House of Crafts

Research-by-Design Journal

Contents
(This will need adjusting)

Graduation plan	1
Reflection	3
Research	4
Social groups	5
Human spatial behaviour	11
Design principles	19
P1	20
P2	22
References	39

Graduation plan

Argumentation of choice of the studio:

The public building studio challenges a student to evaluate an area, understand its socio-urban context and interpret issues that exist into a design proposal. This provides an opportunity to explore how architectural design can influence activity and experience within the built environment.

Location: Nordvest / Bispebjerg Bakke, Copenhagen, Denmark

The posed problem:

Over the past century, globalization has facilitated movement of people varying in ethnicity and cultural background leading to cities that are by definition highly diverse, becoming even more diversified (Nielsen et al, 2016). Whether this be refugees escaping war and economic turmoil or more simply expats choosing to live in a place that is more suited to their lifestyle. However, studies such as Beckman et al (2015) have found that coexistence of different groups alone does not facilitate substantial interaction between them. Without substantial interaction, groups are at risk of being stigmatized (especially along the lines of ethnicity, culture and economic class) which can lead to these groups becoming segregated from the rest of society.

As the capital city of Denmark's social welfare state, Copenhagen on the one hand has attracted migratory movements and then felt the resulting social stigmatization on the other. This is apparent in the Danish Government's 2018 initiative labelled the Ghetto Plan, which aimed social integration between 'Western' and 'non-Western' residents by reshaping demographic distributions in certain neighbourhoods (Justice Initiative, 2024).). However the legislation faced global criticism over concerns that it disproportionately targeted non-European backgrounds, specifically from countries in North Africa and the Middle East (Math, 2021). The legislation cited for a residential area to be determined a 'ghetto' it must have a threshold of 50% 'non-Western' residents and meet two of four criteria relating to unemployment, criminal convictions, low education and household income (Sorensen et al., 2024). The term 'non-Western' expands to citizens born in Denmark with one or more migrant parents and residents who were born in 'non-Westen' countries that later obtained Danish Citizenship (Bendixen, 2020). If these criteria are met, the residents face forced evictions and the property will be sold off to the private sector (Justice Initiative, 2024). In effect, the Ghetto Plan lays the foundation to remove 'non-Western' residents to make way for 'Western' replacements.

While at a district level Bispebjerg is widely regarded as one of the most diverse areas in Copenhagen, both in terms of its built environment and the social composition of it residents. The connection between residential typology and the residents these house, has formed socio-economically segregated areas at the neighbourhood level and smaller (Beckman et al, 2015).

At the higher end of the socio-economic scale, more affluent residents dominate the social composition of detached housing areas in the west of Utterslev and to the north in Emdrup. They are primarily middle-class Danish families, often with a background in higher education with extensive socio-economic connections. Whilst there is a high degree of social cohesion within these areas, the residents do not have extensive interactions with residents living outside of the housing estates (Beckman et al, 2015).

Lower down the scale, retired Danish natives live in the terraced blocks that were built to house workers during Bispebjerg's industrial past. Many of these residents have lived within their homes for the majority of their lives and as a result, the composition of their social networks are homogonous not only in age, but also ethnicity, attitudes and lifestyle (Beckman et al, 2015).

In contrast, students and young professionals are attracted to the low rental prices of apartments above commercial functions in the district's mixed-use blocks. The cultural diversity of restaurants, food outlets and supermarkets within the plinths of the blocks is a driving factor for these groups of residents. However, most of their activity takes places outside of the district and they tend to see their homes in Bispebjerg as temporary, a stepping stone before their economic position improves (Beckman et al, 2015).

At the lowest end of the scale, many of Bispebjerg's ethnic minorities reside within the social housing blocks of the Utterslev and Nordvest neighbourhoods. These residents include: Turkish (Weiss Flensburg, 2022) and Pakistani labour migrants from the 1970s and 1980s; refugees that fled the Middle East and Somalia in 1980s and 1990s; and more recent waves of labour migrants from Asia (Skovgaard Nielsen et al, 2019). In addition to this, local social workers consider the social housing blocks a 'municipal dumping ground for problem categories' including unemployed, mentally ill and elderly residents (Hansen, 2019).

Although there is a high degree of diversity present within the social housing blocks, diversity in terms of socio-economy, ethnicity and lifestyle are rarely present within the networks of the residents. It is not uncommon for virtually no social interaction between direct neighbours, in which is in contrast to the affluent detached housing estates where social cohesion facilitates mutual support structures. In other words, within the disadvantaged blocks of flats there is virtually no opportunity for social mobility (Beckman et al, 2015).

Studies by Beckman et al (2015) and Skovgaard Nielsen et al (2019) relating to diversity within the context of Bispebjerg have identified that relationships across socio-economic positions can significantly increase the social mobility of disadvantaged residents. However, it requires continuous effort from the residents that have extensive support networks. For the disadvantaged resident, it is essential to have relationships with residents that have greater socio-economic connections for this mechanism to be utilised. In a community as diverse as Bispebjerg, relationships can be established through shared experiences and interactive engagement between residents at different positions of the socio-economic scale (Community Tool Box, 2019).

Main question:

How can public architecture inspire interaction the different social groups of Bispebjerg?

Sub questions:

How can architectural affordances allow the users of the condenser to regulate their privacy and intimacy?

How can movement be utilised to create intersection between the condenser's different user flows?

How can the condenser utilise props to stimulate triagulation between its users?

Design assignment in which these result:

The aim of this project is to design a public building that's program is orientated around art, craft and performance. This program will attract a range of users and should therefore be organized in approach that creates connection between different functions. Design decisions taken should focus on creating moments where the users can interact by employing architectural principles in movement, scale, proportion and materiality. Movement should be used to reveal different activity taking place to the users as they travel to their destination within the building. The relationship between scale, proportion and perceived atmosphere should be considered to create spaces that are open and inviting to spaces that are more personal and intimate. And materials with tactile qualities that create a sense of comfort and calmness should be used in order to create spaces that are socially stimulating.

As a result, the design proposal should be for a public building that invites users to engage with activity taking place, providing opportunities for users to interact and establish relationships that have not been able to develop in Bispebjerg's current situation.

Method description:

The following methods have been used to develop a proposal that focuses on stimulating social interaction within the context of Bispebjerg, Nordvest.

The literature review focused on academic papers that directly relate to diversity within Bispebjerg. Analysis of the papers revolves around three themes: the socio-economic groups of the district, their attitudes towards diversity and how diversity can be utilized rather than being stigmatized as problematic. The papers include analysis of interviews with disadvantaged groups to more affluent residents as well as social workers carrying out their duties in the district.

In addition to the literature review, a site analysis investigated the existing facilities and functions within the direct vicinity of the project area and the greater area of Bispebjerg. This analysis examined the physical features of the built environment surrounding the project site, recognizing opportunities to enhance positive qualities that facilitate interaction whilst disrupting negative characteristics that inhibit it.
To inform the design process, case-studies with mixed-programs that have created spaces with an atmosphere that stimulates interaction between users have been assessed to learn what conditions provide such an environment. The findings were filtered and can now be used as reference throughout the project. Notable projects this included are:

- The Kennedy Centre by Machado
- Viby Culture House by Christensen & Co
- Roskilde High School by MVRDV + Cobe

In coordination with the data collected, experimentation with digital and physical prototyping has been conducted to evaluate the potential of architectural design to facilitate interaction between different social groups. The research-by-design will be concluded with a design proposal of a public building that incorporates socially stimulating spaces with a functional program that incorporates a wide range of activity.

Literature and general practical references:

Academic papers in the literature review are from sociologists who have focused on the relationship between the built environment and social science. This includes Senior Researcher Rikke Skovgaard Nielsen of Aalborg University who has been involved in multiple studies analyzing diversity in Bispebjerg. The topics of her research include: diversity and local businesses; ethnic segregation in schools; perceptions of diversity; and creating social cohesion and social mobility in hyper-diversified cities.

Another key source of inspiration for this project is the work of Jan Gehl who has focused his career researching how architecture and urbanism can influence public life. Jan Gehl's work is recognized globally for improving the performance of urban spaces to facilitate social activity. Gehl's publication Life Between Buildings has been studied in the first part of this project and will include publications such as Public Spaces, Public Life in the next stage of the project.

Bendixen, M. (2020, October 23). Denmark: UN human rights experts urge halt in sale of "ghetto" buildings | European Website on Integration. Migrant-Integration.ec.europa.eu. https://migrant-integration.ec.europa.eu/news/denmark-un-human-rights-experts-urge-halt-sale-ghetto-buildings_en

Beckman, A. W., Blach, V. E. M., Nielsen, R. S., & Andersen, H. T. (2015). Fieldwork inhabitants, Copenhagen (Denmark): report 2e. SBI forlag.

Community Tool Box. (2019). Table of Contents | Community Tool Box. Ku.edu. https://ctb.ku.edu/en/table-of-contents

Hansen, C. S. (2019). Countering Spatial Alienation: Social Work in a Stigmatised Neighbourhood in Copenhagen, Denmark. Social Work & Society, 17(1).

Justice Initiative. (2024, June 14). EU Court to review Denmark's "Ghetto Package." Justiceinitiative.org. https://www.justiceinitiative.org/newsroom/eu-top-court-to-review-denmark-s-racially-discriminatory-ghetto-package

Math, S. (2021, March 11). Denmark's "Ghetto Package" and the intersection of the right to housing and non-discrimination. Housing Rights Watch. https://www.housingrightswatch.org/content/denmark%E2%80%99s-%E2%80%9Cghetto-package%E2%80%9D-and-intersection-right-housing-and-non-discrimination

Nielsen, R. S., Beckman, A. W., Blach, V. E. M., & Andersen, H. T. (2016). DIVERCITIES: Dealing with Urban Diversity: The case of Copenhagen. SBi Forlag.

Sorensen, J., Sørensen, M. T., & Christensen, F. K. (2024). Nuances of "Ghetto" Policies in Danish Spatial Planning. Nordic Journal of Urban Studies, 4(1), 1–9. https://doi.org/10.18261/njus.4.1.5

Skovgaard Nielsen, R., & Hedegaard Winther, A. (2019).
The complexity of diversity in reality: Perceptions of urban diversity. Urban Studies, 57(14), 004209801988673. https://doi.org/10.1177/0042098019886737

Weiss Flensburg, J. (2022). Bispebjerg - Fra udsat boligområde til blandet forstad i byen? Copenhagen: Aalborg University. Retrieved from Aalborg University website: https://vbn.aau.dk/ws/files/484263476/ Speciale__Bispebjerg_fra_udsat_bydel_til_blandet_forstad_i_byen_.pdf

Reflection:

The research explores hybridity through functional integration by condensing mixed program that is relevant to the surrounding neighbourhood into a single volume with the intention of maximising encounters between residents of different backgrounds. In one of my previous studios, the aim was to incorporate human centred functions with the conditions that support the habitat of the surrounding ecosystem. This challenged more traditional approaches of addressing nature within the built environment and emphasised hybridity as an essential principle in sustainable design. Monofunctional buildings create inherently segregate urban spaces which in the modern context is no longer suitable because proposals must take a holistic approach to meeting the requirements of a spectrum of users.

Globalization has facilitated movement across the world, creating cities with a rich diversity in ethnic and cultural backgrounds. However, stigmatization is highlighting differences as problematic and potential for clashes within society. This project aims to emphasize diversity as a resource that can be utilized in architectural design. Not by reinventing the wheel, but instead by enhancing existing typologies to create interaction between users within intermediary spaces. The intention is to theorize and practice by means of a design proposal how architecture can be used to improve social cohesion in areas where populations are becoming increasingly diversified.

Reflection

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

The research explores hybridity through functional integration by condensing mixed program that is relevant to the surrounding neighbourhood into a single volume with the intention of maximising encounters between residents of different backgrounds. In one of my previous studios, the aim was to incorporate human centred functions with the conditions that support the habitat of the surrounding ecosystem. This challenged more traditional approaches of addressing nature within the built environment and emphasised hybridity as an essential principle in sustainable design. Monofunctional buildings create inherently segregate urban spaces which in the modern context is no longer suitable because proposals must take a holistic approach to meeting the requirements of a spectrum of users. And finally, the project incorporates sustainable technical design principles that are a key component of the built environment tract.

The research explored hybridity through functional integration by condensing mixed program that is relevant to the surrounding neighbourhood into a single volume with the intention of maximising encounters between residents from different social groups. The master's architecture tract in TU Delft establishes that architectural design is more then purely focusing on elements of the built environment. It incorporates knowledge and data from other fields of knowledge. This project follows this philosophy by investigating topics that are within the sociology field such as the factors that influence social interaction and diversity within Bispebjerg.

How did your research influence your design and how did the design influence your research?

In the end the research covered a broad range of topics both directly related to the built environment and topics that are more towards sociological research. This included paper's examining diversity within Bispebjerg to human spatial behaviour and how this translates into architectural design. These topics could be the subject of a thesis themselves ,and have been, therefore one of the hardest challenges I encounter during the project was converting the information gathered into design strategies that could be directly applied into the project. Incorporating these strategies into the design led to further research to investigate how the strategies have already been utilised in other buildings.

An example of this would be Irwin Altman's privacy regulation theory where he states that humans regulate their social contact depending on their needs at any given time. This meant that the design required spatial affordances that would allow users either to retreat to gain privacy or to become involved in activity to prevent feelings of isolation.

As the design progressed, it became clear that in order to preserve individual or group privacy, users need to be able to adapt the open-enclosed properties of certain spaces for specific situations. This lead back to further research what methods are used to divide and open spaces with element such as moveable or folding partition walls.

How do you assess the value of your way of working (your approach, your used methods, used methodology)?

For every topic of my research I dove deep into research papers, books and studies to really gain an understanding of each topic. With access to online databases there is a abundance of rich information at our finger tips and the majority of the topics I found really interesting.
However, I spent countless weeks delving into subtopics within the research when the reality was that I had gained the information I needed for my design mush earlier. An example of this would be looking at various studies that investigated various seating preferences during different scenarios. Yes this was useful, but I didn't need to understand all of the repeated studies and their methodology. Inevitably, this left more limited time for design related process. Most notably generating images that visualised the design studies I had been carrying out. This meant that too often than not, I struggled to present my ideas and design steps at tutorials. This was a real waste because when I was able to convey my ideas to my tutors, I received insightful feedback that really helped me direct my design to the position I was taking.
As a result I have two principles that I will follow during my career as an architect. The first is to not get hyper focused on specific topics, but to know that it is needed to research or design something else which will make the solution to the problem I am struggling with more clear. And the second is to take time to produce diagrams, perspectives…etc before any discussions not matter how informal they may be - don't describe it, draw it.

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

In the post-modernism era, there has been a paradigmatic shift away from massive clean cut volumes placed on open horizontal planes that neglected human scale to produce bleak and empty environments to design approaches that focus on how human interact and operate within the built environment. With this in mind, my project positions itself as an example that demonstrates how human behavioural patterns, with specific attention to the dimensions of social interaction, can be utilised to create an environment that facilities interaction between its users.

This project identifies the principles of privacy and intimacy regulation, movement and intersections, edges and thresholds and finally props and triangulation as a design strategy for socially stimulating spaces in a building focused on cultural exchange of arts and crafts. This strategy can act as a starting point for new buildings that require interaction between the surrounding community with further design principles derived as a result of that building's specific function.

