home when the theater plays were scheduled, dressing up, perfecting the design of their interior - for some plays, the scriptwriters even engaged the residents of the theater to become part of the script. Routing their lamps to the lighting control panel of the theater's lighting engineer, the back of the apartments for a moment became the front of the performance. At scheduled times, the residents would perform pieces of the script, the entire wall becoming a scaenae frons that was alive. After hours, when the regular theater performances were done, the exhibitionist potential of the accidental and unique floorplan was used to its full potential. The theater became a walk-in theater for performances that were only suitable for after-dark, attracting record revenues, yet also attracting a reputation for shadiness and bad taste. According to concerned municipal politicians, something had to be done about those apartments and the performances that they made possible.

conversion

The decision was made for the city to acquire ownership of the apartments and convert them to a building that served the public's interest. As the residential flats were part of the historic center, constructing a new building was challenging; the easy choice was to embrace the residential layout of the exposed dwellings. The inherently capsular nature of residential buildings, designed to be safe havens for individuality and personal culture, was the starting point for the design of the public building. The idea of **public domesticity, temporary ownership of public space**, was the concept for the design. The potential for domestication was divided into different temporalities: practically creating a new building every day, being a mirror of the moment. It was to be a building of extreme flexibility, broadcasting perpetual change in different speeds.

The ground floor, entirely oriented towards the street, was converted into an information desk for practical reasons, supplemented by a coffee bar. The back of the ground floor, too low to be connected to the theater, is a storage room, a kitchen and the place for technical appliances for the building.

The first floor: temporary art center. The space is divided by a long paper canvas, suspended with long vertical rollers. The paper originates from a comically large paper roll and is pulled towards a shredder, ready to recycle the paper. Everything drawn on the paper roll, be it graffiti, meticulous artwork, or simply a signature proving one's visit, is destined to only survive for one month. It's a place with a history that lasts for exactly one month. The temporary art, being transported along the vertical rolls like an oversized printing press, is displayed towards the street and the theater. Towards the street, it is an invitation to explore. Towards the theater, it is a backdrop to the stage, decorated with art and the process of its creation.

The second floor: workspaces for community initiatives, startups and social organizations. They can use the space for an entire year, after which it

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is rewarded to the next party. The condition to use the space is that the users have to curate an exhibition about their initiative, projected towards the street. It is publicly accessible and creates an understanding with the public for what is done in this particular year. The side of the floor oriented towards the theater is the actual workspace, where office spaces are available. Towards the theater it projects an image of work and productivity.

The third floor: a movable study landscape. As an addition to the facilities of the nearby university, the third floor is designated as free to use study spaces. To make sure that the lay-out is optimal for the current demand for study spaces, the tables can be divided into smaller units, free to move longitudinally like storage racks in a depot. This facilitates the possibility for unified and for isolated study tables, depending on the need for collaboration or for focus. The temporary landscape changes continually, the first users of the day probably having the biggest say in its layout. Throughout time, the study landscape reflects what study layout works best for specific groups. During the day it can be reserved by schools, during the evening it can be reserved for night school.

The fourth floor: cooking as domestic spectacle. Cooking, normally hidden away in either the privacy of the home, or the restaurant kitchen, is now seen as a performative art. Some days, it is used as a communal kitchen. Groups from the neighborhood organize an evening where food is prepared from a specific culture, an event where both residents from the area and those passing by are invited. The floor is also an excellent location for cooking classes. By displaying the kitchen as the stage that it can be, cooking techniques are performed.

Sometimes, it's a pop-up restaurant. An aspiring chef could have a week to present his innovative sustainable food. There is ribbon-screen towards the street, showing what the program is for that day. On other days, social organizations might organize an evening where food is cooked for the homeless. The same space, celebrating the preparation of food, can be used in wildly different ways, with different effects and with a different target group.

public furniture

short story 1 Hugo van Rossum 4840909 12.02.25

Appearance

No one knew for sure where they came from. The seven objects, as typology familiar to all, were found on a Thursday morning on the main market square. Someone must have worked tirelessly, since the largest object, a table made from massive concrete, was precisely placed into the ground below the rhythmic pavement bricks. For each leg, three pavement bricks were removed in order to dig out the underlying sand and place the concrete leg of the table. That explained the small pyramid of pavement bricks. It was neatly stacked some meters from the table, creating the illusion that they could be placed back any moment. What no one knew, is that the table legs extended for 20 meters into the soft soil, hitting the first layer of solid packed sand. The table had in fact been anchored into the ground in the same way as any other building in the Netherlands, circumventing the pathological inclination of every built structure to sink into the depths of the soft drained bogs and swamps. Surrounding the table were six chairs, similar to those found at most domestic dinner tables. What made these chairs unique was the material of which they were made. Formed like an ordinary wooden chair, yet produced from cast iron and painted with a glossy red paint, they seemed to be excessively sturdy variants of their domesticated relatives. If someone managed to steal one, it would probably break through the fragile floors of its forced domesticator. By design, they were exiled from the traditional domestic spaces.

After a while the surprise had subsided and peace had been made with the fact that the table and its red chairs would probably remain there forever, either because cost of removal was in no way proportional, or because there was no real popular opposition. So they stayed.

the market

The table with the six chairs quickly became a regular part of life in the city. And just like a kid on a school trip to the big city, there was no choice what activities to partake in. Every Thursday there is a big farmer's market on the main market square, where the entire square for a day is colonized by cheesemongers, fish stalls, people selling coats, blouses and other garments, stalls with florists and butchers. On these days, the public square is populated by islands of private commerce, creating a temporary city of alleys, streets and avenues. The square has become a miniature version of the surrounding dense city fabric. Our table with six chairs gets to be a compact counterpart to the public square within this temporary city of commerce. It's a place of rest in the busy atmosphere of the market, momentarily isolated from the yelling salesmen, immune from the orchestrated temptations to buy. As a character in the urban environment, the table with six chairs places those who sit down in an opposing position, creating the sensation that the only prerequisite for the feeling of community is sitting at this table. A multitude of activities happen: eating the herring they bought just now, resting their tired legs from roaming the temporary streets of the market, using the table's surface to arrange the goods they bought in the bag that ideally would have been bigger.

On other market days, the salesmen perhaps were quicker to colonize the table with six chairs. The local tea shop was smart enough and decided to put a dark blue tablecloth over the eternal concrete table, install a large water cooker on it make it a temporary tea tasting table. "Sit down and and taste!" reads the cardboard sign that was hastily drawn to improve the chances of their success. Walking around the table is the son of the tea salesman, handing out free tea samples and encouraging the temporary inhabitants of the table to "taste another one!". Most of the time, they do.

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On most other days, the square is almost empty. Like the rest of the center during the workday, it seems evacuated of any public activity. On sunny days, weekends, or holidays, however, it attracts tourists that perhaps wish to escape the crowds of the capital. Obviously, they do not come for the table. They come for the tall church tower, the decorated old town hall, and to walk around the picturesque canals. What about the table? It's just a place where one might sit down on the heavy red chairs, or stand on it to take a better picture of the surroundings. It's a piece of public infrastructure with no prescribed way to use it. Each new way of colonization adds a chapter to its non-existent user's manual.

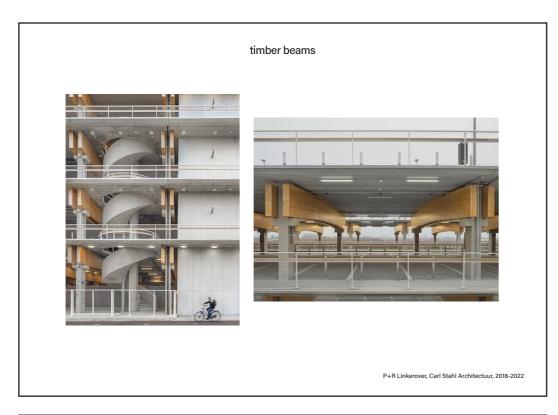
performing domesticity

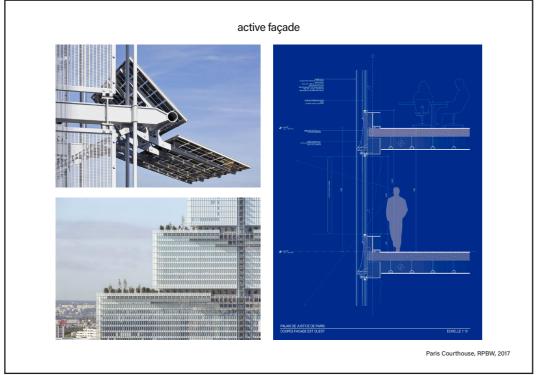
In the warm summer months around dinner time when there is still plenty of time until the sun goes down, the table with six chairs is fully domesticated, perhaps by some students living around the Markt. They bring their meal, cooked in their student house, in mismatched pots to the table on the square. For a few hours, the table is theirs. Friends are invited, candles are lit, it's an performance of familiarity performed by strangers. The ritual of the table, learned from a young age, is usually conducted in the home, where access is denied to strangers. Although the the access to the table on the square is public, no one else bothers to sit down there, to interrupt this ritual. The domestication of public spaces by students is not an unusual sight to those who traverse the square. They have seen students in other parts of the city build a table which can be mounted on a bicycle rack, in order to create a temporary table to have their dinner. While being public property, a temporary type of ownership of the table has been established. We're not talking about legal ownership, but about the socially accepted dominance you have of the space immediately around you. By sitting on a bench in the park, it has been made unavailable to the rest of the public, temporarily appropriating it into the realm of an individual culture.

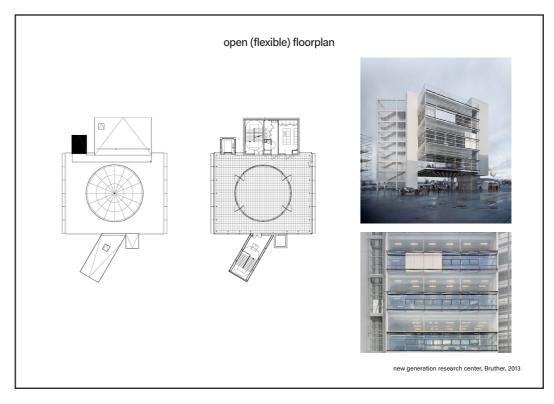
condensing // experiments

Some architecture students wonder whether this phenomenon of temporary domestication of public spaces can be densified - what happens if we stack multiple tables to be appropriated? So, as a temporary experiment, wooden tables are stacked on top of the eternal concrete table, each with a vertical spacing of 2.5 meters in between. From the outside, they are made accessible by a scaffolding of stairs, built-in chairs and walkways around the tables. The "Tower of Table" is constructed, ready to be temporarily domesticated by whomever wants to. During city festivities, it's a look-out, during the market a place to taste, rest, organize. During summer, it's a place to have dinner and enjoy the view. Through its context and the way temporary ownership is taken of it, the collection of objects that started out as alien artifacts has become a piece of social infrastructure, facilitating a place where one might feel at home in the city.

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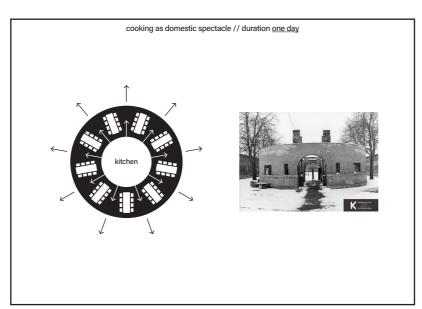


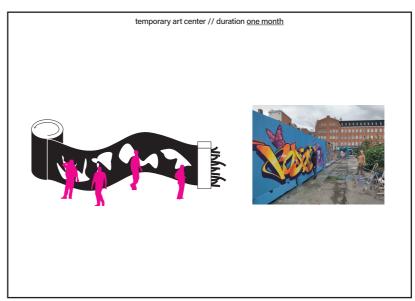


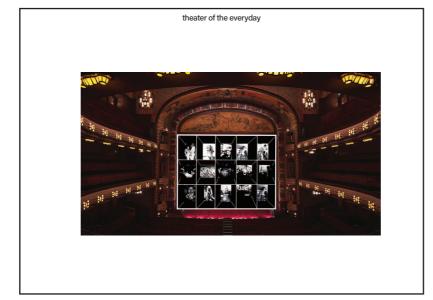
week 3.2 17.02 - 23.02

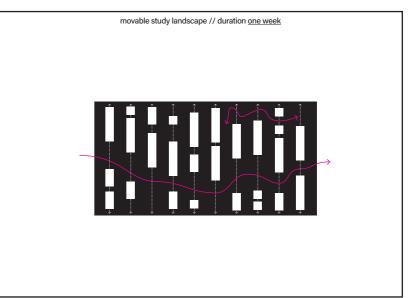
user research

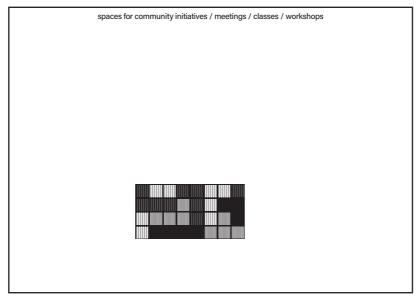
Researching who lives in Ydre-Nørrebro and how a Public Condenser might serve them was the focus of this week. I developed several personas, of each analyzing their suspected domestic situation, daily lives and hobbies, and distilling what functions could be a valuable addition to their lives. As a result, I made an A1 overview poster to show the result of my research.

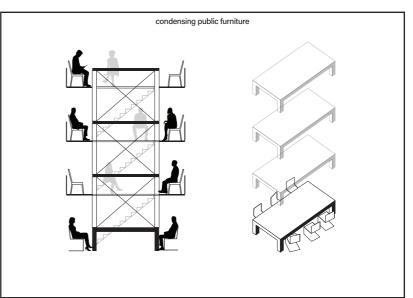












Hugo van Rossum, 19.02.2025 daily lives facilities user groups living situation events (some) typologies parent B works at home, takes care of kid. parent A goes to flex-office, then to gym. together they take a walk in the park maternity leave cafe 1-bedroom apartment, a bit too Young family, 1 child study spaces reading event library the three of them go to a community center for an art workshop for kids parent B works at home, takes care of kid. parent A goes to flex-office. working out exhibition spaces weekend activity parent A does not work, goes with kid to reading event in the library parent A works at home, B art workshop flex office working picks up kid student living alone studying study spaces meeting a friend cafe group work collaboration spaces shared kitchen working out gym studying at home, re-heating dinner, cinema with friends group work, lunch, recap in watching a movie cinema painting workshop art facilities gym, studying in library, cooking with friends student house studying silent study spaces finishing a project in the local screen printing workshop lectures, then their weekly dinner with all roommates meeting a friend studying in the library with a friend, then they eat together group work collaboration spaces working out gym studying at home, re-heating dinner, cinema with friends whole day of group work, reheat dinner and watch a watching a movie cinema chess training rentable space dmandsgade 61, Nørrebro, Københavr screen printing art facilities art center flex office shared facilities, high quality, more working spaces friends co-living, just cooking workshop with old friend from high school on how to cook falafel home-office day for most, some work in living room and some in co-working spaces private space started work getting local vegetables local vegetable store visiting a local theater performance, drinking a coffee in the city having a drink bar going to the office, staying somewhat late, walking the somewhat I house dog visiting theater theater going to the office, getting groceries at local vegetable drink a coffee cooking workshop cooking spaces Engelstedsgade 30, 2100 København Ø visit exhibition exhibition spaces working spaces theater of the everyday flex office young couple one goes to the office, other to uni. Heat up some leftovers from sunday for dinner 1 bedroom apartment, starting household working out repairing amplifier repair cafe work and study together co-working spaces joining communal dinner shared kitchen watching a movie cinema studying and working together in the local library, joining dinner in the shared kitchen next door Haraldsgade 45, Nørrebro, Københav buying second hand table second hand store X works from home, Y drops kids at school. A plays with friends after school, B has soccer family with 4-bedroom row house, busy lives playing with friends board game cafe Y takes kids to an exhibition, X school-going kids works on a freelance project. Family dinner at home. soccer practice sports facilities practice, C does homework. Y drops kids. X works remotely. Kids visit grandma after school, Y works late. school project arts+crafts workshop theater club theater Y takes A and B to school, C goes with a friend. A does a group project, C plays video games. flexible workspaces X stays home, Y takes A and B to school. C takes the bus. collaboration spaces attend study group A has a school project, B goes to theater club. work on freelance project flex office X works remotely. A plays outside with friends, B attends study group, C reads. exhibition spaces visiting exhibition elderly couple Takes a walk, spends time reading, has a restful evening with partner. coffee with retirees 1-bedroom apartment in row house, active in community cafe volunteering to repair repair cafe Short walk in the park, relaxes with partner, enjoys a leisurely afternoon.

Course in digital skills. reading a book silent study spaces visit theater performance theater Cooks with partner, takes a walk, spends time reading a book. Takes a stroll around the public living room read Danish stories neighborhood, enjoys a theater performance in the evening. Course in digital skills multifunctional 2nd hand store and repair cafe Vibekegade 29, Nørrebro, Københavr classroom new immigrant family 2-bedroom apartment, just arrived bring kid to daycare Park trip, picnic lunch. Relax, unwind together. Parents work, older kid at school, daycare younger kid at daycare. Skateboarding, family dinner, relax. skateboarding skatepark Market visit, older kid skateboards. Family time, relax at home. Parent works from home, takes multifunctional classroom Danish course are of younger kid. Danish course nuseum visit, family time. museum visit exhibition spaces Parents work, older kid at school, younger kid at daycare. Family dinner, reading, games. Parents work, older kid at games board game cafe school, younger kid at daycare. Danish course, family cooking. market visit space for temporary market

Sigynsgade 48, Nørrebro, København I

Parent works from home, younger kid at home. Park walk, family dinner.

demographics of

Nørrebro, København

place of birth

age

90-99 years

80-89 years

70-79 years

60-69 years

50-59 years

40-49 years

30-39 years

20-29 years

10-19 years

0-9 years

male female

source: Københavns Kommune Statistikbank, 2024

amount

201

1.078

2.968

4.836

7.246

8.878

12.739

22.581

5.633

7.907

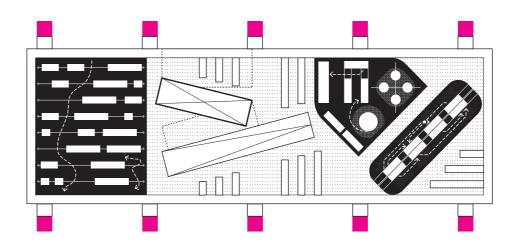
42.7%

week 3.3 24.02 - 02.03

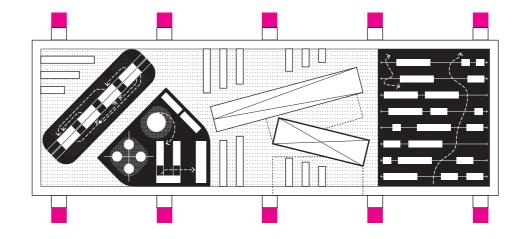
plugin study + functional atlas

Plugins had been an important part of my design since P2, due to their functional effects, their potential influence on sustainability, and their aesthetic appeal. I investigated their position, program and image.

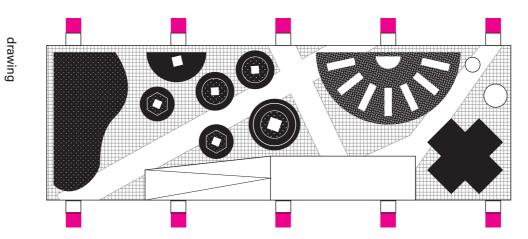
(next page) Additionally, I made an atlas of the functions that were the result of last week's research. For each function, I made a 'datasheet', showing the physical needs of that function, as well as the implications on the user. This atlas (A1) of 'extra-domestic spaces' was divided into themes, making an attempt to cover a broad range of activities that normally could not take place in the domestic area. As a proof of concept, I merged them into a stacked building (A1).

