

4.0 CASE STUDIES

4.1 INTRODUCTION

In 2012 Oslo went from 0 to 4 IT and startup-related coworking spaces during the summer vacation (Aftenposten 3). Closer examination of interest organizations for Norwegian startups such as Oslo Business Region and Startup Norway, reveals that as of 2016, 17 in total have been established in Oslo area within a timeframe of 4 years, although 6 of them belongs to the semi-corporate coworking franchise Evolve, in accordance with the 2010 global hybridization and the capitalized version of coworking.

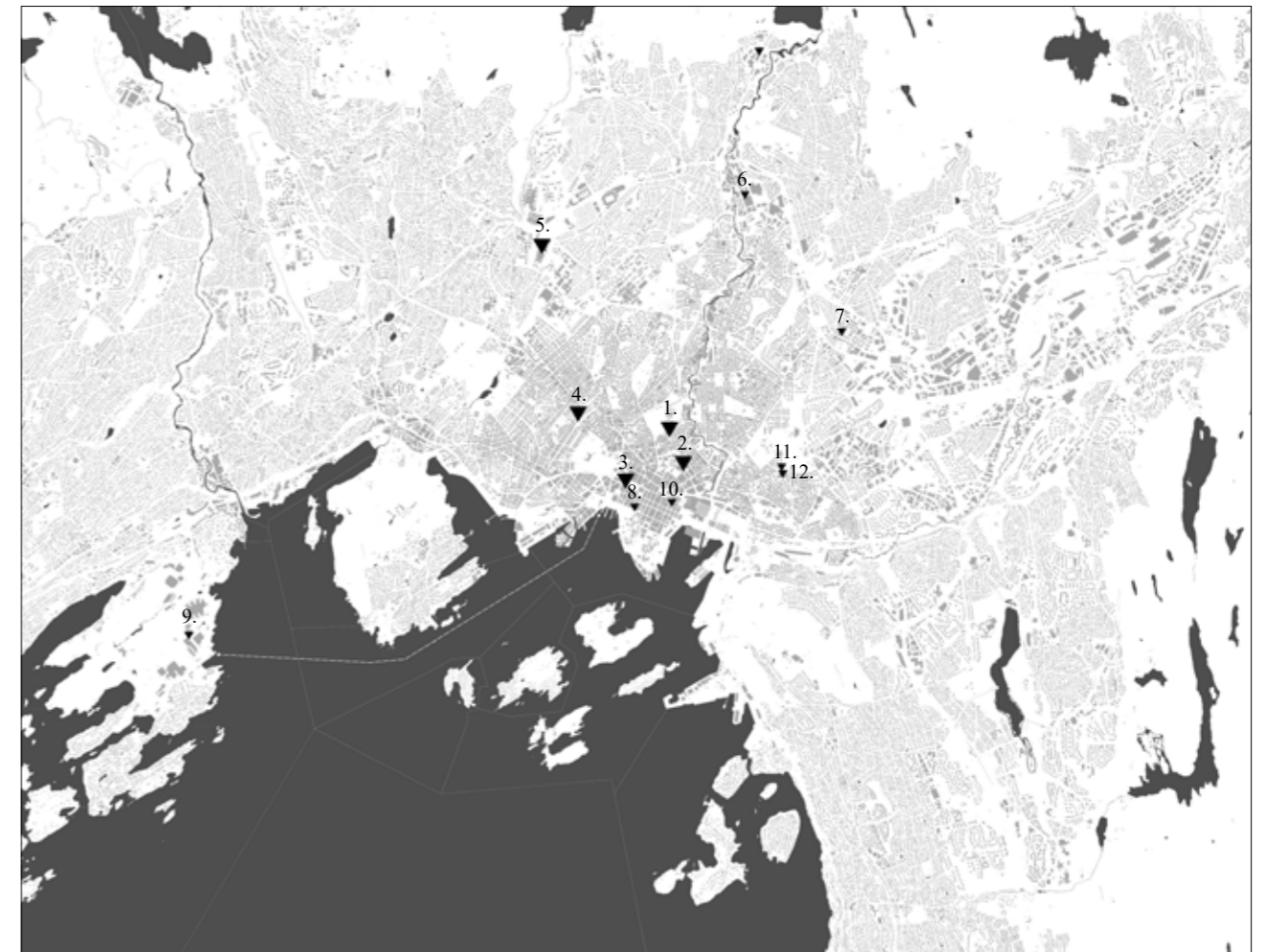
This chapter investigates the different aspects of 3 Oslo-based and startup-related coworking spaces (MESH, StartupLab, The Simula Garage) which convey a specter or a history of development of the coworking concept. Meanwhile the 4th (Tøyen Startup Village) represents the current tendencies in the planning of coworking spaces, and more in the direction of an urban development strategy. Before the presentation of the 3 case studies, a revision of Moriset's work is necessary to carefully explain the current state of coworking spaces.

List of Oslo startup front

List of official coworking spaces existing in Oslo, the info has been obtained through their own websites and through interest organizations such as Oslo Business Region and Startup Norway:

- 657, creative- and consultancy-oriented collaborative. Fredensborgveien 24D, St. Hanshaugen. Established 2012.
- BI Cowork, basic entrepreneurial coworking space. Nydalsveien 37, Nydalen. Established 2014.
- Bitraf, hackerspace and makerspace. Pløens Gate 4, Gamle Oslo. Established 2012.
- Evolve, major Oslo based franchise with 6 locations and with the entire specter of coworking- basic coworking, startup community, freelance etc. Usually not listed among bench marking organizations and not considered a coworking space by interest organizations due to its corporate nature and business model. Established 2005-2013.
- House of Nerds, inconclusive on what the profile of their coworking space is. Huge emphasis on the gaming event space for children. Lørenveien 38. Established 2013.
- MESH, basic coworking space, creative- and consultancy-oriented collaborative and startup community. Tordenskiolds Gate 3 & 6. Established 2012.
- Oslo International Hub (formerly known as Gründernes Hus), international image, but basic coworking space, incubator and startup community. Oscars Gate 27. Established 2012-2014
- Sentralen, creative collaborative and socio-entrepreneurial oriented collaborative, makerspace. They are promoting themselves as heavy on cultural production, with amenities and hybridization such as event spaces, café, stage etc. Øvre Slottsgate 3, Gamle Oslo. Established 2016.
- Simula Garage, image of altruism with profile of startup community and basic coworking space.

- SoCentral, pilot project, which resulted in Sentralen, look at their description. Skippergata 22, Gamle Oslo. Established 2013.
- StartupLab, Tech-savvy, elitist. Profile: incubator, startup community, basic coworking space,
- Tøyen Startup Village, an umbrella organization for several startup communities and coworking spaces in Tøyen. Socio-entrepreneurial collaborative, startup communities, basic coworking spaces etc. Currently dabbles in alternate operations of coworking spaces, without actually operating from one. Planned establishments 2016.
- TUBen, socio-entrepreneurial collaborative, based and built around an independent and socio-entrepreneurial organization called Tøyen Unlimited. Established 2016.



Coworking spaces 1:100.000 Sudden rise of coworking 2012:

1. 657, 2012.
2. Bitraf, 2012.
3. MESH, 2012.
4. Oslo International Hub, 2012-2014.
5. StartupLab, 2012

The rest:

6. BI cowork, 2014.
7. House of Nerds, 2013.
8. Sentralen, 2016.
9. The Simula Garage 2014
10. SoCentral, 2013.
11. Tøyen Startup Village, 2016.
12. TUBen, 2016.

The selected case studies are:

MESH (2012).

StartupLab (2012).

Simula Garage (2014).

How the interviews were conducted

The community managers (although under different monikers) at each of the startup-related coworking spaces are:

- Sondre Li Hauger, community manager at MESH.
- Kjetil Holmefjord, incubator manager at StartupLab.
- Jonas Archer, Project coordinator at Simula Garage.
- Fredrik Syversen, director for business development at ICT Norway and the key developer for the brand Tøyen Startup Village.

The information has been gathered through interviews with interest organizations for both IT and startups/ entrepreneurship in Oslo, such as ICT Norway and Oslo Business Region. For the case studies Simula Garage, StartupLab and MESH, both community managers and entrepreneurs at the coworking spaces have been interviewed. They have also been asked to sketch out a map of the floorplan and urban context their daily life at the office, where they sit, eat, relax, hang out etc. The depiction by the entrepreneurs does not give a complete picture, since the selection of them was based on day-time visits and those very busy were either not available or not in office. What it does provide is an insight of how the workspaces are perceived by a short selection of entrepreneurs. Many hours have also been spent observing these spaces, how the members interact, and respond to each other within the coworking concept. All the entrepreneurs interviewed also had one thing in common, none of them actually had any experience with traditional office job or at any corporate firm.



Sondre Li Hauger
Community manager
MESH



Kjetil Holmefjord
Incubator manager
StartupLab



Jonas Archer
Project coordinator
The Simula Garage








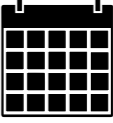
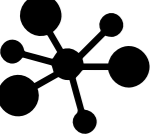




















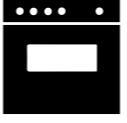




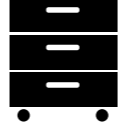




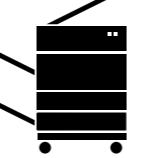




Fredrik Syversen
Director of Business development
Tøyen Startup Village,
ICT Norway



Fredrik Winther
Managing director
Oslo Business Region



GENERIC AND SPECIFICS OF COWORKING SPACES.

| CORE ELEMENTS | VIRTUES | PROFILE | AMENITIES | HYBRIDIZATION | ALTERNATE OPERATIONS |
|--|---|---|--|--|---|
|  <p>COWORKING SPACE A place or facility where people of different employment share office space and amenities. Also a place to meet, socialize, collaborate etc.</p> |  <p>TECHNOPHILIAC Tech-savvy, technological obsession. The ubiquity of technology makes it relevant in every aspect of coworking concepts.</p> |  <p>BASIC COWORKING Flexible or fixed desk, basic facility where independent workers sit together.</p> |  <p>WIFI Important for the lone eagles, the ubiquity of IT in daily operations makes WIFI the outmost priority.</p> |  <p>CORPORATE COWORKING When major firms and corporations start a coworking space together, an attempt to generate and test new ideas.</p> |  <p>EVENT MANAGEMENT Participates and manages public and major events.</p> |
|  <p>A COMMUNITY The keepers of social and working culture, intellectual property etc. There is no coworking without its people, the community.</p> |  <p>INTERNATIONAL Open to global trends, foreign impulses etc.</p> |  <p>INCUBATOR Result-oriented and facilitates for small but growing companies. Generally with accelerator programs, investors etc.</p> |  <p>DESK It may be fixed or flexible, whatever suits the daily operations of the lone eagle best. The desk ultimately represents different memberships.</p> |  <p>ENCLOSED OFFICE SPACE To cater growing or bigger companies. Also to maintain other interests within the coworking space.</p> |  <p>BRANDING Treats coworking as a brand, merchandise and company.</p> |
|  <p>COMMUNITY MANAGER The all-seeing eye. Decides who stays and leave, keeps tabs, curates and cultivates the space etc. Also deals with HR or human capital.</p> |  <p>CORPORATE Capitalistic and result-oriented mindset. Main goal is to succeed on the market.</p> |  <p>MAKERSPACE or hackerspace. A mixture of coworking, workshop, machine shops, studios. etc. where people ranging from hackers to designers can share knowledge and build stuff.</p> |  <p>LOUNGE Function as the third place in coworking spaces. An alternate place for relaxation, work or informal meetings.</p> |  <p>MIXED-USE SPACE Auditorium, theatre, stage, scene, event space, networking etc. Also mixed between private and public use.</p> |  <p>URBAN DEVELOPMENT Participator in urban and smart city development and discussions.</p> |
|  <p>ADMINISTRATIVE UNIT Technical support, legal advice, human relations, public relations etc.</p> |  <p>COLLECTIVE Community builders. Great supporter of shared economy, knowledge sharing, social events, networking, mingling.</p> |  <p>STARTUP COMMUNITY Focus on repeatable and scalable business model. Growth and innovation as main goals, bound to leave. Temporary state.</p> |  <p>MEETING ROOM Dual role: for the sake and image of professional appearances.</p> |  <p>RESTAURANT Managed as a separate unit to the coworking space. Has dual function as the third place. Becomes a part of the urban fabric.</p> |  <p>PUBLIC RELATIONS Deals with media, press and marketing etc.</p> |
|  <p>MEMBERSHIPS Defines rank, accessibility, agenda and activity of the members. Is only given by the administrative unit or community manager.</p> |  <p>ELITIST Competitive mindset. The belief of possessing intrinsic qualities, intellect or experience greater than others.</p> |  <p>CREATIVE COLLABORATIVE Workers with background in arts and design often in relation with consultancy.</p> |  <p>KITCHEN Food, coffee, water etc. Usually preferred over the regular cantina. A place for informal meetings.</p> |  <p>CAFÉ Managed as a separate unit to the coworking space. Has dual function as the third place. Becomes a part of the urban fabric.</p> | |
|  <p>LONE EAGLE Knowledge workers, freelancers, skilled labor who can live and work from anywhere, made possible by tech-advances.</p> |  <p>ALTRUISTIC Philanthropic and humanitarian mindset. Acts on the behalf of the greater good for society. Concerns about the welfare of companies and not personal gain.</p> |  <p>CONSULTANCY-ORIENTED COLLABORATIVE Consultants who offer services and advice to other companies. Considered the stark contrast to startups.</p> |  <p>FURNITURE AS MEDIATOR Sometimes on wheels, works as spatial separators instead of walls in the context of open office- landscapes.</p> |  <p>BAR/PUB Managed as a separate unit to the coworking space. Has dual function as the third place. Becomes a part of the urban fabric, also at night time.</p> | |
|  <p>SERENDIPITY PRODUCTION The production of the events by chance, informal meetings and random encounters leading fortunate happenstance or pleasant surprise.</p> |  <p>PATRONAGE Patrons of cultural production and supports it in any way possible.</p> |  <p>SOCIO-ENTREPRENEURIAL COLLABORATIVE Local entrepreneurship to increase social life for the less fortunate people, immigrants, welfare etc.</p> |  <p>PRINTER One of the important amenities from the traditional workspace, where the cost of owning one was high. Its current importance can be debated.</p> | | |
|  <p>THIRD PLACE A place for informal gatherings of individuals beyond the realm of home and work. Irreplaceable in the production of the urban fabric.</p> | |  <p>OTHERS Other profession-specialized collaboratives, that have not yet to be coined or invented.</p> |  <p>RECEPTION Important if coworking space is part of a bigger institution or brand. Dual function as the voice and physical presence of coworking.</p> | | |
| | | |  <p>TABLE TENNIS Exist in almost every coworking space. Its importance can be debated. Other recreational games include pool, chess etc.</p> | | |

4.2 GENERICS AND SPECIFICS OF COWORKING SPACES

In Moriset's research paper from 2013, "Building new places of the creative economy" he provides a comprehensive insight into the genesis of coworking spaces and the complexity of hybridization. However, the Norwegian case studies reveals that Moriset's data falls short in describing their current and contemporary state. Based on the interviews, observations, study of physical layout, it is important to convey how the concept coworking has evolved so rapidly the past years. The table, Generics and specifics of coworking spaces makes an attempt of categorizing the entire specter of coworking as of May 2016. This is to make the readers of this thesis aware of every possible aspect of the coworking concept today, from core elements to alternate operations. It is also for the reader to understand lingo of the startup trend, and how policy makers and developers proceed in the discussion of coworking spaces, or to be more precise, the current trend of startup-related coworking spaces. The next segments 4.2-4.6 explains how some established concepts differs in the context of coworking. There are also some new concepts within the coworking concept that needs a further description. These descriptions may be more colored by the emphasis on the most popular variety of coworking these days, the startup-related coworking spaces.

4.3 CORE ELEMENTS

Coworking space and the community

The definition of coworking spaces is as mentioned before, very generic. Moriset's description of a facility where people from different employment share office space and amenities may imply that every members of the community are equals. However, in the context of contemporary coworking, there is a hierarchy between different lone eagles, types of serendipity production and the degree of how the coworking space function as a third place.

Community manager and the administrative unit

If a community is defined by its members, then the administrative unit is the very definition of the community. The success of the community seems to lie in the management of the community, where the community manager of the administrative unit plays the most vital role. A community manager is the equivalent of a mayor in a city, he/she makes sure that the needs of every member is satisfied, and to use the full potential of each of the community's members.

The concept of community is a careful and eclectic selection of entrepreneurs, made by the community manager and the administrative unit. Their main objective to cultivate or curate certain cultures within the coworking space that fits their notion of what a coworking space should be. The reasons for doing so may vary, from harboring only advanced startups, to help out the ones that are most vulnerable or profit the most from the coworking space. The community manager and the administrative takes rent and no equity in the companies they house.

Membership

A membership usually implies that a you are free to choose between the options that an institution or group have to offer. However, in the context of coworking, it is not only something you choose, but the membership

and the kind of membership will also be assigned to you by the community manager and the administrative unit at the specific coworking space. Access can even be denied based on your business model, size and scope of your startup company, personality, ideology, or even solely based on your reluctance to share etc. A basic membership for example, gives access to the entire facility, but those with that membership with a basic membership with access to the community (directed to major companies who wants to keep tabs on promising startups). Taken all the memberships in consideration, there are four main memberships:

- Basic membership.
- Flexible desk, or commonly known as clean desk. The rules of conduct around flexible desks are that nobody can claim these desks as their own.
- Fixed desk,
- Enclosed office space, or commonly known as an office.

4.4 VIRTUES AND CRITERIA FOR ADMITTANCE

Every community in a coworking space is built on a foundation of core virtues or values. The virtues apply both to the administrative unit itself and the members at the given coworking space. It is a question about the co-existence of like-minded people, working in close proximity to each other. This is important in relation to the criteria for admittance. According to Winther from Oslo Business Region, the coworking spaces that struggles the most are the ones with the least criteria for the people they invite into the community, and mentions House of Nerds in Økern as an example. This is an important aspect in acquiring the much coveted or specific traits and cultures of a coworking space such as synergy, shared knowledge, working culture, field of interests or common interests etc.