Research

Social groups research

Bispebjerg Housing

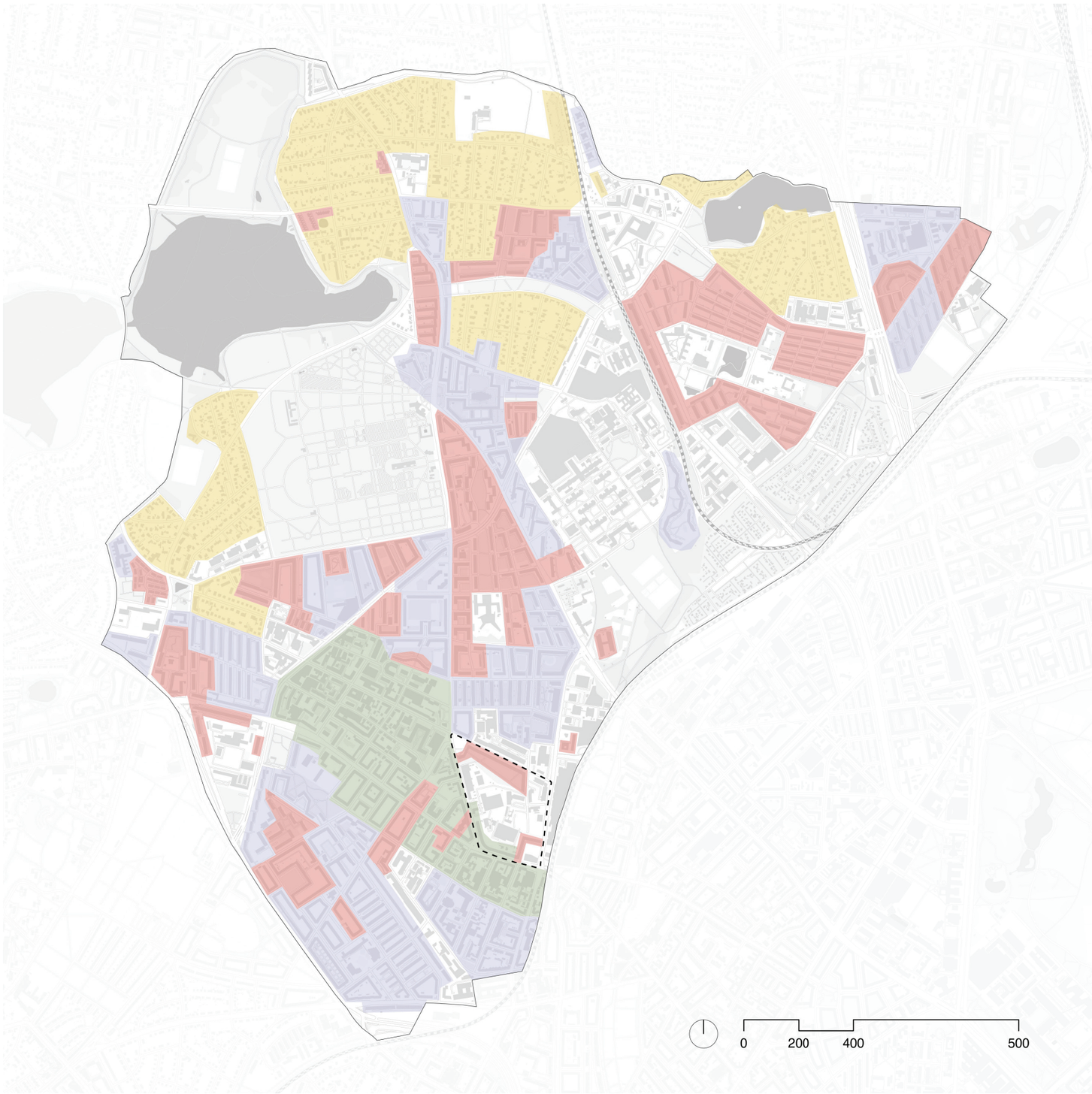
Project Site

Semi/Detached Housing

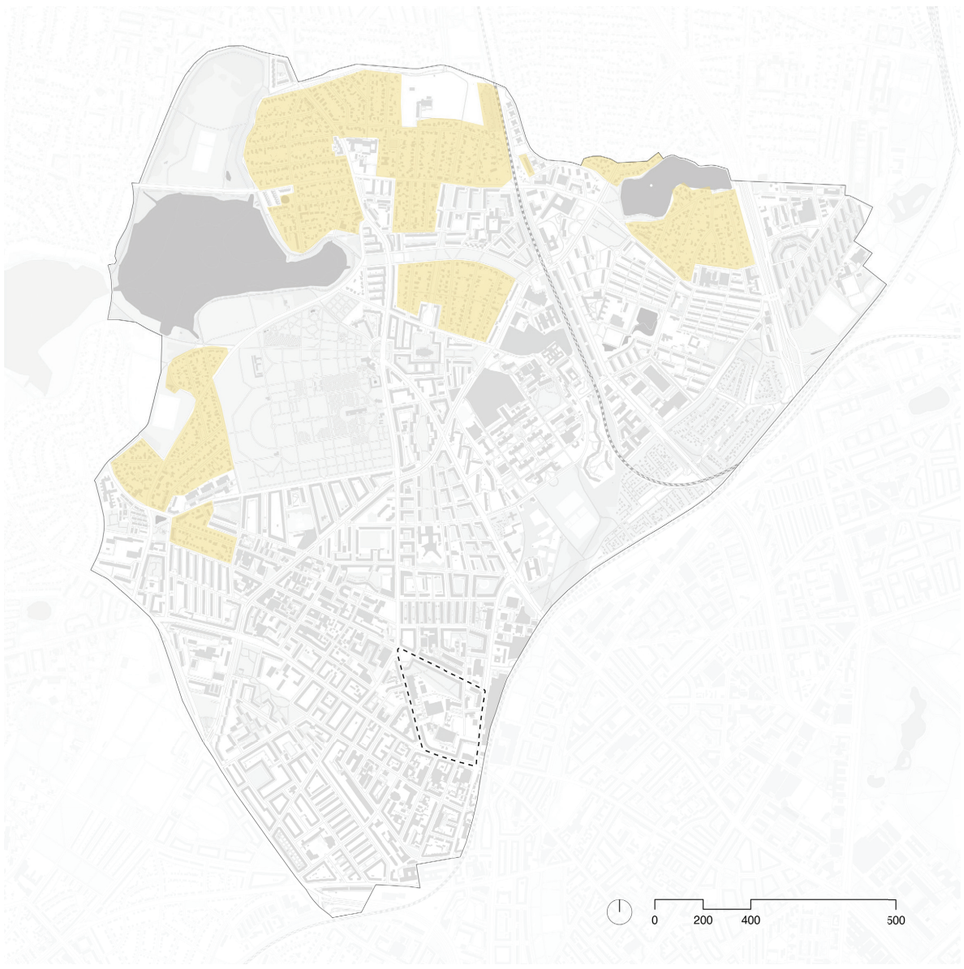
Residential Blocks

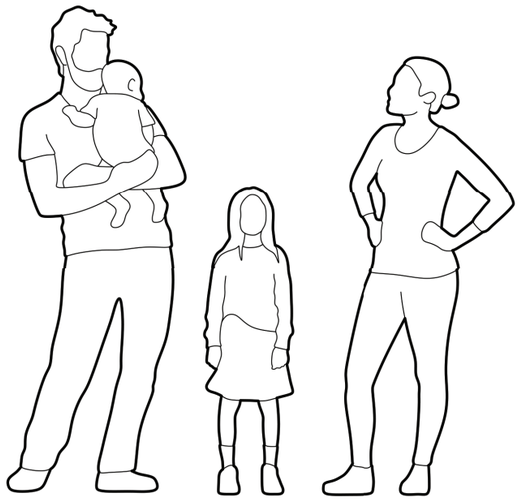
Mixed-Use Blocks

Social Housing Blocks



Affluent Families





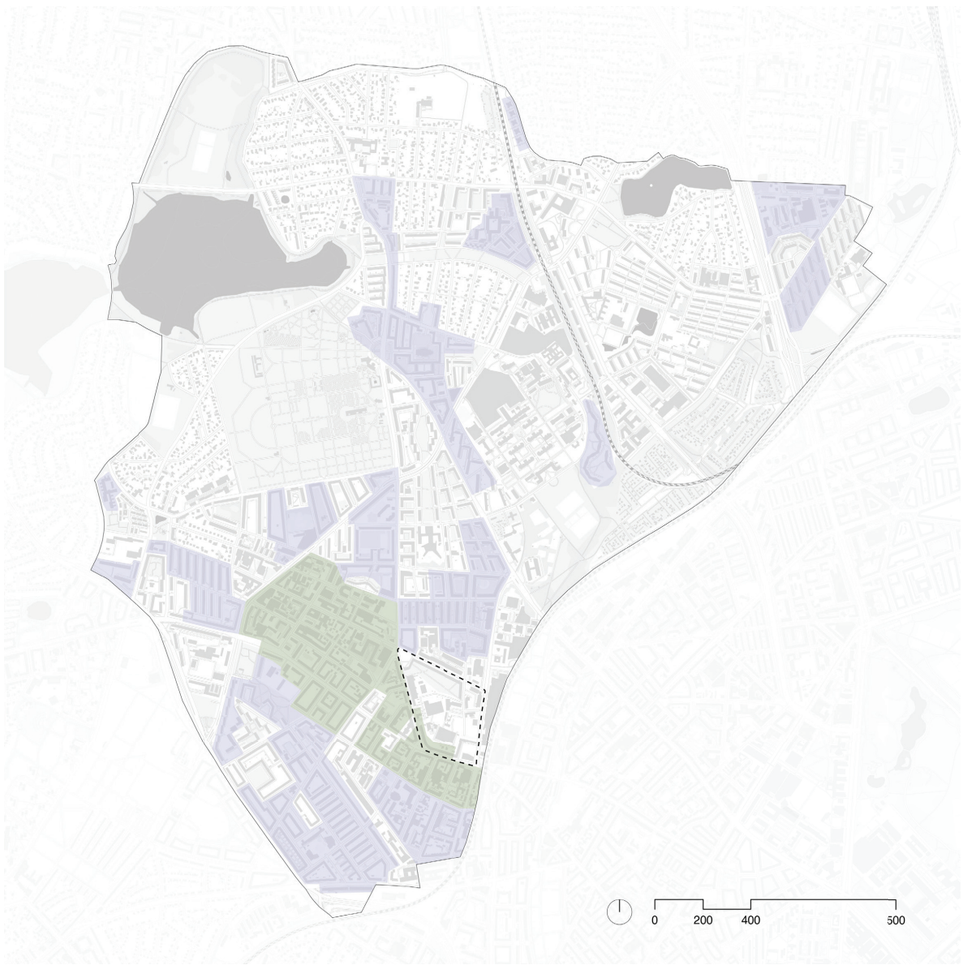
Wealth

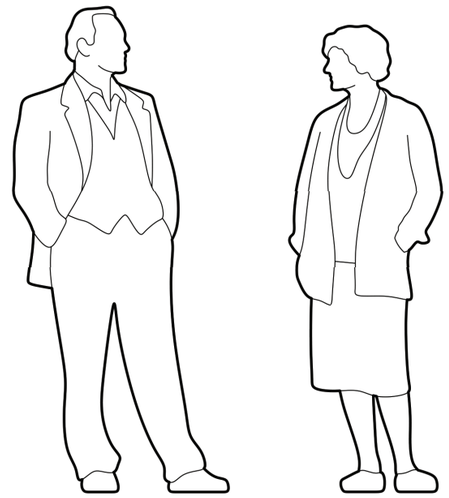
Education

Support Network

Cultural Activities

Native Retirees





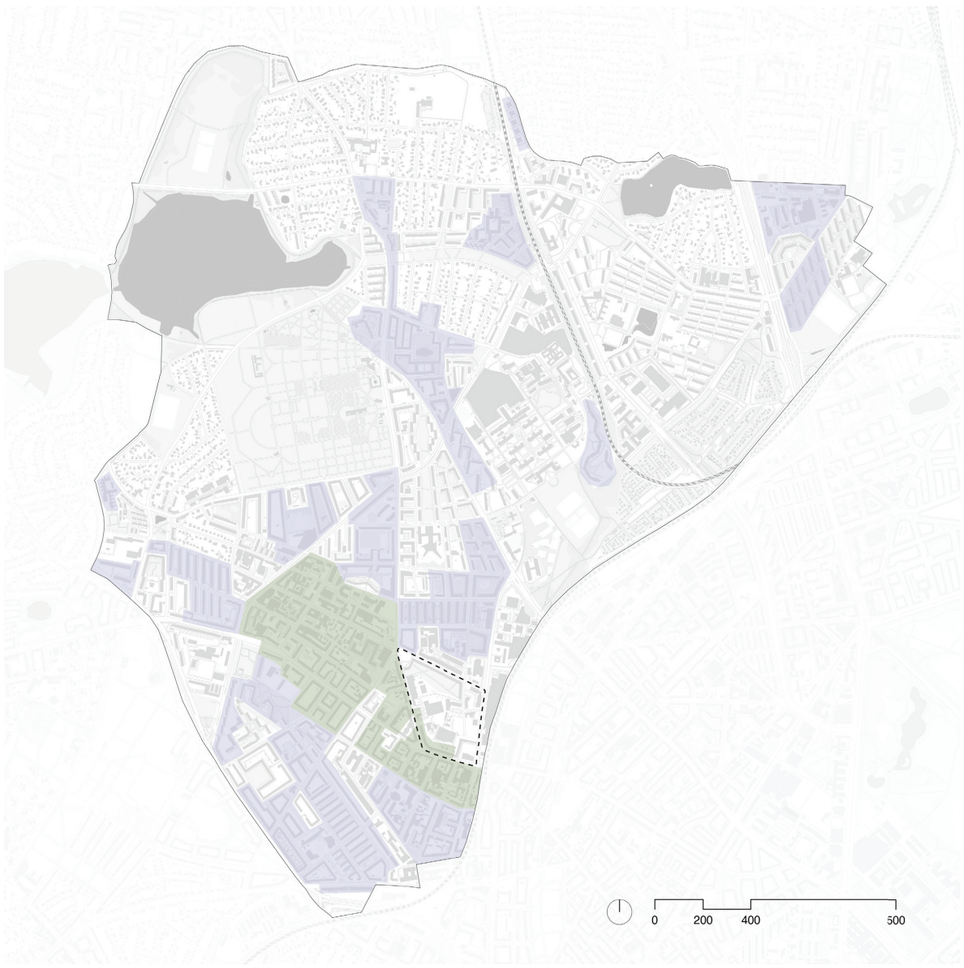
Wealth

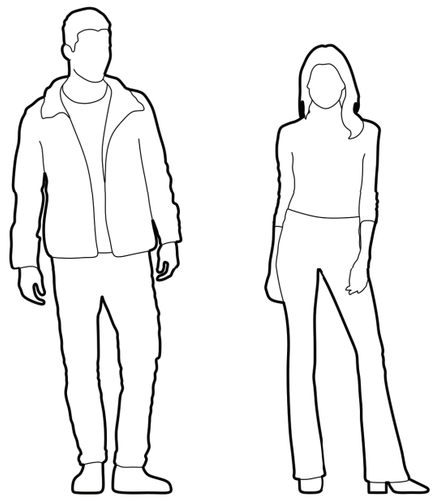
Education

Support Network

Cultural Activities

Students and Young Professionals





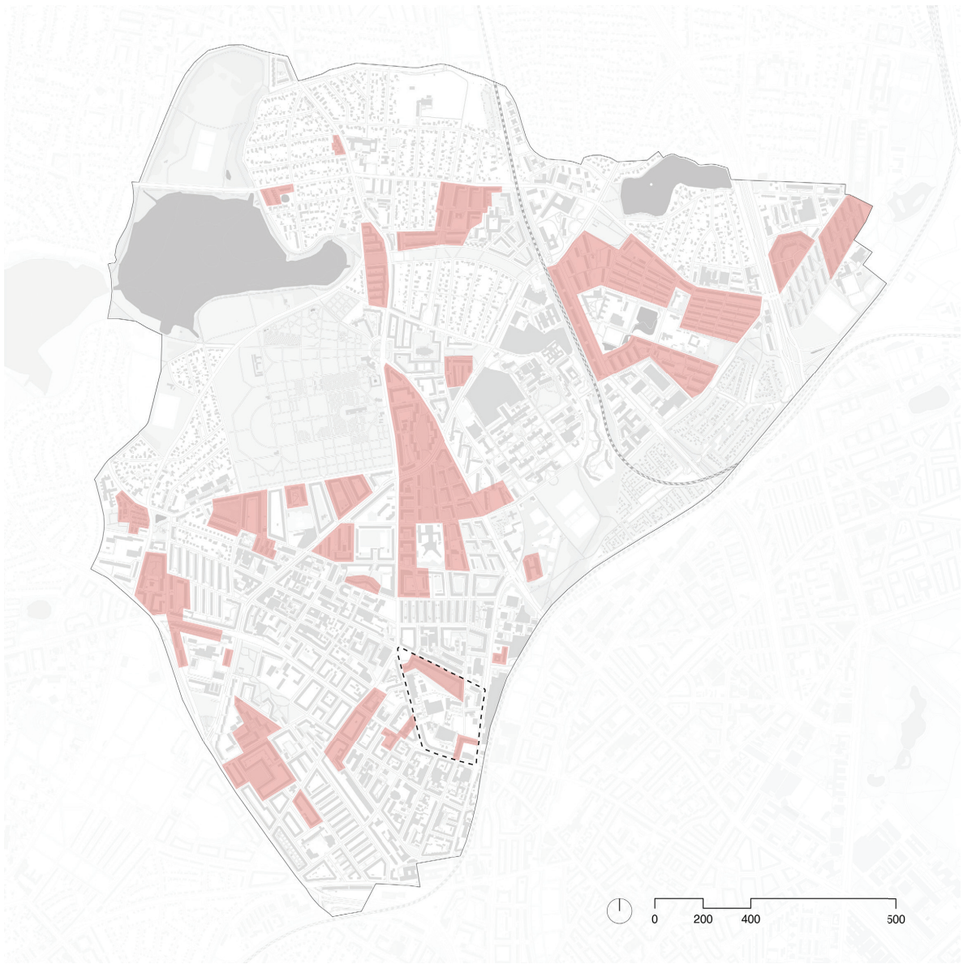
Wealth

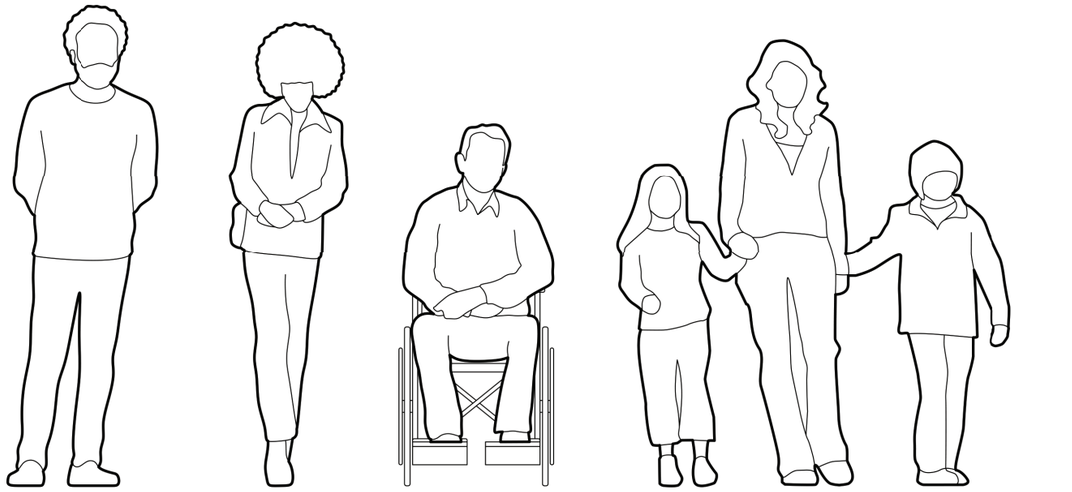
Education

Support Network

Cultural Activities

Vunerable Groups





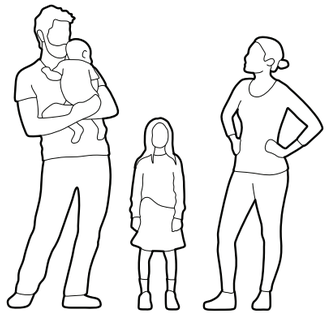
Wealth

Education

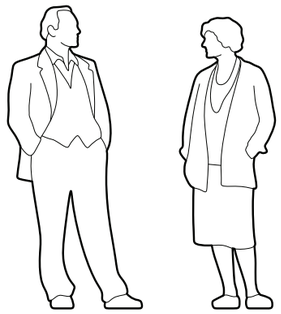
Support Network

Cultural Activities

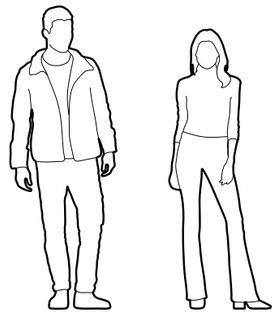
Lack of social cohesion



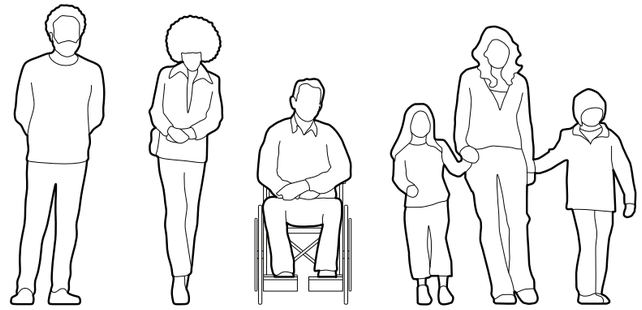
“Diversity was something we encountered when we were compelled to, but not otherwise…”



“I think there’s opened too many foreign shops, and the others seem to be disappearing, and I think the area is becoming too dominated by this.”



“I know it sounds like a cliché, but it’s the diversity, really”



“You know, it’s just that people just keep to themselves… yeah, we just don’t have anything in common”

Human spatial behaviour research

Affiliiative conflict theory

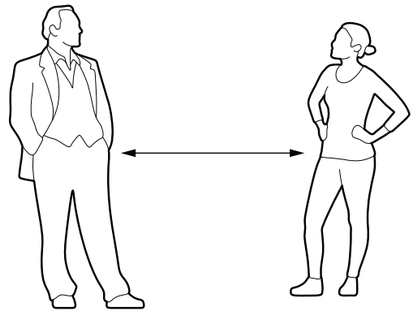
- Michael Argyle and Janet Dean 1965

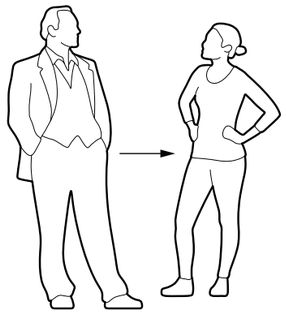
- During any **interation** and level of **intimacy** is **established**

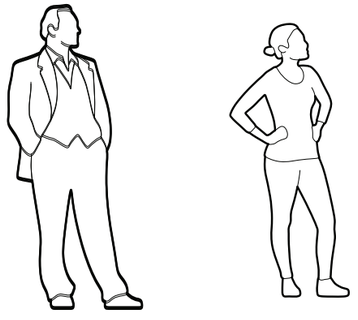
- This level is a function of **proximity**, a**mount of eye contact, body orientation**... and other related variables

- If one variable is **increased**, other variables must be **decreased** to **maintain equilibrium**