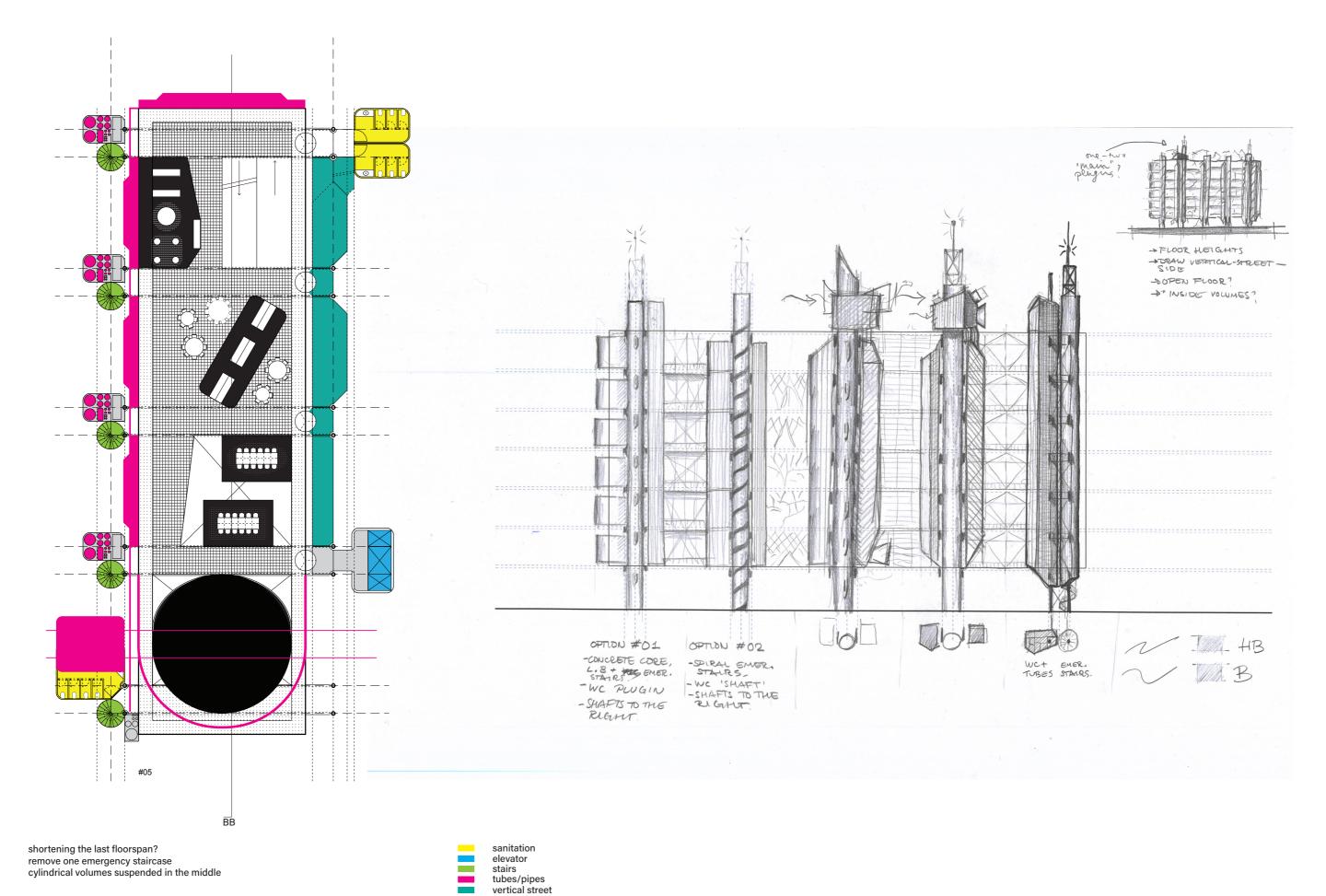


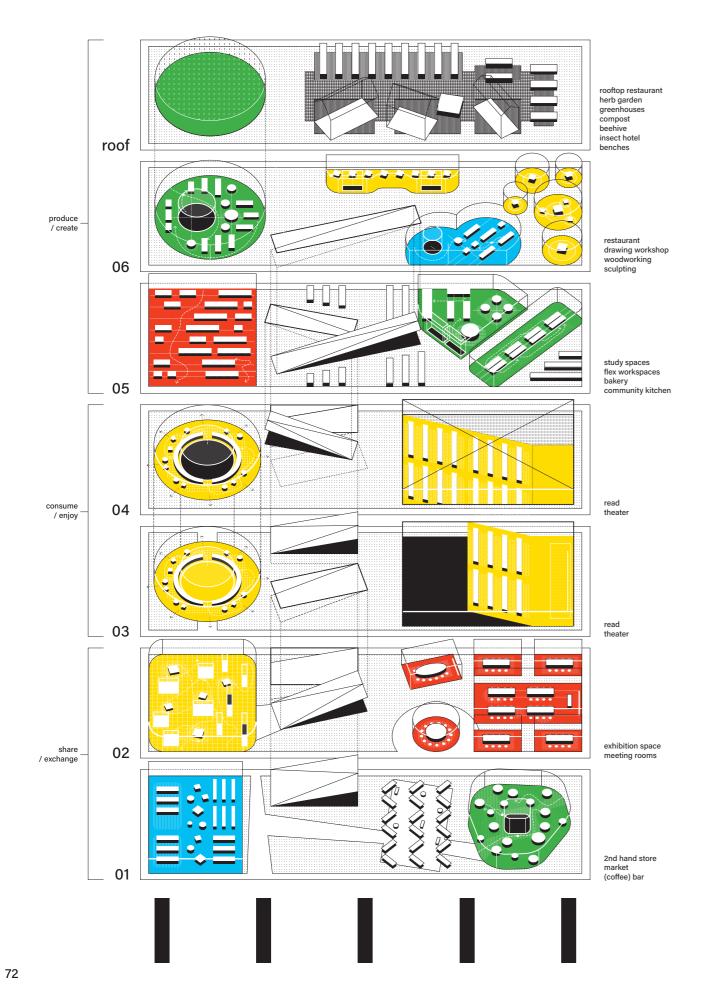
to-do:
vertical street
placeholder -> real plugins

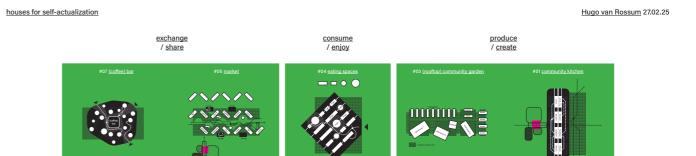


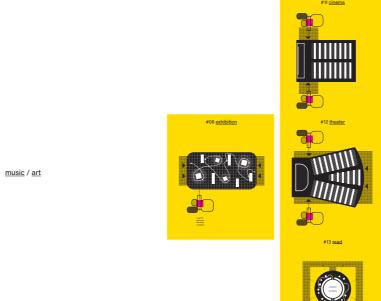
woodworking
3D-printing
sculpting

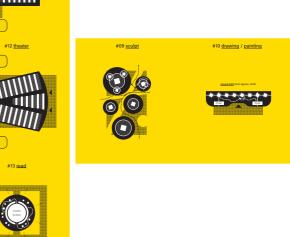


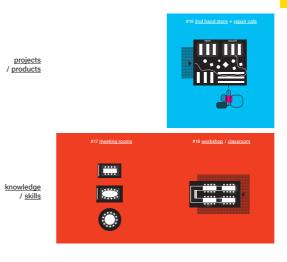




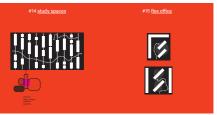


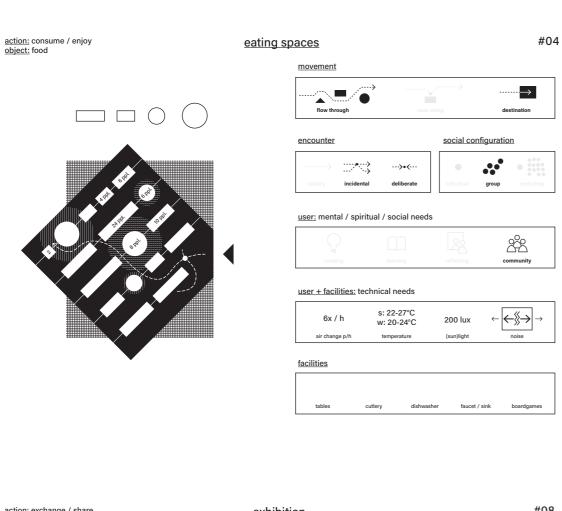


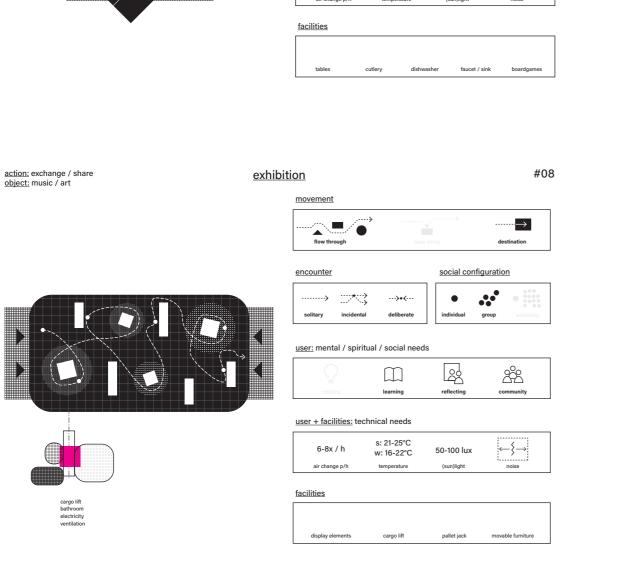


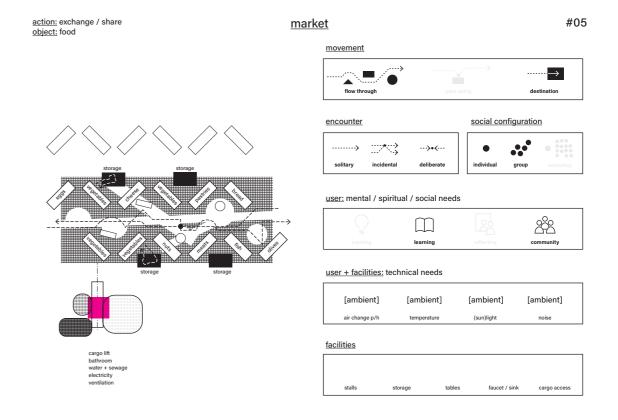


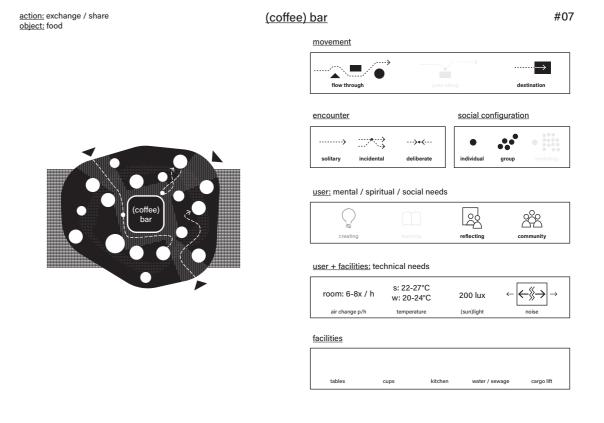








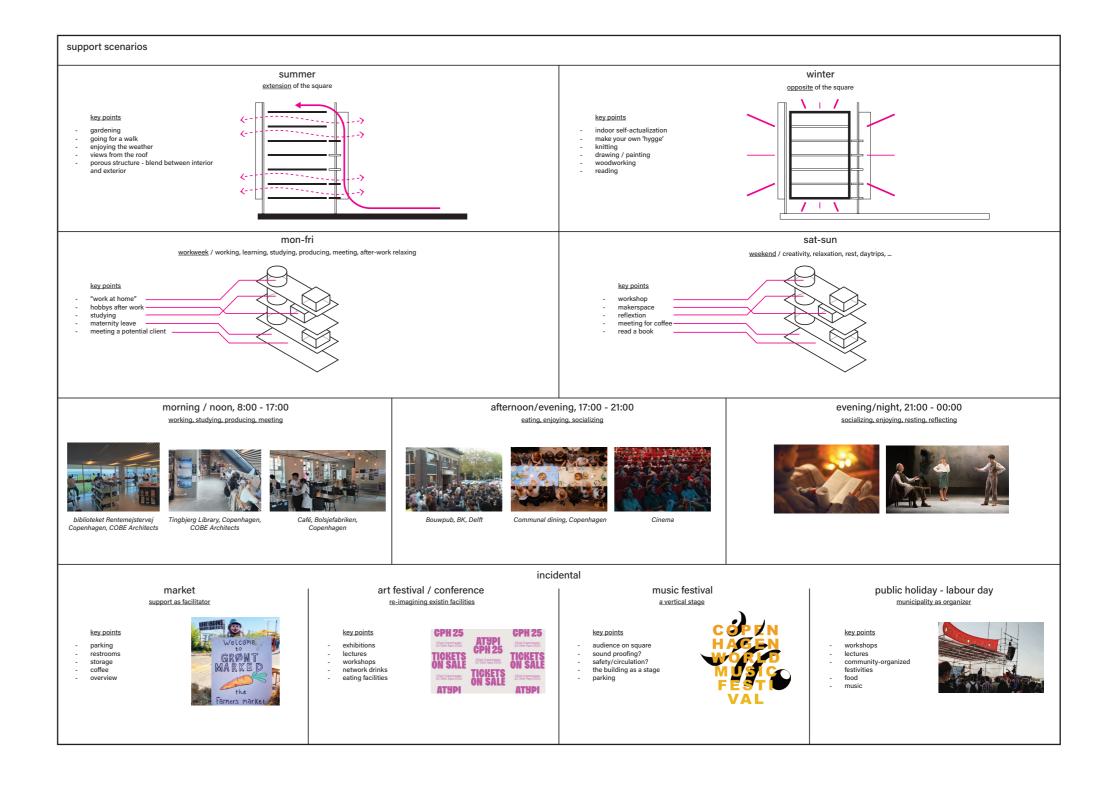




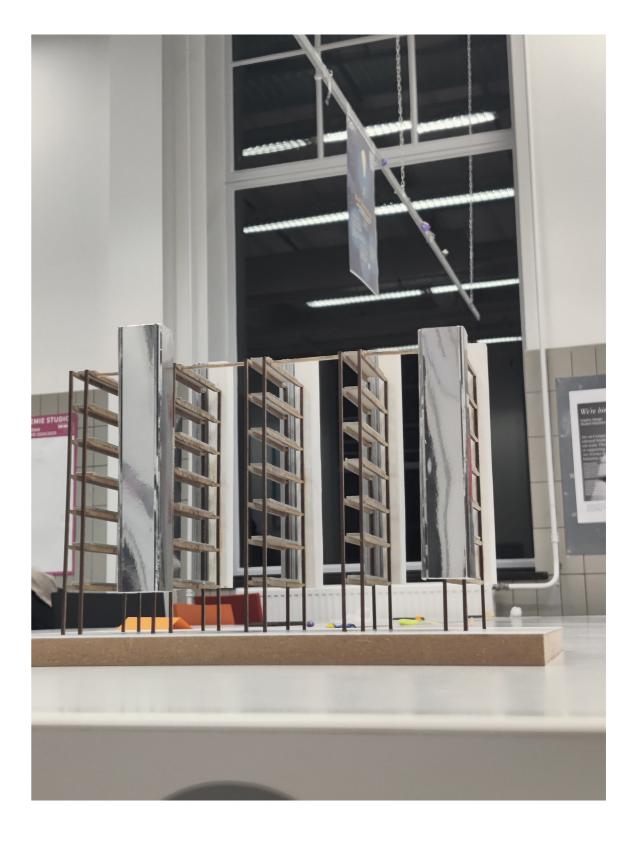
week 3.4 03.03 - 09.03 support

this week, I more closely investigated the multifunctionality of the 'support', the structure that would be filled in by the funtional atlas of last week and kept alive by the plugins. Scenarios throughout the year, the week, the day and special events were researched.

This research into the support culminated into a 1:200 scale model, with the plugins attached to this support.







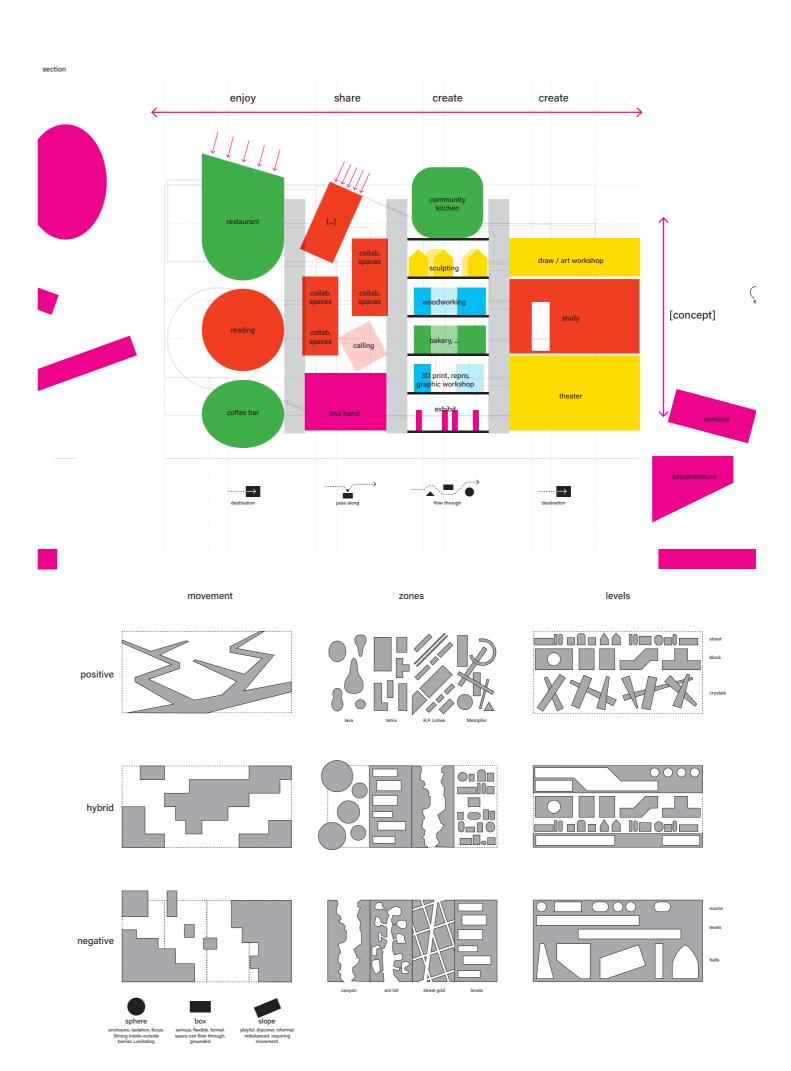
week 3.5 10.03 - 16.03 hybridize

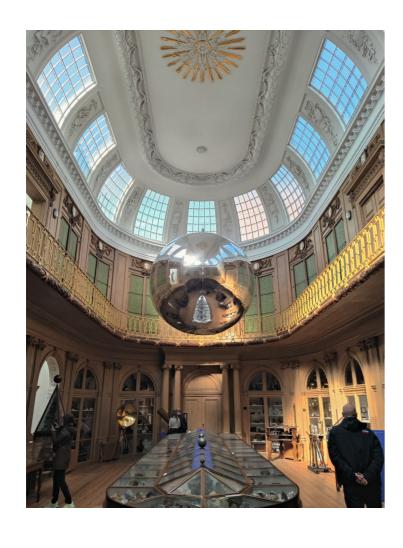
the combined effect of the programmatic atlas and the supporting structure resulted in a study of various sections. These sections were different ways of how the diverse program could be ordered based on size, publicity, environmental requirements etc...

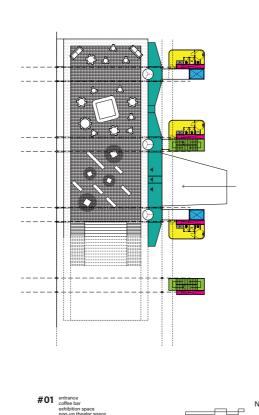
Furthermore, I made a mass model for studying the plugins by 3D-printing them and sticking them into a block of styrofoam.

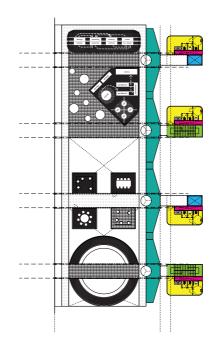
Perhaps unconsciously, during a visit to the Teylers museum in my hometown of Haarlem, a suspended glossy sphere inspired the materialiy of the 'focus sphere' in my design.