4.5 PROFILE

A profile is basically a coworking space plus an additional area of focus or a focus on a specific group of professionals. The additional area of focus changes how the coworking spaces are planned, perceived and what kind of cultures it has. Some of the profiles are self-explanatory, yet there 2 profiles and 1 model that are startup-related, in which needs closer attention:

- An incubator, or more commonly known as a business incubator, focuses on promising startup companies. In addition to this, the incubator provides professional and corporate help, management training, accelerator programs etc. aimed at increasing the success rate of startup companies. These coworking spaces provide an extensive network and connection to corporations, companies, investors, funding organizations etc. which are supposed to benefit its members.
- An accelerator program, or more commonly known as seed or startup accelerators is a cohort-based program which focuses on highly competitive startup companies. It is not mentioned as a profile in relation to coworking, because their focus is not on the concept of community, but on return of investment, which means they are highly competitive and highly selective. These programs invest in exchange for equity and take no rent. The startups must "graduate" by a given deadline, usually after 3 months, which makes the accelerator program a highly temporary model. The final examination

day usually culminates in a demo day, or pitch event where they meet investors and present. These accelerator programs are important to mention, since it is often mentioned in media as the key aspect that is missing on the Oslo startup front. Although Incubator may have a variety that may resemble an incubator, they not take any equity and have no graduation day.

- Startup community, is a coworking space focusing on only startup companies, but with a focus on the community aspect, where the incubator and accelerator program does not. The variety and differences of startup companies within these communities are therefore important, not the premise of success rate or return of investment. Since the entire concept of startup to become a bigger company, their stay in a startup community is temporary as they are destined to move on.

4.6 HYBRIDIZATION

Coworking is undeniably exposed to dynamic changes and the vagueness of programmatic purpose opens up for coworking hybridization, such as event space, pub, café, lounge etc. One perspective of programmatic hybrids in coworking, is that innovation and entrepreneurship may be denoted from center stage. On the contrary, it can also potentially give coworking a higher relevance in the urban fabric by inviting the average citizen into the same environment as the entrepreneurs (ex. MESH, Tøyen Startup Village). According to Deskmag¹ the contemporary workspaces for standard desk jobs usually resides at office, home, or even the local coffee shop. The growing tendency of lone eagles has caused a demand for workspaces that answer this current trend, which is the hybridization of coworking spaces, where elements such as mixed-use space, restaurants, bars, cafés becomes very important to coworking. There is one aspect of the hybridization that is of interest, which is the corporate coworking. The concept is not present in Norway yet, but marks a merging of corporate and collective ideology. It is not to save any real estate costs, or to provide space for expansion or to provide a remote work option, but to generate and test new innovative ideas in the same tradition as how real startup companies in coworking spaces handles their ideas and projects.

4.7 ALTERNATE OPERATIONS

The alternate operations mark a new wave of activities that the coworking concept can adopt and carry out due to its current appeal and popularity. These operations do not impact the performance of the coworking space itself directly, but increases the importance and influence of the coworking concepts by partaking in discussions on urban life and development.

¹Deskmag is widely considered the first and foremost online magazine about coworking, its people and spaces.

4.8 CASE STUDY: MESH

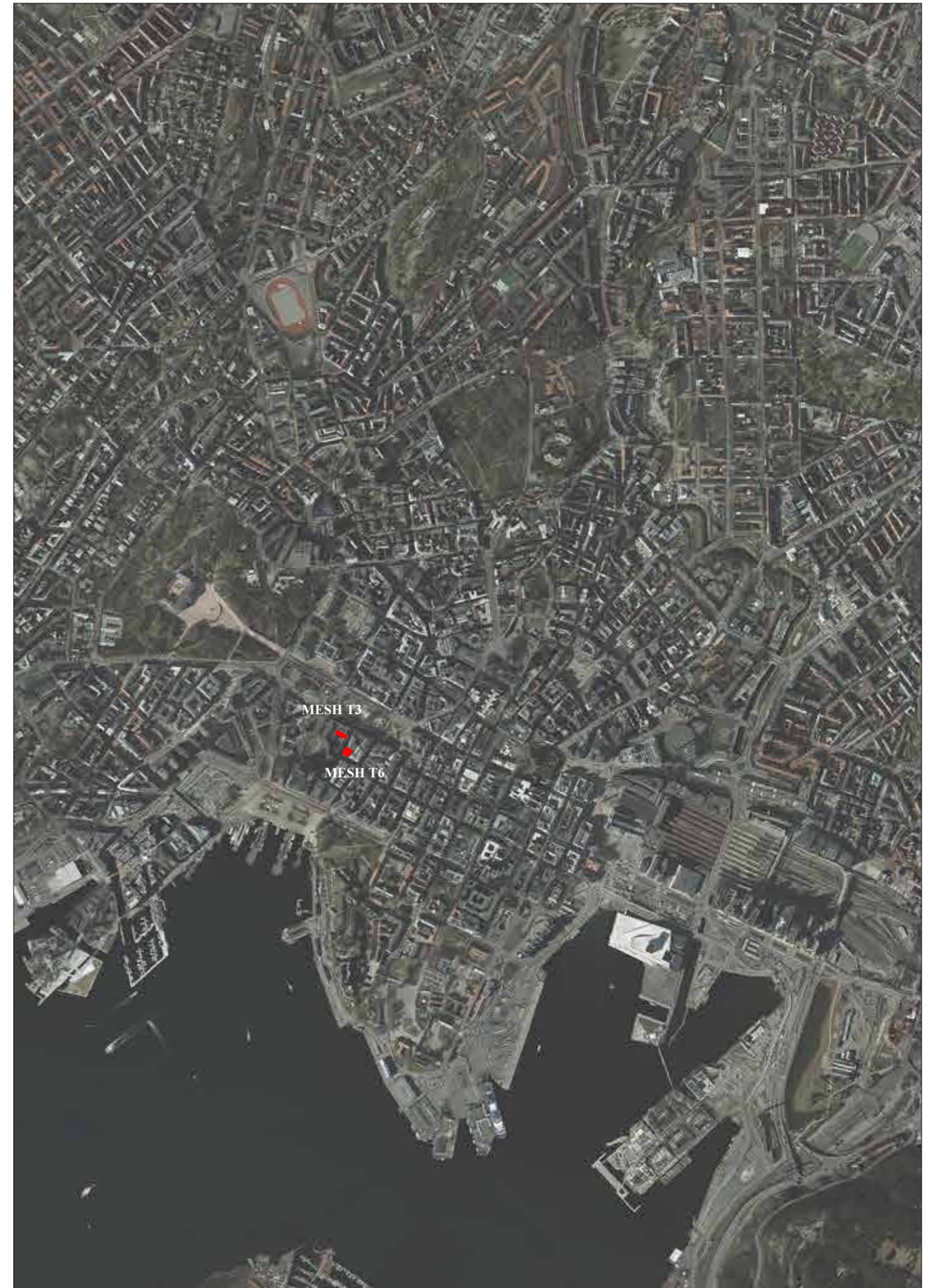
Introduction

MESH was established in April 2012, and became the first coworking space in Oslo. It is a private initiative and has no direct connection to any research institutions in the area. It was established by Audun Ueland and Anders Mjåset, two twenty-something promising entrepreneurs with a great track record in the startup front with startups such as Prampack, Topstudenten etc. during their studies at the Norwegian University of Science and Technology (NTNU) in Trondheim. After travelling the world and taking notes, they decided to establish themselves in Kvadraturen, an area mainly dominated by office-tenants. This was possible through leasing the building owned by Ole Petter Gilbo, which gave Ueland and Mjåset free reins to explore the possibilities of coworking. Aside from running his business as an investor, he is the proprietor of some other locations in Kvadraturen housing galleries, art school, publishing etc. He is also the board member at some of Oslo's most prominent E.R.'s, pharmacies and other R&D-related companies' in Norway. Since then, MESH has gone from simple beginnings with a coworking space in parts of the 3rd floor at Tordenskiolds gate 3 to gradually taking over the entire 3rd and 4th floor and currently taking over the entire 4 story apartment building. As of the summer of 2015, MESH expanded to the 2nd and 8th floor of the adjacent building with Oslo Areal as landlord. The case study MESH will be described only through Tordenskiolds gate 3, as the majority of MESH's activity is located there. It is worth noticing that Tordenskiolds gate 6 houses companies of considerable size, some are even leasing 2 units of enclosed offices.



Management

MESH consists of two teams, the administrative unit for coworking space and the event team for events. The agenda of these two create a dynamic serving both the coworking space and the café/bar/restaurant/event space, blurring the lines between private and public to semi-private and semi-public. The dual management has generated spaces with double roles, such as the work lounge functioning as the third place and coworking space from 8:00-17:00, after hours transforming into an event/mingling area. Although the building is owned by Gilbo, the brand MESH is owned by Ueland, Mjåset and partners. MESH has to make ends meet as they answer to Gilbo as their landlord. Hauger, the community manager reveals that MESH is financed mainly through the event management, and not on the rent income of the entrepreneurs. Therefore, going in surplus is the outmost priority for MESH.



The buildings MESH manages, is the entire four story apartment building at Tordenskiolds gate 3 and the 2nd and 8th floor across the street at Tordenskiolds gate 6. Their partners are Selmer and Telenor, a strange union of a celebrated lawyer firm and a telecommunications company who offers support to the members of MESH. They are usually present at the weekly Monday breakfasts where the partners and new arrivals present their companies and ideas, very similar to what one would call a pitch event on the startup front.

The rules of conduct are just as much defined by the members as they are defined by the community manager. Hauger is very open to creative input on how to manage the space and treats this process more as an open source management. The members can modify their own workspace, simple things such as hanging up pictures and more extensive matters such as painting walls or re-organizing memberships or workspaces, as long as it makes sense to the administrative unit to do so and the interventions are beneficial to the community. MESH tries to connect their members and their expertise to each other, introducing beneficial unions in-house. This is where their business support ends. Although MESH would be gladly to introduce their members to suitable contacts within their network, they do not tell members what to do or where to go with their business. This is where MESH cooperate with StartupLab whether they are a better fit to handle accelerator-oriented requests, because MESH do not have the same incubator profile as StartupLab, nor are they interested in telling their members what to do with their business. The membership fees per month at MESH are as following:

Community: Free.

Work Lounge: 790 NOK.

Flexible and fixed desk space: 2190-3190 NOK.

Office space (enclosed office space): 7000 – 20.000 NOK.

MESH introduces new membership concepts that are worth noticing, such as the community membership, which is basically a product of hybridization where the common citizen is invited into the backyard and sometimes other parts of the 1st floor of MESH, even though it is only the common spaces. The work lounge membership is an invention by MESH. They have created the work lounge membership for travelling businessmen whose desk are empty most of the time (explained in the physical layout segment). This is mainly attributed to their awareness of assigning inactive members to the community. Inactive in terms of how much activity, life and presence they generate in the facility. The administrative unit is not interested in people occupying MESH without feeding back to the social life here or people leaving their desk empty.

There is no maximum timeframe for staying at MESH, but according to Hauger, the companies stay on for approx. 18 months. Although the members sign a contract for their membership, they are also advised to keep an open mind regarding changing up desks and the rearrangements of office spaces. This is not only to enhance the dynamic of change and new relations, but also to make space for new arrivals.

The event team gets approx. 1500 event requests a year and manages about 600, both private and public, resulting in days with multiple events. The events are divided in 3 categories:

- Self-initiated events, by MESH.
- Niche events that are theme-based, where both members of MESH and public will benefit and meet one and each other.
- Conventional commercial events, where MESH still caters the food, tech etc.

Some of the self-initiated events are organized to lower the threshold for local interaction and provide synergies between the companies in the area, such as the famous Floor party. The event team requires that each floor in the two buildings create pre-parties, or commonly call on themes related to their business and companies. This is to inhibit a typical corporate working culture where people only work and go home. The management of the last category has also caused the guests at the events to come back 2-3 days later for a casual coffee.

They also aim to connect with existing coworking spaces and communities on a global level. Their future ambitions and management of MESH will have a focus the expansion of MESH across the entire Scandinavia, hence the slogan, MESH the Nordic community. According to Hauger, their next move will probably be to expand with location in Norway, and they are currently looking into a specific site in Molde.

Image, profile and criteria

MESH's image or one-liner is to function as a platform for entrepreneurs and startups. Although MESH do have some altruistic virtues and ideologies on supporting and facilitate entrepreneurship, and offers free printer service, coffee, meeting rooms etc. out of their own pocket.

Their event management should be profitable, as it is in fact, is a private-run initiative, or tenants themselves. Profit is a necessity and outmost priority for MESH's business model and survival as they also have to answer to their more corporate landlords and the Oslo startup front.

They have one crucial criterion for admission, aside for looking at the past success and levity each company brings with them. It is the candidate's willingness to share an idea, or their willingness to feed the shared knowledge culture. This is an inherent attitude MESH is looking for in every company. When working with innovation, secrecy is a big issue. However, at MESH the criterion is to establish a dynamic community of networking, shared knowledge and intellectual property. This is also what many members consider as MESH main asset.

MESH do clearly state that their main profile is to be a startup community. Their other aim is to facilitate a more open-ended profile and include a wide range and broad specter of knowledge workers that are usually considered as the opposite, such as startup community and consultancy collaborative etc. however, observations at MESH reveal that the majority of their members now are coders and tech workers etc.

Physical layout

MESH as of now, consist of a coworking space with 28 flexible and 6 fixed desks, 11 enclosed office spaces, 5 meeting rooms and a mixed-use space. Up until the summer of 2015, MESH consisted of 5 core programs, office- and coworking space, a café, event space, nightclub and a makerspace with access to workshops (wood, 3d printing). MESH 2.0 as the Oslo startup front calls it, consist now of their 3 core programs (nightclub and makerspace excluded). One of MESH's key management aspects, is their willingness to evolve, to test and fail and check the limitations and potentials of coworking. There are about 250-300 members frequenting MESH at all times, divided amongst 90 startups/companies. Many of the bigger firms are placed in their secondary location across the street. etc. making it the biggest coworking space or startup community in Oslo.

What is distinct about MESH, is not only the emphasis on the common spaces, but also the dynamic and evolving nature of its physical layout and programmatic, architectural and interior changes. The interior in the common spaces at MESH changes at least 2-3 times a week, sometimes on a daily basis. Sofas may disappear for a day or two and suddenly resurfacing on another floor or a complete extra set of furniture which may be replaced. The explanation of this phenomenon is simple; MESH stores an extra set of furniture in the basement. This is something the administrative unit and the event team emphasize as important, to try out spatial concepts, to test it, sometimes fail and readjust.

As none of the administrative unit are actually trained architects, the modifications they have made at MESH is both peculiar and interesting. The randomness of a walled in windows, doors leading to mid-air of the Backyard or even a sculpture of solid granite resting on two metal beams above the stairwell, a WC next to the kitchen, 1m2 rooms etc. The variation and flexibility of spaces has also been mentioned by the members of MESH to have kept their interest in exploring the different spaces and work in different conditions. MESH has somewhat generated an architecture fitting the ideology behind coworking space, the core element of serendipity production, spaces that makes the user wanting to explore the curiosities and wonders of the facility, creating new groupings and random working environments every day.

Urban implications

Does MESH benefit from its urban context? According to the literature review, there is a conventional wisdom that industrial complexes is defined by a union of research, education, commerce and industry. MESH has only the commerce to rest on. The metropolitan urbanity and qualities of MESH seems to outweigh the fact that it is without any connection to research institution, university or schools, or at least the image of it as some of the other case studies seems to benefit from. This is in regards to that the administrative unit at MESH has been successful in generating a great deal of buzz through events and word of mouth. Their popularity may even have paved the way for other coworking spaces not only in Kvadraturen, but Oslo in total. Bitraf and Sentralen which opened in 3rd of March 2016, are some of the notable examples in Kvadraturen. Although there are many coworking spaces in close proximity of MESH, Hauger do admit that the coordinating between them could have been better. MESH's closest coworking collaborator is StartupLab. Despite a missing coordination between the coworking spaces, the entrepreneurs

do frequent the coworking spaces in close proximity. Members contribute this to when being a part of the coworking culture, it automatically creates an awareness of the other coworking spaces nearby.

Two of MESH's memberships are a direct result of its urbanity, such as the community and work lounge membership. The guests using the free-of-charge community membership in the Backyard is a mix of students, freelancer, office workers nearby, parents with a stroller and random people passing by. The serendipitous nature of MESH would not have been possible if it was more secluded (ex. Fornebu) to the urban fabric or part of a homogeneous urban development (ex. Gaustadbekkdalen). The work lounge is a direct result of a demand for an established working environment and meeting rooms central in Oslo by travelling businessmen, freelancers and those with secluded workspaces that make it hard to meet with clients and conduct business.

The metropolitan context also seems to bring with it not only business-related benefits, but also recreational. There is a walking distance to many clients, popular cafés, nightclubs or Sunday trips to the park. In the summer, many of them even go to the harbor or docks outside the city hall during their lunch break. MESH is very much part of their everyday life as it is their work life in the city.

Working culture

As mentioned, the profile of MESH includes a wide range and broad specter of entrepreneurs, but the majority of the community works in the tech and IT industry. What repercussions does this have for the working culture? The community seems unaffected by this fact. Although it has been observed that IT and tech workers have deeper technical discussions and bond much easier, the entrepreneurs from different vocations and the technicians here meet halfway, talking about aspects from both fields that are relatable. People connect easily, despite professional boundaries. The wide range and broad specter also forces the members to be more precise in their description of their professional activities, improving the way they communicate their project. This may have a direct link to MESH's criterion of the inherent attitude of shared knowledge in each of the members admitted.

Different memberships do imply where some members are allowed and not allowed to work. Such as the flexible are allowed to work in the coworking area with flexible desks on the 4th floor, while the ones with an enclosed office space are not allowed entry. It seems the variation of spaces has created such a strong urge in entrepreneurs of all memberships frequently moves around and work different places. Sometimes work is done in the kitchen, on the sofa, in the gallery or even those with an enclosed office space on a flexible desk, although only when it is empty up on the 4th floor.