- If **equilibrium is not restored**, uncomfortable feelings will be invoked and the **interaction will end**







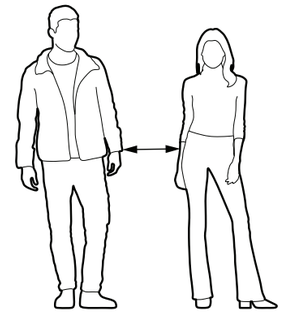
Proxemics

- In 1966 Edward Hall published ‘**The hidden dimension**’ where he described the **spatial paraments** around **human interaction**

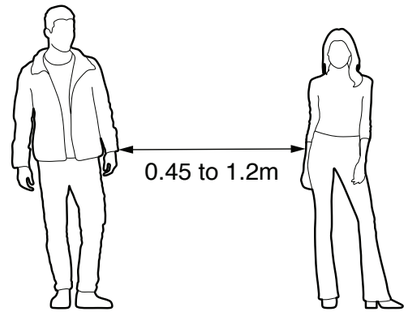
- This it’s publication, many studies have confirmed Hall’s **four regions of interpersonal distance**

- Intimate domain, personal domain, consultive domain and the public domain

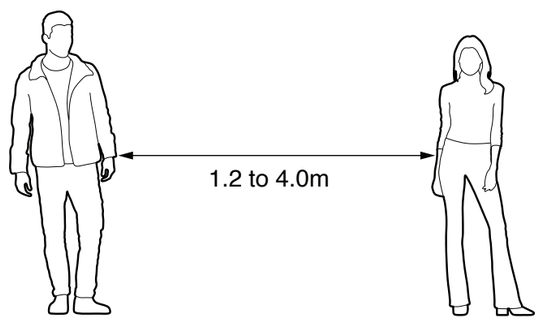
Intimate domain



Personal domain

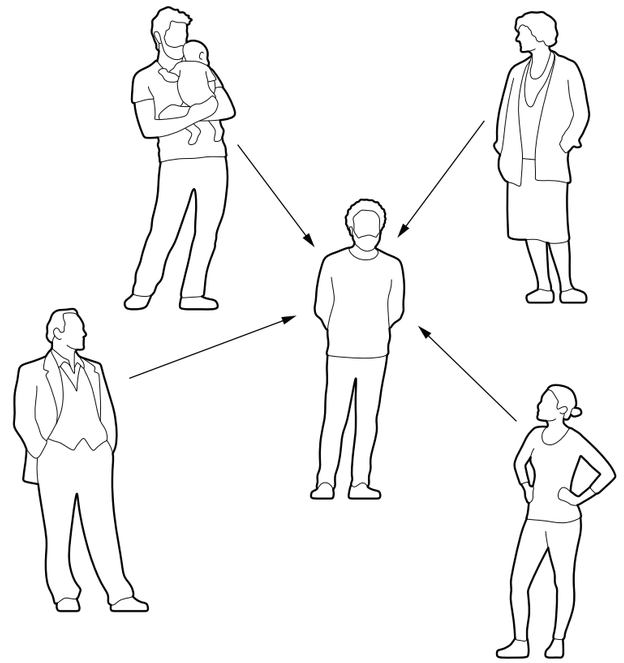


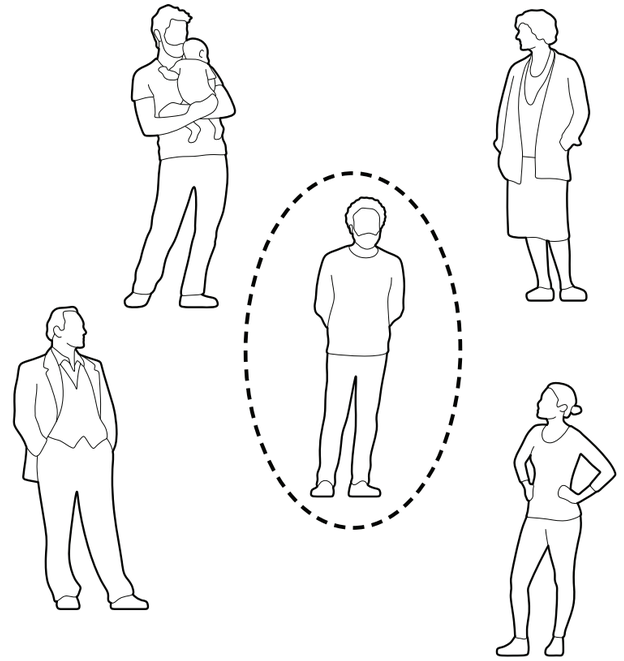
Consultive domain



Privacy regulation theory

- Irwin Altman 1975
- Human need to regulate social contact
- Humans will feel **satisfied** when there is a match between **desired** and **achieved privacy**
- **Inadequate privacy** and someone will experience a feeling of '**crowding**'
- Without a **physical** way to **gain privacy**, that person will **internally withdraw**
- I**nadequate social contact** will lead to feelings of '**loneliness**' and '**isolation**'





Territoriality

- **Territoriality** is a **behavioural mechanism** individuals utilise to **regulate social contact**

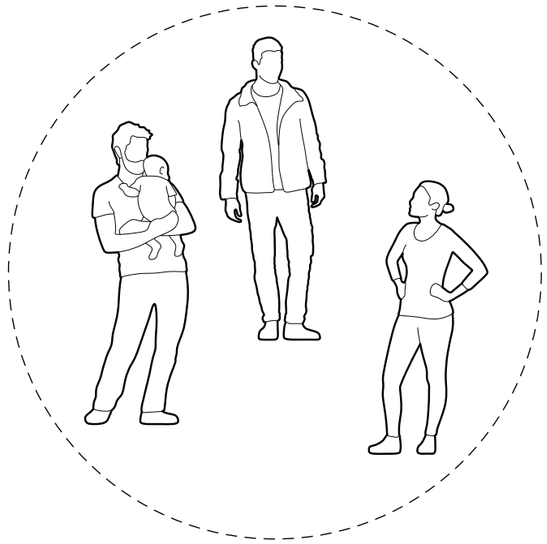
- Using **territorial markers** to provide a **visual and physical cue** to indicate that a **particular space is claimed**

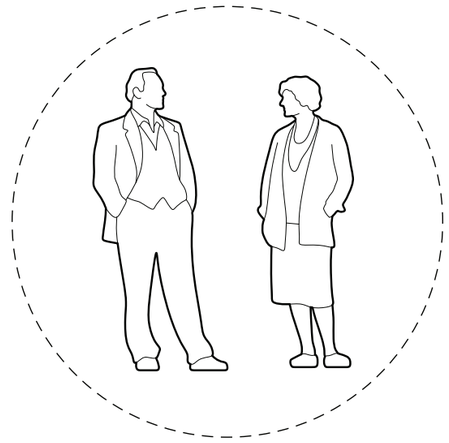
- The classic example would be someone placing their bag in the empty seat next to them during a rush hour train

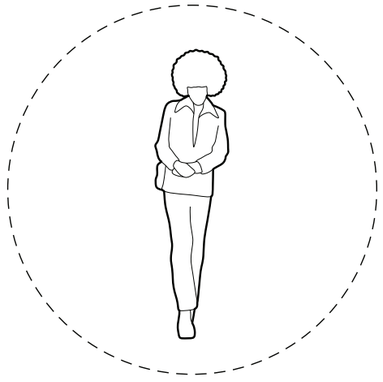
Claiming an extra seat on a train

Claiming a extra space in the library

Intimacy and privacy regulation







- The condenser should be **architectural affordances** that allow the buildings users to **regulate** their **privacy** and **intimacy**