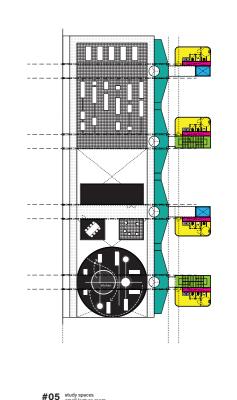
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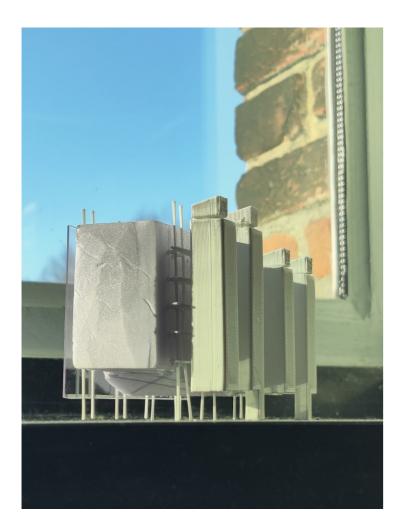


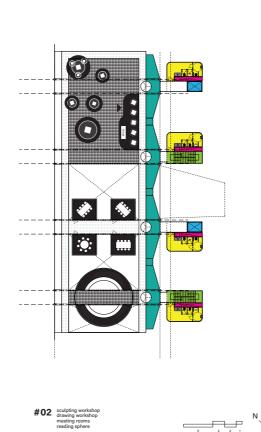


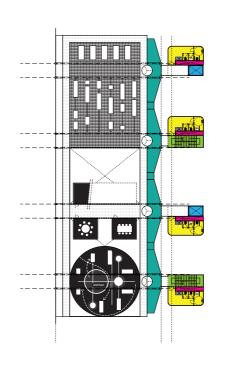


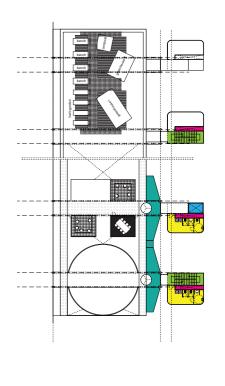
















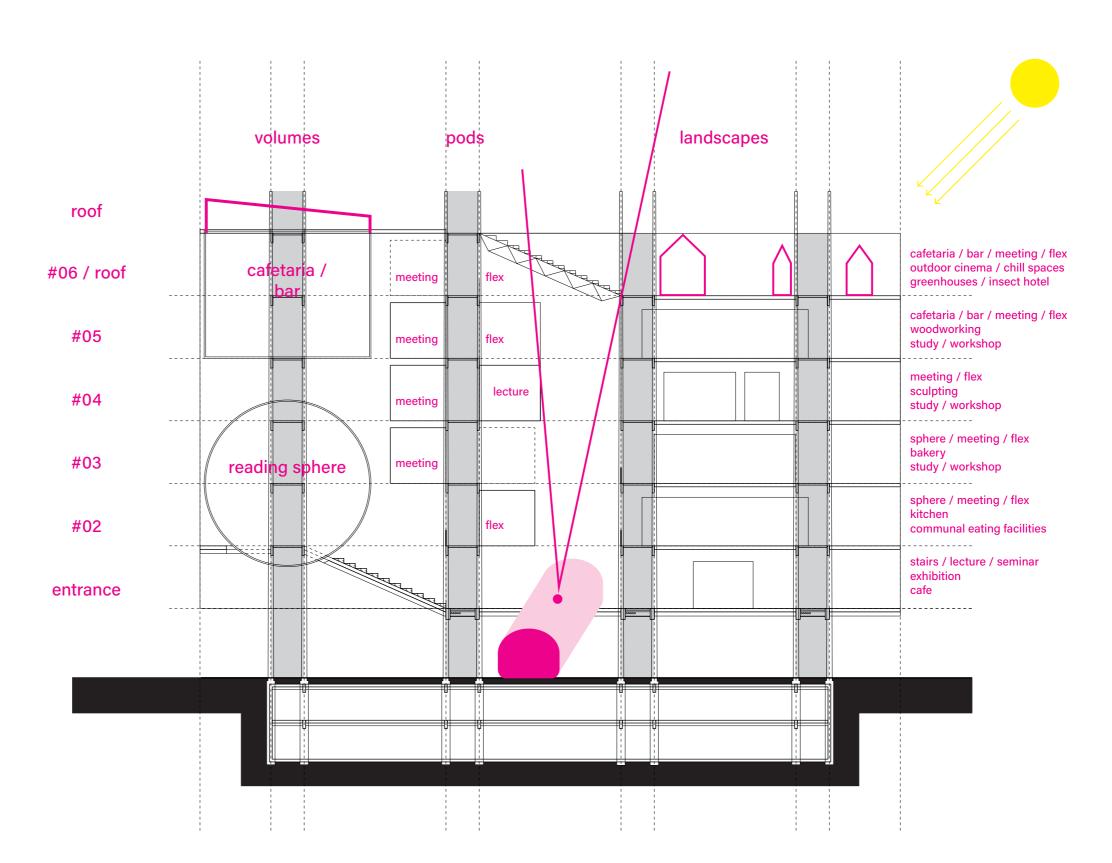


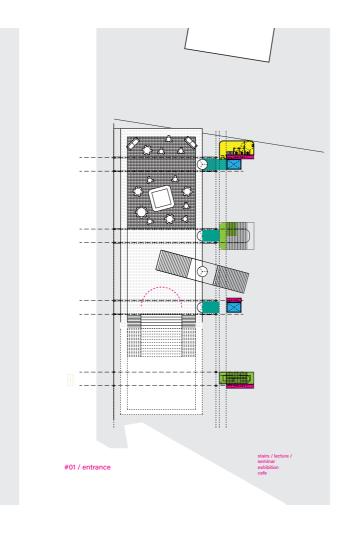
<u>week 3.6</u> 17.03 - 23.03

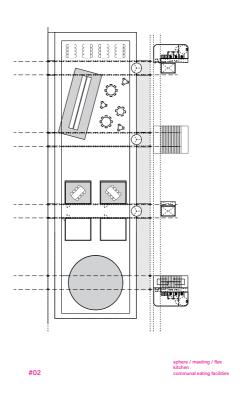
section, façade, Groningen

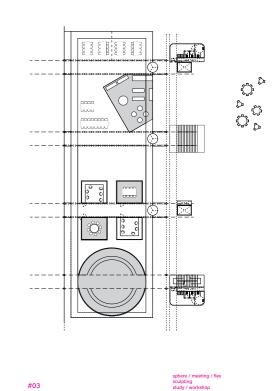
The section that I developed last week was further refined into a prototype, keeping in mind the various environmental factors described last week. Themes like access, sight lines and themes per floor were explored.

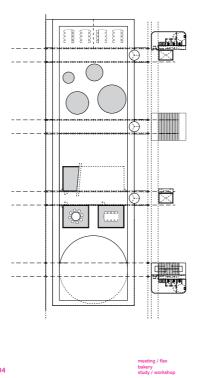
The plugin buildings were further researched by looking into their façade profile. Multiple studies were conducted into rhythm, movement and variation. Ultimately, I decided to choose the flat variant for the reason that an elaborate façade would be 'too much' when also designing a non-standard interior space.

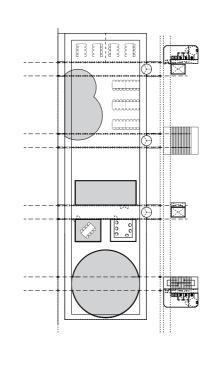


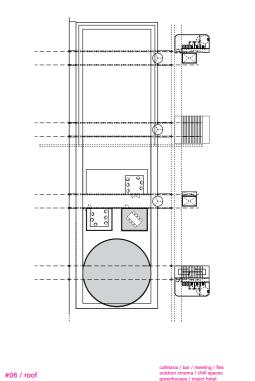


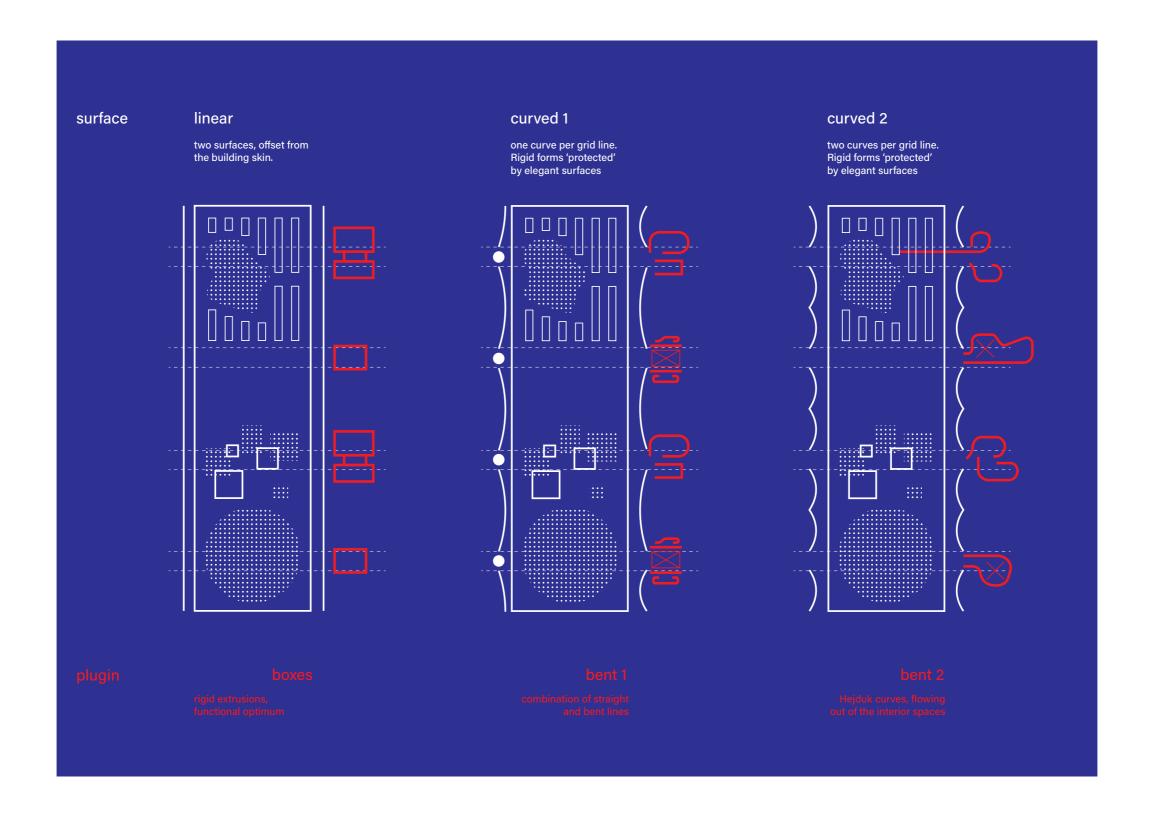


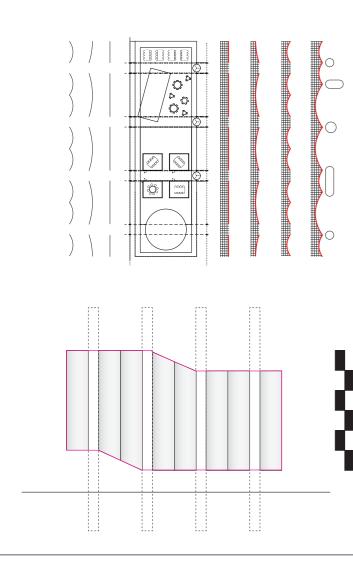






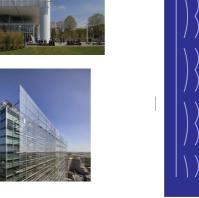


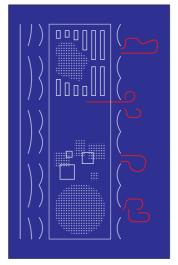


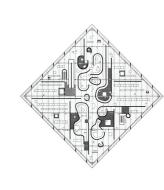


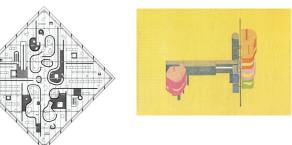


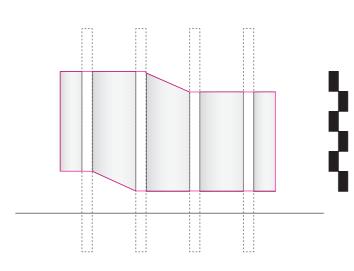


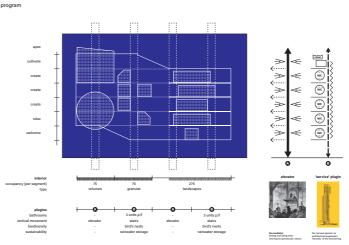


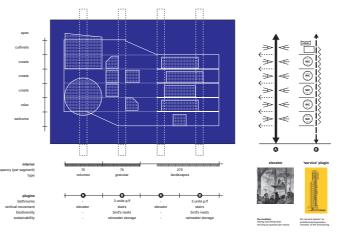


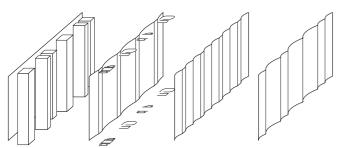


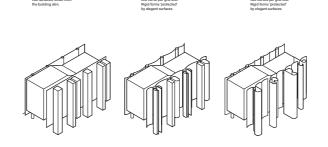










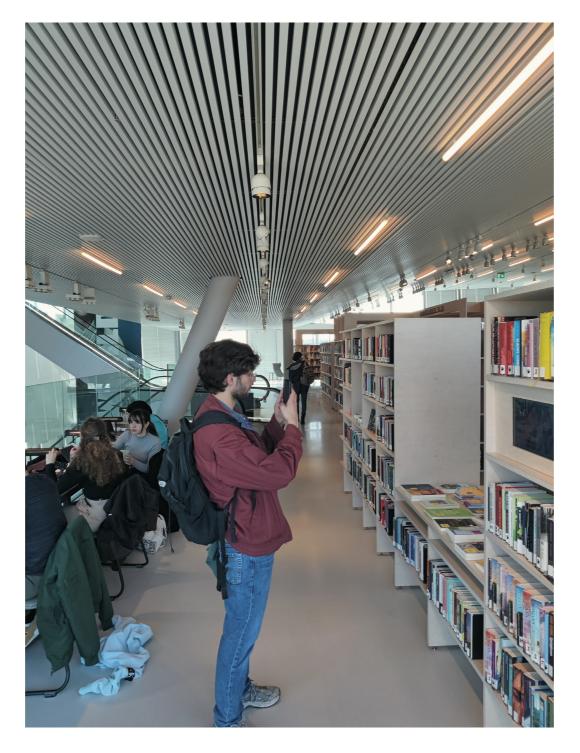


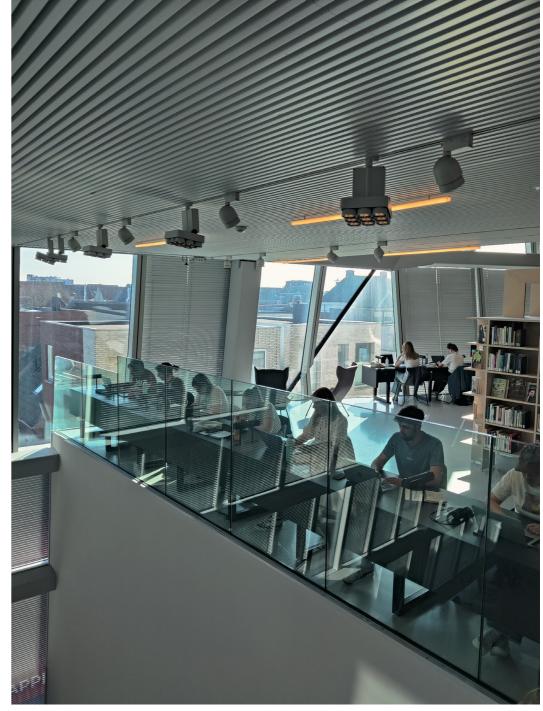




field trip to groningen

We went on a study trip to Groningen, specifically the Forum. This was a great experience, as without my knowledge it has quite a similar section to my design. I was inspired by the scattering of study spaces around the building, being seemingly always occupied. Additionally, I was inspired by its vertical circulation, use of the roof, cooling ceilings and using height as an advantage to its interior experience.









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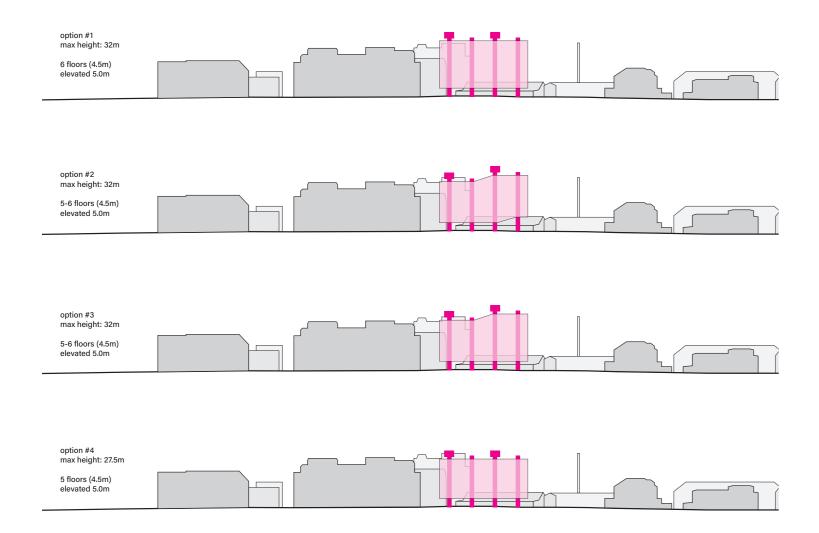
<u>week 3.7</u> 24.03 - 30.03

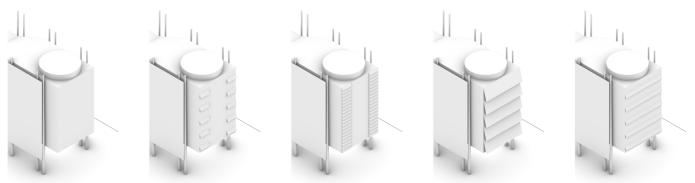
3D modeling, street profiles, façade

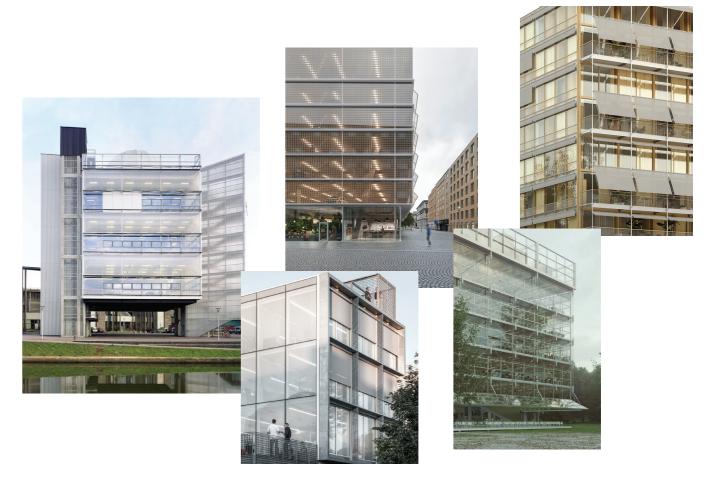
This week, I made many iterations of façades and street profiles. I tested how they fitted into the context, and how the façade would change based on the different studies. By making preliminary renders in Twinmotion, I could get a grasp of the building as an isolated entity. By making street profiles in illustrator, I could make some choices regarding the floors and how they interact with the context.