The members seem very aware of the competence and the skills that can be found in their working environment. Although all the information is on Slack, the members contribute the culture of using each other to the low-key events, making it easier to take contact later on when professional issues emerge. As mentioned the work lounge is meant for travelling businessmen which is in town for a couple of hours or days and in need of an established culture or business environment. It can also be viewed upon as a private

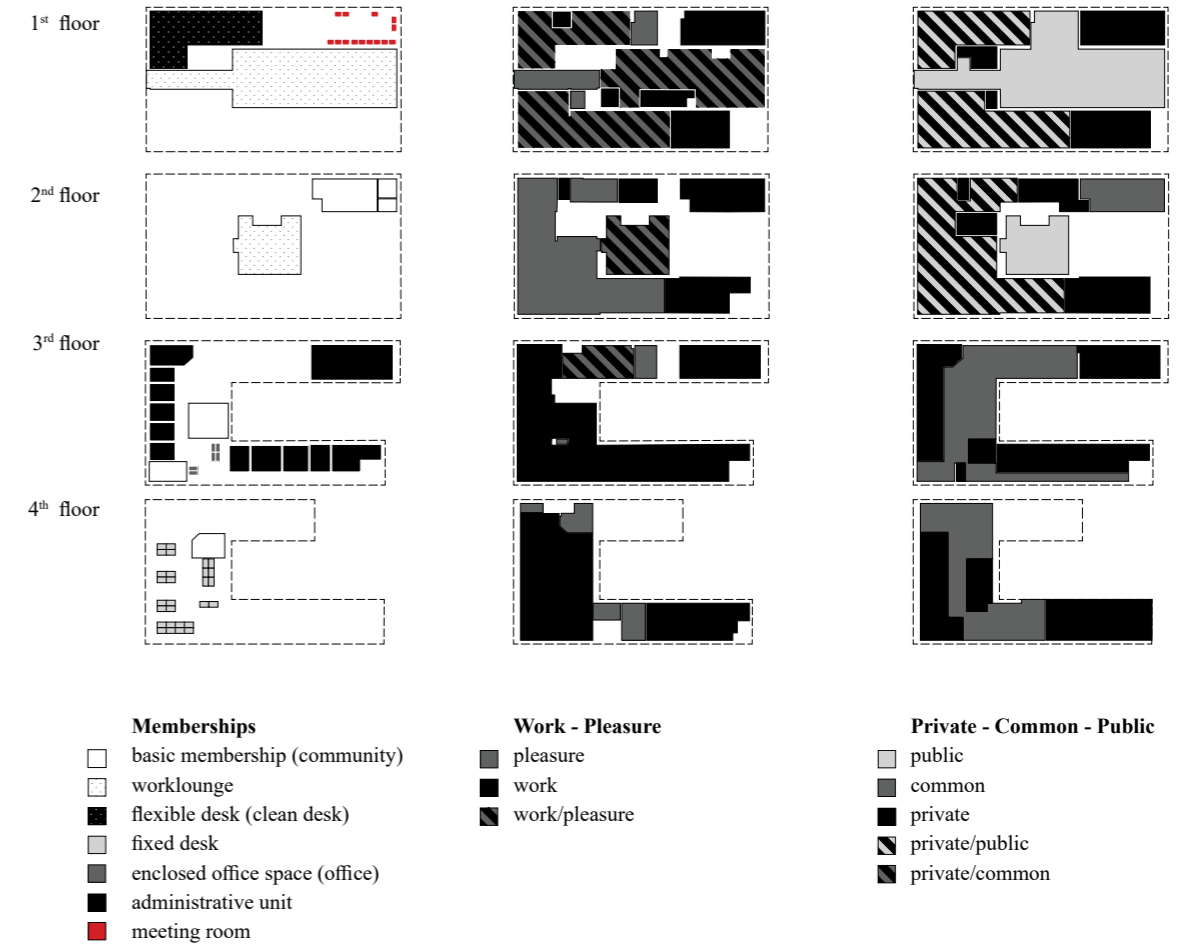
third place for members with flexible desks. In a way the work lounge creates a meta environment at MESH, a working culture within a working culture.

Social culture

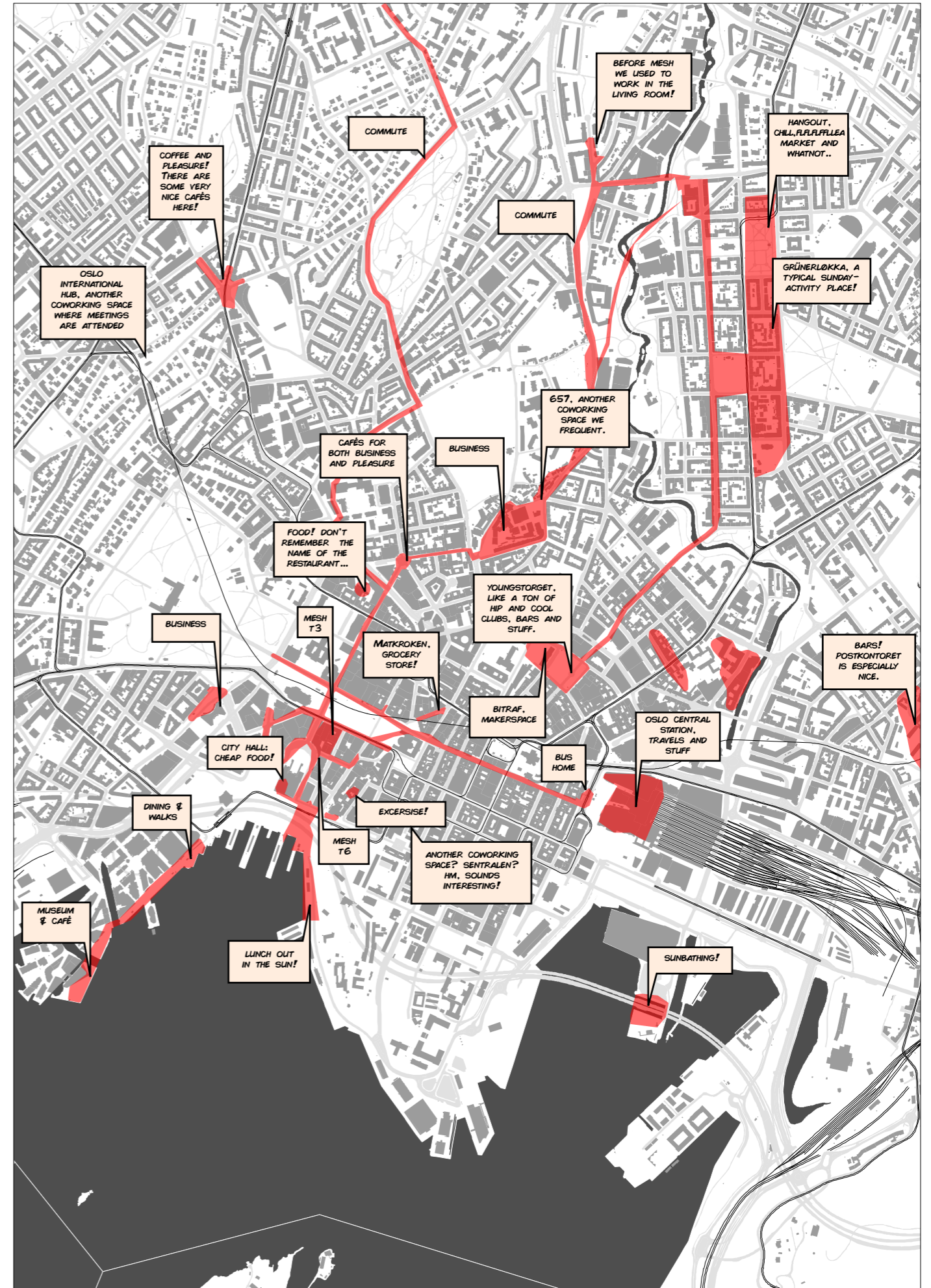
The social culture seems to be a direct result of MESH's main criterion of willingness to share. In another way, the criterion imposed is also an eclectic way of choosing tolerant and free-spirited personalities. The reasons for why the members chose MESH, was not directly linked to the professional community, but because of the vibrant and social nature. There is an attitude here, maybe due to the fact that people did not come for professional purposes only, they also came to MESH because of the social limitations of entrepreneurial work brings to it. The lone eagle could also be the equivalent to lone people, stripped of established corporate communities. The members at MESH seem to have come bond and interact with others. They seek eye contact, smile and greet when they see an unfamiliar face. Although MESH is the biggest coworking community in Oslo with its 300 members, there is a sense of a village mentality where everybody knows everybody and helps each other out.

It has to be mentioned that the prices in the Backyard is quite steep, making the kitchen one of the tightest spots for social interaction during lunch hours. Whether it is intentional or not, the entrepreneurs say the kitchen is too small in comparison to the 300 members at MESH.

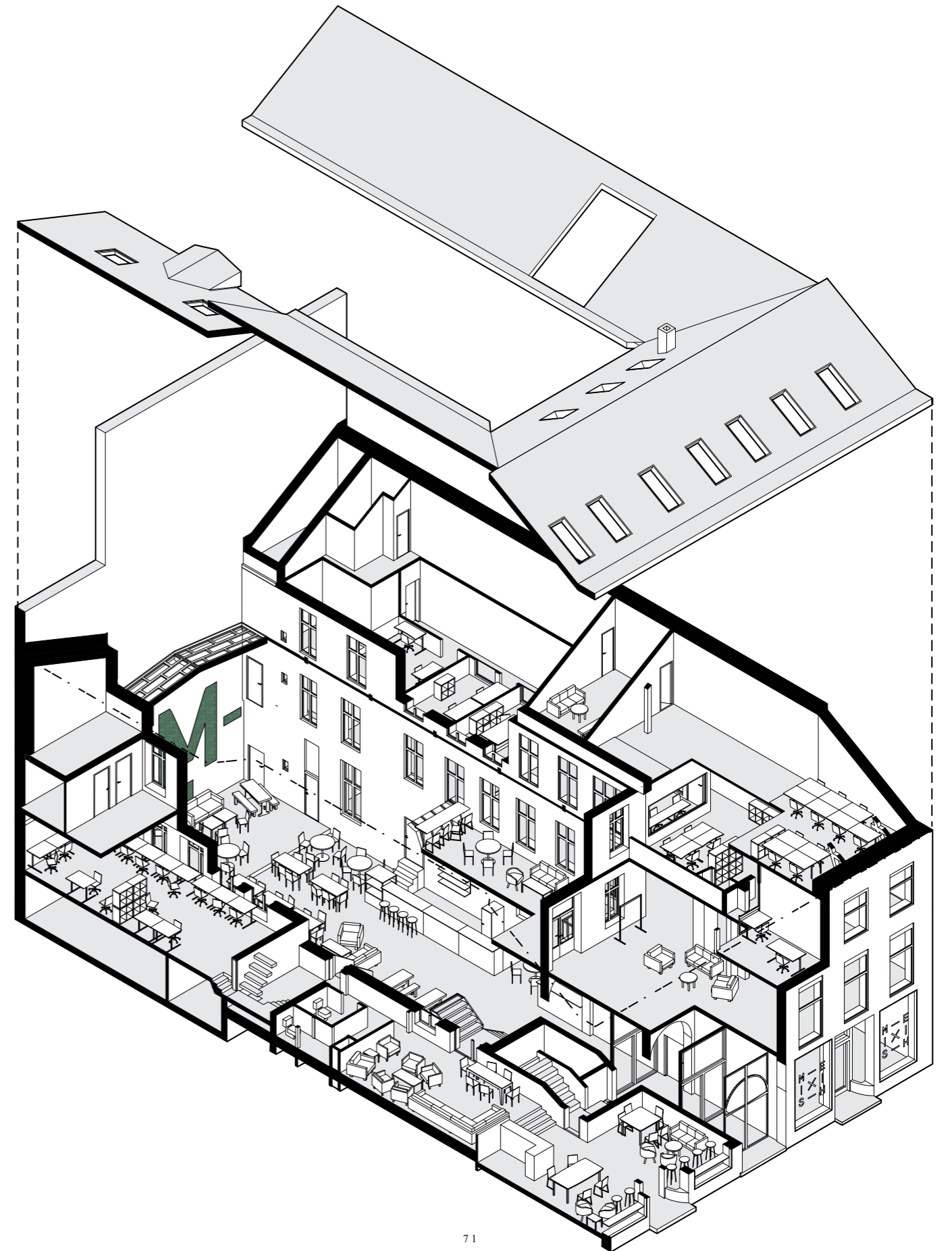
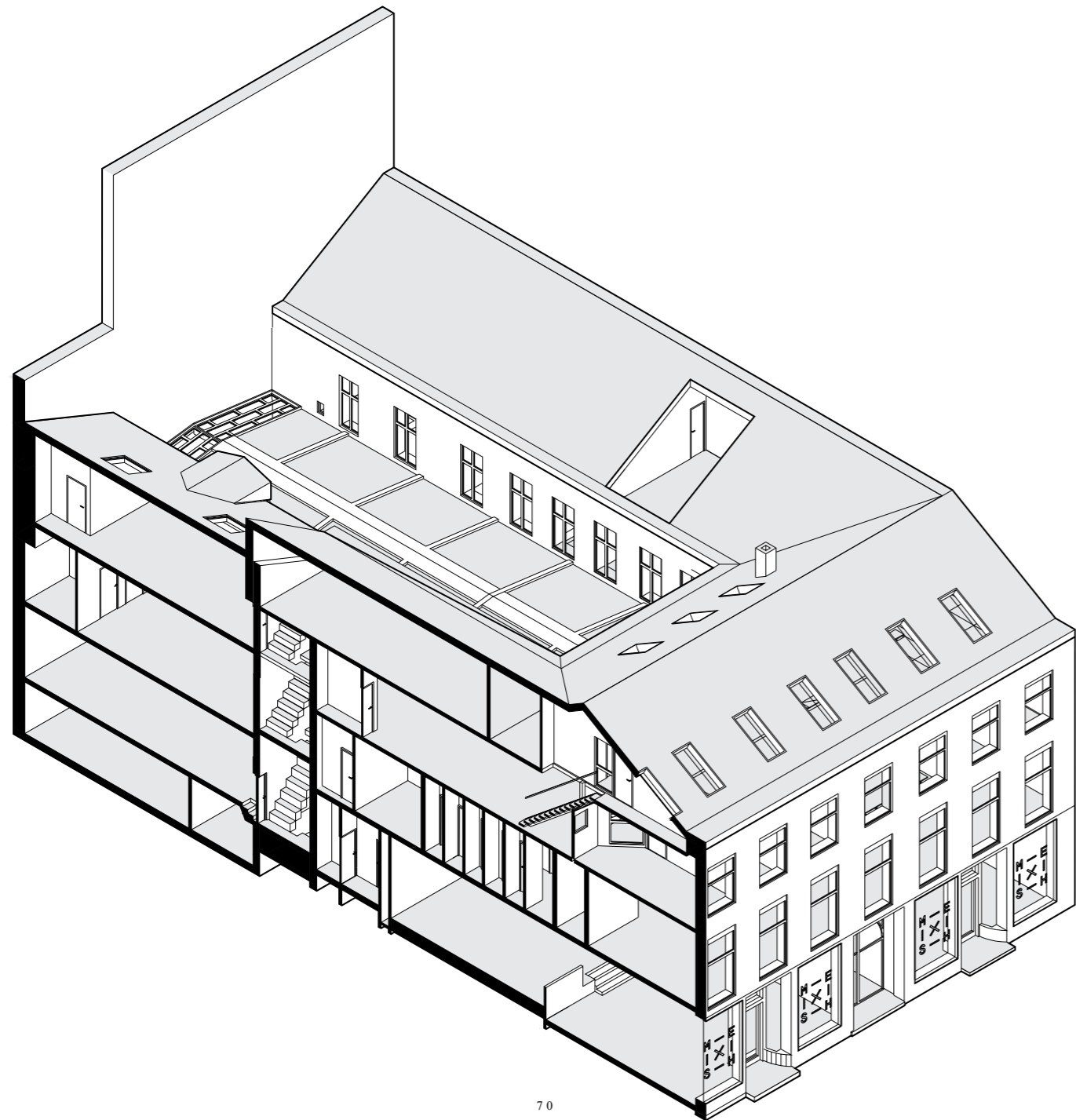
The iconography of events does change how the members perceive MESH as a vibrant place, some entrepreneurs explains its effects on the energy and atmosphere in the working environment, even though they do not attend the events. Small things such as the Monday breakfast, Wednesday lunch or Friday beer, or bigger launch parties or corporate events it creates parallel social environments that exists alongside each other.



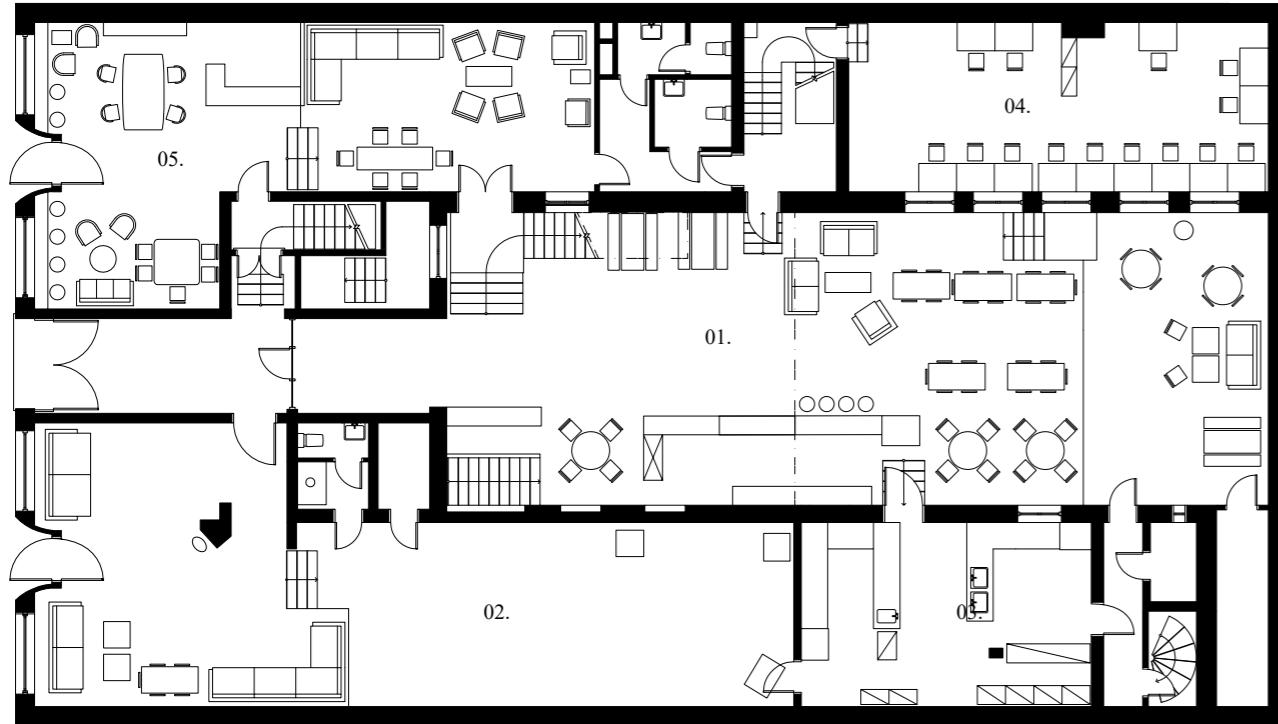
Spatial analysis 1:1000



MESH, Tordenskiolds gate 3, scale 1: 250
Axonometry.