- Whether this is **indiviual** or **smaller** and **larger group privacy**

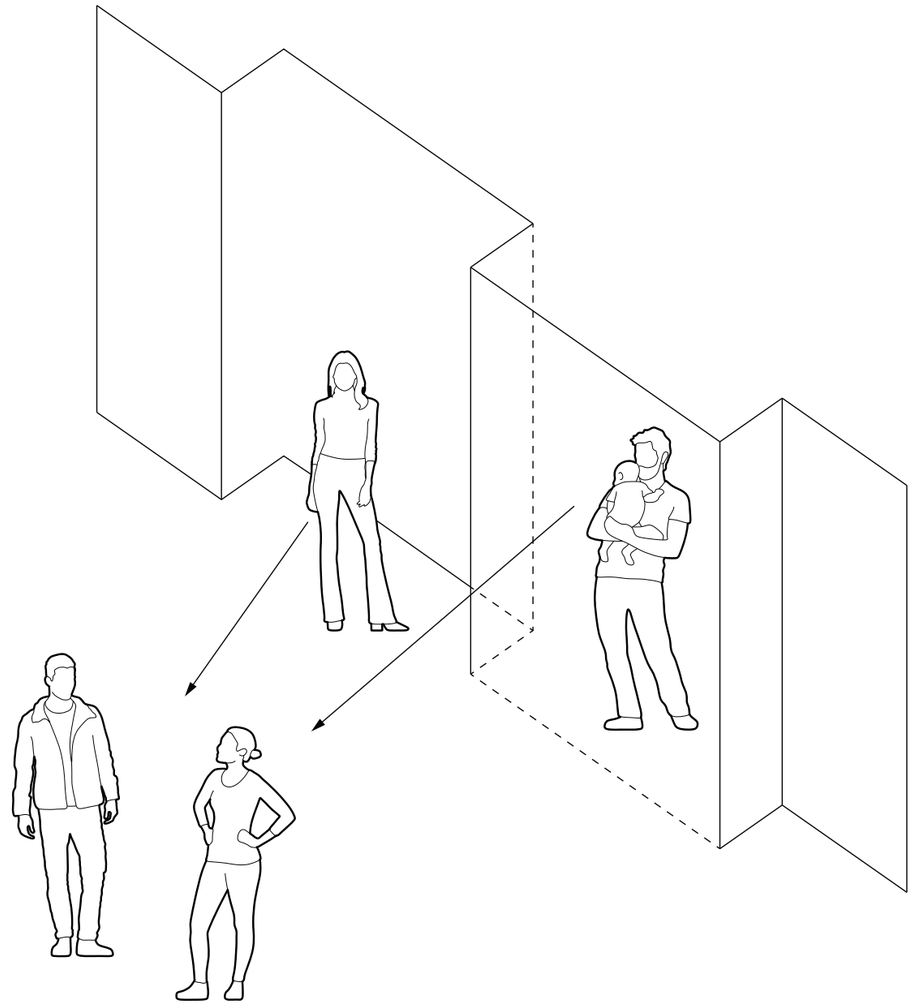
Edges and thresholds

- People take **preference** to positioning themselves towards the **edges** of open space

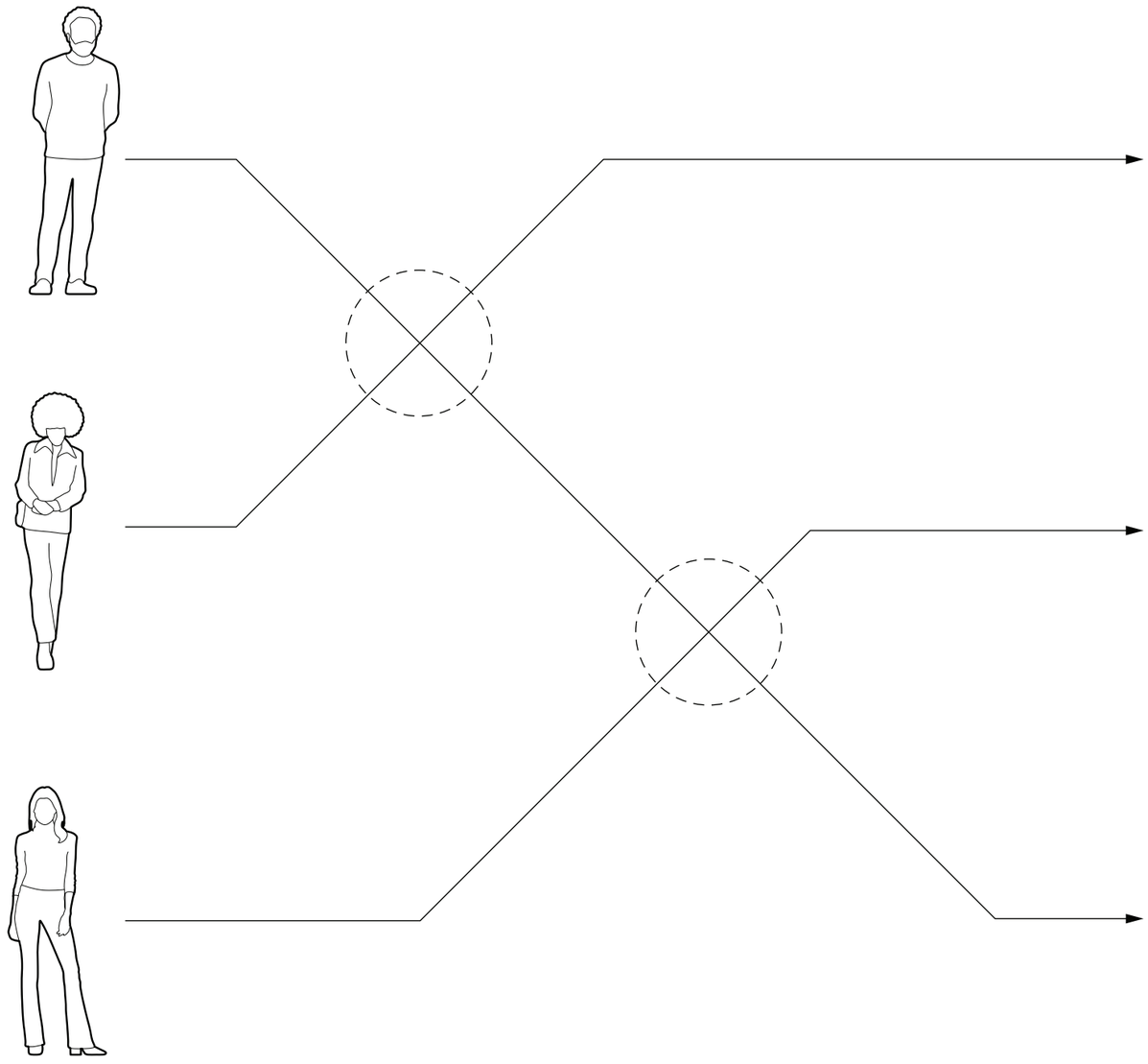
- Edges provide **shelter** and a **view of the activity** taking place within the open space

- Therefore the design should incorporate quality edges into the condenser

- In addition to this, **thresholds** between spaces offer potential for **social interaction** as they provide access between different spaces



Movement and intersections



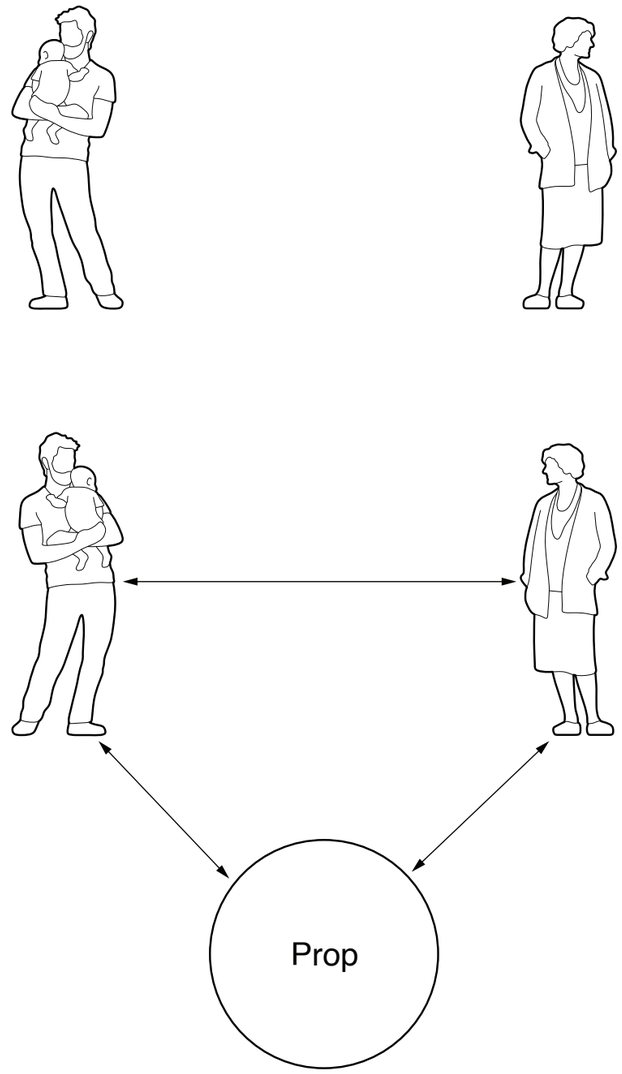
- **Movement** patterns though the condenser should **intersect** allowing for **informal encouters**

- At the locations of **intersection**, spatial affordances should allows visitors to **break away** for **extended encounters**

Props and triagulation

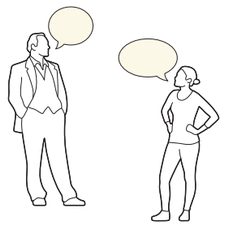
- **Triangulation** is a concept were an external factor or **prop, stimulates social interaction between strangers** that would not otherwise actively interact

- Examples of props include:
  - Viewing a performance
  - Physical objects such as sculptures
  - Shared activity
  - Play equipment