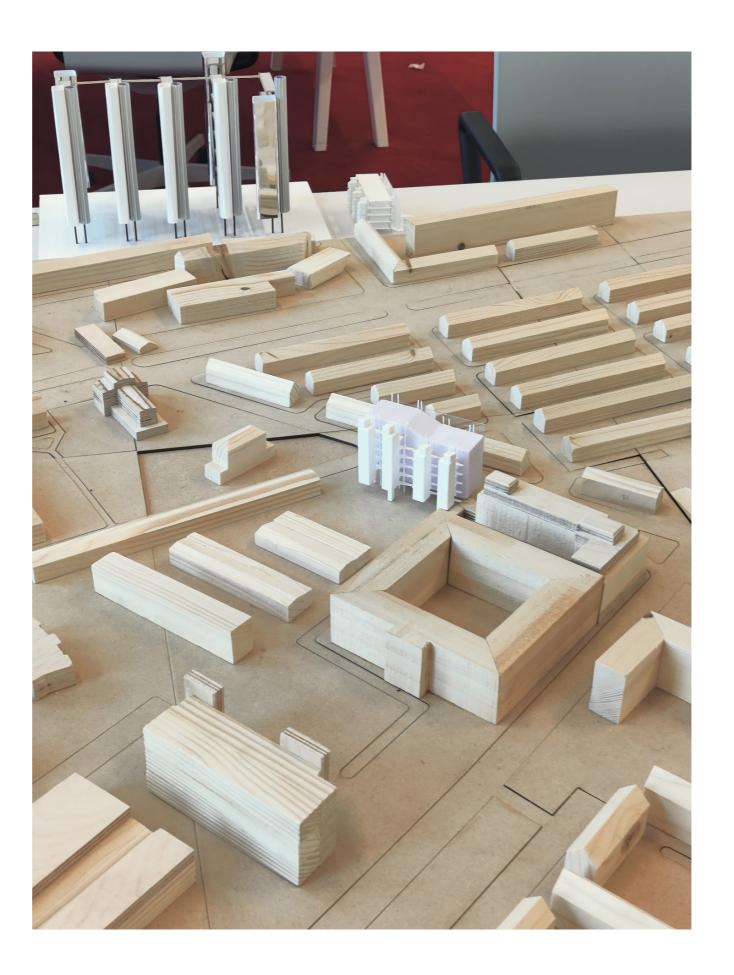


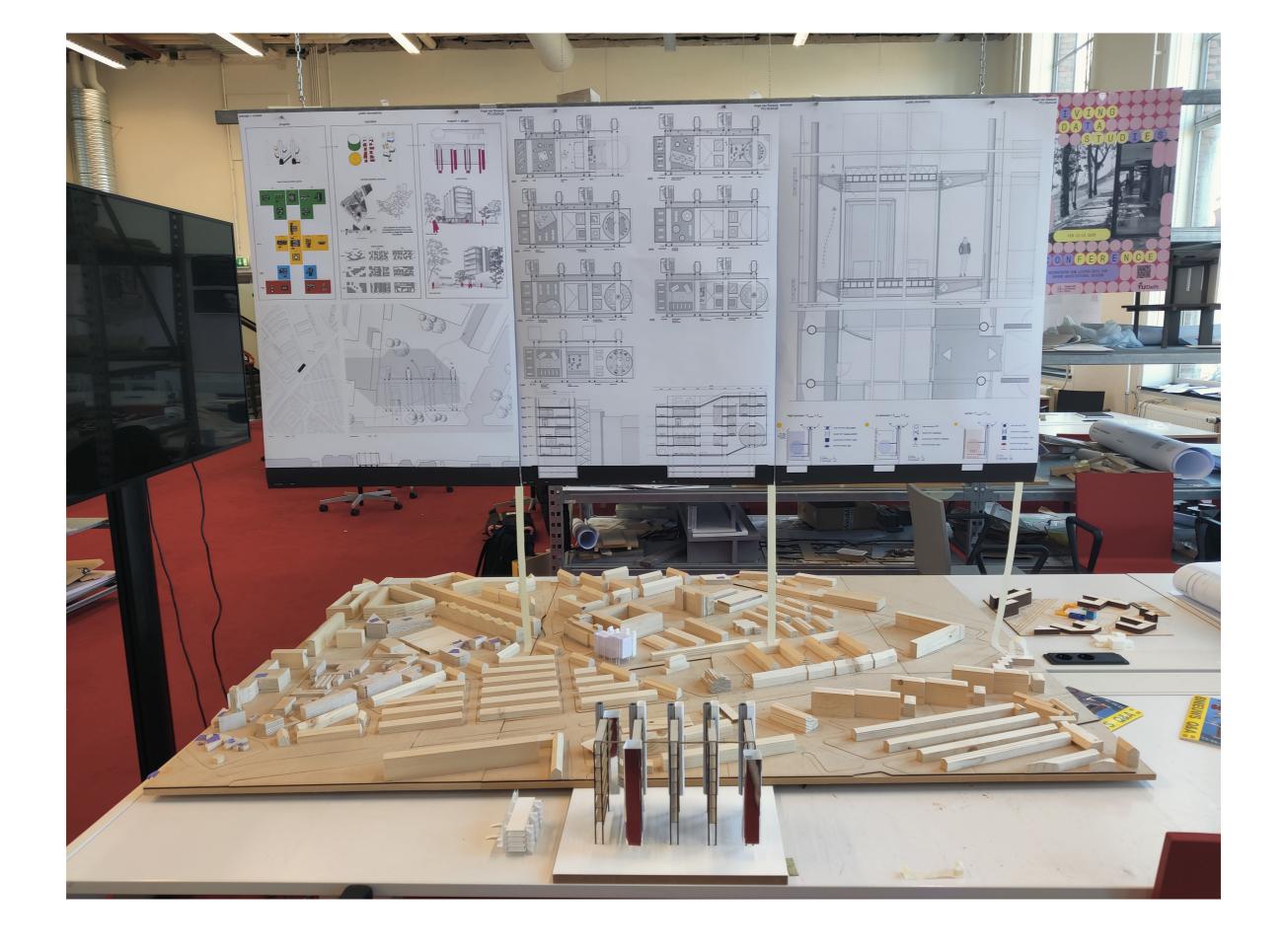
19.06.25

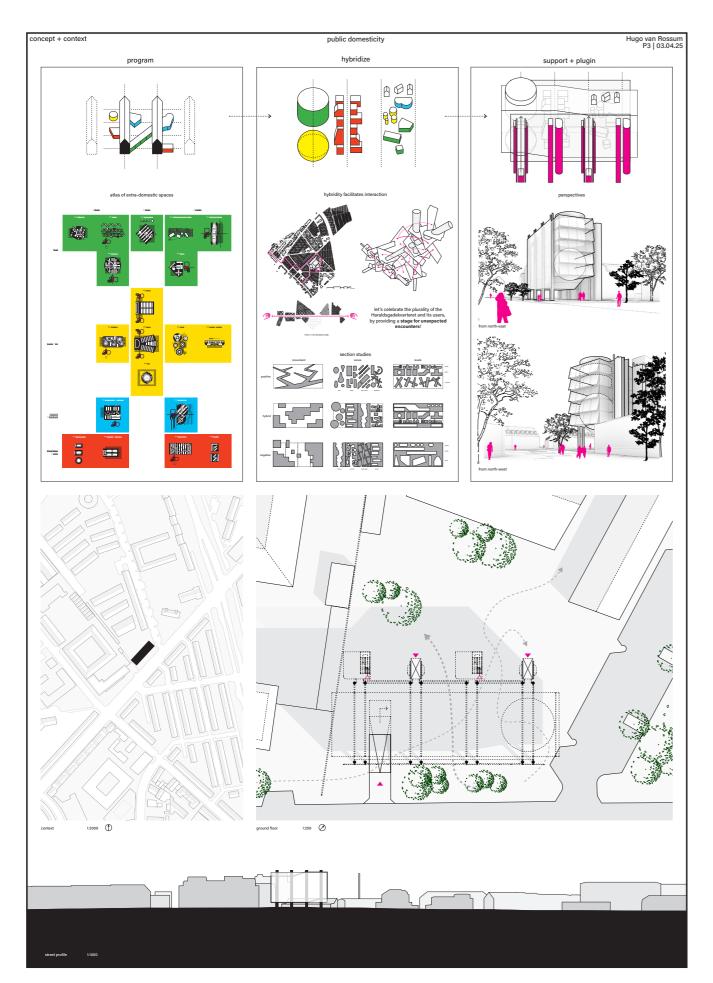
<u>week 3.8</u> 31.03 - 06.04

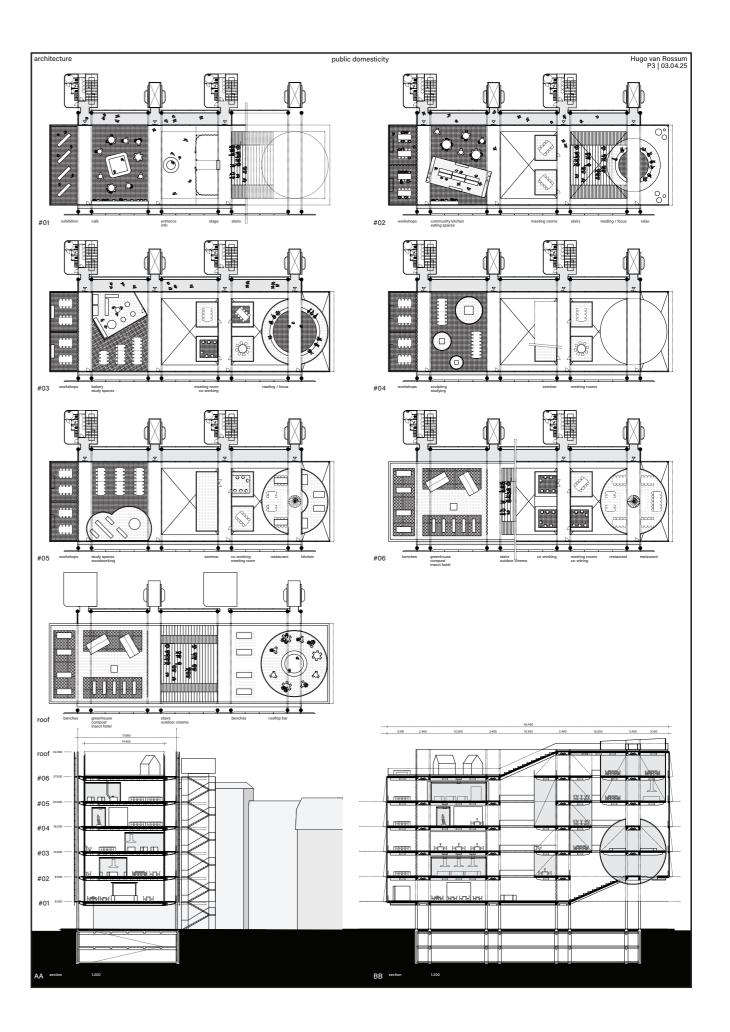
P3 presentation

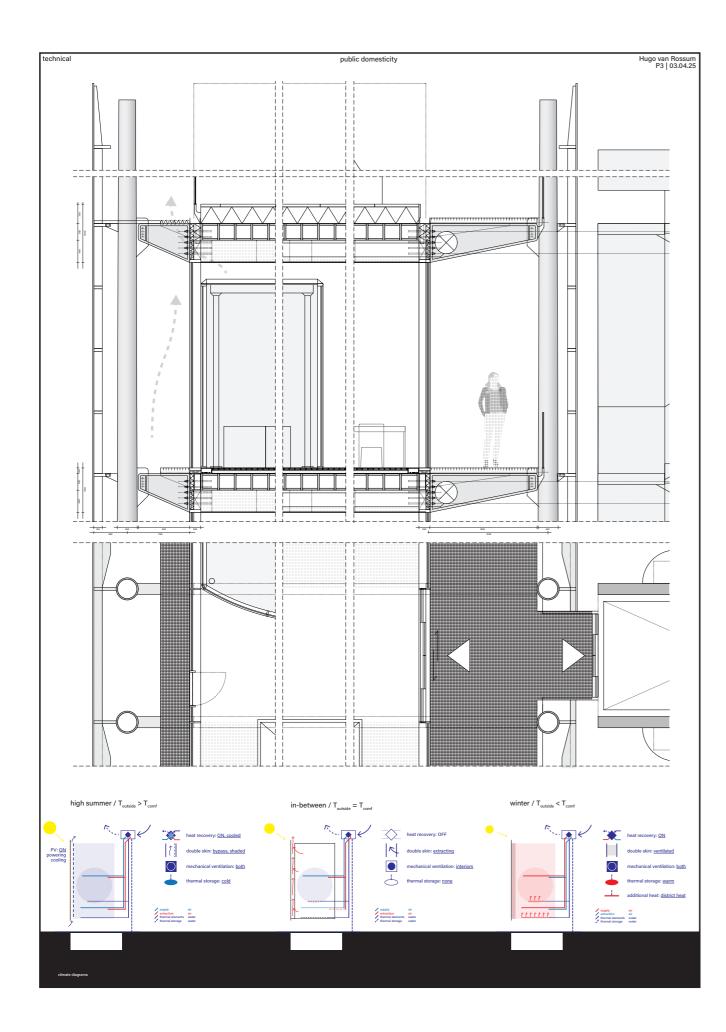
this was a great moment to bring together the preliminary design that I had been developing since P3. Being a presentation exclusively based on A1 posters and a model, it was a nice exercise having to make my design as consise and brief to understand as possible.

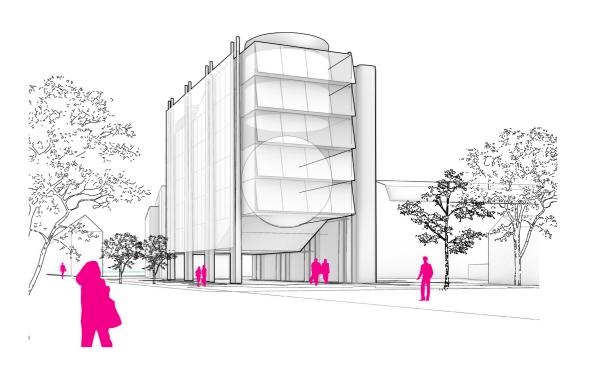


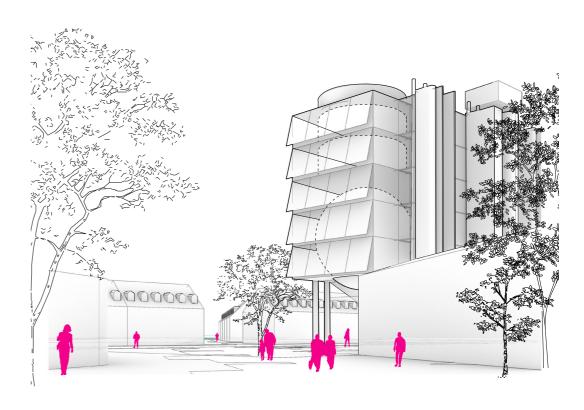












<u>week 3.9</u> 07.04 - 13.04

ground floor, materials, massing

This week, I took a dive into materiality and the design of the site plan of my design, as well as climate sections and load bearing structure.

By collecting references of interior spaces that fit the function and atmosphere of my design, I could immerse myself in the designing of my interior spaces.

(p. 92, p.93) Additionally, I wanted to change some things about the massing of my design. As can be seen, I made multiple studies by drawing and rendering, ultimately deciding on removing the cylinder from my design, deeming it superfluous and taking too much attention from the sphere. Furthermore, the sphere is lowered by two meters, adding more connection to the ground floor.

materials // ground floor









materials // light façade











biodiversity, climate adaptation, functionality, spatial qualities and care and maintenance