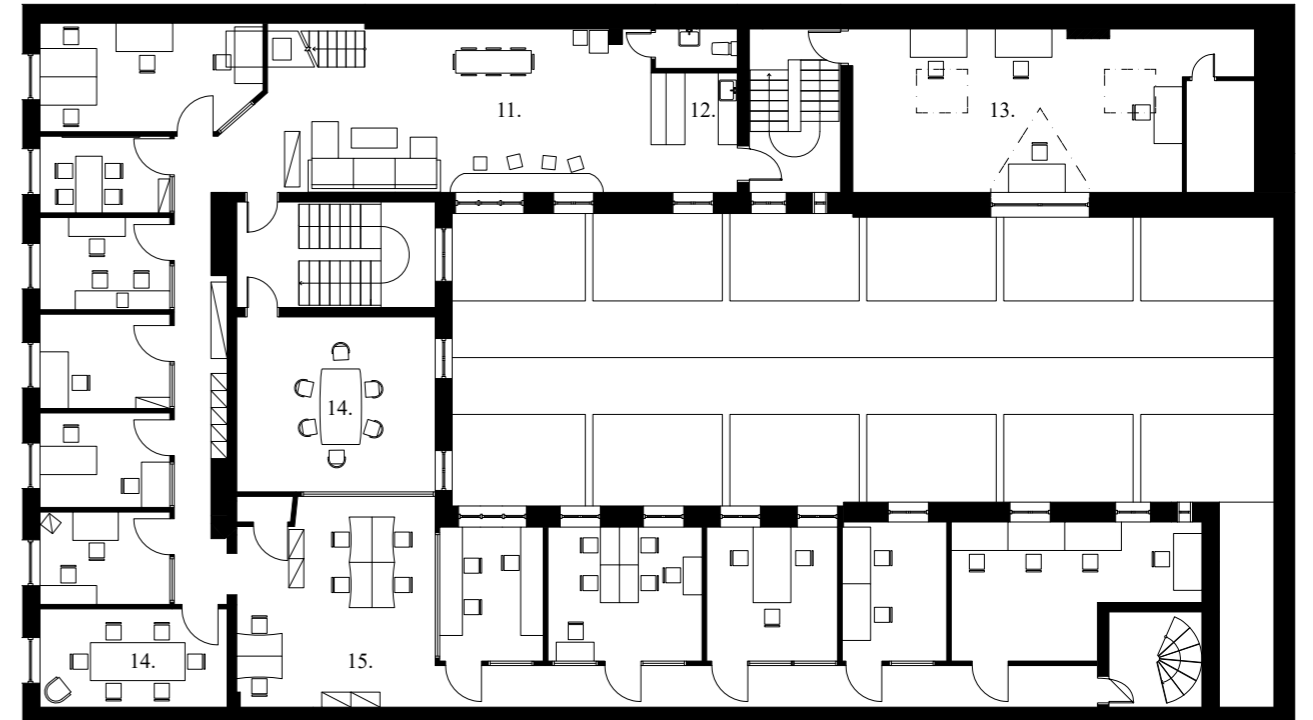
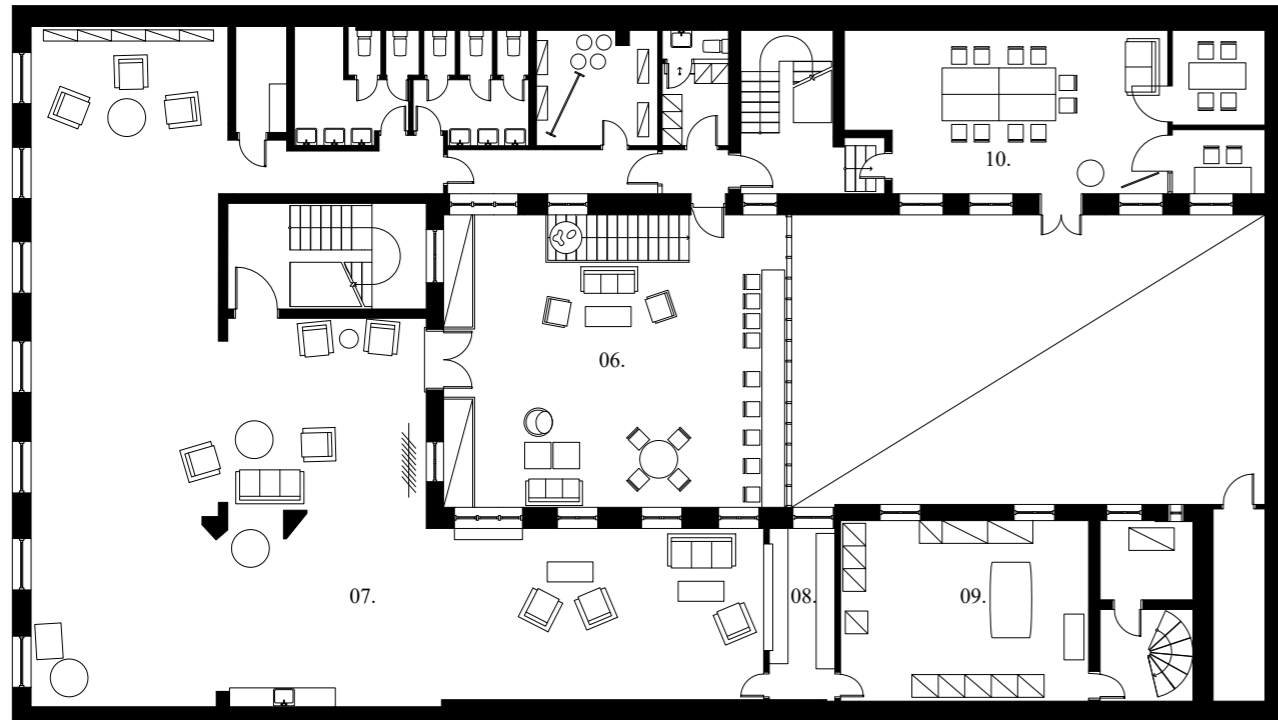


MESH, Tordenskiolds gate 3, scale 1: 200



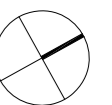
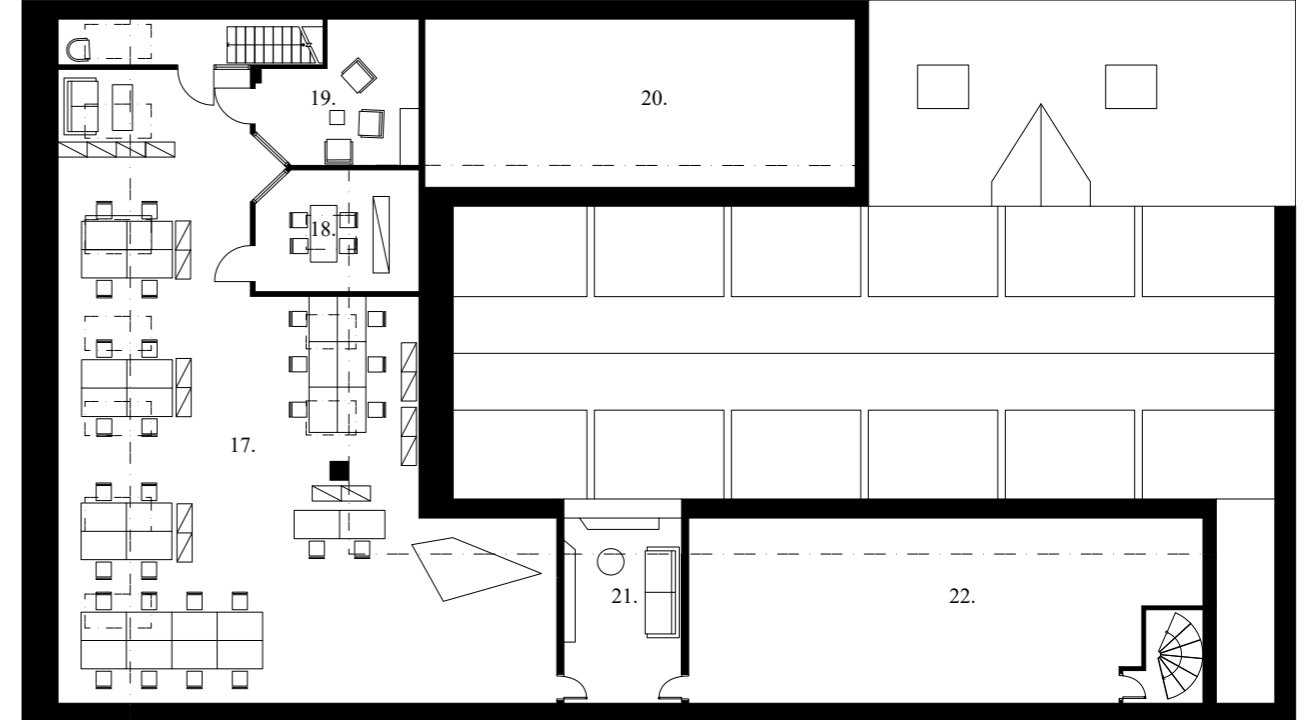
1st Floor. 1. backyard, 2. gallery, 3. kitchen, 4. administrative unit, 5. work lounge.

2nd Floor. 6. mezzanine, 7. lounge, 8. bar, 9. storage, 10. meeting room.

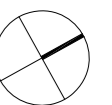
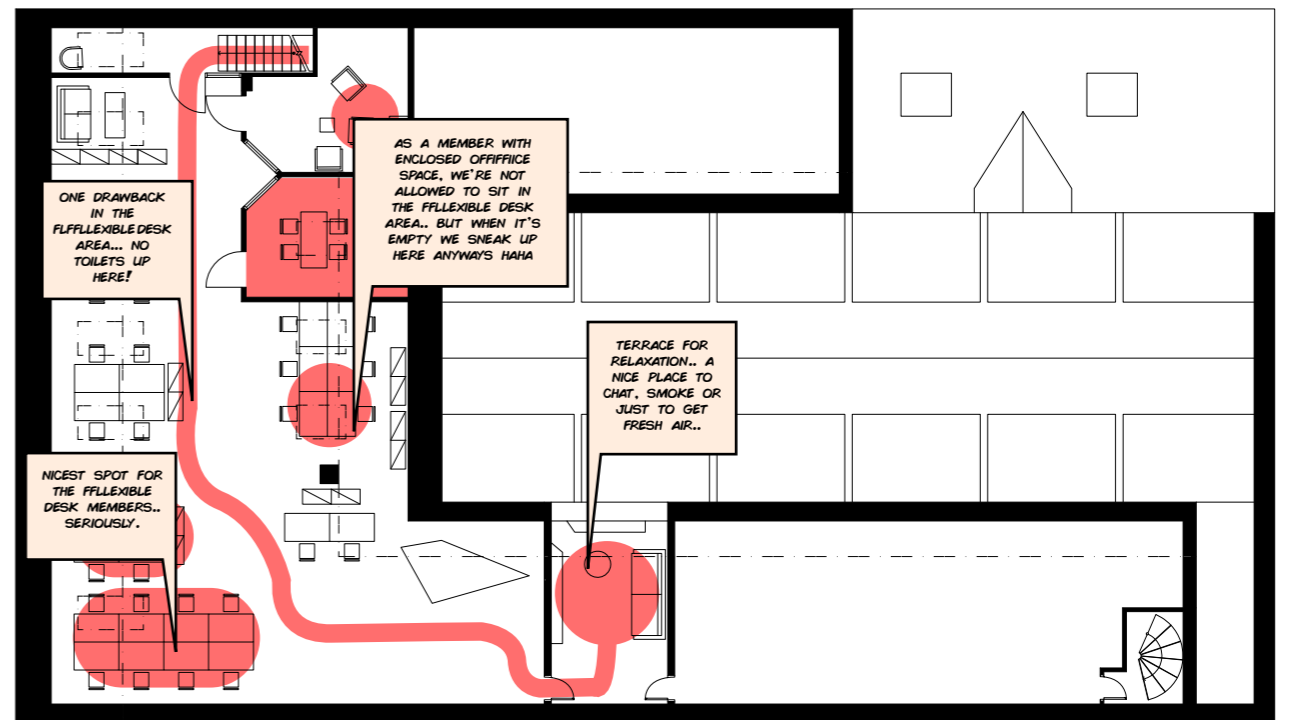
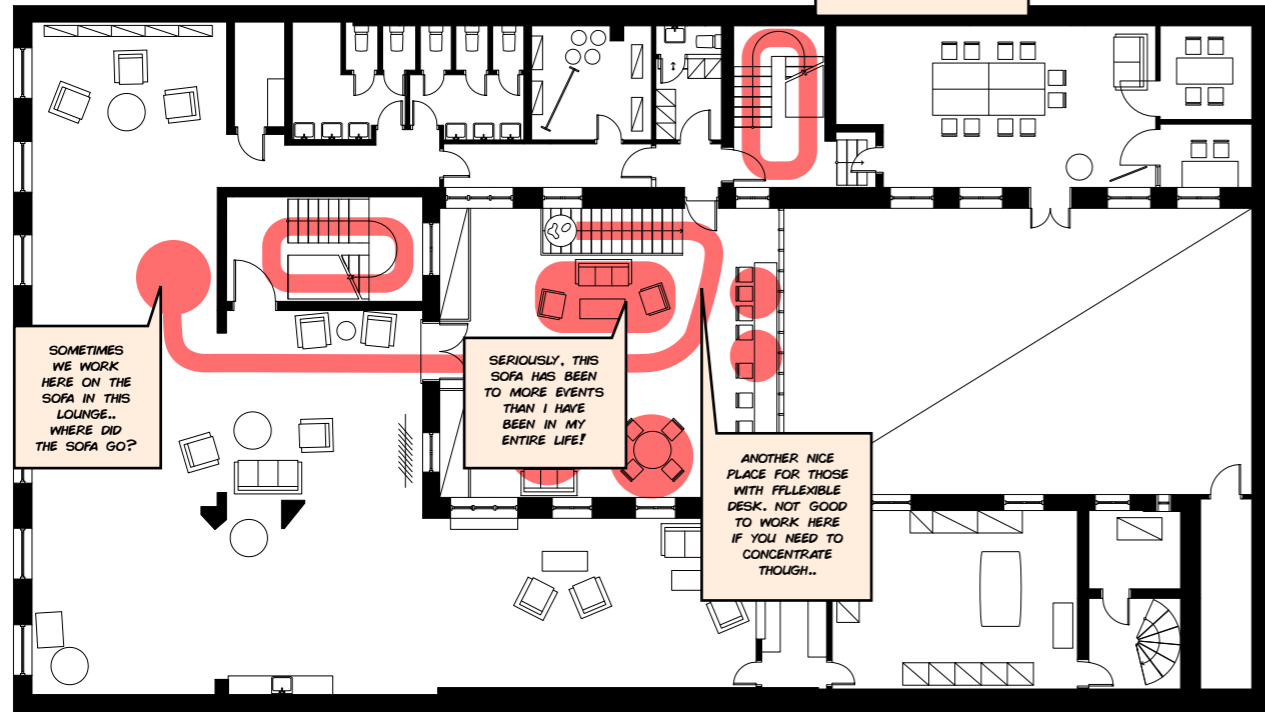
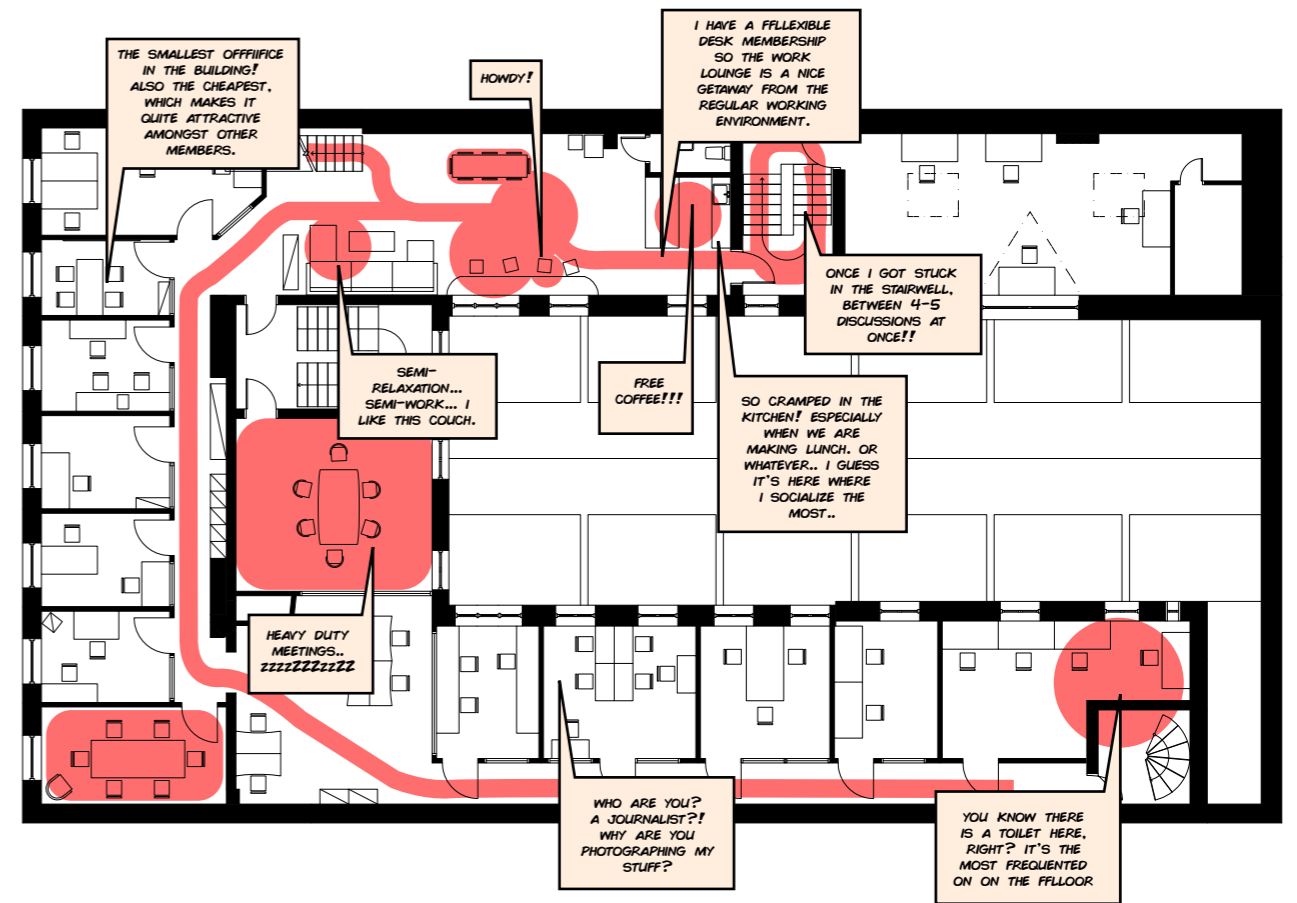
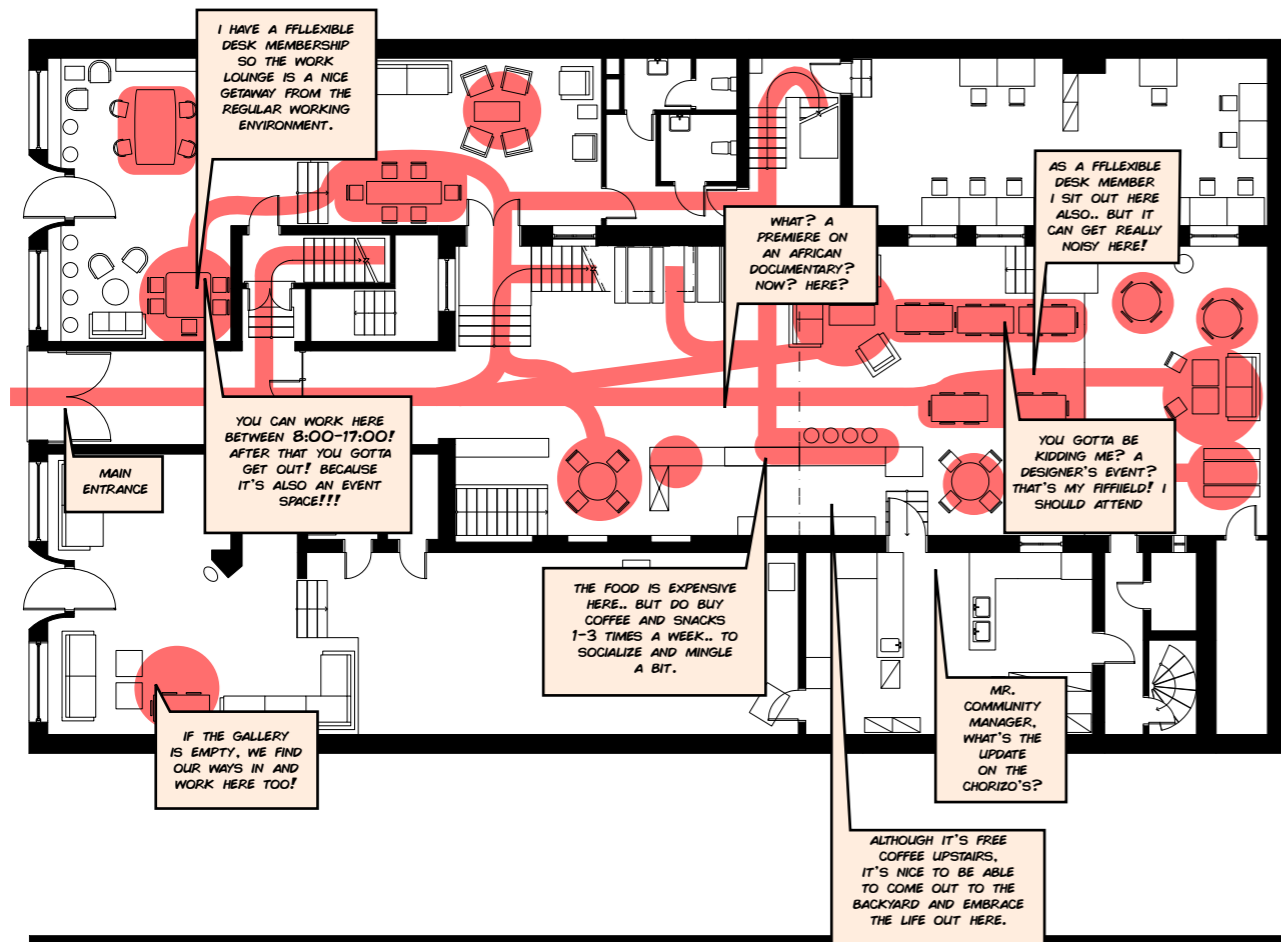