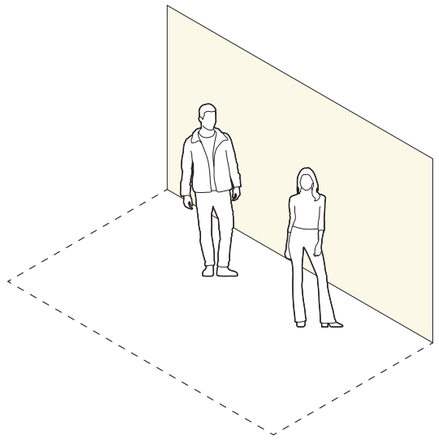


Design Principles

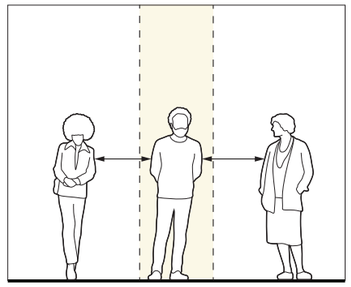
Frequent contact



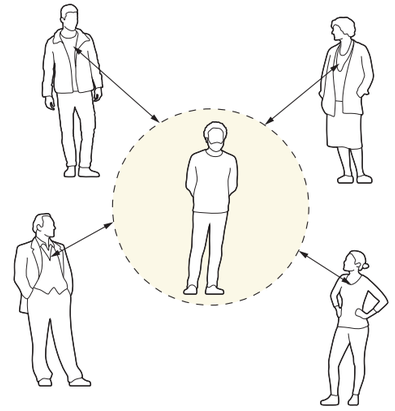
Preference for edges



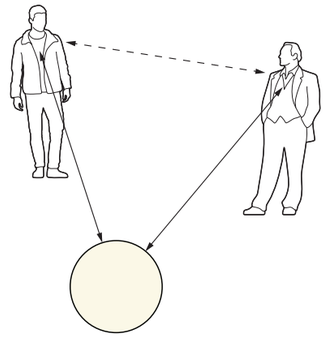
Threshold potential



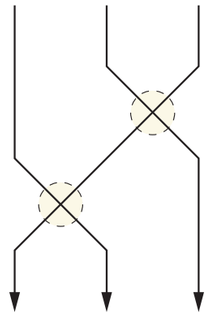
Privacy regulation theory



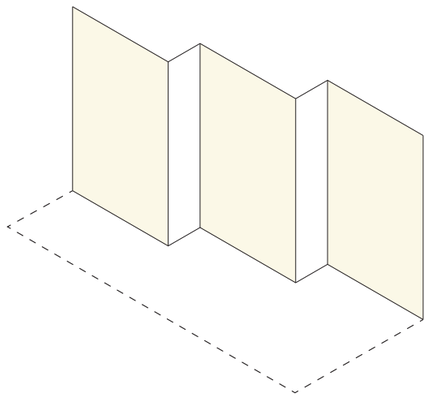
Triagulation



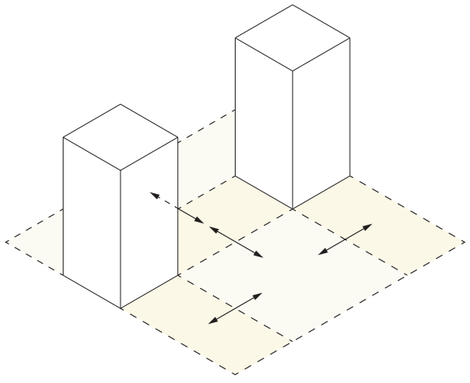
Intersecting movment



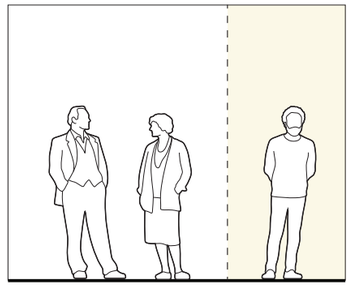
Integrated edges



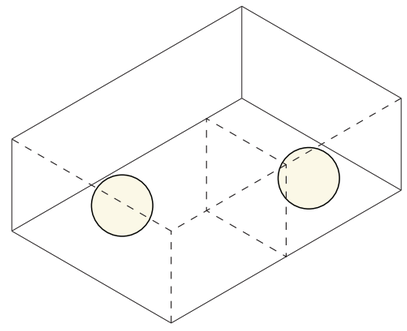
Levels of threshold



User privacy adaption



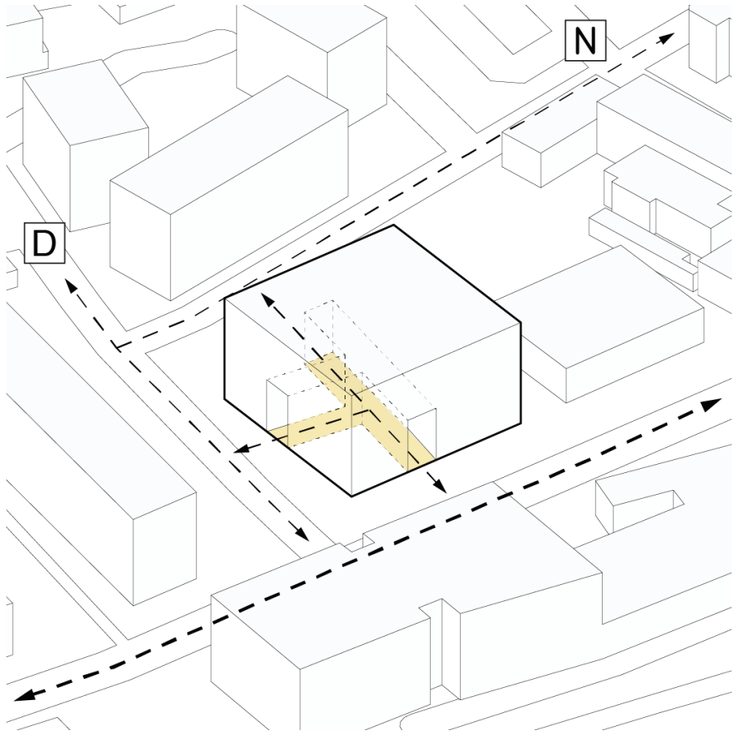
Use of props



P1

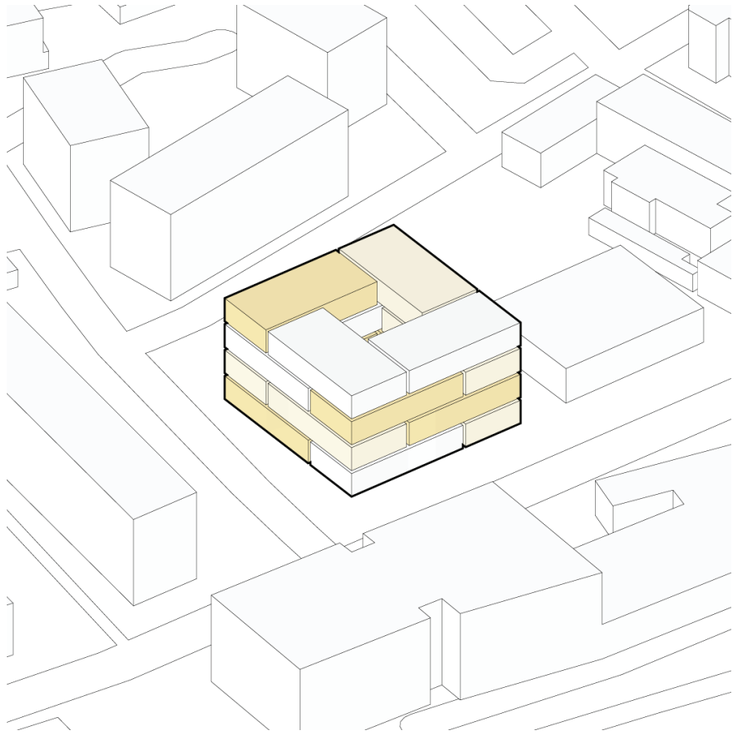
Concept

Access



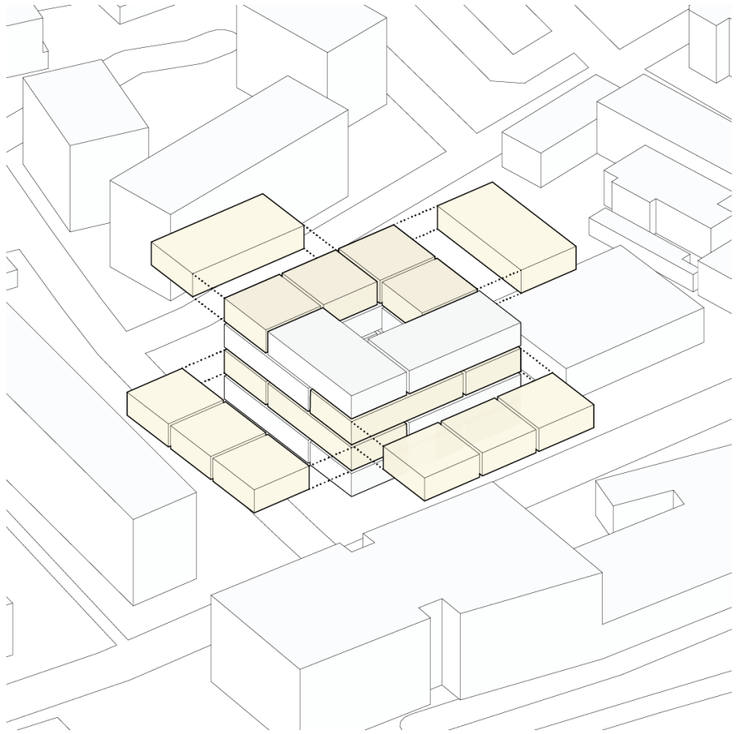
Accessible to all the **social groups** of Bispebjerg

Integrate



Integrated and overlapping **functions** to facilitate different **interests**

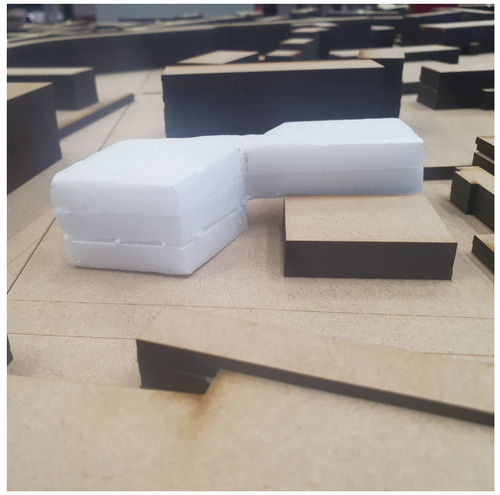
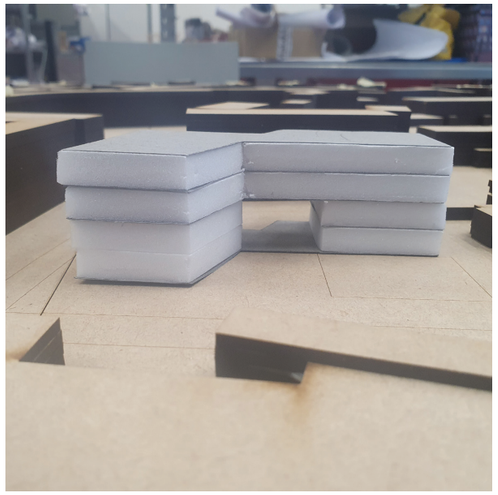
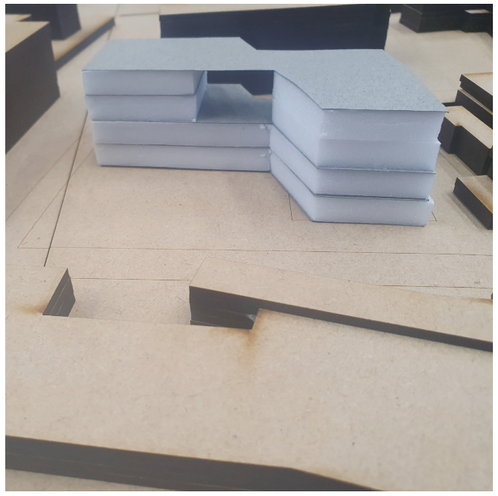
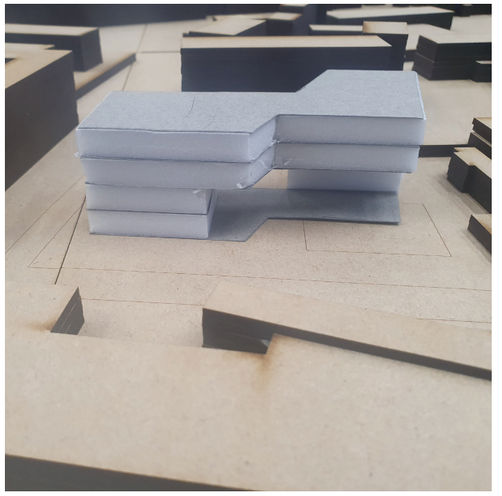
Adapt



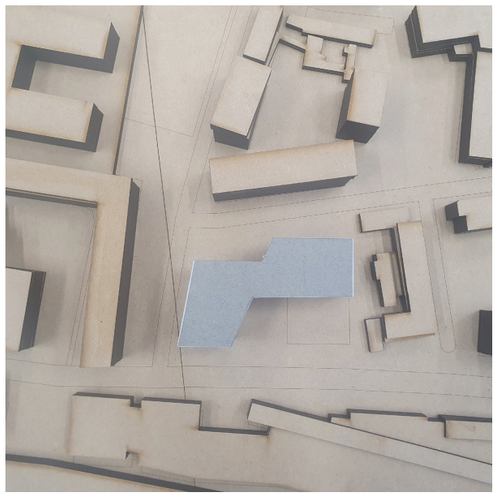
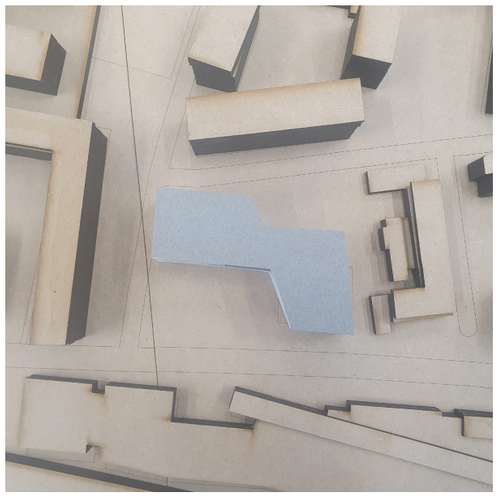
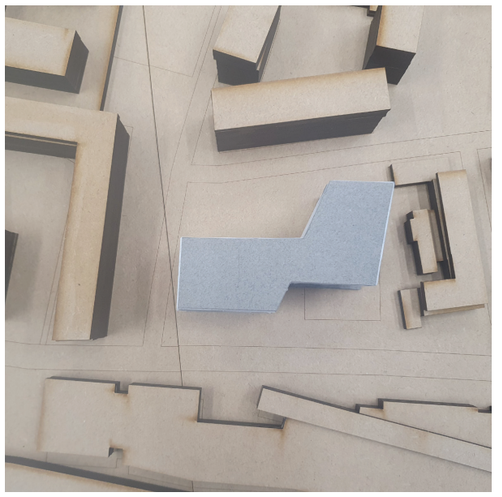
Adaptable space to vary **openness** and **intimacy**

P2

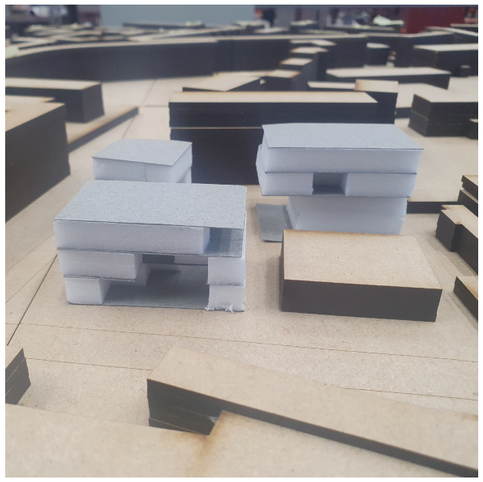
Mass Modelling

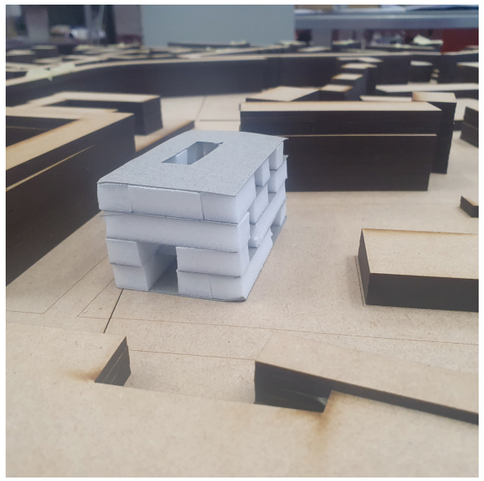





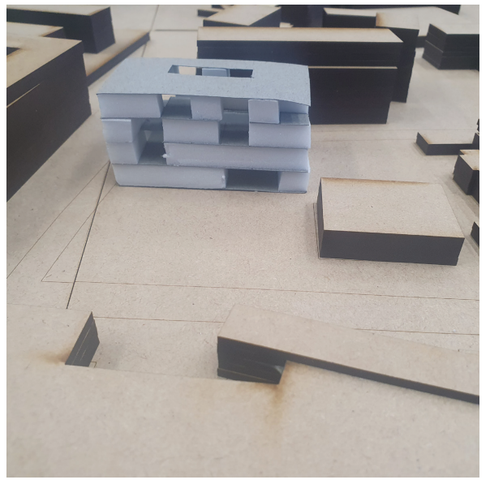
Reacting to Urban Space

Mass Modelling







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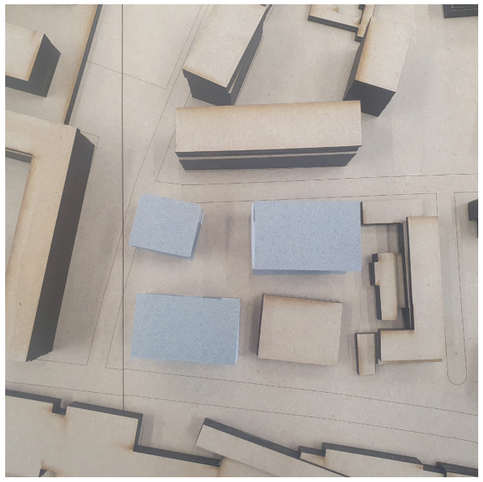
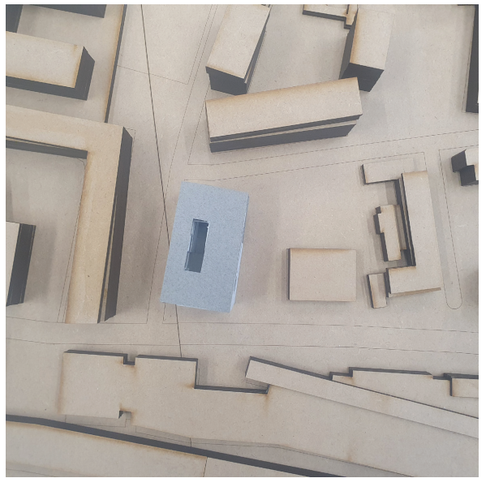
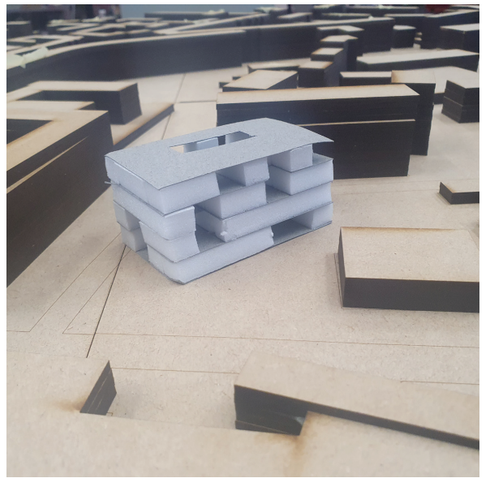
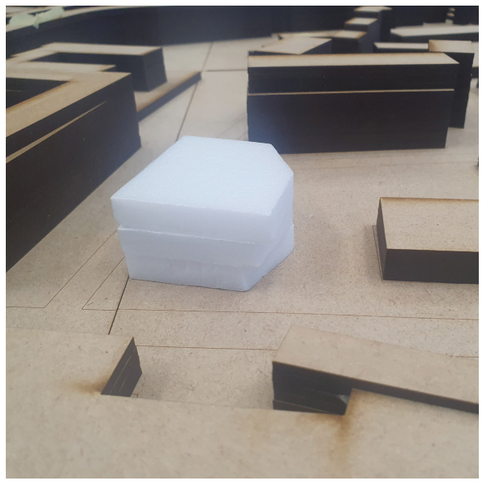