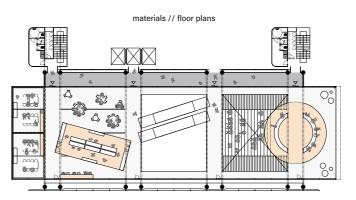
materials // interior







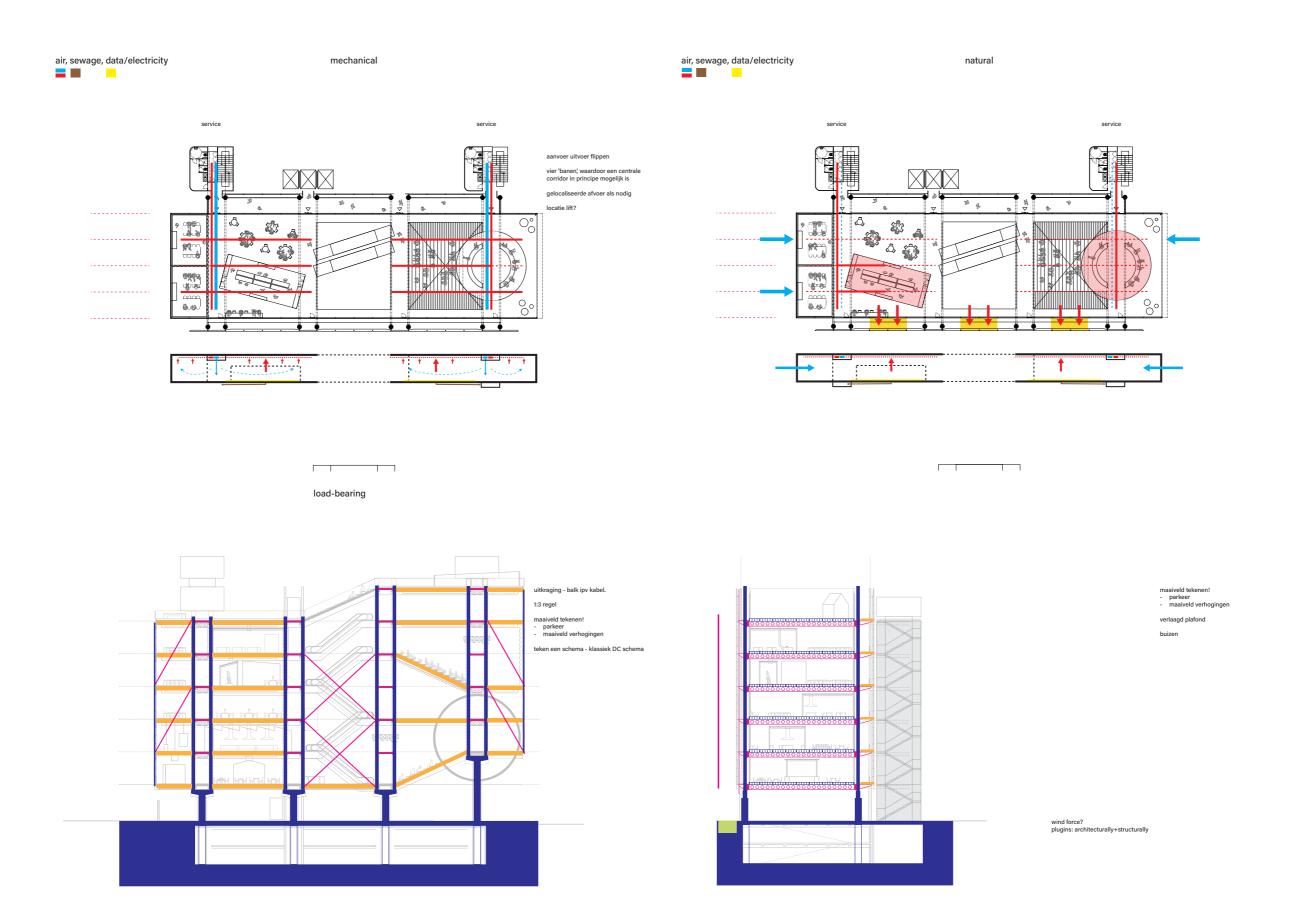


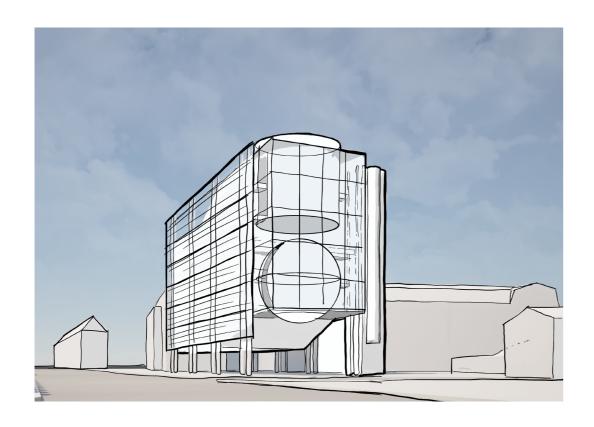


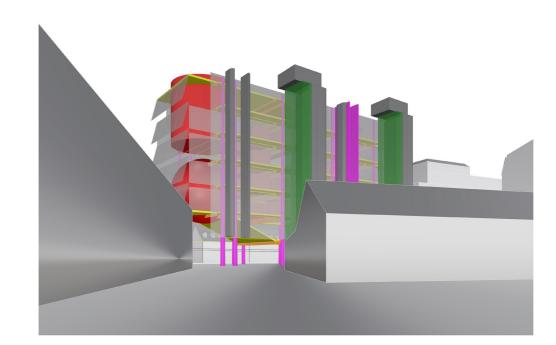


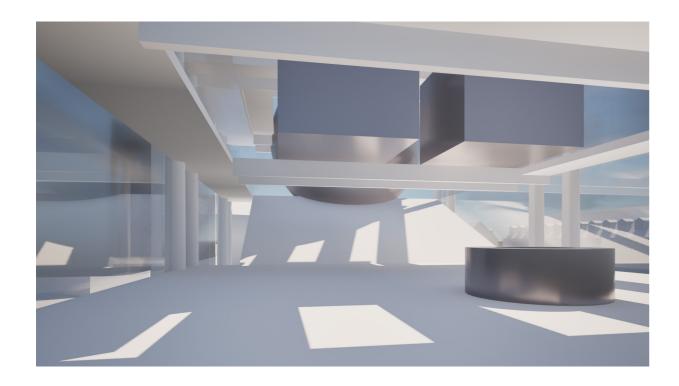


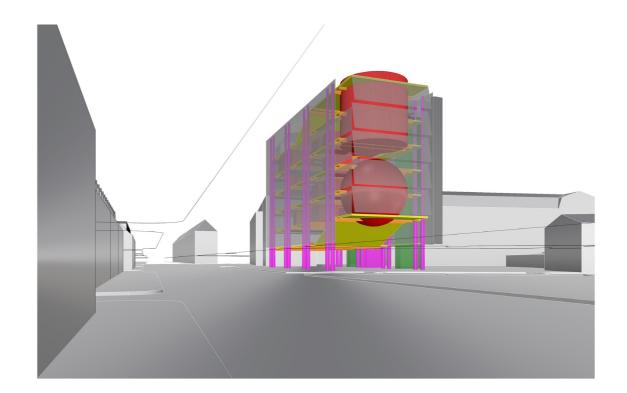


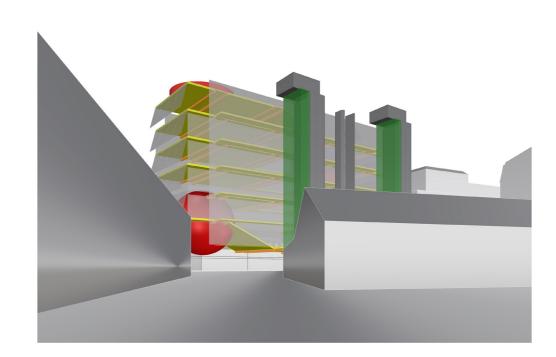


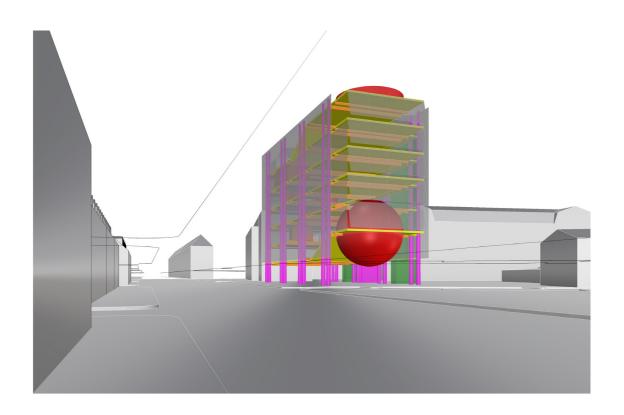




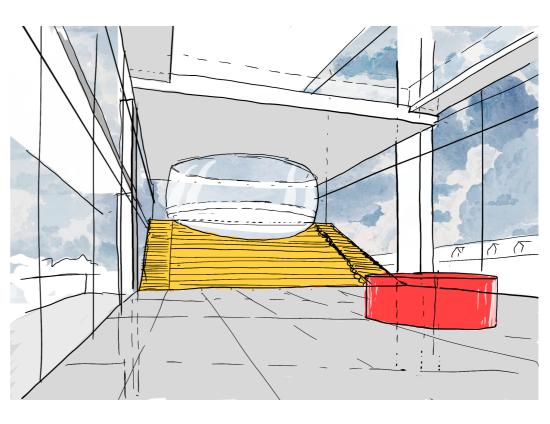












<u>week 3.10</u> 14.04 - 20.04

more renders and modeling

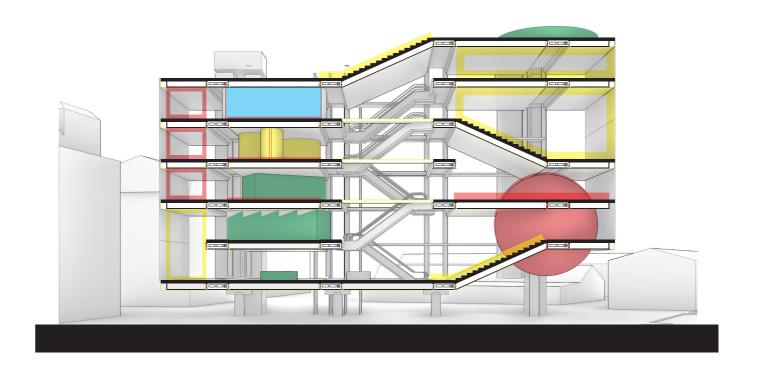
to get a better grasp of my improved section, I made two 3D-sections of my design. Together with Antonio, the decision was made to remove the top floor and add 500mm to each floor in order to increase visibility and reduce repetitiveness.

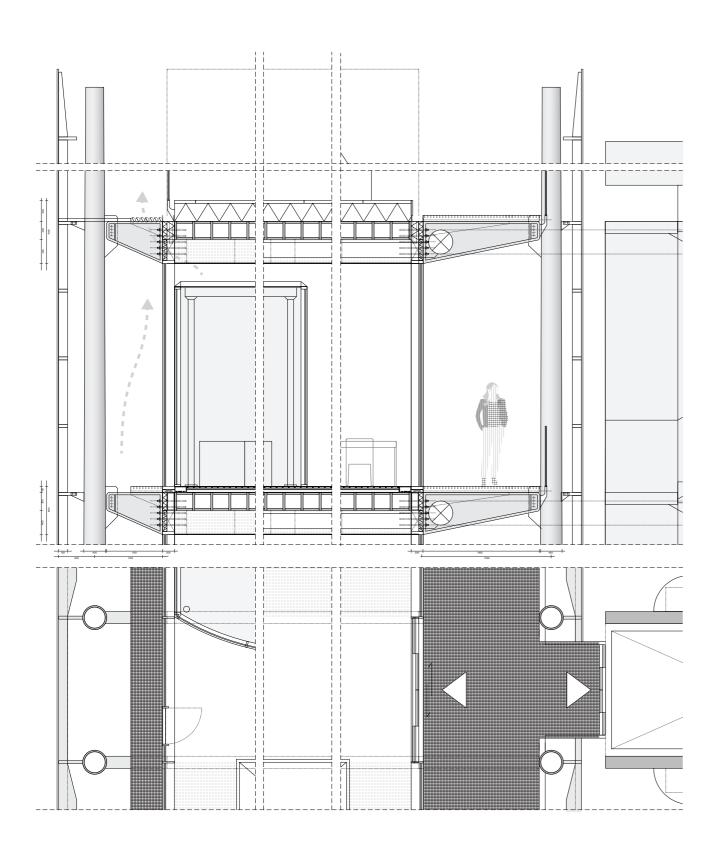
furthermore, I made an improved 1:20 fragment, incorporating feedback from P3.

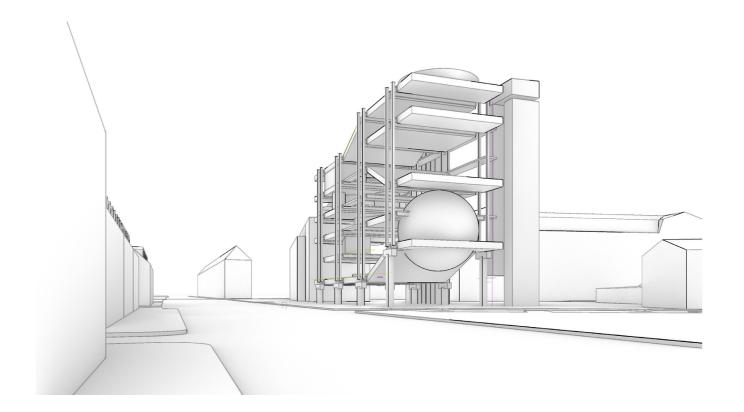
Finally, I did some studies on the 'feet' of the building, as of now the double columns were just extending towards the ground. Different options were evaluated, but I settled on a simple concrete column (d=1.200mm), branching into two hollow steel columns (d=600mm)

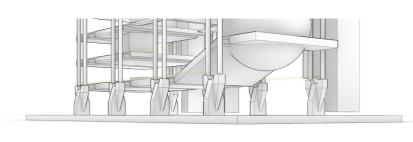
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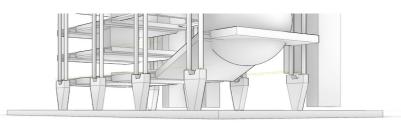


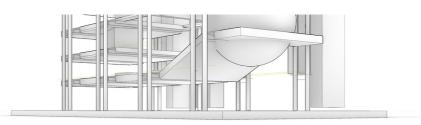












<u>week 4.1</u> 21.04 - 27.04

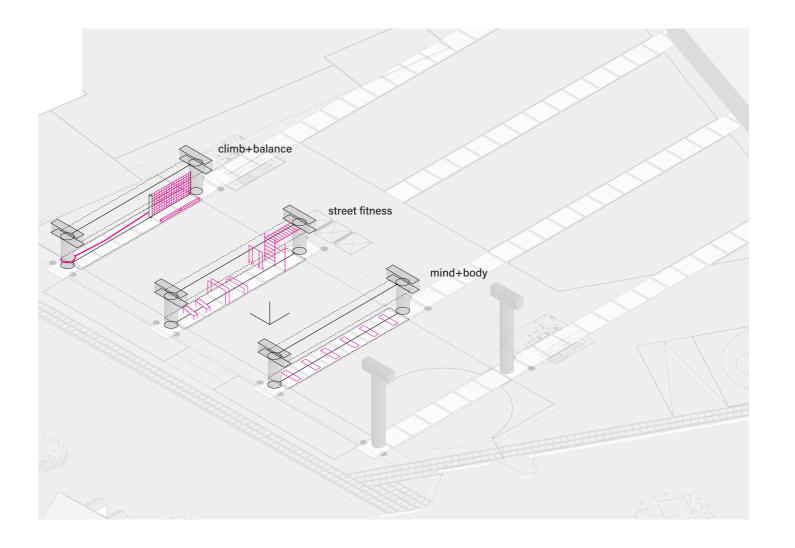
ground floor, façade

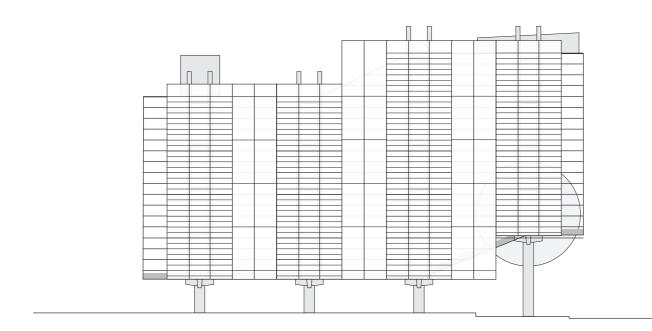
I made scenarios for the ground floor 'below' my building in the case that it is used for sports. Different types of activities, like climbing, workouts or yoga were planned ot be facilitated between the load bearing columns.

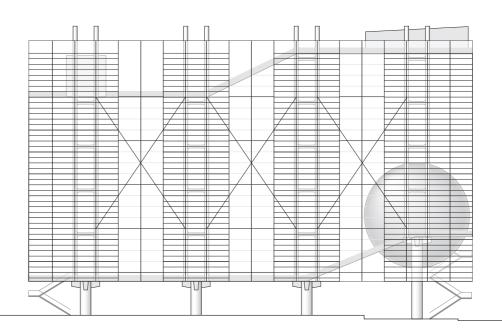
I made a start on façade studies. By looking both in elevation view, as well as in perspective, different options could be evaluated. I looked into 'opening up' the façade towards the ground floor, as well as breaking it up into multiple disjointed parts. In the end, I decided to use the strength of simplicity and design the double skin façade as one rectangular surface where the window frames dictate the rhythm and scale.

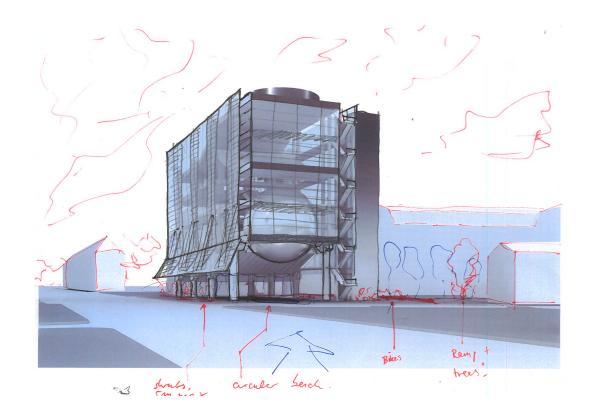


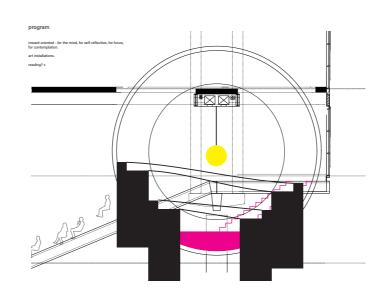
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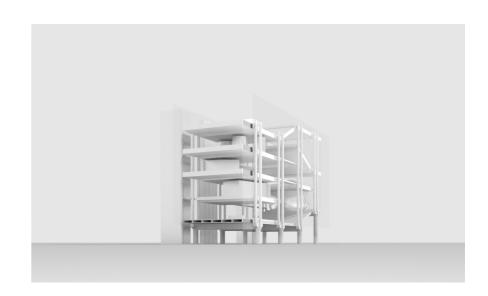


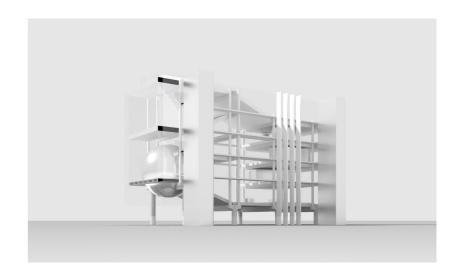












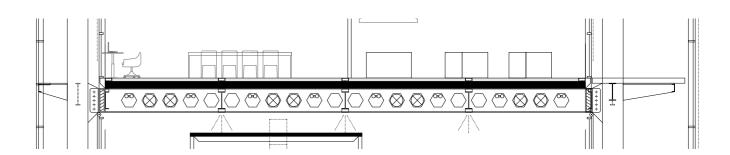
week 4.2 28.04 - 04.05

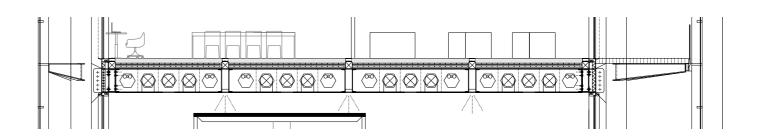
details, load-bearing, ground floor, elevations

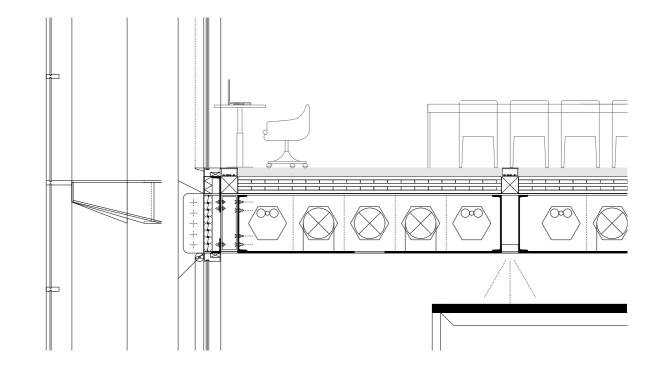
this week I worked out the building in more detail, drafting detail views of the façade, as well as multiple options for the load-bearing structure of the floors and the ceiling. In the end, I decided for glue-laminated beams for their sustainability, weight and strength.

(p.100, p.101) by designing the ground floor in more detail, I finally reconciled building and site by using the plugins as the interfaces, the mediating devices. Additionally, the plugins help in taking up wind loads.

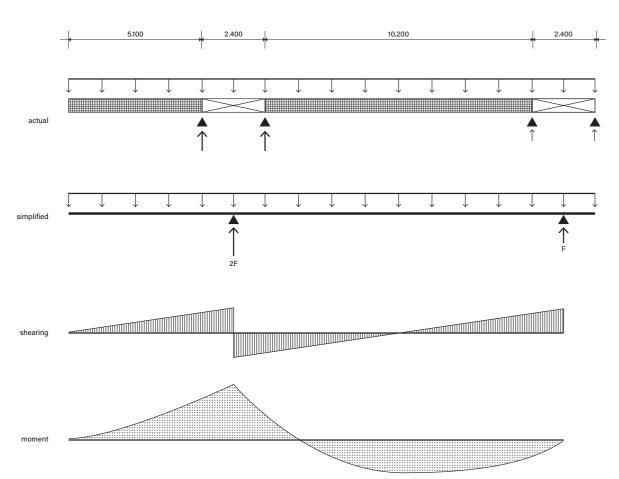
(p.102, p.103) the load bearing principle of the sphere, the exception in the otherwise repetitive load-bearing structure, was solved. By building steel rings in the floors around the sphere, the sphere could be suspended without beams cutting through it.