3rd Floor. 11. dining, 12. kitchen, 13. enclosed office space, 14. meeting room, 15. coworking area (fixed desk).

4th Floor. 17. coworking area (flexible desk), 18. meeting room, 19. loft, 20. technical room, 21. terrace, 22. storage.



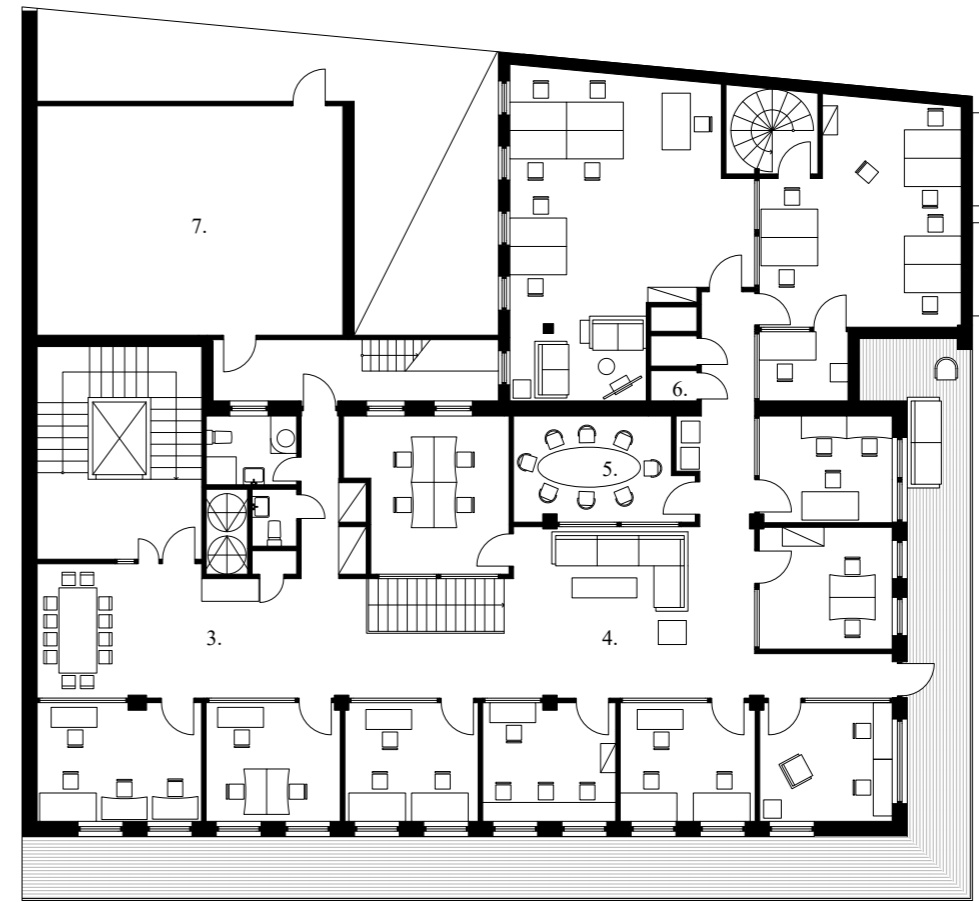
MESH, Tordenskiolds gate 3, scale 1: 200
From the perspective of the members.



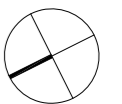
MESH, Tordenskiolds gate 6, scale 1: 200



- 2nd Floor**
- 1. meeting room
 - 2. coworking area, fixed desk
 - 3. kitchen & dining



- 8th Floor**
- 4. coffee & dining
 - 5. meeting room
 - 6. booth
 - 7. technical room



Tordenskiolds gate 3 (T3)

1. Main entrance
2. The backyard
3. Kitchen
4. work lounge
5. The event team carrying away the furniture
6. The community manager in a discussion with the chef about chorizo sausages
7. Backyard with the M logo
8. Storage room with the ping pong table folded away



1.



2.



3.



4.



5.



6.



7.



8.



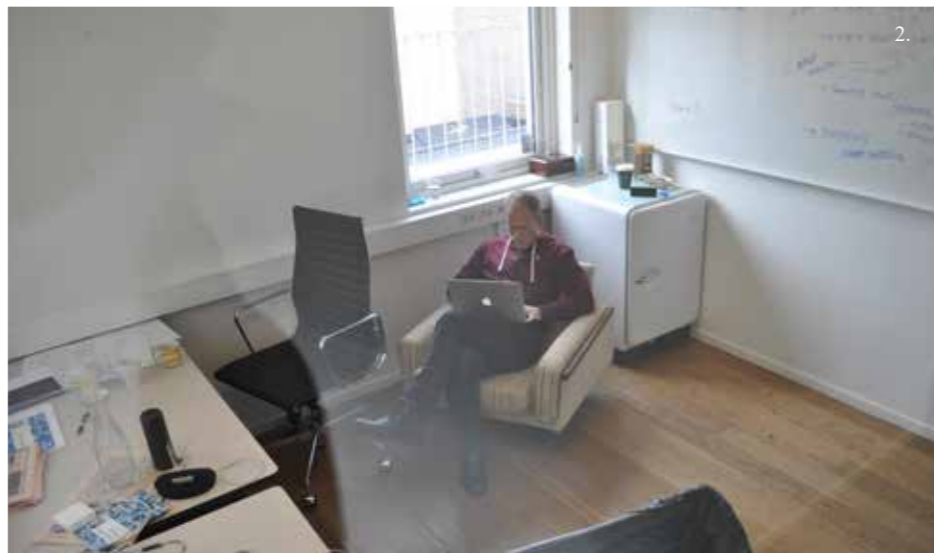
9.

Tordenskiolds gate 6 (T6)

1. Enclosed office space 1
2. Enclosed office space 2
3. Meeting room
4. Enclosed office space 3
5. The common space on the 8th floor
6. The view from the top balcony
7. Serendipity in the hallway
8. Enclosed office space 4
9. Meeting room 2, storage room



1.



2.



3.



4.



5.



9.



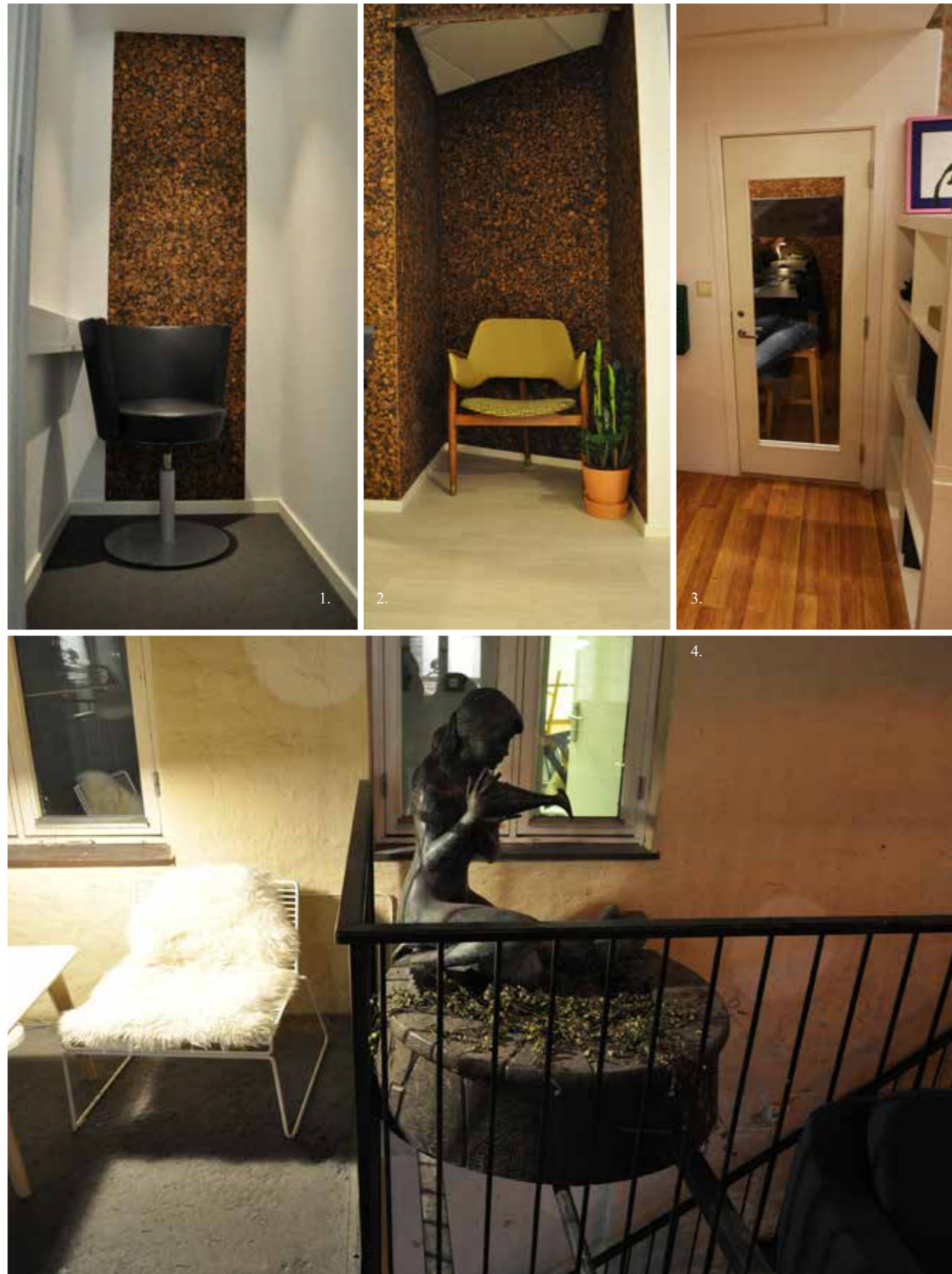
6.



7.

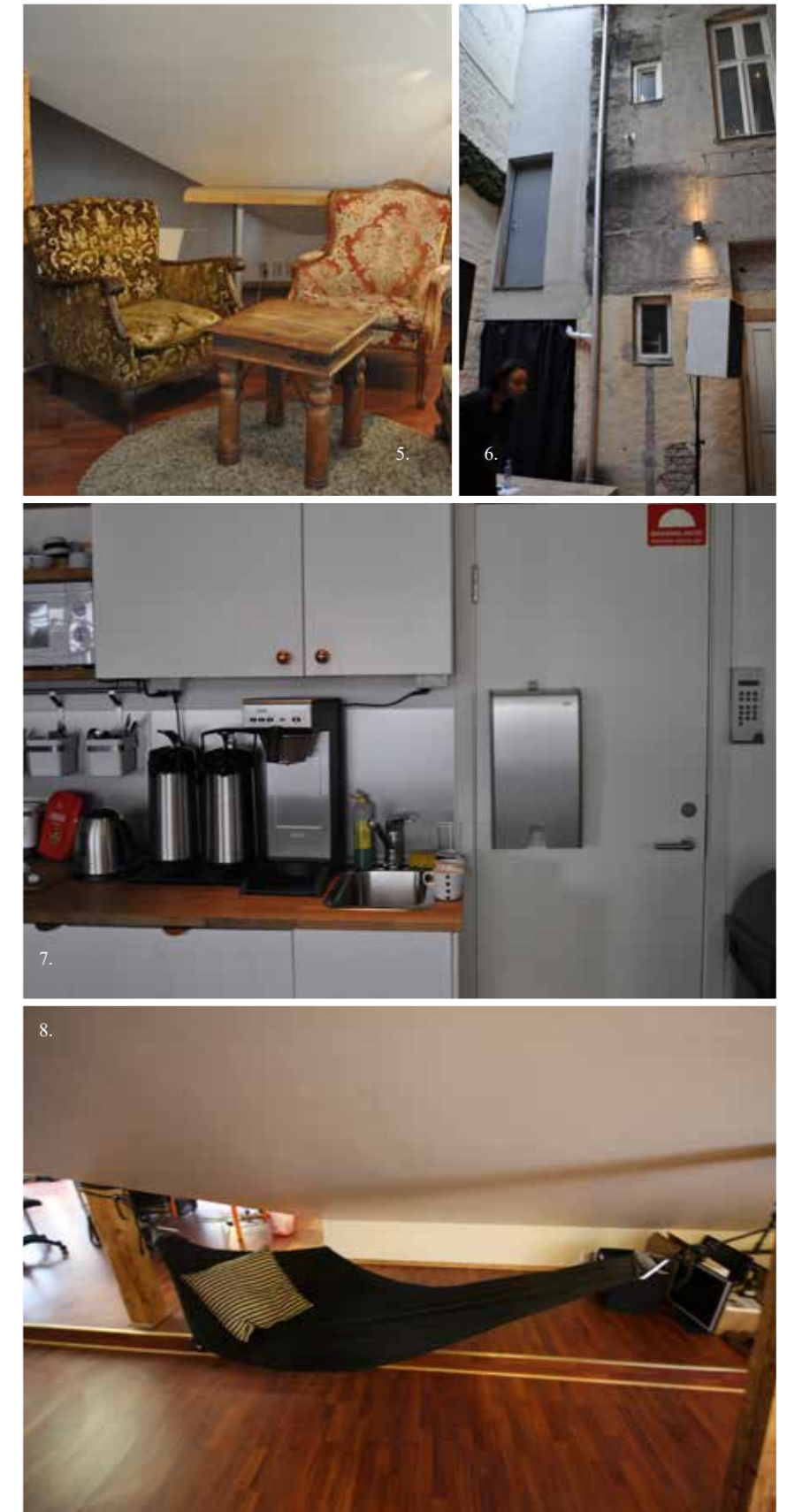


8.