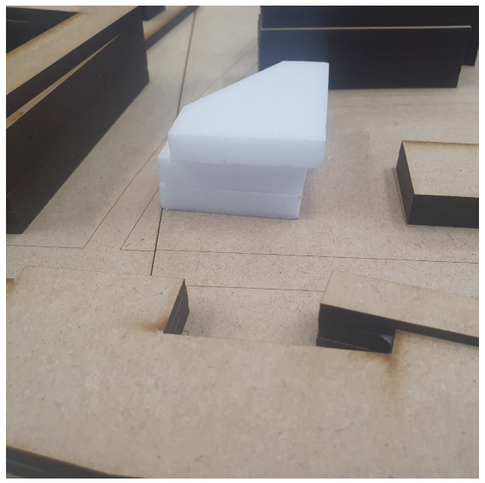
Compact Mass

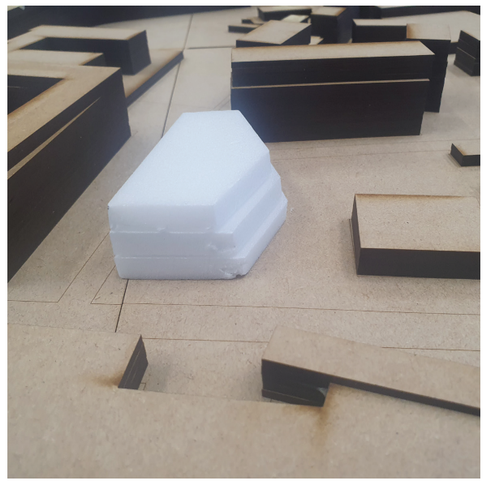




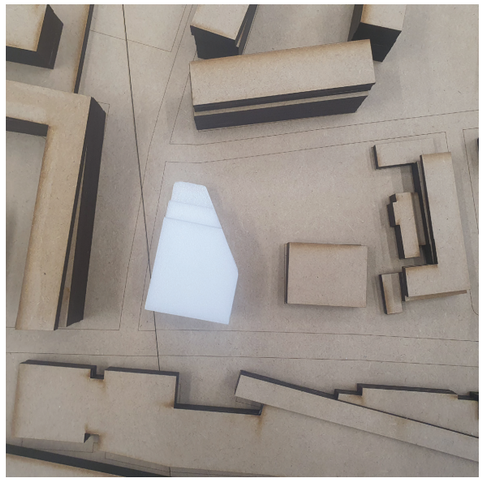
Mass Modelling

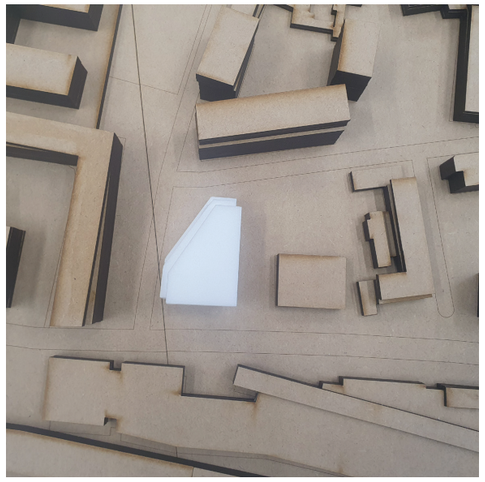


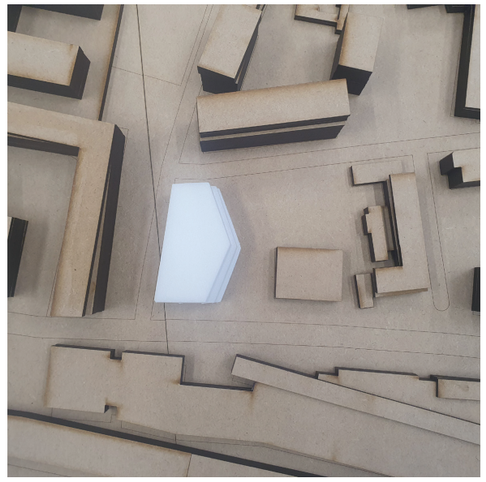




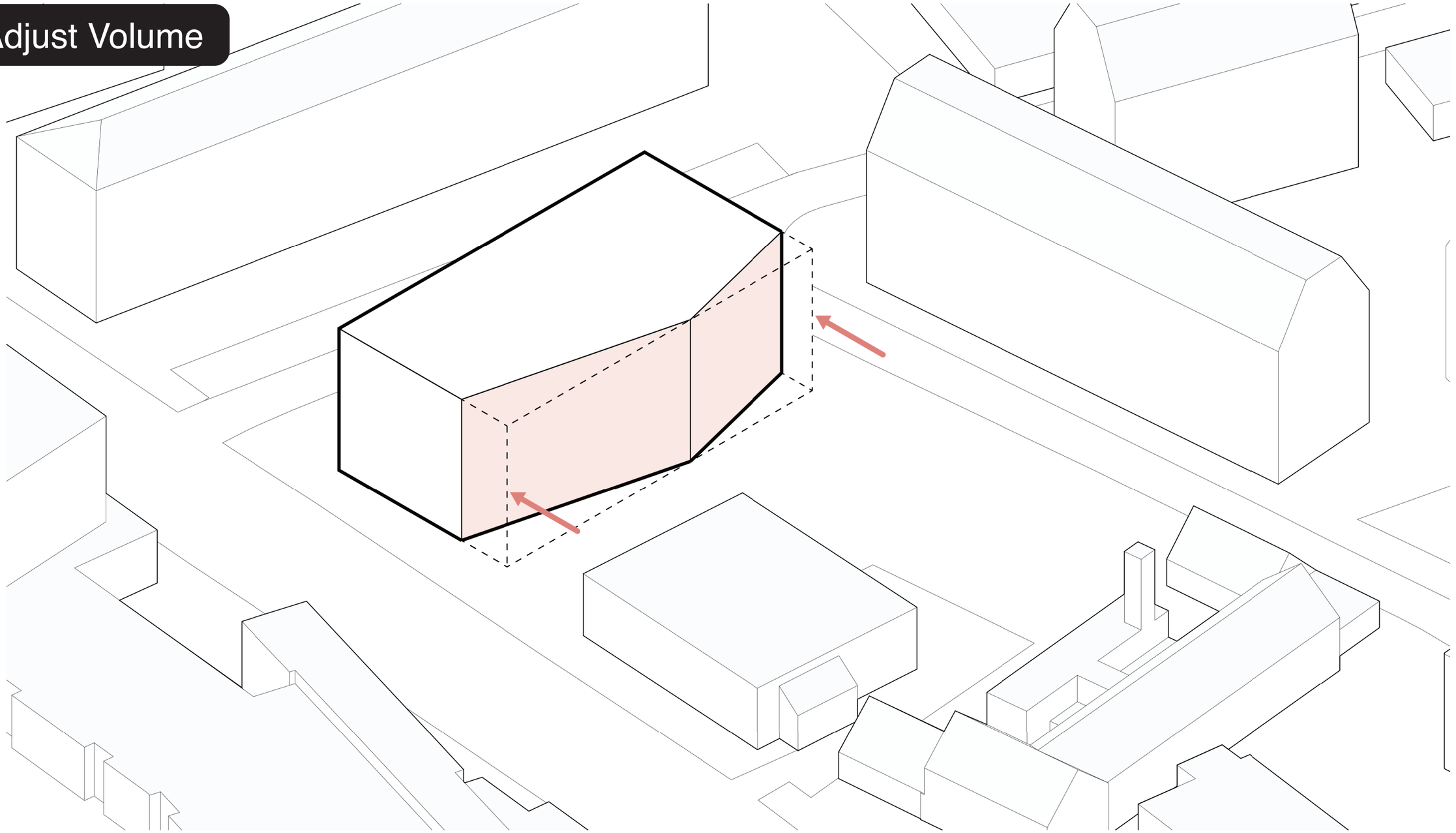
Carving Forms



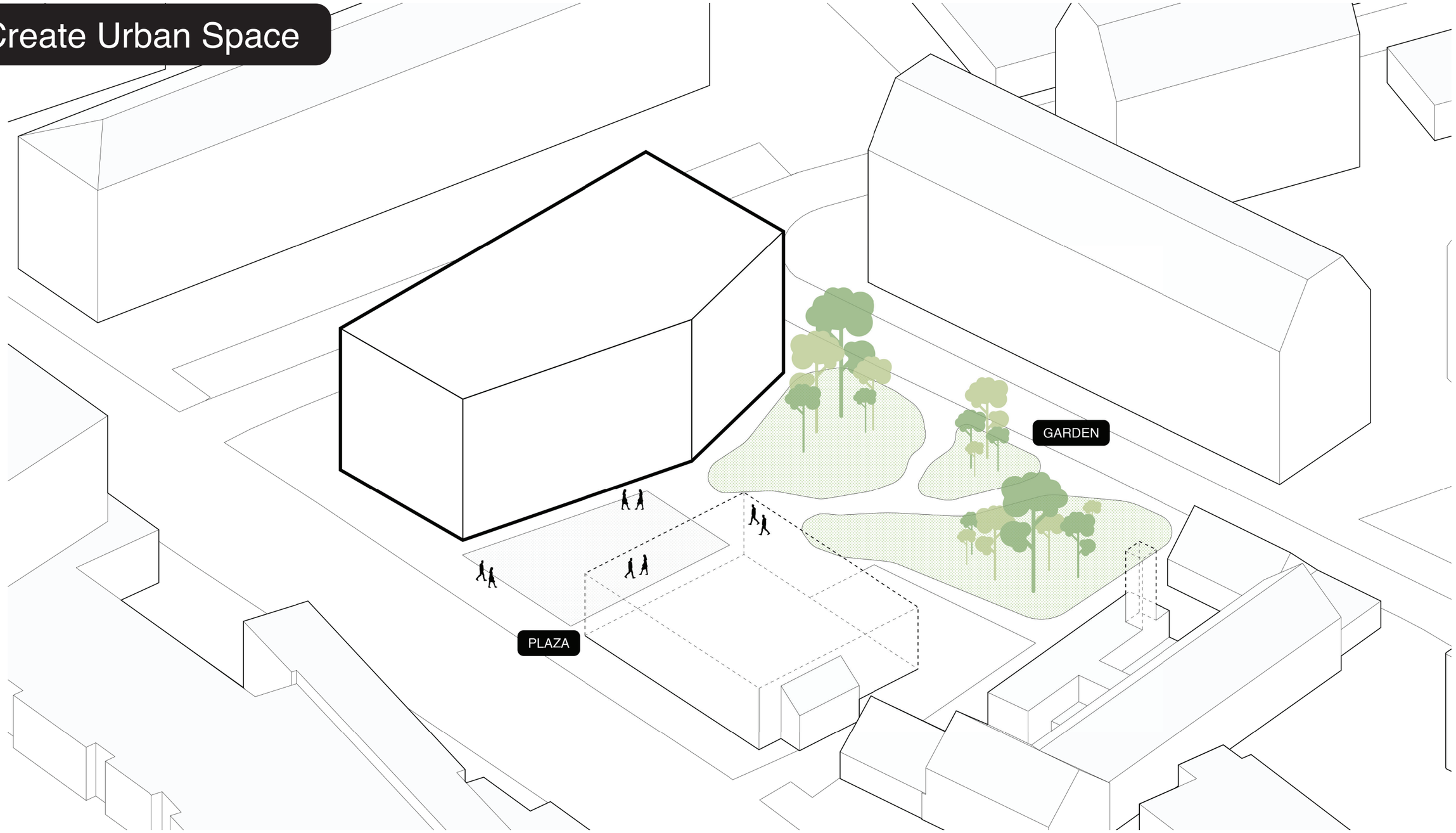




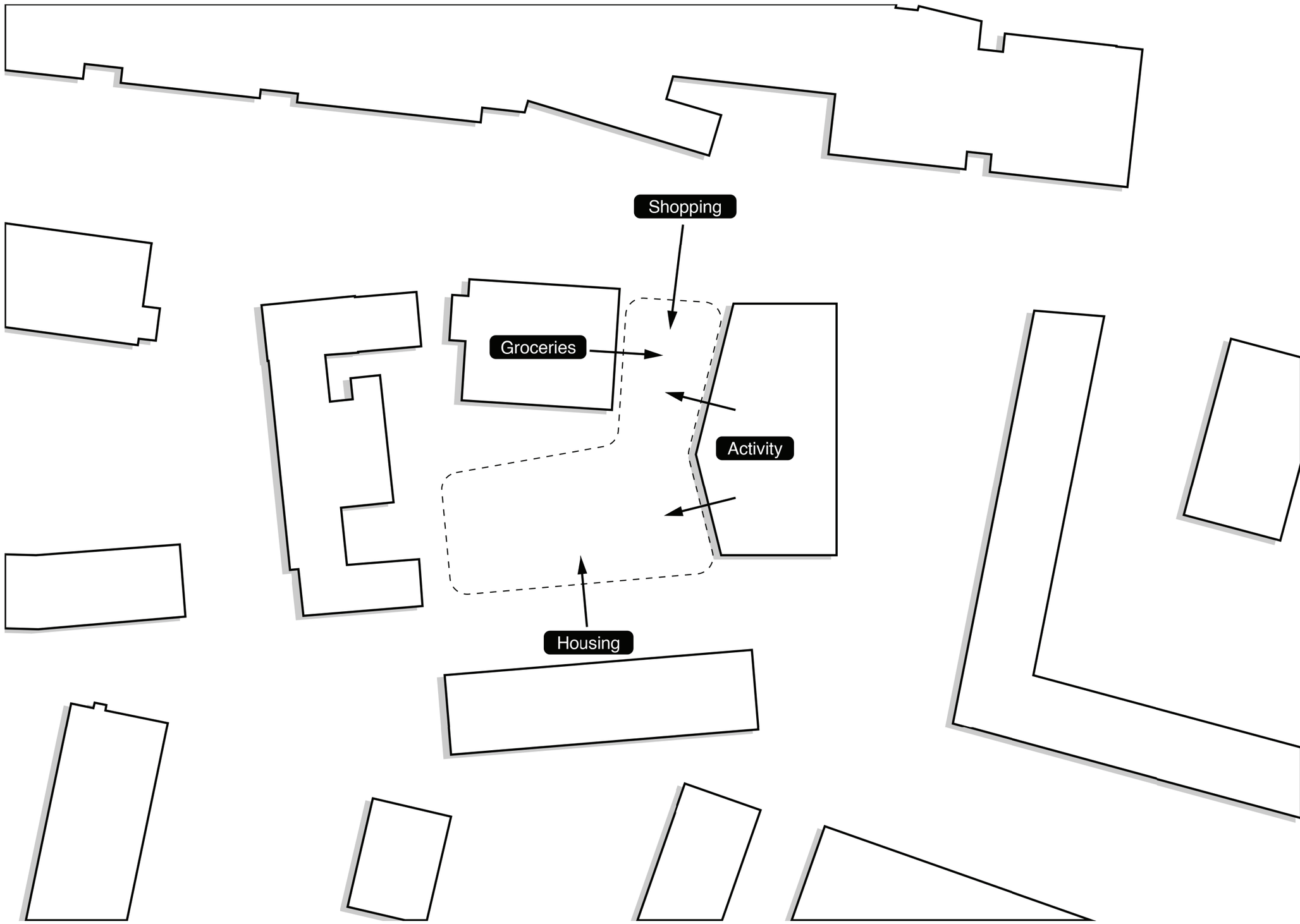