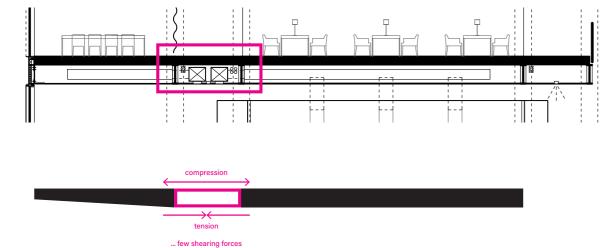


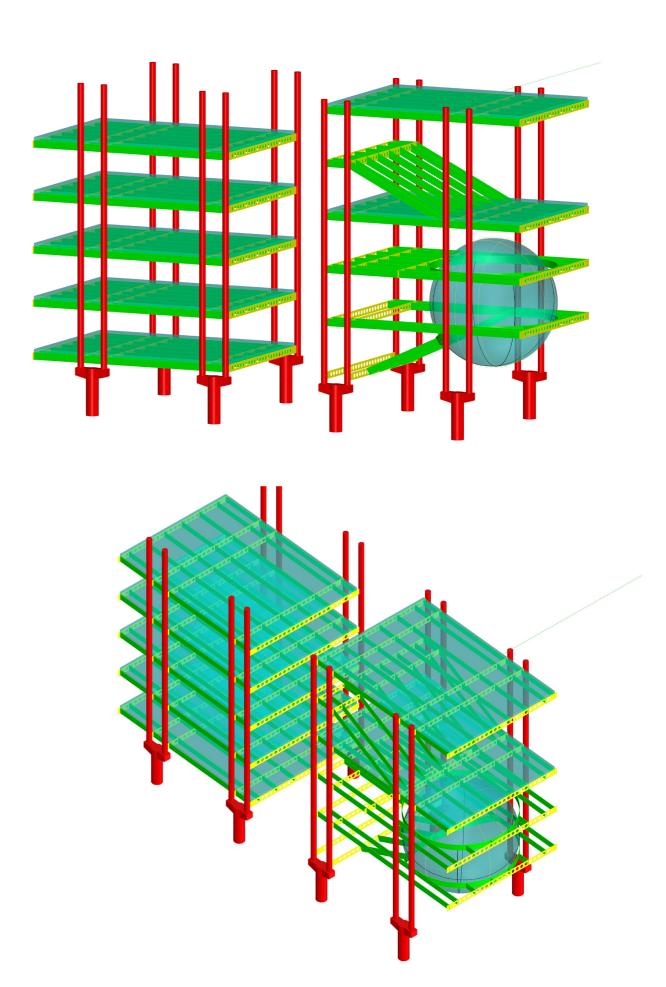


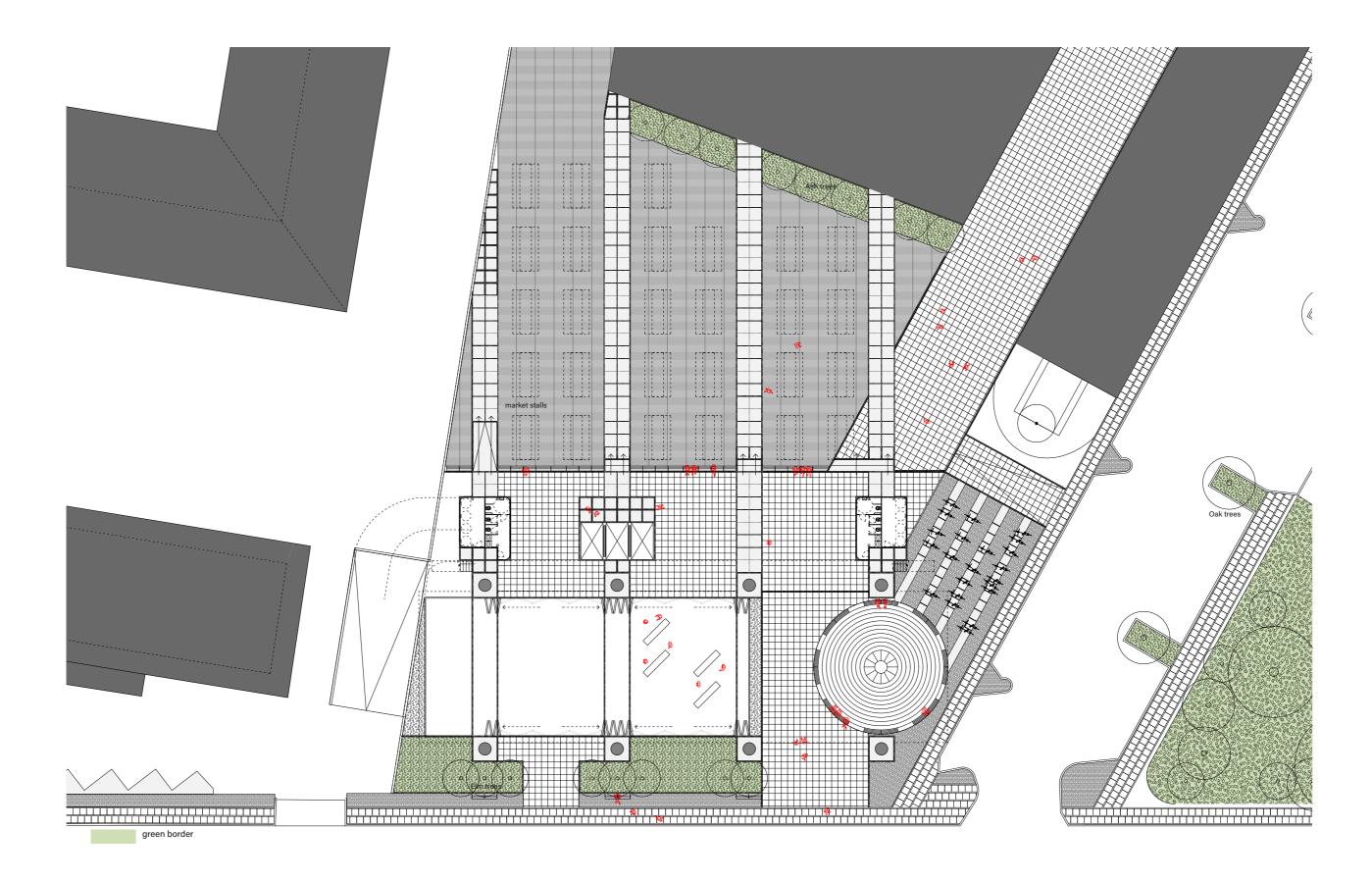
load-bearing principles

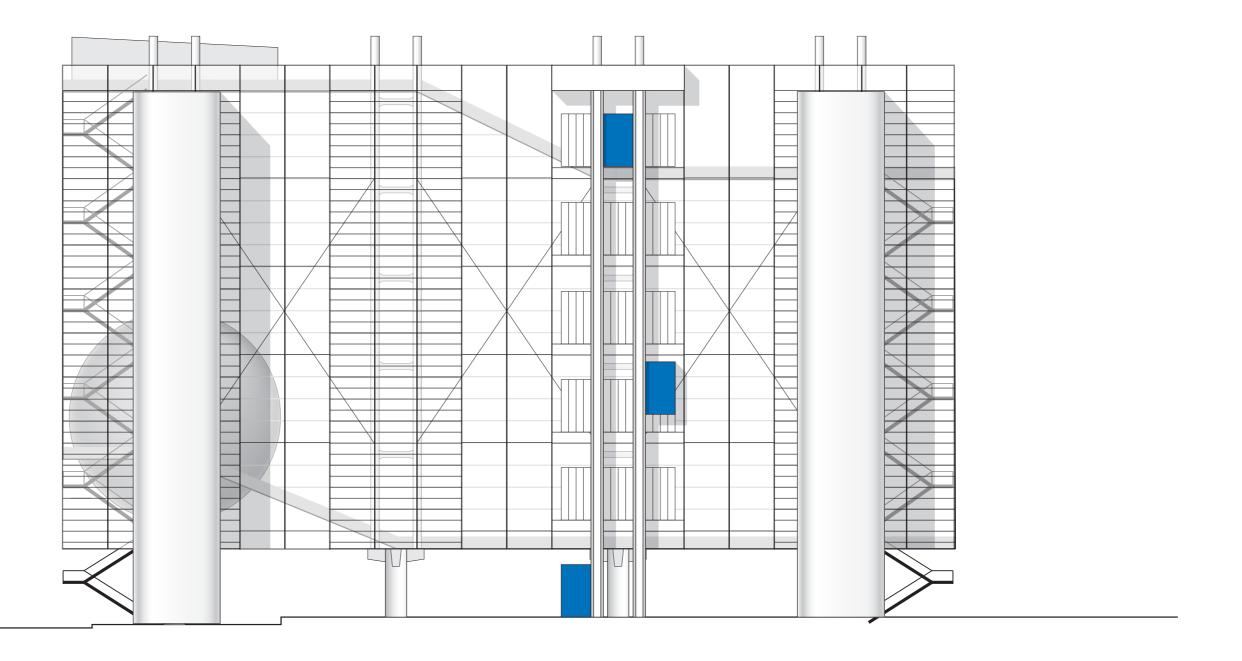


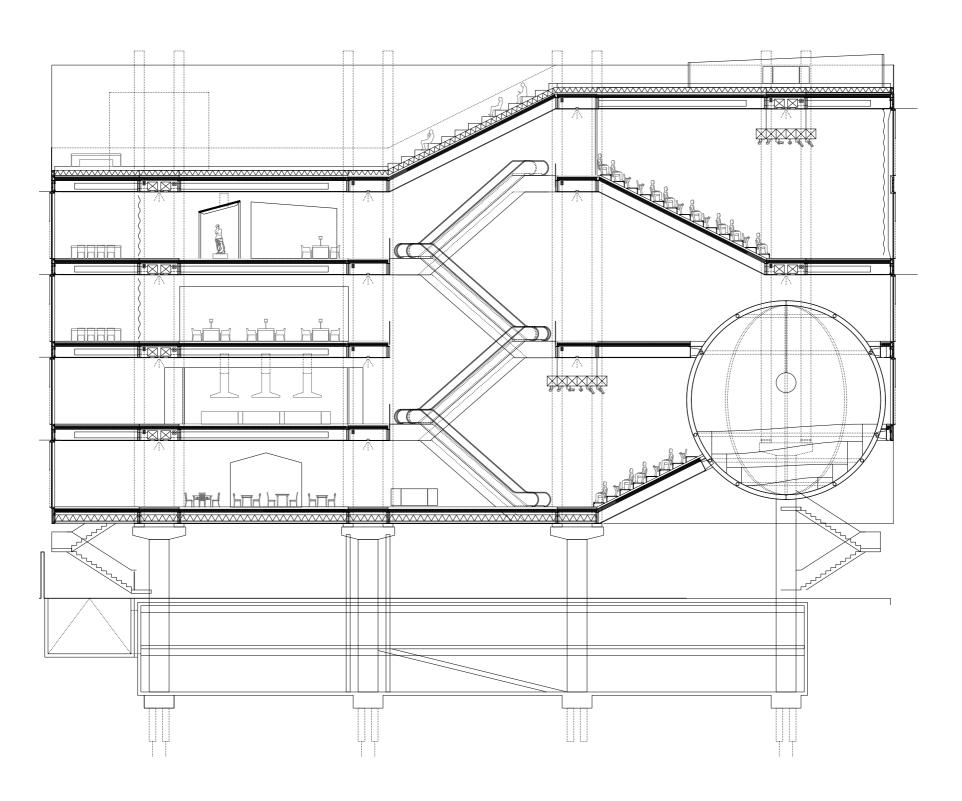
duct through highest moment

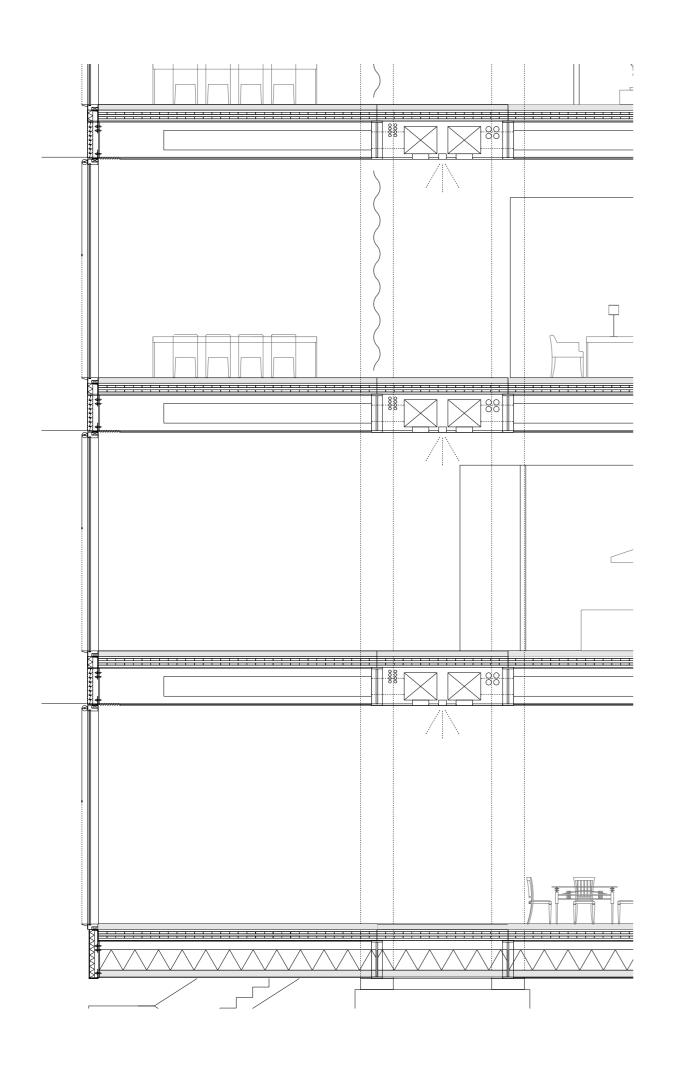


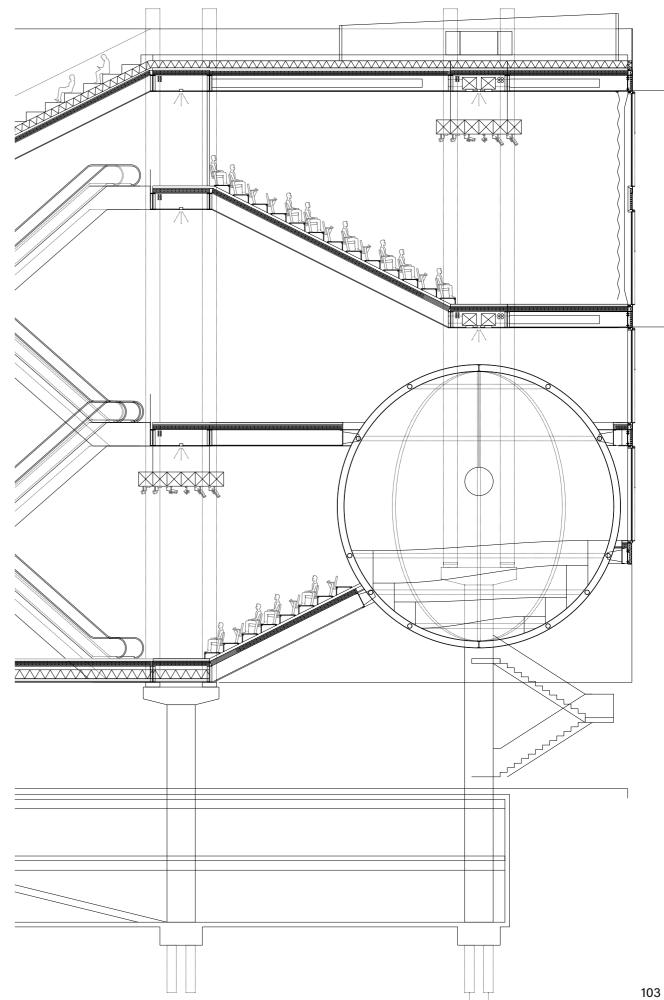










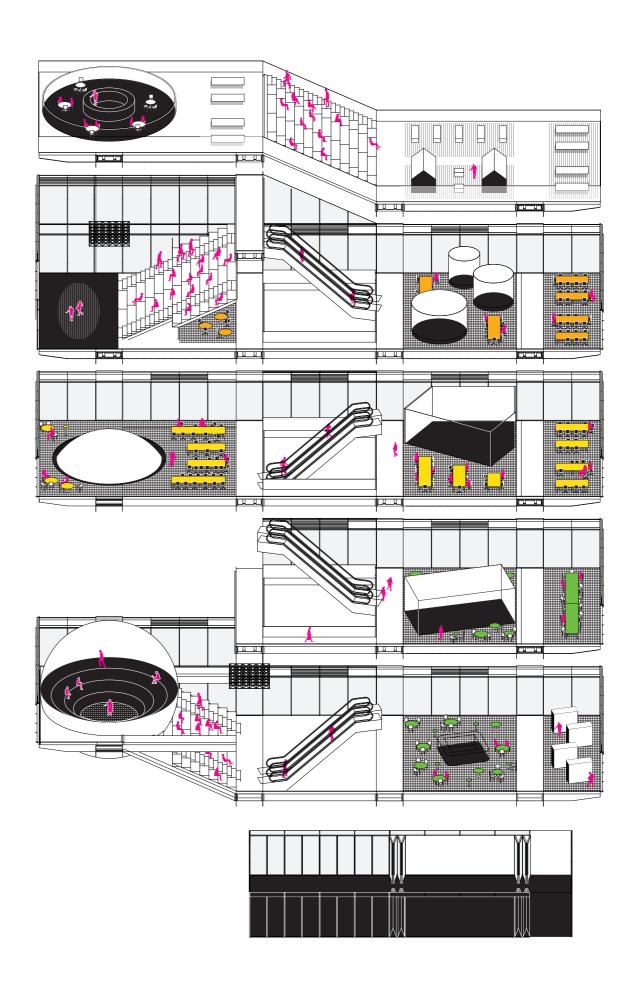


<u>week 4.3</u> 05.04 - 11.05

P4 preparations

the final week before P4 was mainly spent on building the final 3D model of my design, as well as taking care to match the visual language of the various drawings and diagrams. I spent quite some time on making photorealistic renders, combining street view photos and ray-traced renders in the rendering software Blender.

(p.107) finally, I made axonometrics that explain the concept in simple graphics.



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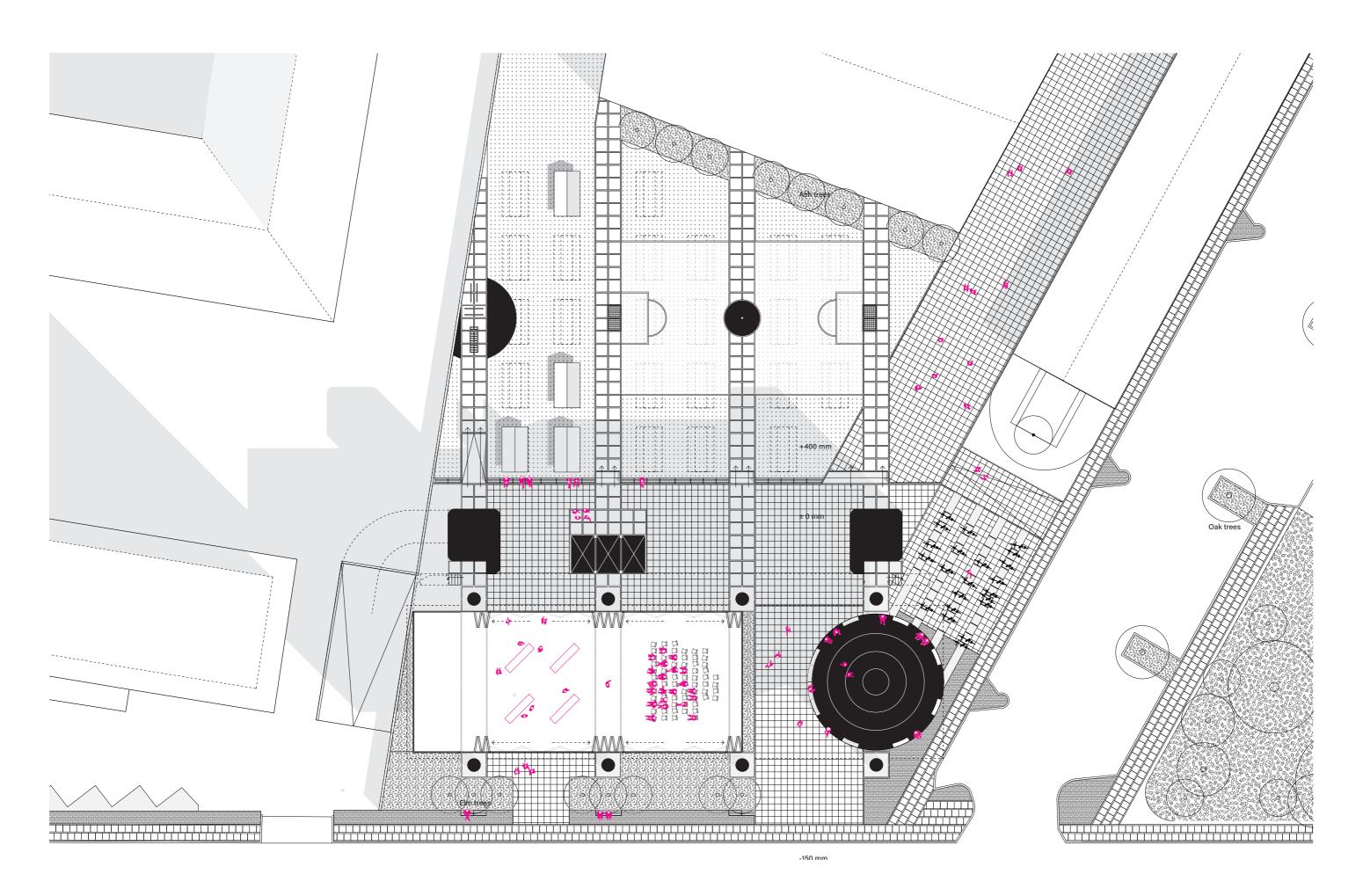