Oddities of MESH:

1. 1m² relaxation booth
2. 1m² sitting spot
3. 1m² relaxation booth
4. A statue of solid rock hovering above the stairwell
5. Loft, with a sitting group
6. Coffee area with a napkin dispenser on the door
7. Hammock



4.9 CASE STUDY - STARTUPLAB

Introduction

StartupLab was established in 2012 as a coworking space meant to capitalize and commercialize the intellectual property existing in close proximity of the research, Gaustadbekkdalen and the University of Oslo. It is located in the building named Oslo Science Park, or more commonly known as Forskningsparken in Norwegian. Forskningsparken is also used as a brand for the entire Gaustadbekkdalen area, hence the metro station being named Forskningsparken. Oslo Science Park brand is owned and funded by Oslotech, which includes StartupLab. Oslo Tech independent organization meant to stimulate business growth in Oslo.



The history of the building, branding and the surrounding development strategies are of interest here. The term science park is treated more as a brand and not an industrial complex, the building (established in 1986) was meant to mimic the synergies described in the literature about the science park. At the time, the building housed four relatively big companies that basically co-existed with no interaction. The StartupLab was envisioned as an effort to address this issue within Oslo Science Park, a community that has lasted for almost 3 decades.

To understand the complexities of StartupLab's location and it is important to mention the different development strategies Oslo Science Park is part of (Johnstad 2003: 5, 47), which has lasted for almost a century with the acquisition of the Blindern site for educational purposes. From micro to macro, the different strategies are:

- Oslo Science Park, or Forskningsparken, the brand of a building and Gaustadbekkdalen.
- Gaustadbekkdalen, an area with the co-location of commerce, research and education in IT and the soon-to-be Life Science Center expected to finish in 2022.
- The University of Oslo, or Blindern campus, the bigger education and research context.
- Oslo Science City, a major co-location of University, University Colleges, hospitals, organizations etc. within a 1,5 km radius of the University, which represents 33% of the research activity in Norway. All of these actors were meant to benefit from 3 synergistic axes.

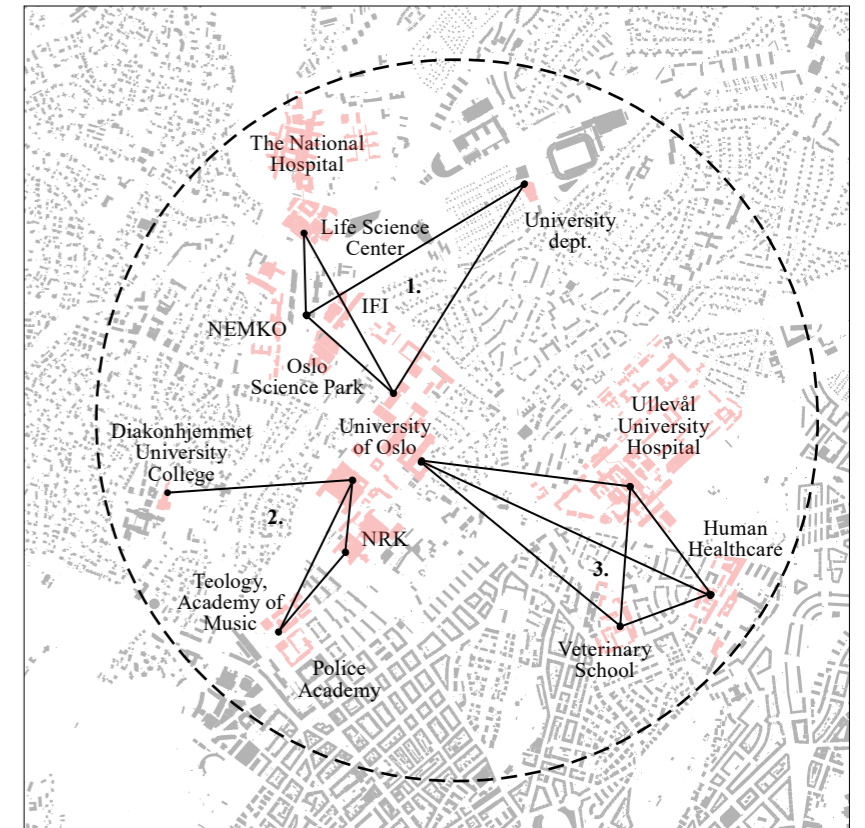
Management

The administrative unit, or the so called team consists of 7 members, ranging from incubator manager (equivalent to community manager), PR- representative, data analyst, office manager, investor manager etc. The team do also offer legal and business advice to corporate counseling. The administrative unit has an impressive track record and extensive experience of both startups and major companies such as Telenor, Opera software, WiMP etc.

Oslo Science City 1:30.000

Intended synergy:

1. Blindern, Gaustadbekk Valley, Gaustad - Is an attempt to merge IT, biotech, medicine, health and commercialization of the research and innovation generated.
2. Blindern, Marienlyst, Majorstuen, Borgen - is an attempt to merge ethics, theology, beliefs, music, culture and is tested through NRK, commercial media corporate.
3. Blindern, Ullevål, Adamstuen, Lovisenberg - Is an attempt to merge and create an internationally recognized research and competence in medicine. 66% of the researchers is in this vicinity.



The management of memberships is of interest to study. Depending on the company's size, activity, compatibility and scope, the entrepreneurs are assigned, by Holmefjord the community manager, to various memberships based on these factors. Sometimes, Holmefjord eliminates some of the candidates applying for a membership if their ideals do not match StartupLab's profile. The criteria for entrance may sound simple, the startups must be IT and tech-related with scalable business model and product. The hard part comes in the rigorous and strict admission process based on StartupLab's virtues. Only the ones with the strongest business model and best team combination gets a membership. For example, a company consisting of only 4 coders is a weak business model. Consultancy companies are also not welcome in these types of communities, as they only provide service and does not innovate.

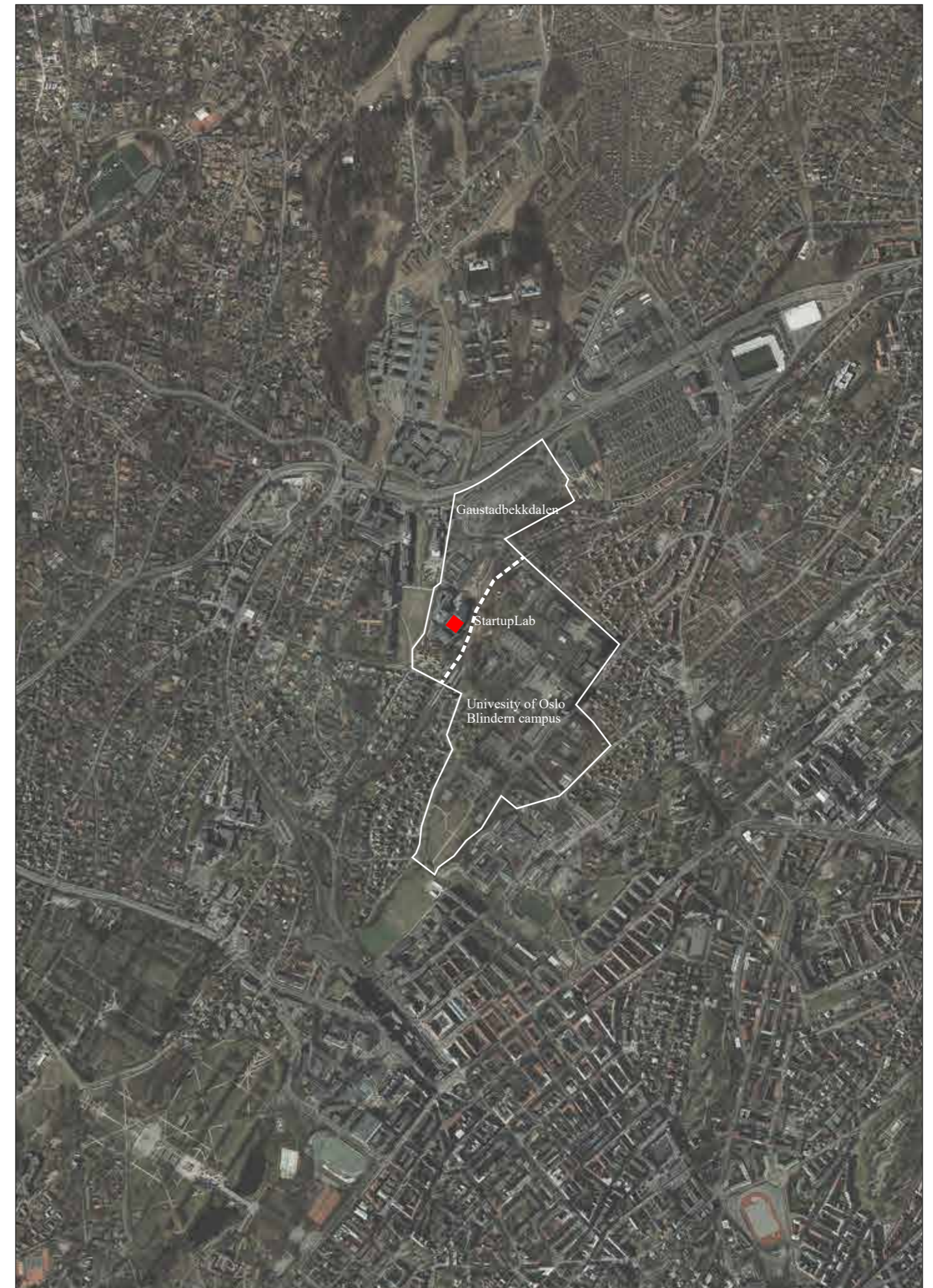
The space is managed through 4 different memberships, as mentioned which limits and enables the use of the facility. The memberships are listed as this:

- Basic membership: price not listed.
- Clean desk (flexible desk): 1790,- NOK. 16 desks.
- Open office (fixed desk): 2390,- NOK. 90 desks.
- Private office (enclosed office space): 5720,- NOK. 12 units, with approx. 2-4 entrepreneurs in each.

It is interesting though, to look at the background of those with basic membership, which include some major companies such as representatives from Telenor. It is assumed they hold their meetings at StartupLab to keep tabs on promising startups. Innovation Noway, an interest organization for entrepreneurship and innovation, is also a member at StartupLab, but only with a clean desk membership. A representative usually sits at the flexible desks to give advice and of course, to represent.

The members' average lease is between 12-18 months without any maximum timeframe. Although startups are encouraged to stay, especially the growing ones, StartupLab's rules of conduct do send mixed signals. Firstly, the startups are required to show results and success, one could imagine the repercussions if they do not fill the requirements. Secondly, the members are not allowed to hang up pictures or modify the workspace. StartupLab do not encourage permanence as the walls are wiped clean, desks on wheels. This is also the reality of dealing with startups, one has to get accustomed to dynamic changes, in which StartupLab do try to facilitate through their management and rules of conduct.

StartupLab's main attractor however, is their affiliation to the Founders Fund. This has been mentioned by many members as one of the decisive reasons for choosing StartupLab instead of other coworking spaces. Founders Fund is a group of both top tier investors and successful in-house entrepreneurs, that occasionally sits and wanders the "halls" of StartupLab. Founder Fund's extended network that StartupLab potentially can benefit from, include some of the world's leading technology companies, such as Google, Amazon, Netflix, Facebook and LinkedIn etc. All these factors comprised, places StartupLab as one of Norway's most advanced startup community and the only one in Oslo with a fully-fledged accelerator program. StartupLab also have connections the Catalyst, an accelerator program in Silicon Valley. It is not mentioned if this



connection is based on Holmefjord's extensive experience and stay in San Francisco. It is a service to support growing startups with best possible resources in the world, to meet a more specific consumer base and get world-class advice etc. by sending startups to the Silicon Valley cluster and startup communities.

StartupLab host a number of events, but is mainly known for two very professional events called JoinaStartup and MeetCorporate. The first is meant as an open and recruiting event for the future generation of entrepreneurs. The latter is an event where members of StartupLab and figures from the corporate world is invited to mingle, share ideas and network. Other than these two StartupLab has their annual winter and summer parties and regular pitching events.

The future ambition and management of StartupLab will revolve around improving the community, and to a bigger degree include and involve the researchers and students on campus to be a bigger part of StartupLab. This is something Holmefjord mentions, may be lacking a bit at StartupLab.

Image and profile

The image of StartupLab is tech-savvy, highly competitive and research-based startups, also contributed to their context of heavy research in the fields of IT, bio tech, life sciences etc. in Gaustadbekkdalen. These factors automatically make StartupLab a niche coworking space giving them a strong profile without defining one. They have currently basic coworking, incubator (one of the few in Oslo), startup community as profile. Their philosophical stances are mainly based around technophilia, corporate and elitist virtues. As mentioned, parts of this may stem from the management and affiliations the place has to top tier investors and world class communities. Although StartupLab has a very corporate and elitist mindset, they are currently operating on deficit, in a way, they invest in the prestige of having the image of elitism and professionalism.

Physical layout

The amenities at StartupLab range from fixed and flexible desks, enclosed office spaces, 6 transparent meeting rooms, mixed-used space/the atrium, kitchen, lounge etc. The facility is open 24/7. The space is divided between 65 companies with 160 members in total, with an average of 60-80 members frequenting StartupLab at all times. Based on these numbers, the percentage of how they sit boils down to this:

56% on fixed desks.

33% in enclosed office space, based on 53 desks inside the offices.

11% on flexible desks. Taken into account more members on the 16 clean desks available.

Although StartupLab provide a high number of enclosed office spaces for growing startups, the numbers above are clear on one thing: 67% of the entrepreneurs at StartupLab sits in the coworking space. This means that Holmefjord, the community manager, has a big task of organizing and managing the seating according to who can benefit most from each other and occasionally separate or potentially co-locate the ones competing, depending if competitiveness can create a positive dynamic or not. This is done mainly through Holmefjord keeping close tabs on who is doing what

and when and a physical intervention where he asks one of the party to either join up or move away. Quite big facility actually. The majority that sits in the coworking area however, are very scattered.

Every desk, shelf, dresser and the specific hanger/sofa mediator at StartupLab are on wheels, supposedly to signify the dynamic nature of startups, which is contemporality. Talking to Holmefjord, it is implied that the main purpose of the physical layout in the coworking area is an ever-changing working environment of entrepreneurs bonding across companies and forming new alliances pushing desks together. As most of the desks in the coworking area are fixed, the members do not move around. Two visits two months apart revealed that the physical layout of the furniture had stayed the same. The entrepreneurs corroborate this and observing little to no changes in the furnishing during their tenure at StartupLab, which ranged from 2 weeks to 18 months. It seems that the administrative unit have found their most efficient physical layout.

The meeting rooms at StartupLab are important and central. The translucent or glassed meeting rooms do generate peculiar situations at StartupLab, both in terms of physicality and management but especially in terms of handling the concept of serendipity production. One interesting aspect is the moment when one entrepreneur is in a meeting and one waiting outside for the meeting room. There is a moment of eye contact implicating a greeting or small talk is necessary before the transaction of the room can be completed. The glass walls therefore have a direct role in the serendipity production at StartupLab. Every member of StartupLab are also able to keep tabs of what is going on in other companies and to the extent of exploiting the transparency. For instance, when a startup company at StartupLab had a meeting with the Olympic champion and alpine ski racer Aksel Lund Svindal, some of opposing entrepreneurs were able to calculate the exact moment when the meeting was over and casually or "coincidentally" run into Svindal, replicating or faking serendipity.

There is also peculiar situation of the old-fashioned booking system. To book a meeting room, the entrepreneur has to write his/her name on a whiteboard on the glass wall outside the chosen meeting room. This forces the members in dire need of a meeting room to show up even earlier, making a competition out of booking meeting rooms. To put even more strain on the situation, there is also the aspect of fixed desk members using it as a quiet zone away from the noisy and busy coworking space.

The atrium is a mixed-use space and is often cited as the most appreciated spaces in the facility. The atrium, consist of a major bench centerpiece with irregular sitting groups with green pillows creating a variety of sitting spots. It also has a couple of trees planted in it, with a ceiling height and exposed stairwell leading up to the 4th floor and a view of the sky, leading to an entrepreneur dubbed it, "the urban jungle". It is the space that works as a mediator to the serious tone in the coworking space of StartupLab. The members do not only mention the pragmatic use of the space, but also its aesthetic values of the atrium, the major source of daylight, as opposed the nauseating artificial lighting in the coworking space.

Urban implications

The location is well-connected in the urban fabric, to both metro and tram and ring road 3. The

administrative unit believes it to be a contributing factor to startups of merit choosing StartupLab. As mentioned, StartupLab is a part of several complex development strategies, from science park (Gaustadbekkdalen and Blindern campus development, not Oslo Science Park itself), to the botched science city scheme (Johnstad 2003: 47). As mentioned in the introduction, StartupLab is a coworking space meant to capitalize and commercialize the intellectual property existing in close proximity of the place. There is one essential question to be asked, has StartupLab managed extract the benefits of its context of heavy research, education and commerce?

In a way, yes. StartupLab attracts highly skilled and promising entrepreneurs from all over Norway. Only 25% of the startups at StartupLab has ties to Blindern or Gaustadbekkdalen. The rest stems from all over Norway, most notably from the Norwegian University of Science and Technology (NTNU). Some of this can be attributed to StartupLab's strong image and profile, their elitist and corporate virtues, management skills and affiliations. It might also be speculated if the complexities of its urban context, the image that it is a part of a major research community, part of a campus and the future home of Scandinavia's biggest research facility in Life Sciences with location in Gaustadbekkdalen, contribute to its effectiveness as StartupLab.