Adjust Volume



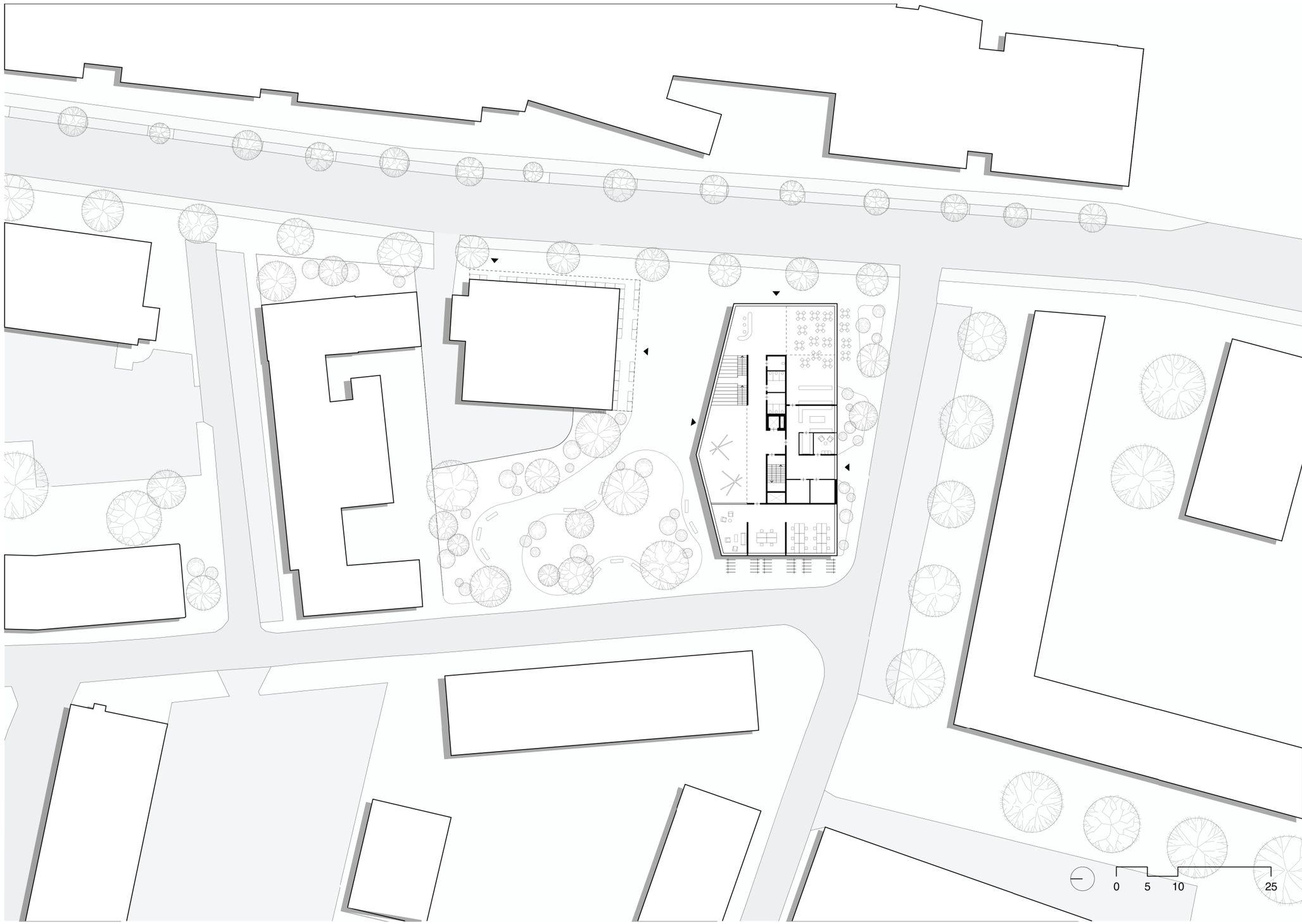
Create Urban Space



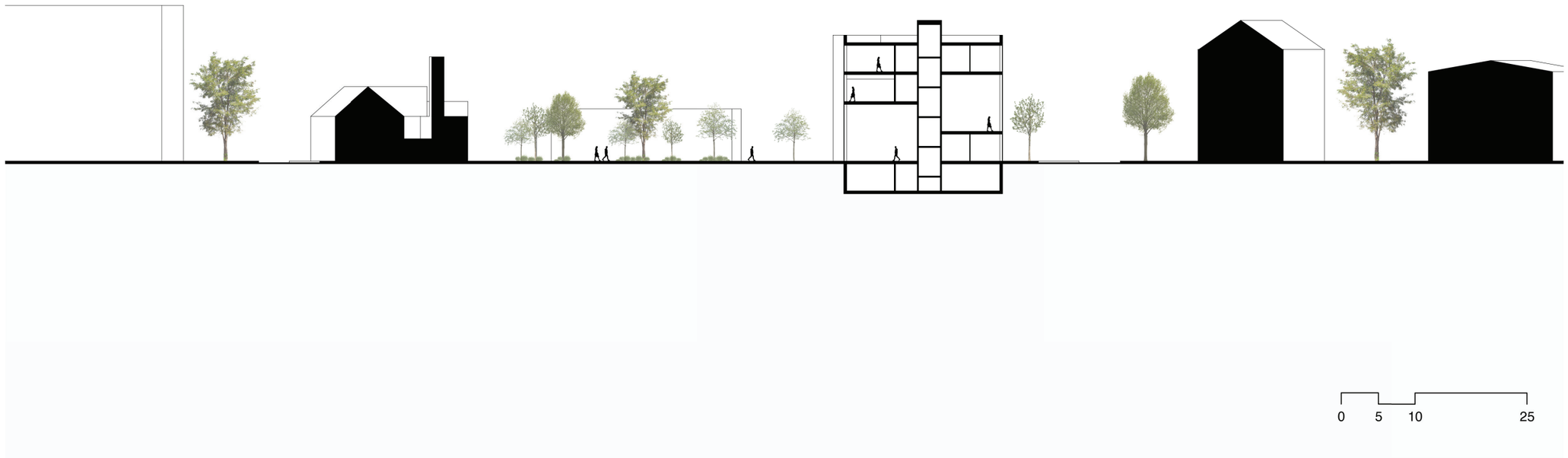
Focal Point



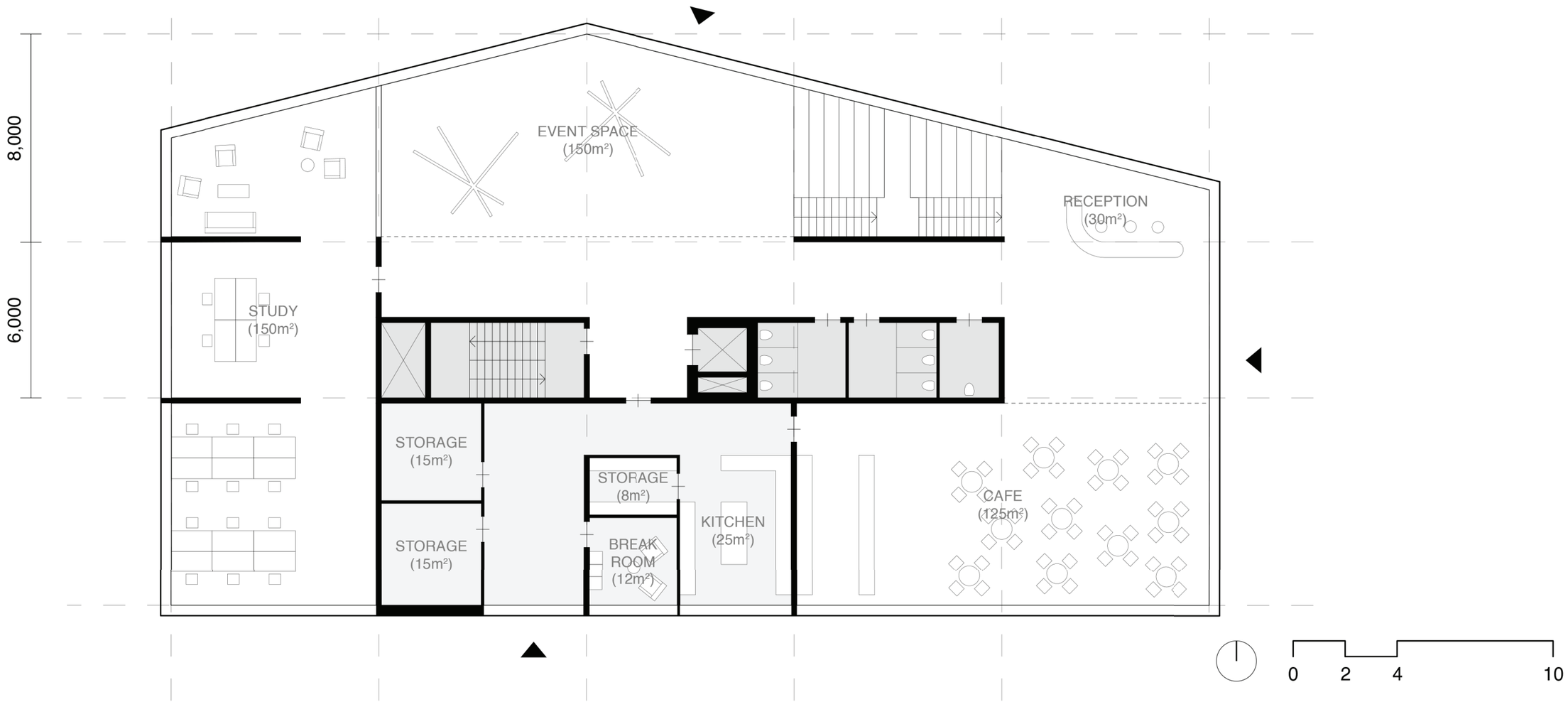
Site Plan



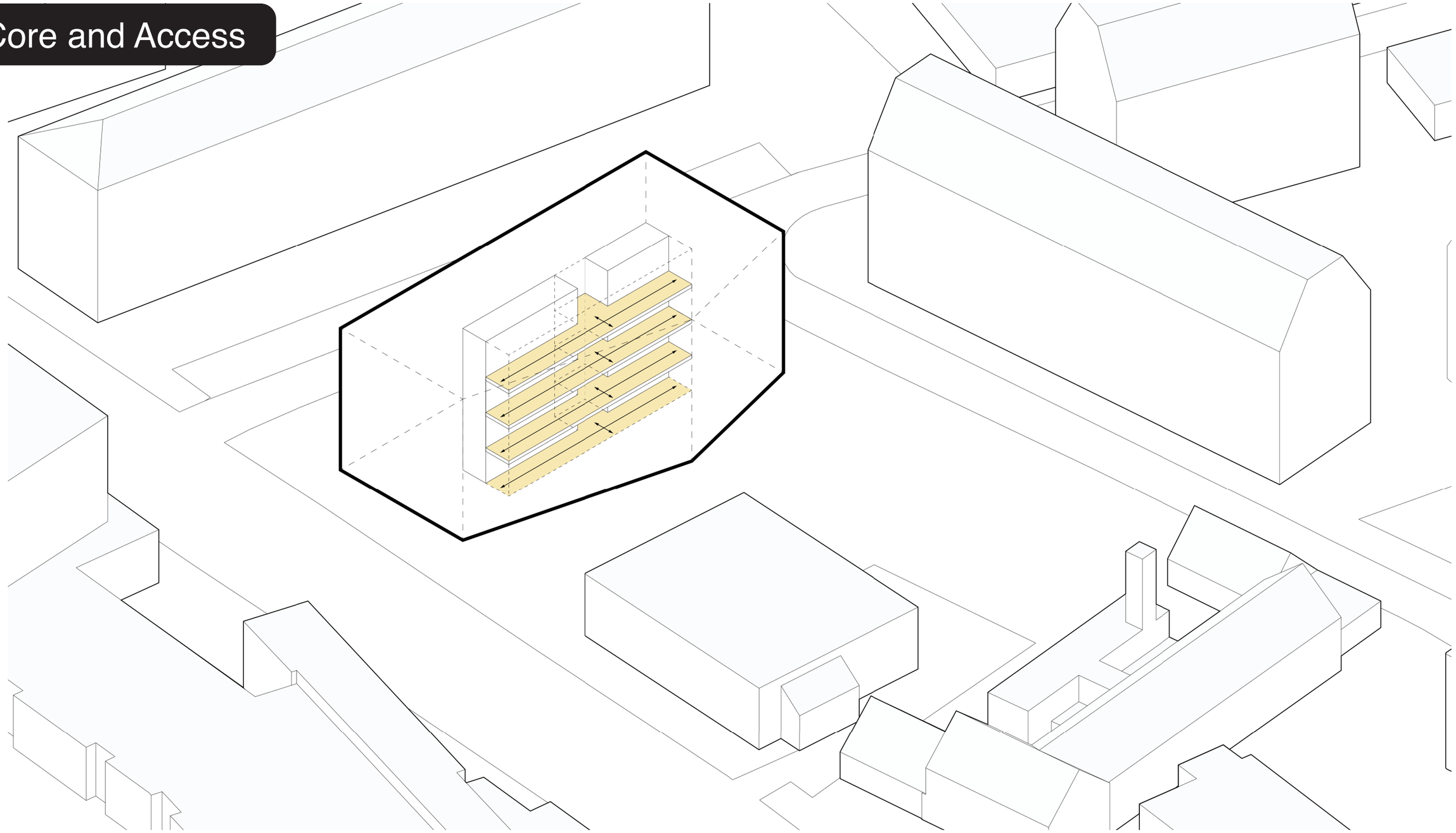
Urban Section



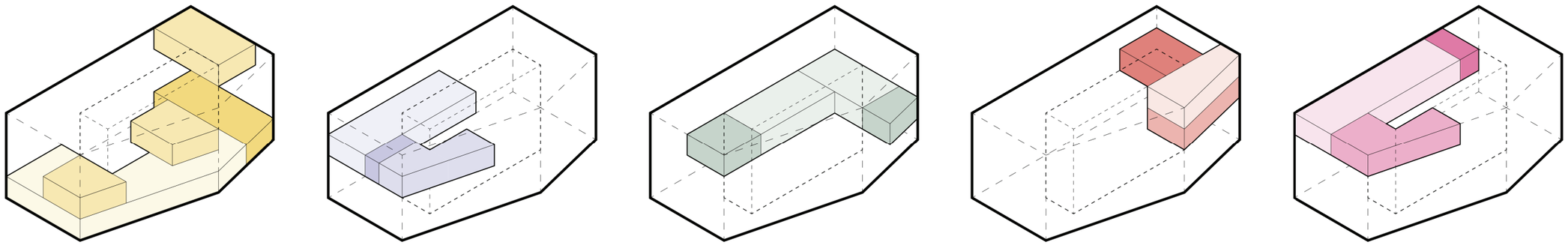
Ground Floor



Core and Access



Program Arrangement



PUBLIC & SOCIAL

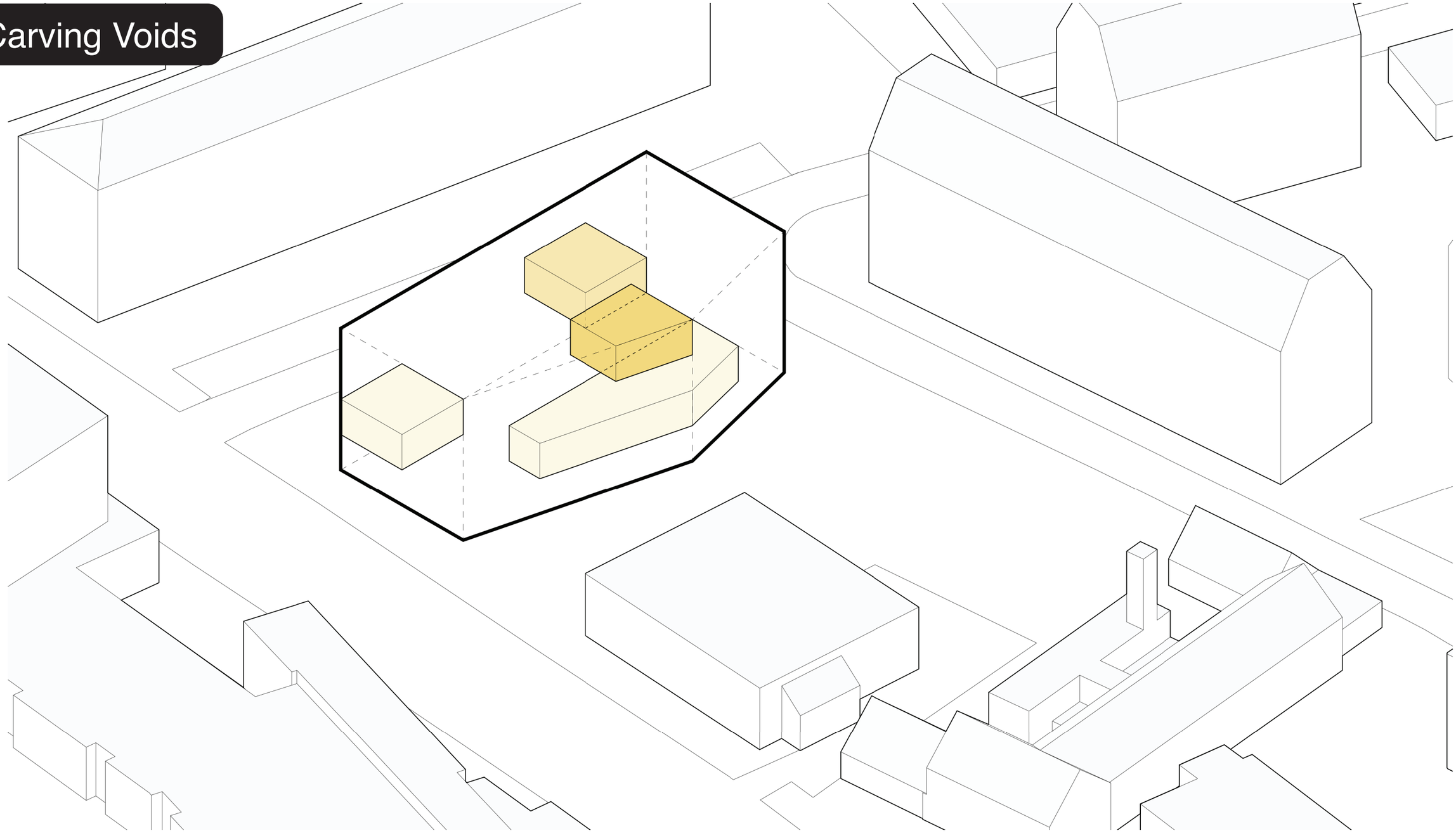