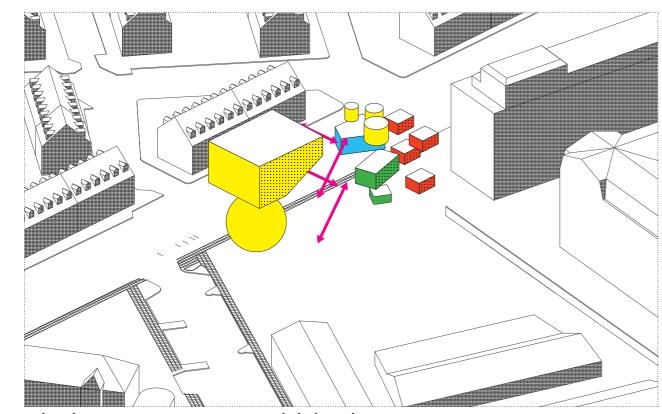




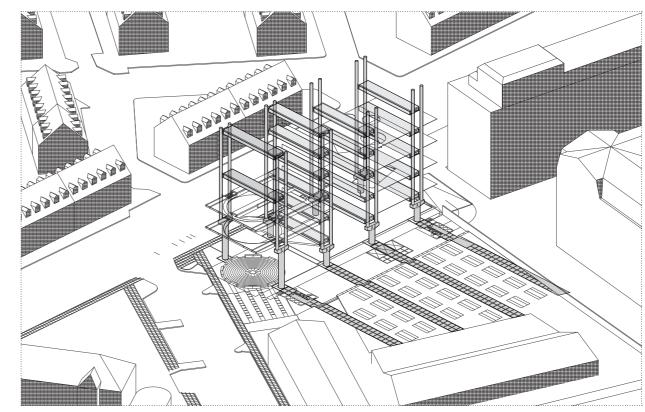








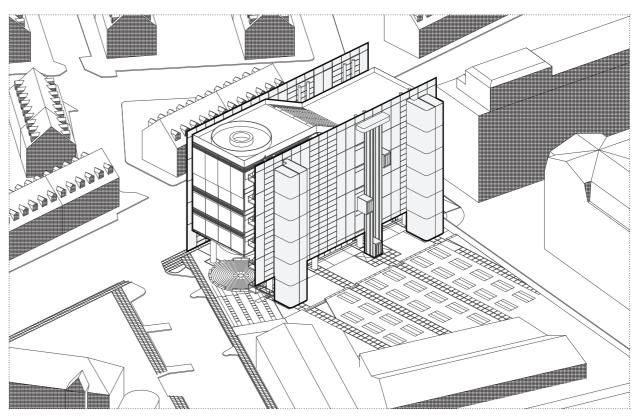
atlas in space - generate social density



support



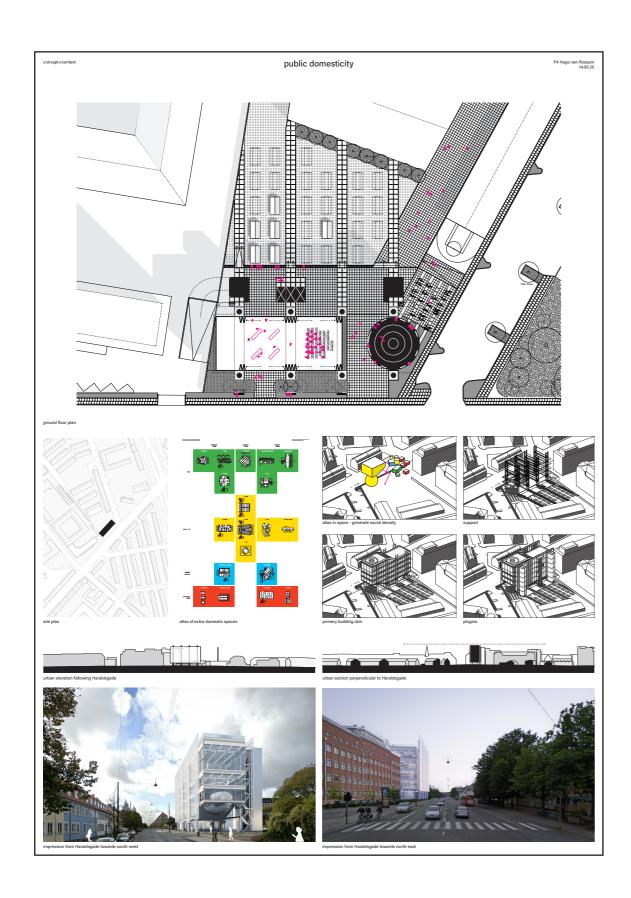
primary building skin

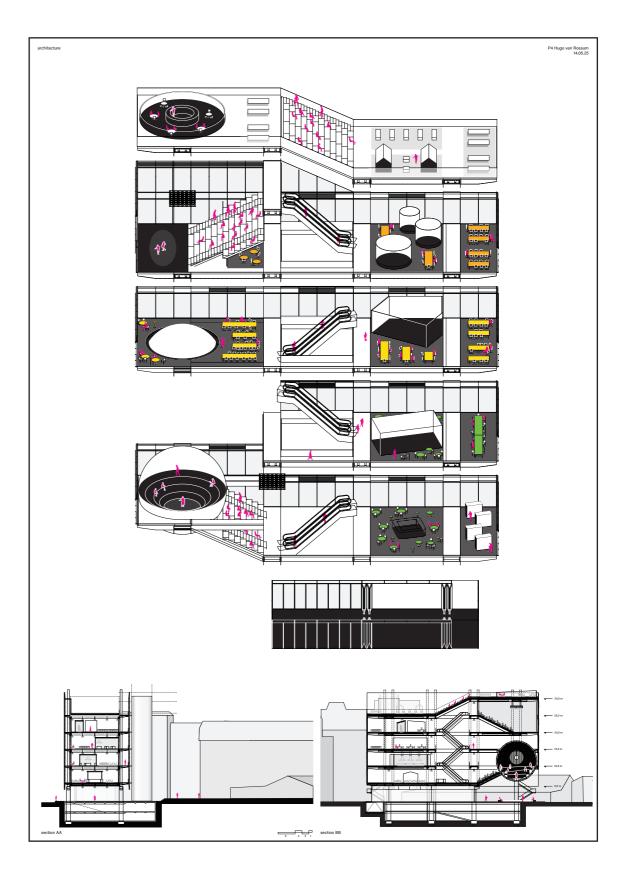


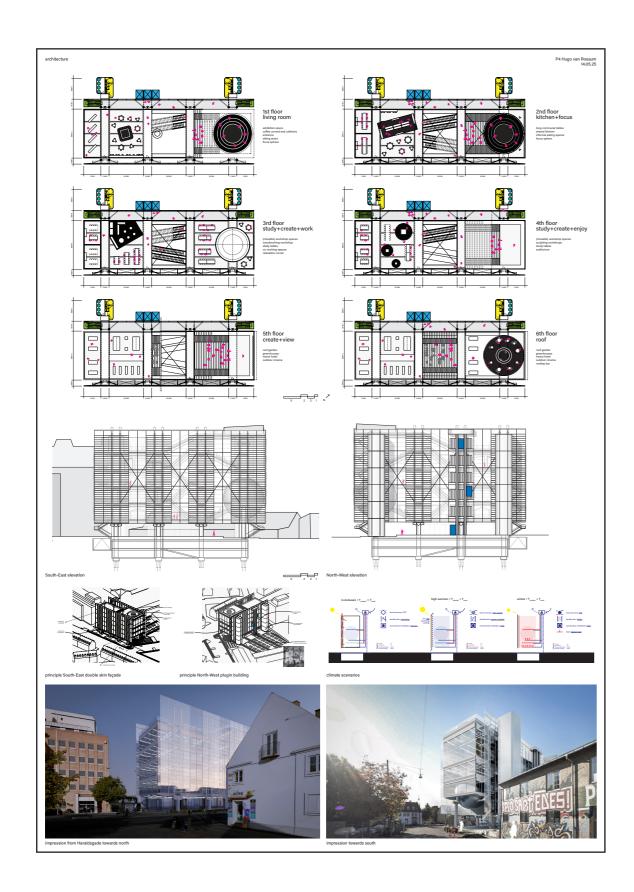
plugins

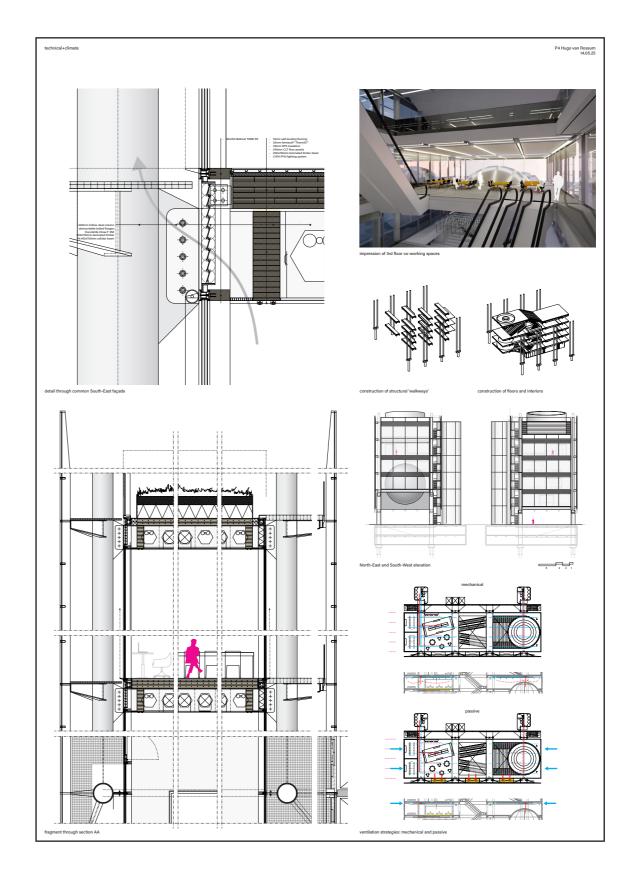
P4 posters

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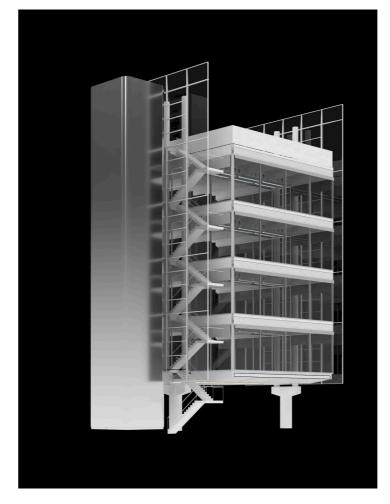
towards P5

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modelmaking

In the final weeks of this graduation project, I set out build a model of my design. The first decision that had to be made was whether to make a model of the entire building, presumably 1:100, or build a fragment in the scale of 1:50. Ultimately, I decided on building the fragment, because the 1:100 scale would probably drown out most of the details. As it turned out, details like shading, cellular beams and ventilation grates would have been a great challenge, seeing as they were challinging in their own right at 1:50.

After more than two weeks, I took the model into the photography lab in the basement and took some high-quality images with the proper lighting.





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first, I made a digital model of the fragment that I wanted to make. By tweaking at what point the model is cut, and what details to include, I could make a concrete plan for building. the cellular beams being spraypainted. Almost all complex parts of the model were 3D printed by me, mostly overnight. The daily routine consisted of 1) cleaning the fresh printed parts 2) painting 3) glueing 4) modeling the parts for the next day.









foam blocks were used to precisely space the floors before permanently attaching them to the external columns. By using high-strength epoxy glue, the model became quite sturdy, despite the single legs which support it. exciting moment: the model can stand without foam support. The feet are bolted to the MDF base, so the model can be taken apart if needed.

the shading is attacked. By using a blueish gray thin cardboard, glued to a spraypainted wooden stick, the illusion of a rolled-up external shading can be achieved.

final touches: ventilation tubing, flooring, and some furniture finish the model.

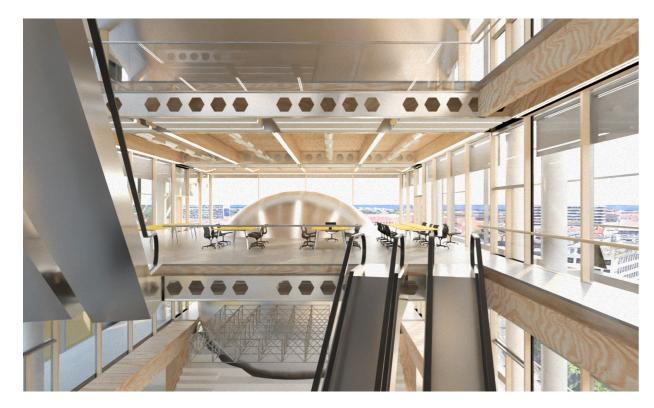
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rendering

Making renders was another task that would 'humanize' my design. By visualizing how the design is experienced, one can imagine oneself to study there, or perhaps follow a workshop. Most images are composites of raytraced renders from Blender, environmental imagery from google maps or the site visit and cut-out people to give the images life.

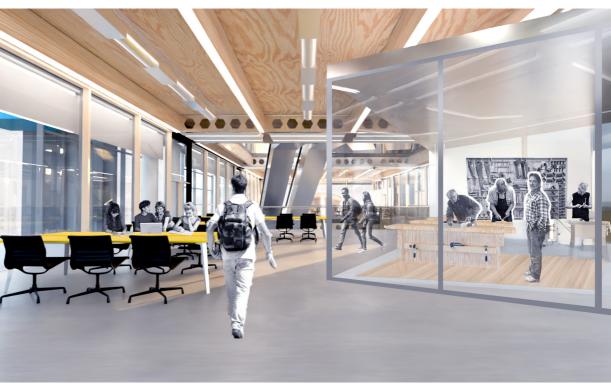






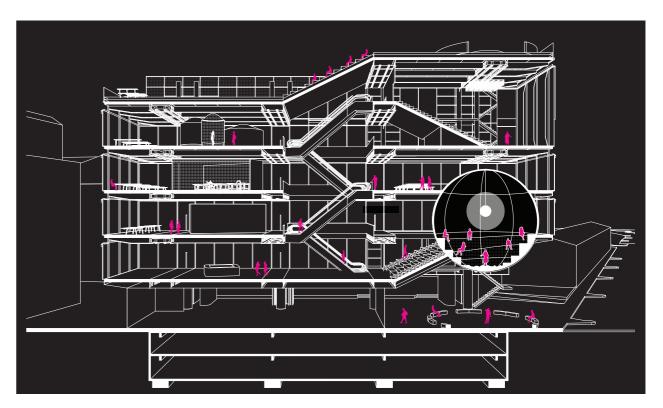


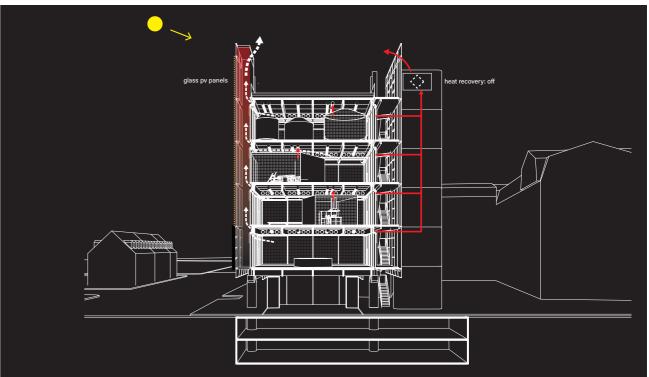




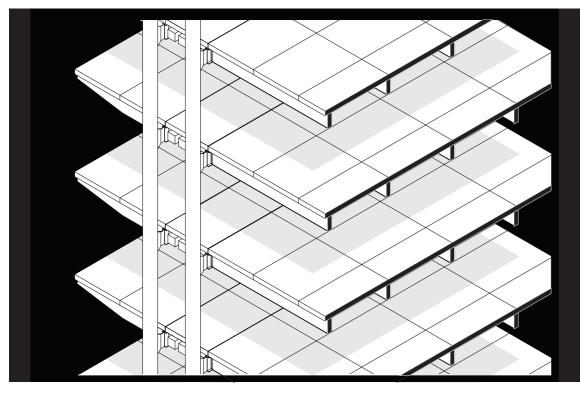
axonometrics + sections

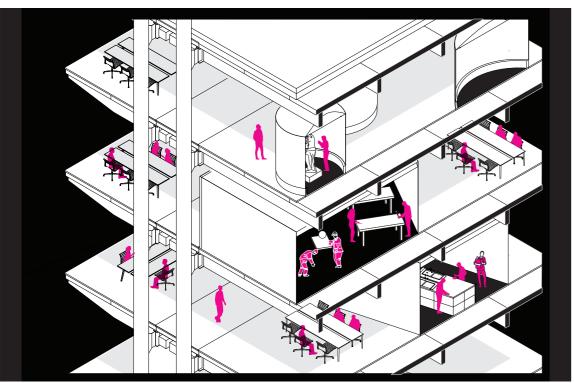
The final segment of my preparations for the P5 presentation consisted of 3D-sections and axonometrics. The sections were made to further illustrate the spatial qualities that are created throught the structure. The axonometrics were made in order to elucidate the construction process, as well as the logic behind the structural system.





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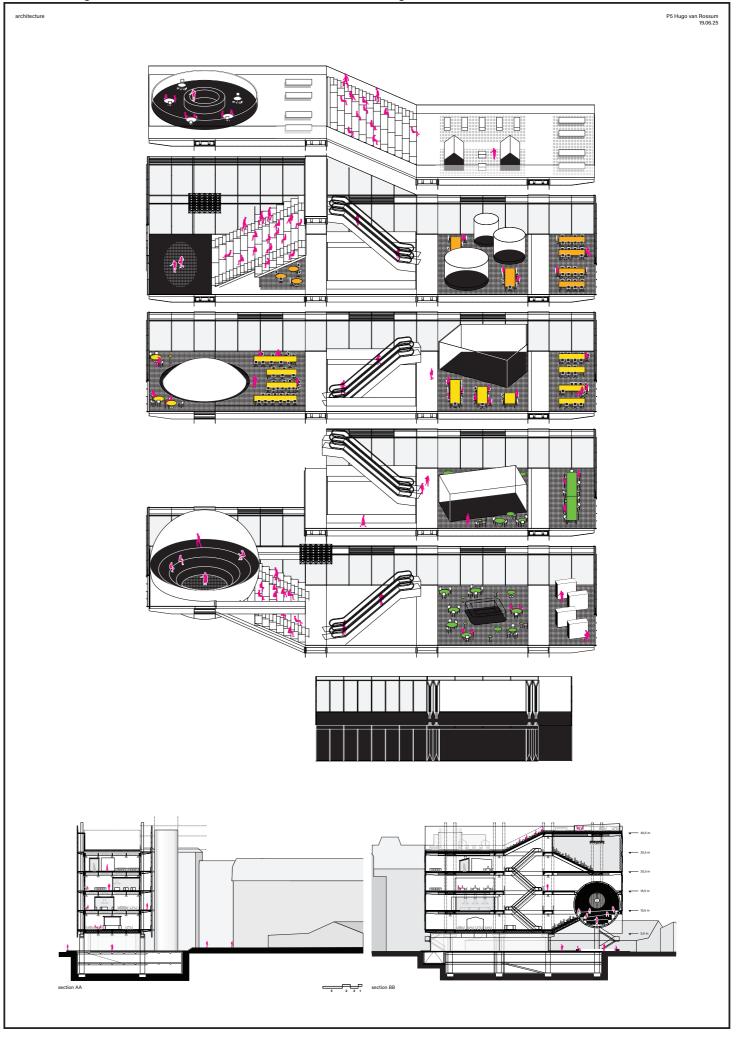