Holmefjord admits that StartupLab is a very introvert community, the members do not speak or interact with other faculties, companies or in other meeting grounds on campus or in the area, such as Fredrikke, the common cafeteria for the entire campus. He has observed that the members of StartupLab do not use the amenities the campus has to offer, not Fredrikke or even the cafeteria in the Oslo Science Park. If the members do, they usually bring their food back in here. The members at StartupLab do corroborate Holmefjord's statements. The only urban amenities used are the local grocery store, the library, and the local student pub.

This relates back to one of the most sought after and enduring traits in the 21st century industrial complexes, the true autonomy which StartupLab has achieved. In this case, StartupLab is so autonomous, it is almost self-sufficient and a secluded entity to its urban context. It may appear so that StartupLab peddles more on the image of being in a heavy research context, than actually gaining anything from it. During the interview rounds, the reason why the entrepreneurs chose StartupLab was not because of its physical context or urban location, but because of their affiliation with Founder's Fund, and preconceived idea of a major cluster of education and research, mainly attributed to the image of the campus at Blindern.

Working culture

Many members consider the working culture, or the expertise and professionalism, the biggest asset at StartupLab. Apart from StartupLab's affiliation with Founders Fund, other major companies such as Telenor have a basic membership at StartupLab as mentioned in the management segment. It is to have an overview of promising startups and talents. A startup community, especially an elitist one such as StartupLab do dictate some exciting circumstances, as one member mentions for instance, is the rewarding and interesting talks he with his peers, when every single one in the working environment is either their own bosses, senior managers etc. the discussions are more fruitful, especially in an elitist startup community such as StartupLab.

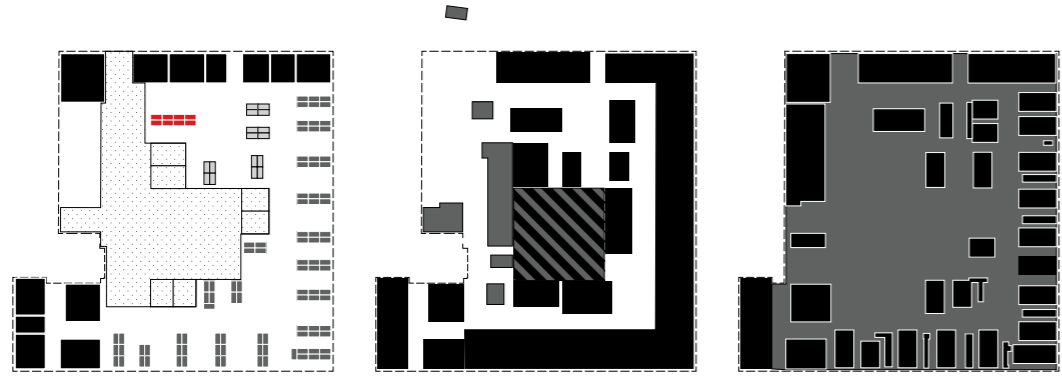
There is an unmistakable tone over the StartupLab, a sense of professionalism and seriousness, with long work hours and so busy the entrepreneurs between them forget about each other. As mentioned, the majority of StartupLab's members that sits in the coworking area, generating some peculiar situations and a mentality of concentration and work mode. Many people in a tight place also brings with it an increased volume. This has led to many using of noise-cancelling headsets in the coworking area, especially the coders. It is considered a faux pas interrupting somebody with headsets on. For example, there was an instance where two neighboring startups, where one had a technical problem and the other with the technical solution to the problem. As focused as many members at StartupLab are, It was only after when the company came back from Boston looking for a solution that they found out their neighbor had the answer all the time. They are currently cooperating on the project.

There is another question of interest in this segment: are the researchers a contributing or integral part of the working culture at StartupLab? As it is intended with any cluster or science park strategy? It is important to question StartupLab's stance on the idealism behind the symbiosis between researcher and entrepreneur, since it in fact was StartupLab's first intentions when it was established. As described in the literature review, it is a well sought after symbiosis any industrial complex would like to possess, StartupLab included. There is today few to none researchers sitting in the coworking space.

Holmefjord who has observed this as a recurring trend, tries to give his personal explanation to why this is so. He believes that researchers and entrepreneurs are in fact, two different breeds. Researchers are a huge asset to any institution, when he or she reach the point when it is marketable, they either develop it even more or research on something else, that is the essence of a researcher. So for a researcher to waste his/her expertise in marketing and finance would be a waste of resources and vice versa. It has yet to be proven right or wrong.

Social culture

However, being a part of an elitist and top division startup community can sometimes be at the expense of a social culture. This has caused a divide of space in the sub consciousness of the members at StartupLab. Relaxation, mingling, casual chit chats, informal meetings, networking etc. does not happen at the desk in the coworking area, but when brewing coffee in the kitchen. As mentioned in the physical layout segment, the atrium works a blurred space between work mode and recreational mode, a space to do both, free from any unwritten rules. The noise-cancelling headsets is often mentioned creating an isolated working environment in the working environment itself. Holmefjord has observed these headsets being used in order to focus more on the work and for a competitive and market oriented society they are also a good sign, however for the social life they have a negative impact. The mental state that the coworking area imposes has caused many of the members to seek the common areas for refuge and contemplation, such as the kitchen and the atrium. The events ease up to hectic work life at StartupLab.

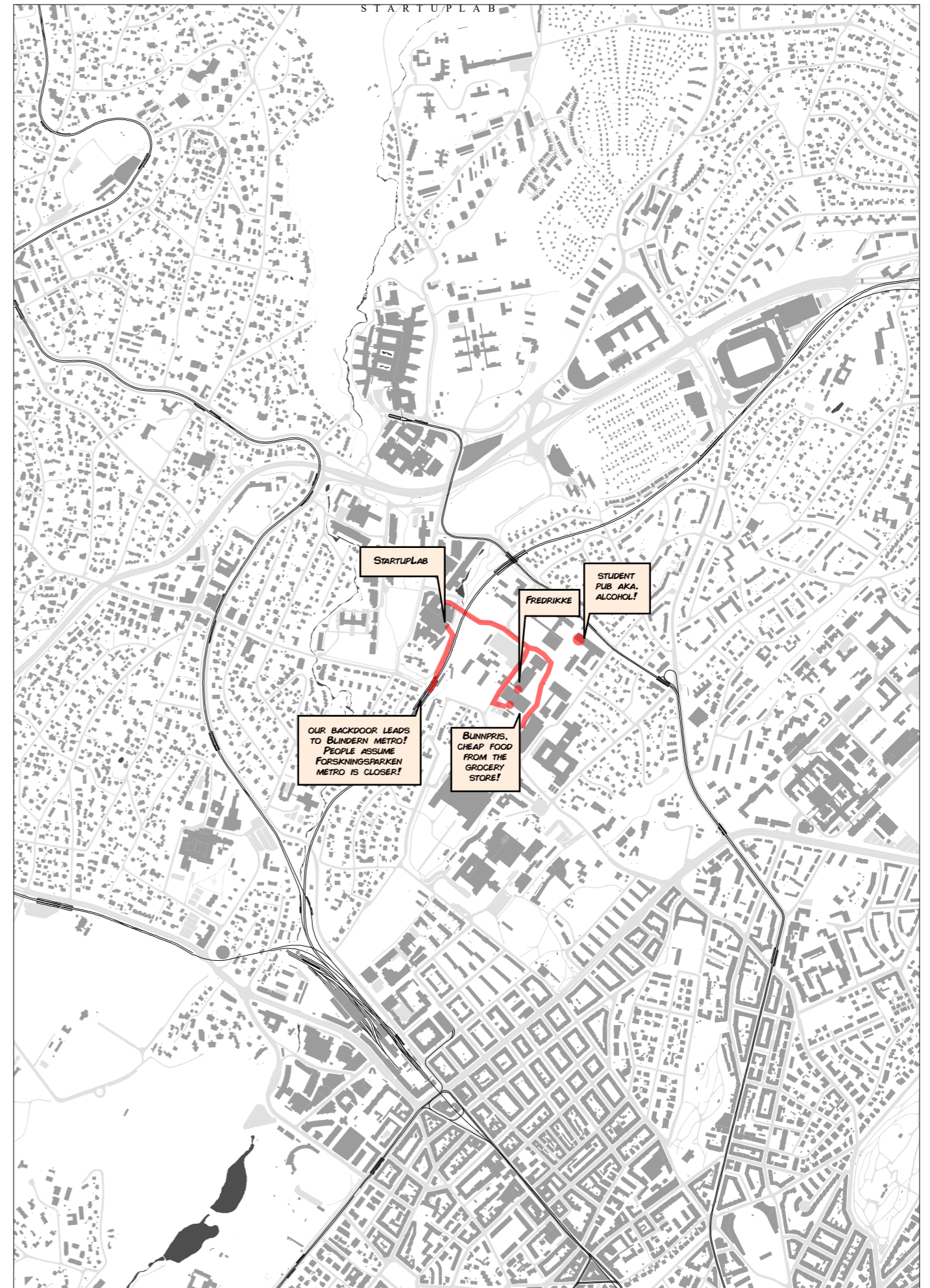


- Memberships**
- basic membership (community)
 - worklounge
 - ▒ flexible desk (clean desk)
 - fixed desk
 - enclosed office space (office)
 - administrative unit
 - meeting room

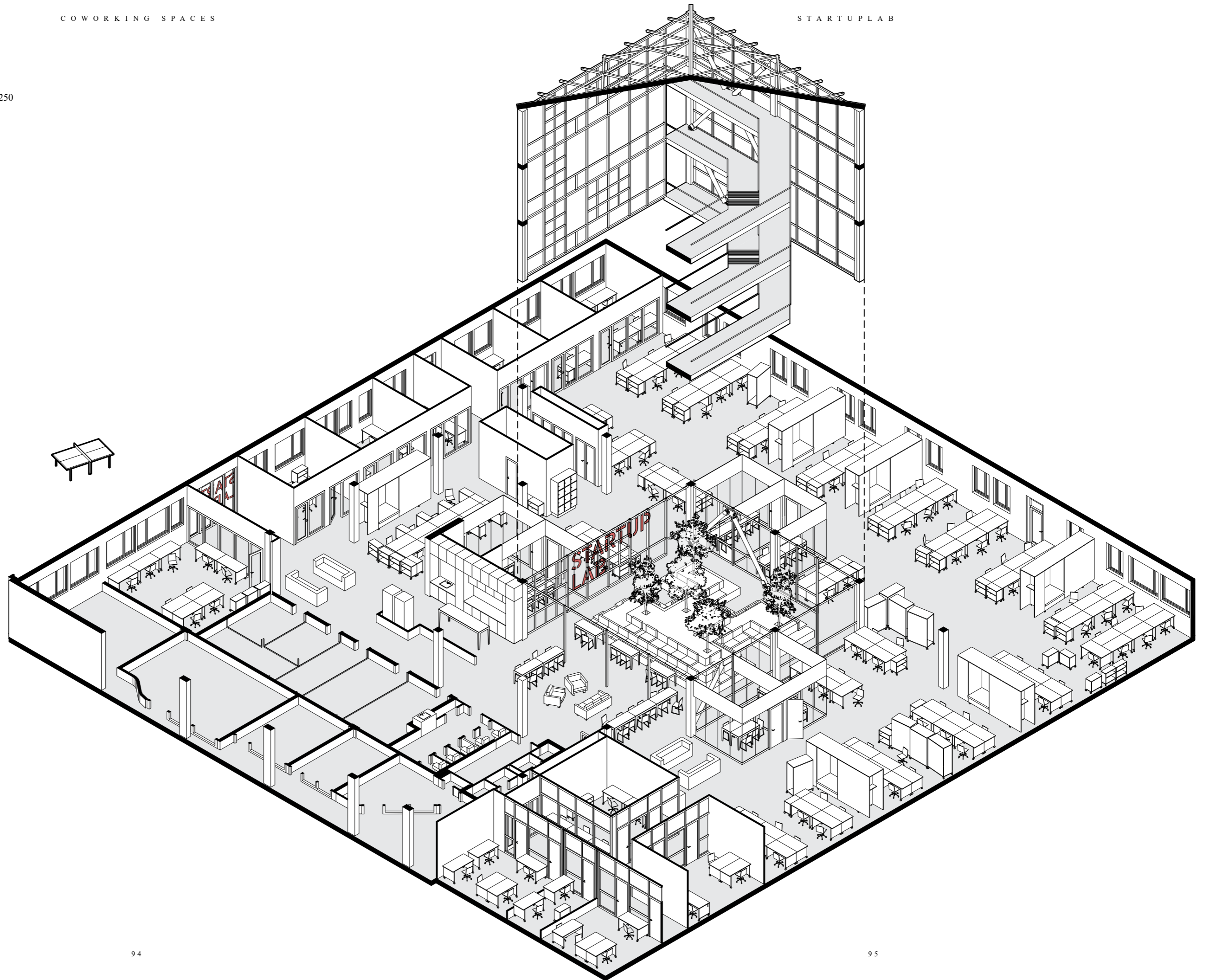
- Work - Pleasure**
- pleasure
 - work
 - work/pleasure

- Private - Common - Public**
- public
 - common
 - private
 - ▒ private/public
 - private/common

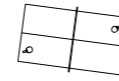
Spatial analysis 1:1000



StartupLab, Gaustadalléen 21, scale 1: 250
Axonometry



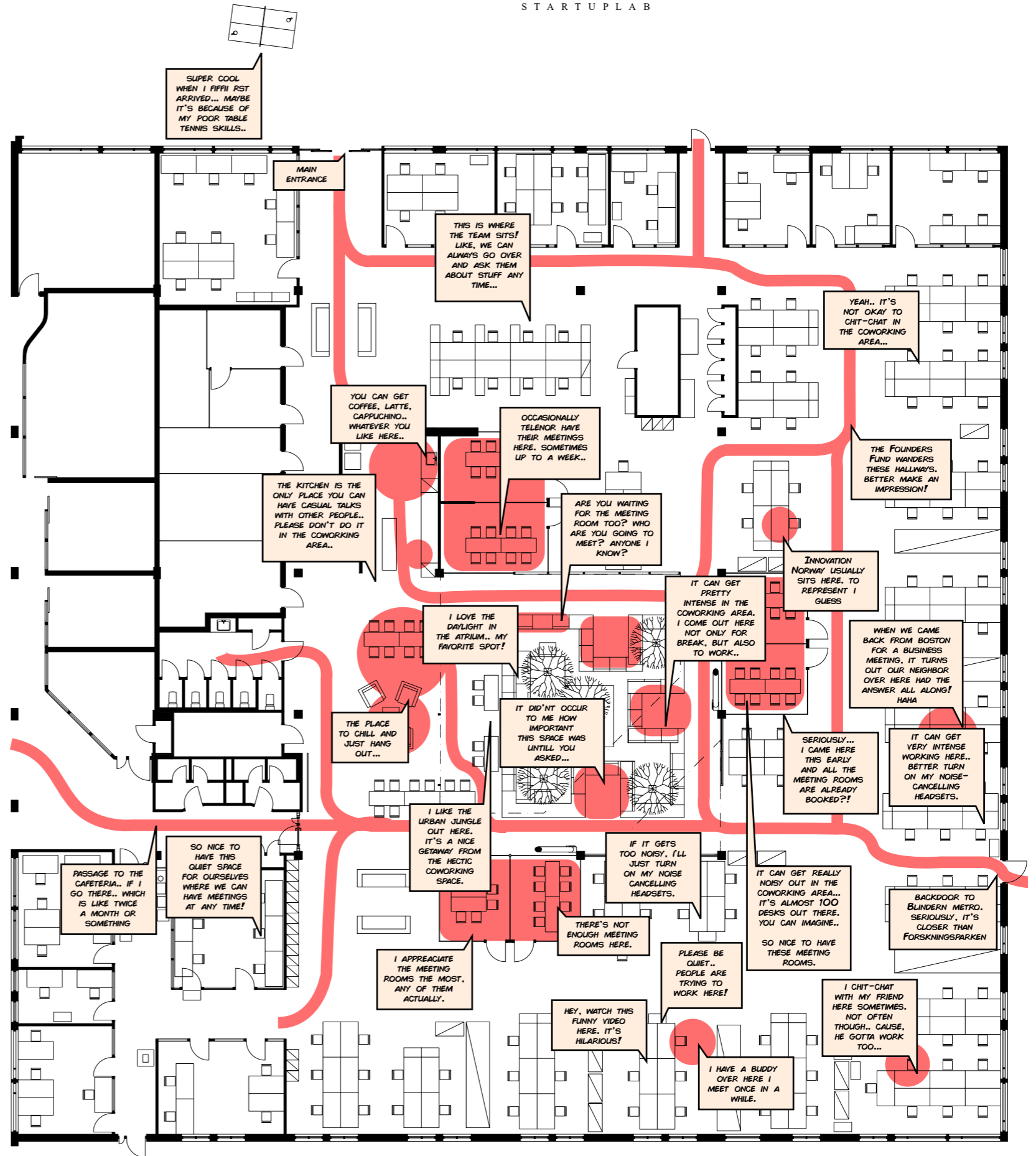
StartupLab, Gaustadalléen 21, scale 1: 200



- 4th Floor**
- 1. coworking area
 - 2. flexible desks
 - 3. kitchen
 - 4. servers
 - 5. technical room
 - 6. meeting room
 - 7. atrium
 - 8. administrative unit



StartupLab, Gaustadalléen 21, scale 1:200
From the perspective of the members.

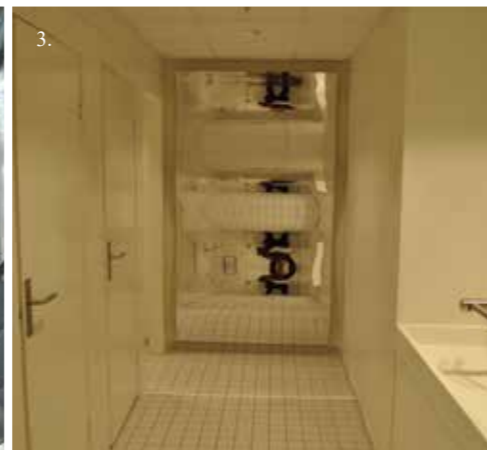




1.



2.



3.