ART

CRAFT

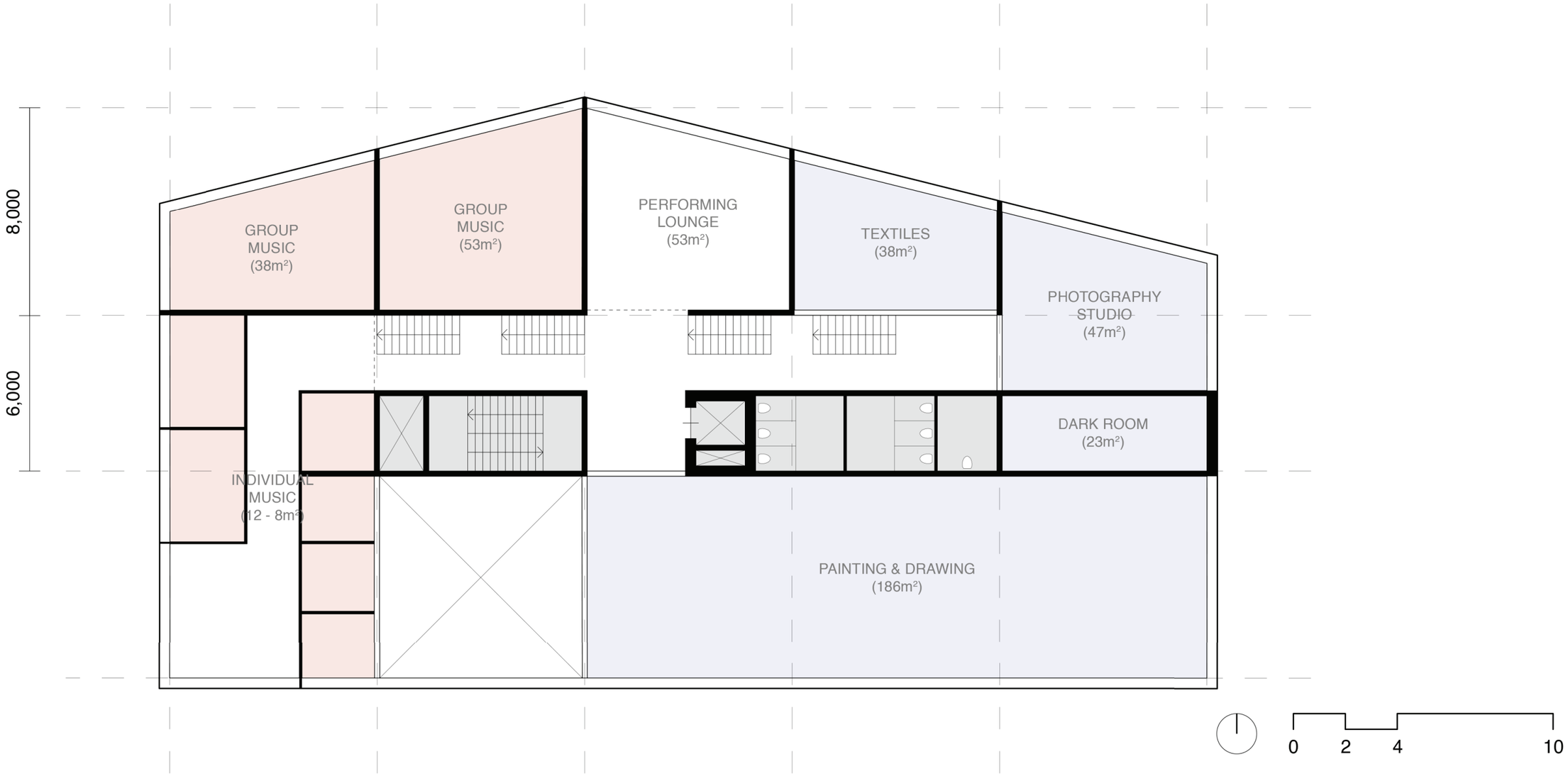
PERFORMANCE

SOCIAL WORK

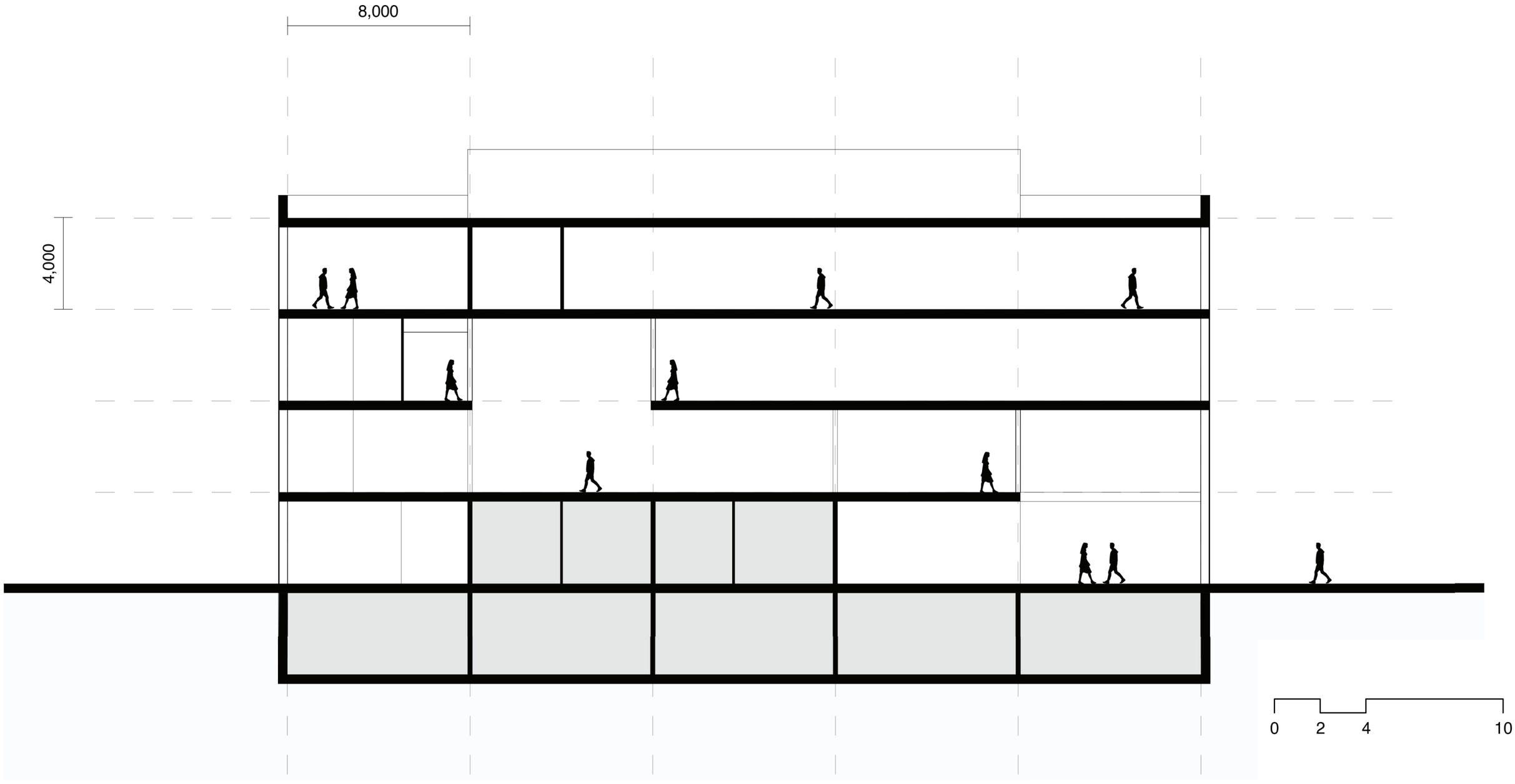
Carving Voids



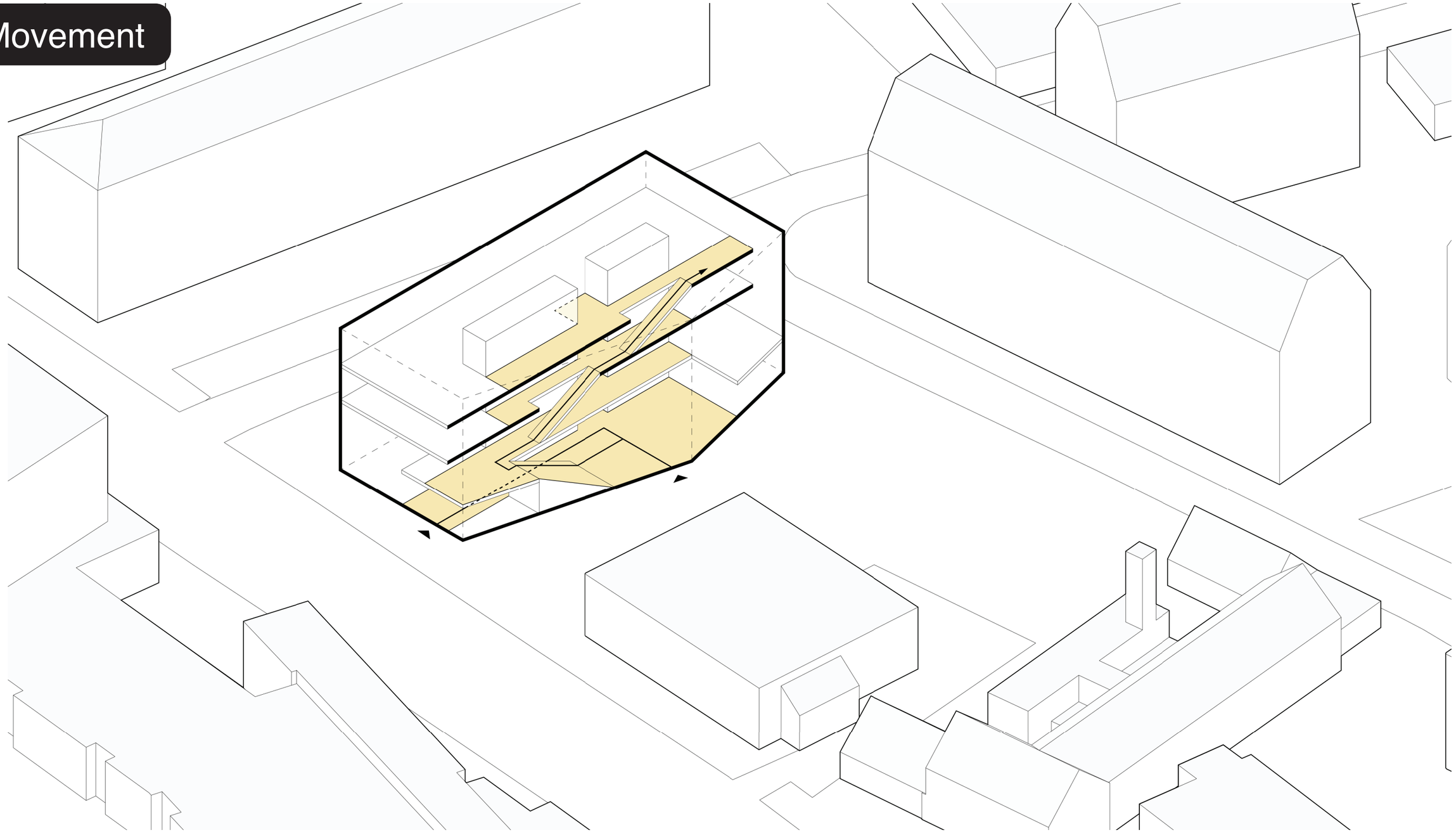
Second Floor



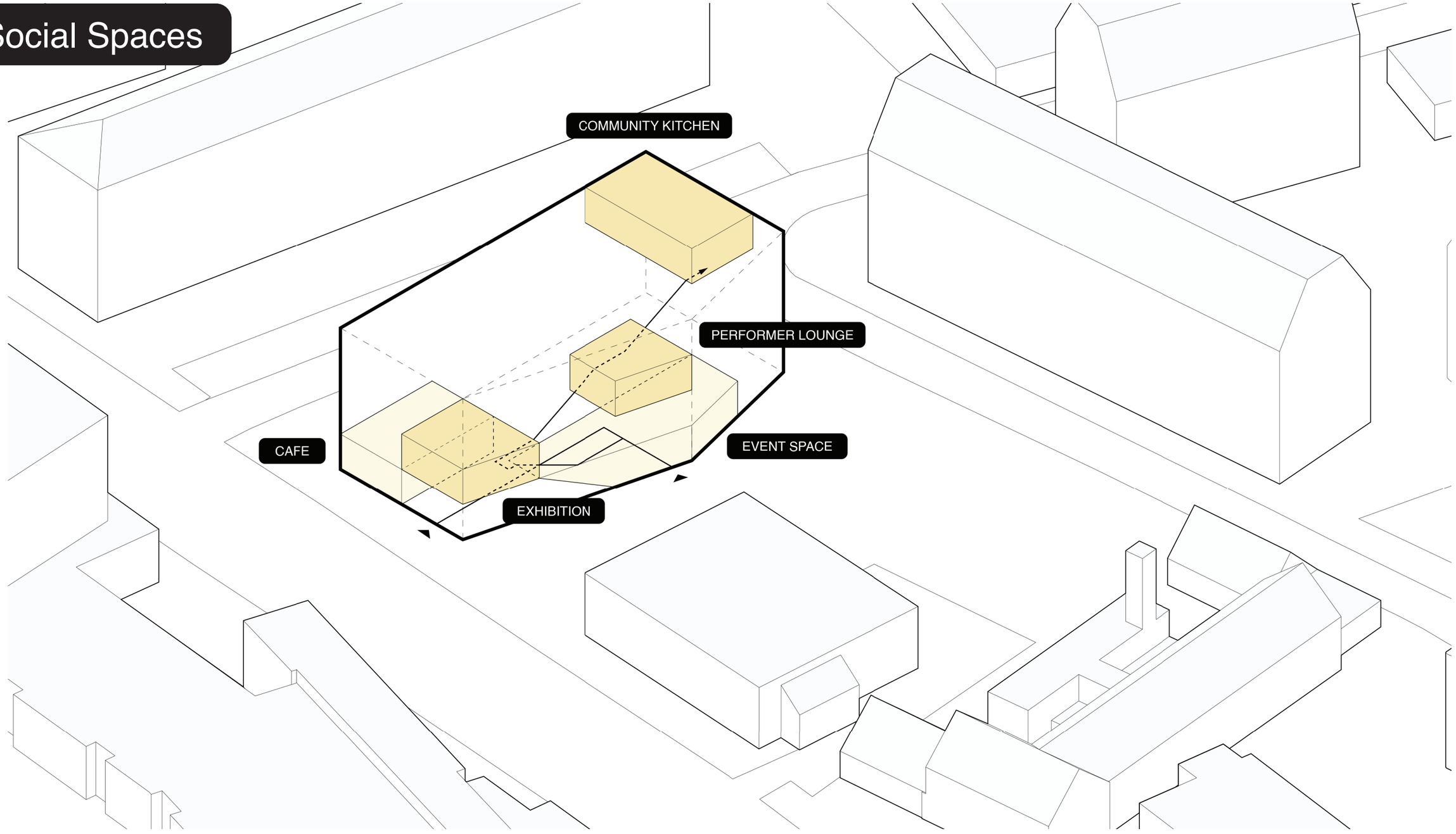
West to East Section



Movement



Social Spaces



References

Social groups

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