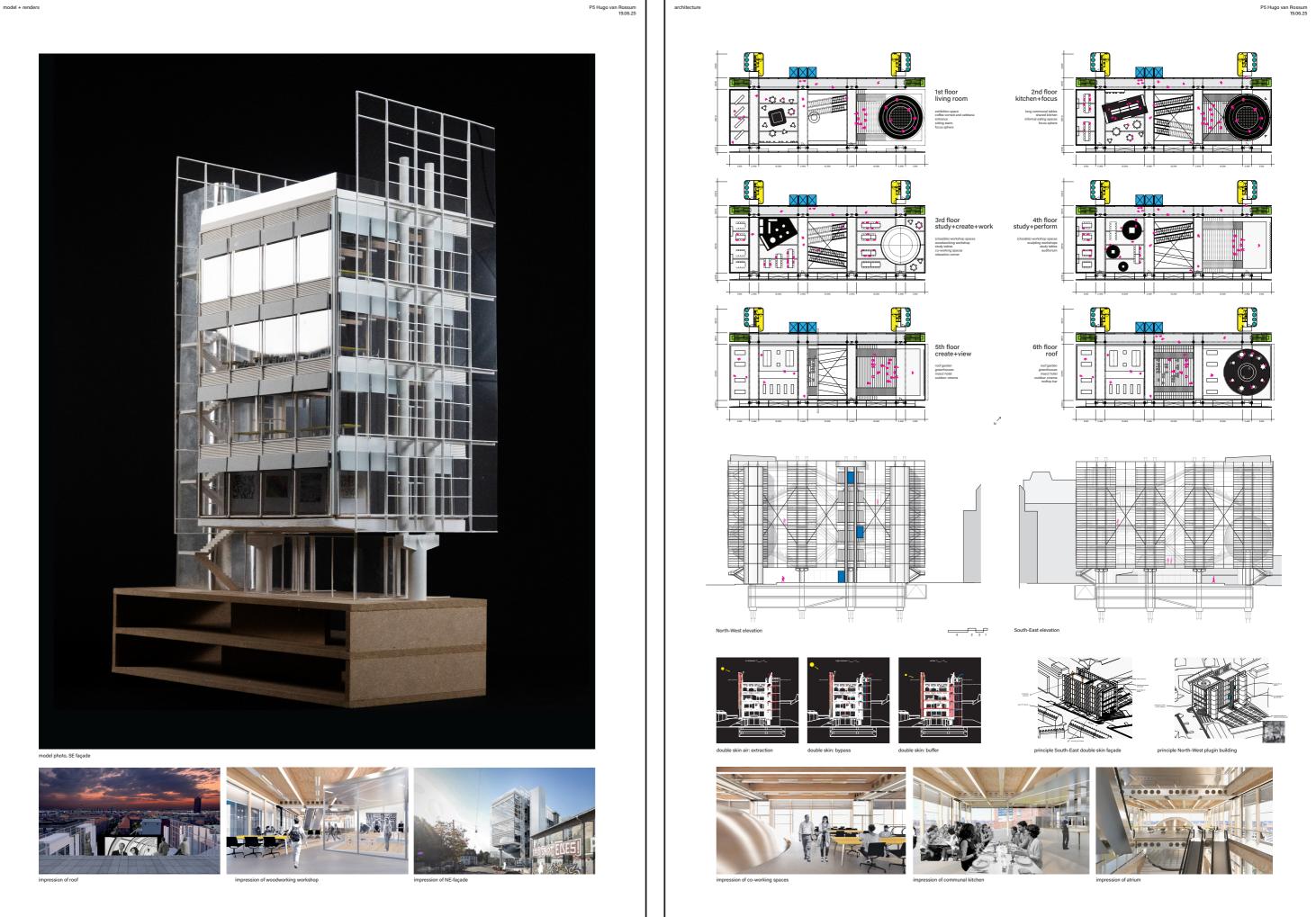


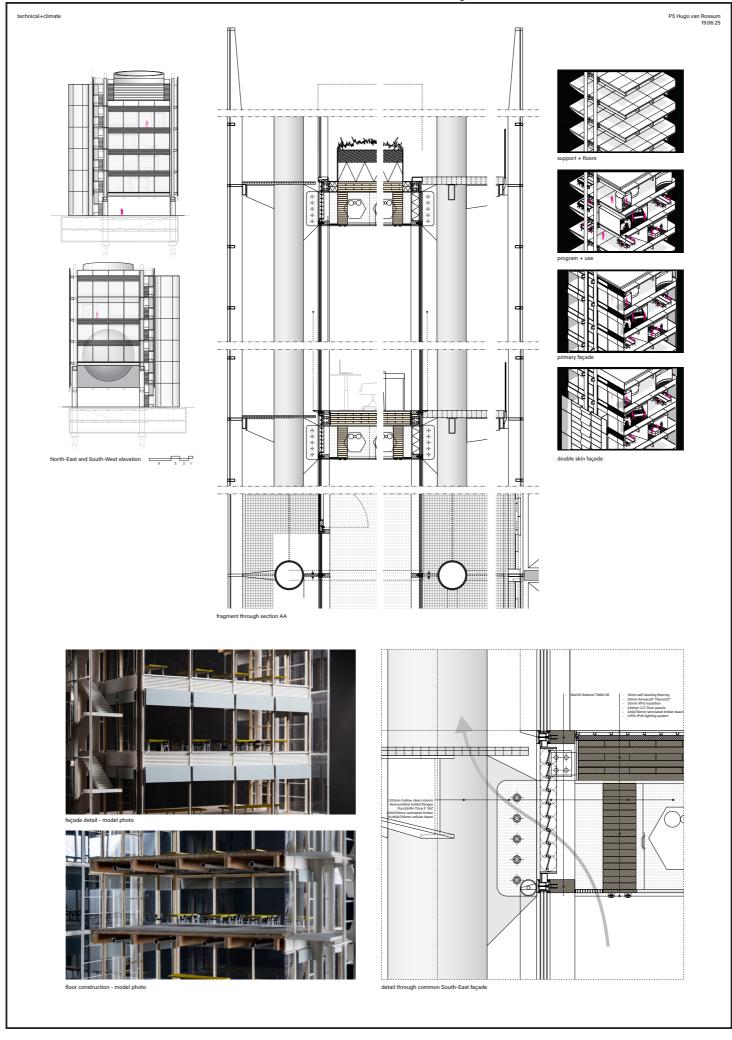


P5 posters + model photos

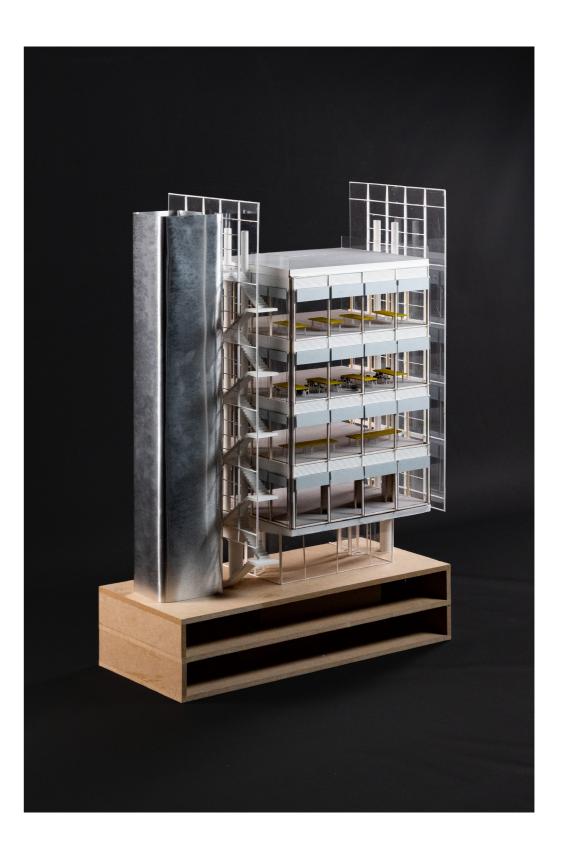


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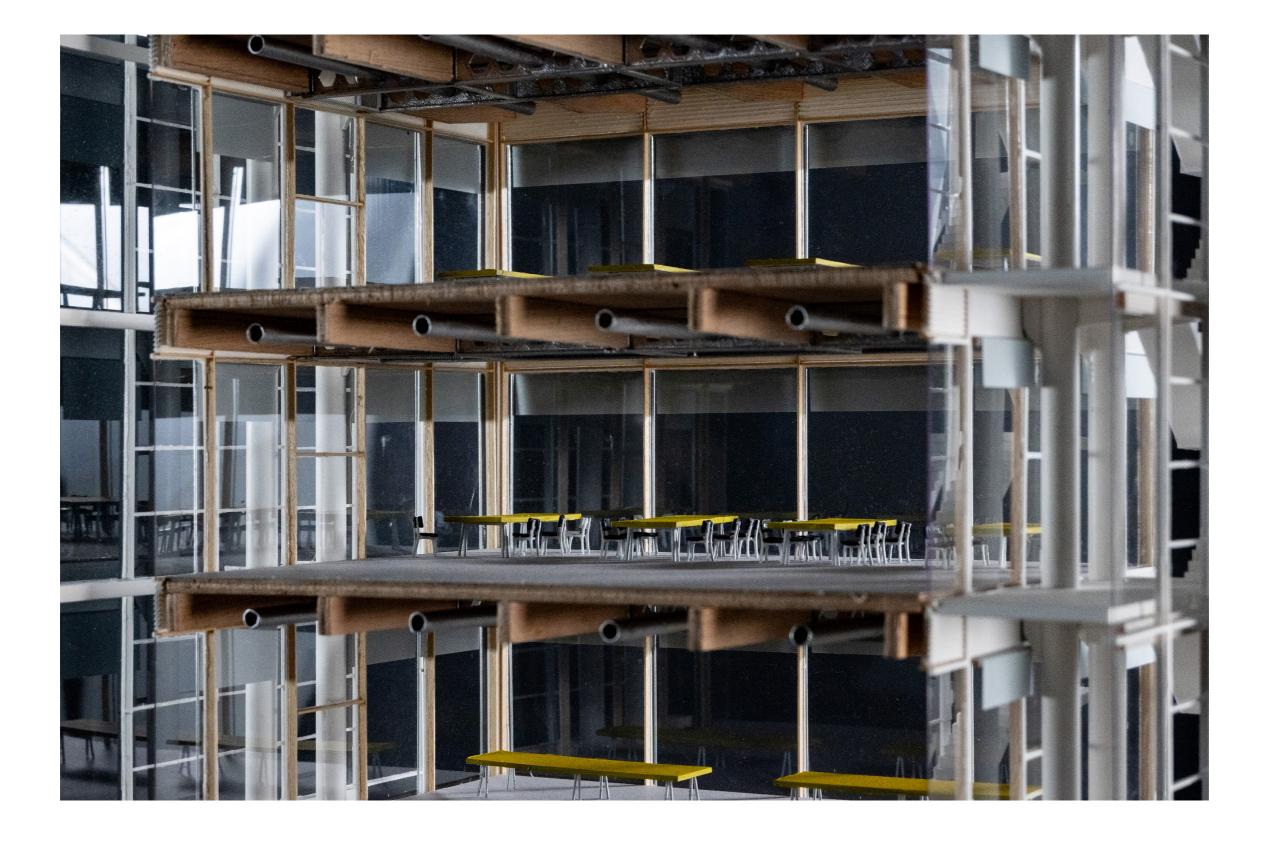












reflection

P4 Public Condenser – Reflection Hugo van Rossum, 07.05.25

Reflection on research-by-design process



P4 Public Condenser Hugo van Rossum

Tutors

Dr. Antonio Cantero (PD)
Ir. Ger Warries (TBD)
Dr. Sang Lee (TD)

Delegate or exam committee

Erik Louw

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Chair of Public Building Group:

Prof.ir. Nathalie de Vries

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P4 Public Condenser – Reflection Hugo van Rossum, 07.05.25

Introducing the studio

Set in the Haraldsgadekvarteret, a simultaneously post-industrial and residential neighborhood in Copenhagen in the district of Ydre-Nørrebro, this graduation studio revolves around the design of a public building, specifically a Public Condenser. Rather than a conventional brief, where a full program of requirements casts the design into a pre-determined mold, the Public Condenser assignment necessitates research into the local context to create an individual approach to the building program.

On the study trip to Copenhagen at the beginning of the first semester, we got the chance to get a feel for the local context. The Haraldsgade-kvarteret, bordered by Tagensvej, Jagtvej, and Lersø Parkallé, is a neighborhood shaped by modernist planning principles from the 1920s and '30s, where functions are rationally divided into urban islands with distinct typologies—from small-scale housing to repurposed factories.

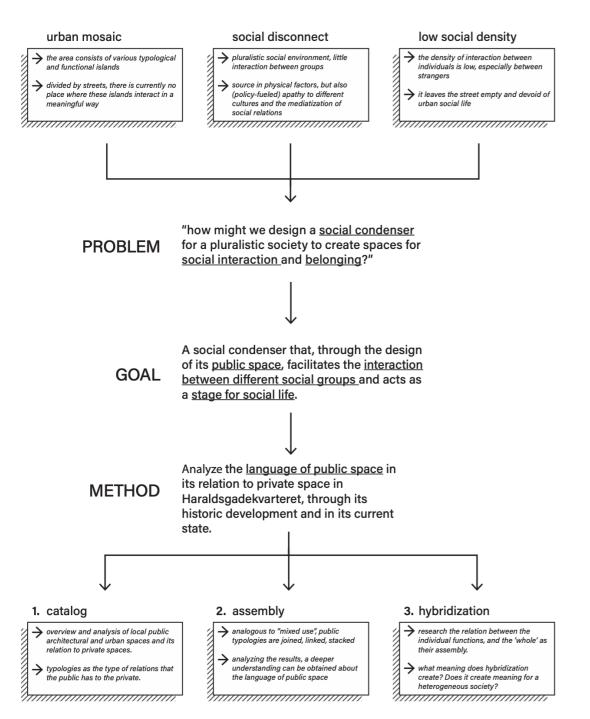
From interviews conducted on site, residents expressed a clear need for spaces to study, socialize, or engage in sports—spaces where they could informally and meaningfully meet one another. As every building responds to a need, I concluded that what Ydre-Nørrebro needs is density. Not population density, as that is already well the case, but social density. Density of information, density of interaction, density of diversity. Social density refers not merely to the number of people in an area, but to the intensity of social moments—ranging from a conversation to a simple glance or shared presence. This kind of density has been eroded by increased urban scale, speed, and digital mediation, leading to what Koolhaas has called the 'evacuation of the public realm.' The ingredients are there, but currently there is no place where these could interact in a meaningful way. My approach for a public building was to be a dense building where unexpected encounters occur between those who normally would not meet. A public building that, instead of a Public Condenser, might be called a Social Condenser.

Intention of research

For my research plan, I set out to research how to "animate" public space, to increase its social density. This ambition was initially fueled by my readings of Henri Lefebvre, Jan Gehl and Richard Sennett. It fascinated me how they talk about the city as a social device, as a mediator of social relations and daily lives. This notion of Sennett's civility, the apolitical public realm as described by him translated to a public building, was something that I wanted to see in my design for the Public Condenser.

What I set out to do, as described in my research plan, was to make an index of various 'social topographies', a sort of catalog where social urban typologies (like streets, squares, parks) are described and their effect on the social density researched. My plan was to conduct this research in a three-step manner: (1) catalog (2) assemble (3) hybridize. I would make the catalog by researching the context; I would re-contextualize these typologies or urban fragments and combine them into something new and finally I would research the effect of these hybrid forms and programs. A diagram showing the research plan is visible on the next page.

P4 Public Condenser – Reflection Hugo van Rossum, 07.05.25



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research by design process

In the time after P1, I spent quite some time further researching what the public realm means to me, how it works in generating social density and how this might be translated into an approach for my public building. Something that kept returning in my readings was the idea of the urban street as the typology where movement is combined with destination, where necessity creates an environment which has the potential to transform physical human density into social density. For P2, this idea resulted in the concept of the vertical street, both circulation and destination at the same time.

In the meantime, I was researching the functional and spatial structure of high-tech architecture from the 1980s, especially works by Richard Rogers and Renzo Piano. The reason for this was twofold. First, 'inverting' a building moves the building systems and the movement of people towards the exterior. The traditional façade ceases to exist and is replaced by different manifolds or interfaces that mediate between nature, human and machine. This might reduce the barrier between building and city, since the building's functionality is projected towards the exterior and thereby extends an invitation to explore. Elements like an external vertical street, or transparent elevator, have the potential to animate the surroundings by their movement and visibility of social interaction. Secondly, the approach of inside-out architecture lends itself to designing more transparent floorplans and sections, creating the possibility for unexpected encounters between users and the mixture of different activities and target groups.

I had imagined the steps of (1) catalog (2) assemble (3) hybridize as pure research steps, culminating in a body of research that could be an input to my actual building design. However, it turned out to be both the structure of my research, and my design. First, I made a (1) catalog of users and their needs. (figure 1). I did not plan for this in my research plan, but it was a crucial part in determining the functional program for my design. Secondly, I made a catalog of 'nuclear' functions, that could answer to these user needs (figure. 2), and researched their needs.

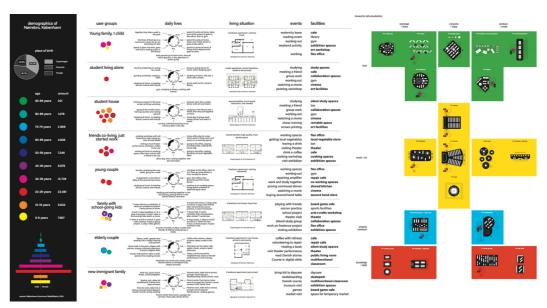


Figure 1. user atlas

figure 2. Functional atlas

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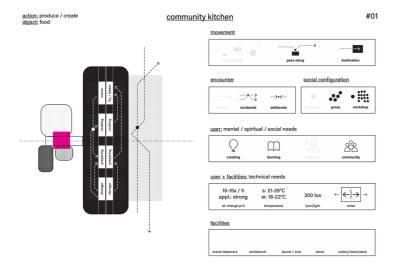


Figure 3. datasheet of functional element

The (2) assemble step similarly was, instead of 'dry' research, an active research-by-design process. By researching sections and different ways of bringing various functions together, I made a collection of schematic sections, as well as finally a dynamic section. (figure 4 And 5)

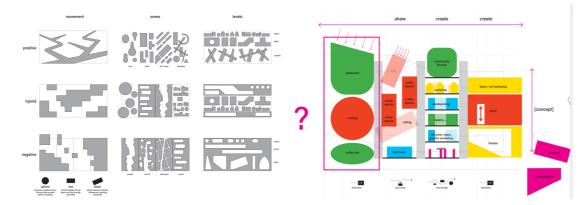


Figure 4. schematic sections

fig. 5: one iteration of building section

Finally, for the final step of (3) hybridize, I looked at what the final building can do, how it can perform. By analyzing scenarios, thinking of different ways it can be used, I was gradually changing the point from Hybridization to Multiplicity.

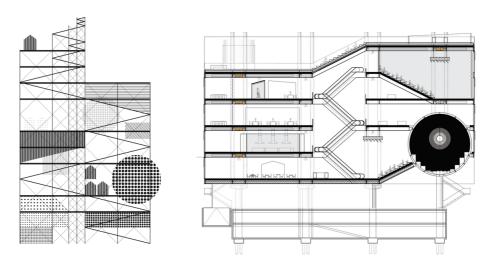
P4 Public Condenser – Reflection Hugo van Rossum, 07.05.25 19.06.25

Reflection and evaluation

As already described, the research plan outlined the plan for an ambitious, time-consuming, yet at the same time somewhat vague body of research. While initially being frustrated that I could not make it work while also designing a public building, I managed to redirect my research plan into an approach for my research-by-design process. By using the three stages of research that I outlined in my research plan, I structured my research-by-design process in a manageable way, while yielding a design that in a way responds to the initial problem statement and design question.

As a point of self-criticism, It would have been better to devise a research plan that is more executable and straight-forward. It would have spared me quite some frustration and tangents. I found it quite challenging to mentally divide researching and designing, therefore making the process at times a bit unclear. It would have been more beneficial to structure beforehand what a research-by-design process could look like. However, by taking time to reflect on what I've been doing, as well as by receiving useful feedback every Thursday, I have been able to stay on track and keep my initial direction. As an illustration, below is a diagram I made for P1, and next to it my current section for the upcoming P4 presentation.

The project's relevance to the larger social, professional and scientific framework is a continuation of the used design methodology, where the public building is a collection of smaller nuclei, generating an 'inside' and 'outside' where different amounts of determinacy generate a potential for multiplicity and self-determination in the building's use. Additionally, by revising the high-tech movement as a potential for sustainable and social buildings, I think my project can be a way to celebrate these various ways of making the built environment less polluting and less invasive.



Ambitions until P5

The final part of this process is undoubtably making a scale model that brings my project to life, and to add finishing touches to all drawings. It is important to bring the project to life, and show that it is a valuable addition to the lives of the people living, working and passing through the Haraldsgadekvarteret.