1. Oslo Science Park (Forskningsparken) with the IT department on the right
2. Entrance to StartupLab and the ping pong table
3. Toilet with peculiar mirror
4. Transparent meeting rooms
5. Kitchen area with natural daylight from the atrium



4.



5.

1. The atrium
2. Enclosed office space
3. Coworking area
4. Common space looking into the atrium



4.10 CASE STUDY - THE SIMULA GARAGE

Introduction

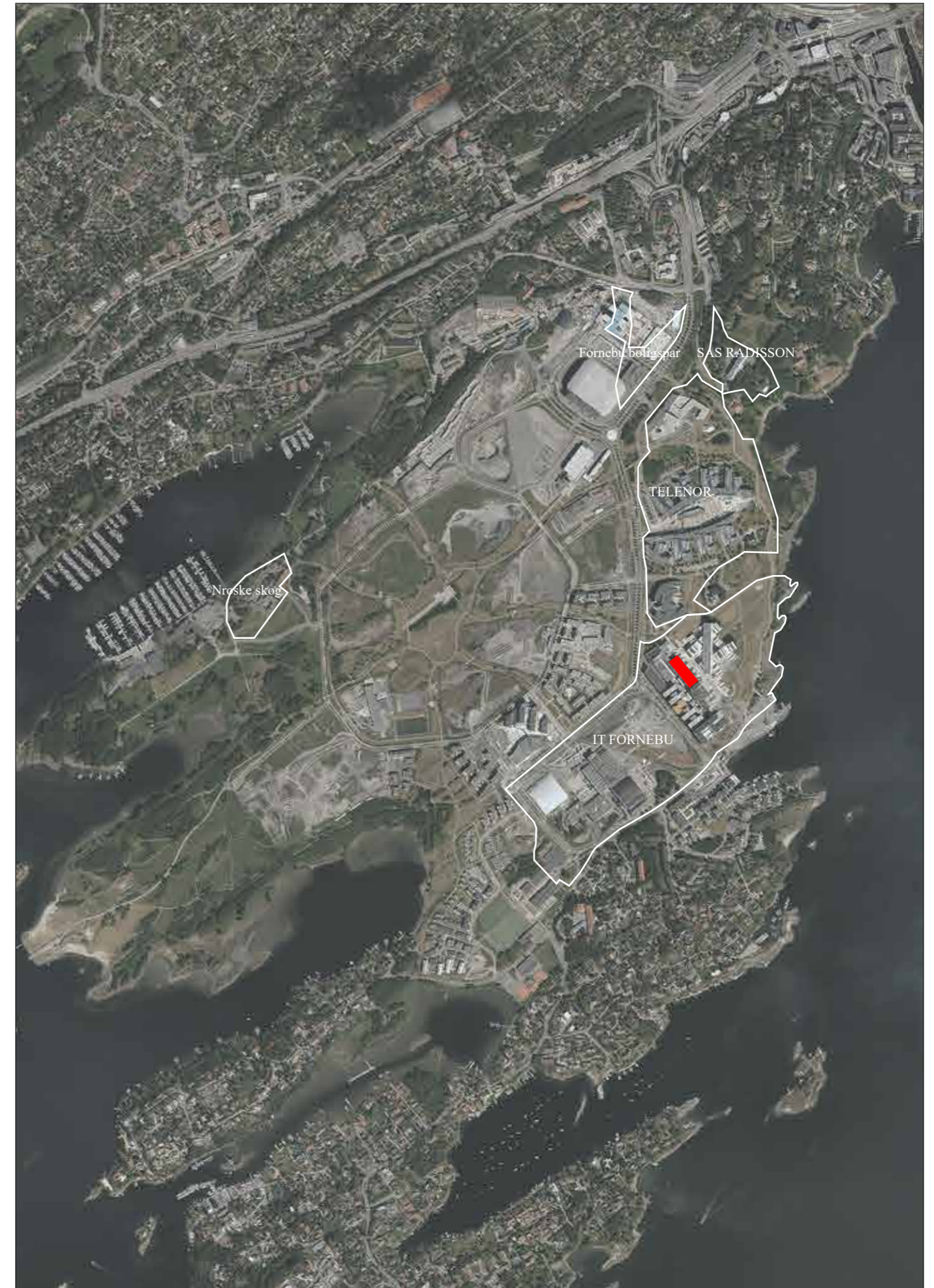
The Simula Garage was established in 2012, as a startup-related coworking space meant to create a symbiosis between the researcher and the entrepreneur, by literally placing the entrepreneurs in the center of the renowned Simula Research Laboratory. The Simula Garage is indirectly owned by the Ministry of Education and Research (Kunnskapsdepartementet), who again run the Laboratory, an autonomous non-profit research organization. Simula itself have ties and affiliations in relation with some courses with the University of Oslo. To avoid any confusion, the Simula Research Laboratory will be referred to the Laboratory, while the Simula Garage will be referred to simply as the Garage. Simula will be used as a term for both communities.



considered to be a research facility of international excellence (Reve & Sasson 2012: p.323). It has also been evaluated by the Norwegian government as the best research lab in the country (Simula homepage) within the fields of networks, distributed systems, scientific computing and software engineering. First, it is of importance to understand the complex development of Simula's context. Simula is located in Fornebu, a peninsular area bordering western parts of Oslo and became the topic of further development when it was determined that the Oslo Airport was to be relocated to Gardemoen in 1992. Fornebu became a hot topic for urban development, leading to the government issuing 3 guidelines for Fornebu:

- The main goal should be residential densification.
- The beach and other parts should be secured for recreational use.
- Business and commerce should be limited to existing built area.

In 1993 Fred. Olsen & co. initiated a successful campaign for a high-tech cluster strategy with the relocation of Telenor headquarters as the centerpiece, backed up by government funding. So when the Laboratory was established in 2001 it was envisioned part of this strategy scheme. 2001 was also the year the IT bubble burst, causing every investor to back out of the cluster development in Fornebu. As a result, Laboratory became the sole research facility of Fornebu. Fornebu's fate was sealed in 2004 when an unfavorable Oxford report was published, leading to the government to cut off funds entirely to what was supposed to be a beneficial union of research, education and commerce.



The main land owners in Fornebu 1:15.000

Management

The administrative unit of the Garage consists of 2 people and Jonas Archer the project coordinator (equivalent to the tasks of the community manager). The administrative team is also the same one for the Simula Research Laboratory. This also decreases the administrative cost of running the Garage.

The coworking space is managed through only one type of membership, clean desks (free desks), encouraging its members to roam freely between desks and form new relations every day. Observations reveal that the members prefer to have fixed desks and proceed in the coworking space as such. This dynamic is mainly challenged by the leasing agreement, where the members' maximum lease of the coworking space is 1 year. The members are all signed in January each year. The membership fee is completely free-of-charge, no strings attached and is generally a unique quality in the context of startup-related coworking spaces. The Garage is currently 1 of 2 coworking spaces in Oslo which offers free services, the other being TUBen which opened 6th of April 2016. The member/startup ratio of 20/40 frequenting the facilities. To follow up on their no-strings-attached policy the administrative unit do not meddle with how much time their members stay in office or what kind of business model they have. The Garage wants to give their members free reins to pursue whatever entrepreneurial ideas they have.

Simula is mainly a research facility do not house any incubator functions within. It is therefore of interest to mention Simula's close ties to the VRI² program. It is the Research Council of Norway's main initiative targeted towards research and innovation at the regional level in Norway. Each single startup can apply for a grant of 250.000 NOK to acquire and finance the salaries of researchers, develop and redeveloping products, services and processes that the startup may need (Simula homepage 2). It is mentioned by the community manager and the members as an important source of income the members take us of to acquire funding, as the Garage has no direct affiliations with investors etc.

The Garage's future ambition is to create more success stories out-of-the-garage (a reference to Jobs), or successful generations who have ties to Simula, so the future entrepreneurs and members here can benefit from. Also, to revise the management of memberships of signing on the entire community in January, meaning all the members will be moving out the same time due to the one-year rule. To put it bluntly, any working culture amassed has to start all over again. Archer notes that he will spread the signing dates throughout the year, so to retain some sort of continuity of social and working culture.

Image, profile and criteria

The Garage's image is to serve the greater good without any personal gains, a safe haven for vulnerable ideas and to support the idea of Norwegian entrepreneurship and to take the research Simula is sitting on out into the market. The main point the Garage tries to make, is that it is only through hard and earnest work that innovation happens. The Garage has technophilic and altruistic virtues and their profile is mainly basic coworking and startup community.

² written with upper cases and not an acronym), as explained on the Research Council's homepage: "The VRI program is the Research Council's main initiative targeted toward research and innovation at the regional level in Norway. The primary objective of the VRI program is to promote innovation, knowledge development and value creation through regional collaboration and a strengthened R&D effort within and for the regions".

They are doing this by supporting only early IT-related startups and entrepreneurship, and offer a platform between researchers and entrepreneurs. More established startups will have to seek refuge at other startup communities or coworking spaces. The Garage pride themselves with an image of a place where serious work is done far away from the distractions of a startup community or a coworking space and the city. Their profile is a basic coworking space and a startup community. Without the typical characteristics of buzz, events and administrative interventions, it is very similar to the archetypical coworking spaces Moriset is describing.

The criteria for being allowed into this community is not strict, but specific. It must be IT related in the broadest sense, either it be hardware, software, apps, services etc. Another criterion is no consulting firms or established companies with real revenue. Their main target group is vulnerable and early startups without financial backing. The administrative unit do not add any criteria of personality or potential financial gains etc. As seen in MESH being wary of how active some members are, it is very present at the Garage that not all members frequent the coworking space. Some treats their startup as a part time job or even weekends-jobs only,

There are some core members that frequent the coworking space the most and have become friendly with each other. Meanwhile the rest that spend their afternoons, weekends and treat their startup company as part time job, have no relations those working at daytime. Some of the entrepreneurs note that even when their hours' overlap, the two factions feels like strangers to each other. Some events dedicated to this issue would have been beneficial.

Physical layout

The amenities that is dedicated solely to the Garage is a coworking space, lounge/workspace, 2 meeting rooms and Adam's office (part of the administrative unit). Archer the community manager sits in the middle of the coworking area. There are 20 flexible desks in the coworking area and 5 in the lounge. The rest of the amenities is provided by the Laboratory since the two share the facility, such as toilet, printer room, auditorium (Storstua, or the big living room), table tennis, pool, common area with coffee and fruit (Pusterom, or the breathing space), IT help, printers etc. The Laboratory is located on the 4th floor in the old airport terminal, now run by Technopolis who manages corporate office spaces in the building.

It is important to question the main characteristic of the Garage's free-of-charge business model and what kind of limitations does this set on the physical layout. The coworking space itself is not the prime square meters of the Laboratory or any other places in Fornebu for that matter. The Garage is placed in the residual and excess spaces of the research facility. It is placed underneath a skylight without in an open space, most likely kept open in order to give some daylight to the enclosed, or glassed Laboratory office spaces at the core of the facility. In the beginning the members went out more often, but have now gotten used to the windowless coworking area.

The coworking area also cuts off the walkways of 2 researcher-based offices, while keeping the walkways free for their own meeting rooms on the adjacent side. This can automatically create some tensions as the

coworking area are literally in the way of the office space and vice versa. The lounge which is mainly used by the members of the Garage, is sometimes also used by the researchers there. Although envisioned as an open office landscape, every piece of furniture (most are on wheels) such white boards, shelves, cabinets and banners has been used as blinds and walls to separate the workspace. The entire facility and planning of the physical layout is of such a low-key and random character; the entire setup can be taken down within a day. The best seats in coworking area are often cited as the ones that are sheltered. Although most of the furniture are on wheels, there have been little to no changes between February and late April.

Urban implications

The urban amenities Fornebu have to offer is a shopping mall, recreational parks, a 12-minute ferry trip leading to central Oslo during rush hours, residential, a restaurant, major headquarters with designed outdoor spaces etc. Yet, the only high-light the members mention is the grocery shop Kiwi as the place they frequent the most, located in the same building at Technopolis.

In the context of urbanity, it is important to question Simula's relation to the botched cluster development strategy: what benefits does the Garage reap from being in close proximity and amongst giants such as Evry, Statoil, Telenor, Aker Solutions etc.? Does IT Fornebu's outdoor and indoor area of the headquarters function as a meeting ground for the different professionals? Although not a fully-fledged cluster, did the members use the urban setting intended as such? Does IT Fornebu generate synergies or any serendipity production? The members mention little to no contact amongst other professionals in the urban setting. Archer mentions that Telenor used to send a representative over to the Garage before his time. The entrepreneurs confirm the same. Both members and Archer mention that it is far too inconvenient to go to their neighboring building Statoil for example, without a reason or to mingle. On the other hand, the urban seclusion and isolation seems to have worked in favor of the profile and image of the Garage. All the members interviewed favored the urban seclusion and image of earnest and hard work at the Garage instead of the super-competitive and tech-savvy StartupLab or MESH where events and networking is part of the daily life. This may reflect the view of the entrepreneurs, urbanity simply does not matter, and may in fact, be a distraction to their work.

Working culture

The important aspect of Simula's working culture is the intended symbiosis between the researcher and the entrepreneur, since the entire premise of the Garage is built around this fact. Although the VRI program has generated 8 collaborations, it is still an artificial symbiosis, since the VRI funding is being used to bankroll expertise. Or to put it bluntly, to buy off a symbiosis between researcher and entrepreneur. According to the members and the community manager, this is not an autonomous occurrence as they have seen little to no symbiosis between the two factions. As the community manager Archer himself has connect people with common interests, which requires that he keep tabs on all the business activities at the Garage at all times, and also in relation each of the researchers' individual expertise etc. As mentioned, the Garage do not meddle with the startup's business model and try to let them be as autonomous as possible.

There is also the aspect whether shared knowledge and discussions play a vital role in the working culture. Some entrepreneurs' states that the intellectual property stays within each startup. Even though the Garage is a homogenous technophilic startup-related coworking space, the IT operations of each company are so specialized it is hard to imitate in deep technical discussions and a shared knowledge culture. It is mentioned that it is not the deep technical discussions the members benefit most from, but the act of communicating an idea to others. The members are forced to rethink, reformulate and make that idea of their startup clearer.

The altruistic virtues and free reins of business activities and image of earnest work, and that in itself is the sum of success. These values do pose an interesting working culture in the context of coworking where networking and socializing is of importance. The Garage is completely without distractions of events, buzz and networking, and the atmosphere at Simula gives a sense of professionalism and seriousness where events and parties are considered as shallow in comparison to the development of the startup company. Some even mention that the social coffee breaks and games of table tennis were very distracting. Or as Archer puts it: "the real work lies in many hours hard and earnest work, not out at cocktail parties talking to investors". It also houses a working culture where it is okay to waste 6 months, where it is possible to test, fail and readjust accordingly so. Some of the entrepreneurs that were formerly members of StartupLab, say they likened the Garage over StartupLab.

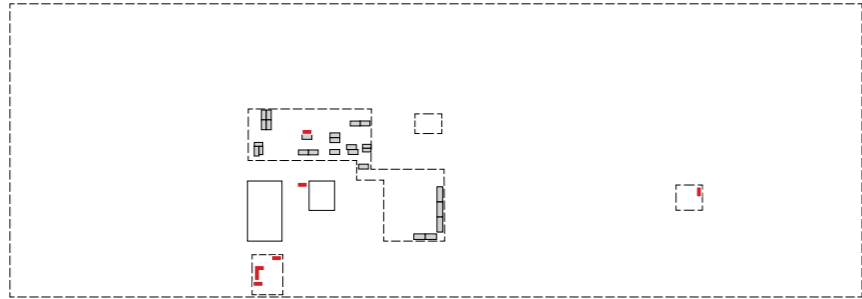
Social culture

Because the Garage's unconditional criteria of entrance and no focus on events, mingling and networking, this does affect the social culture. Unconditional is meant as in relation to personality, ambition and the state of the company that are granted entrance.

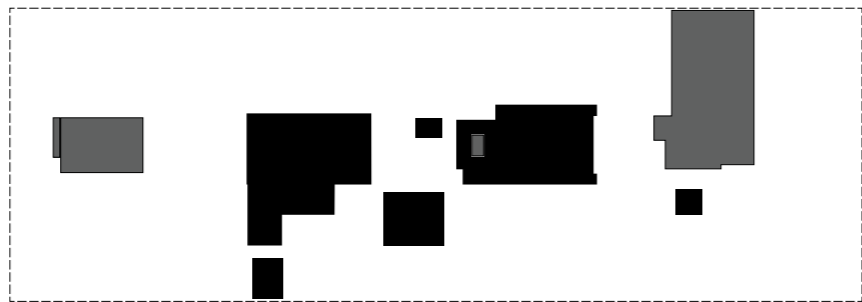
The ones that frequent the coworking space the same time, that are around the same age, with same type of startup and ideology get along better. But the other ones who may be studying or doing a school project, or proceed with their startup as a part time job will to a certain degree, alienate themselves from social culture at the Garage.

As stated in the physical layout segment, the Garage is an artificial implementation into the working environment of the Laboratory, without any roots in entrepreneurship in the daily operations of Simula. in an attempt to create a symbiosis between these two, the administrative unit may have created a divide instead. It may have created a social hierarchy at Simula, where there are researchers who actually feed into the knowledge pool of Simula, and the entrepreneurs who are there for personal gains. Therefore, two different creative or social classes, with different purposes and agendas.

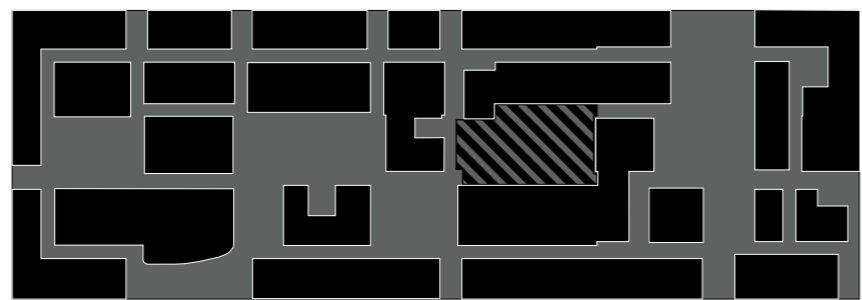
- Mmberships**
- basic membership (community)
 - worklounge
 - flexible desk (clean desk)
 - fixed desk
 - enclosed office space (office)
 - administrative unit
 - meeting room



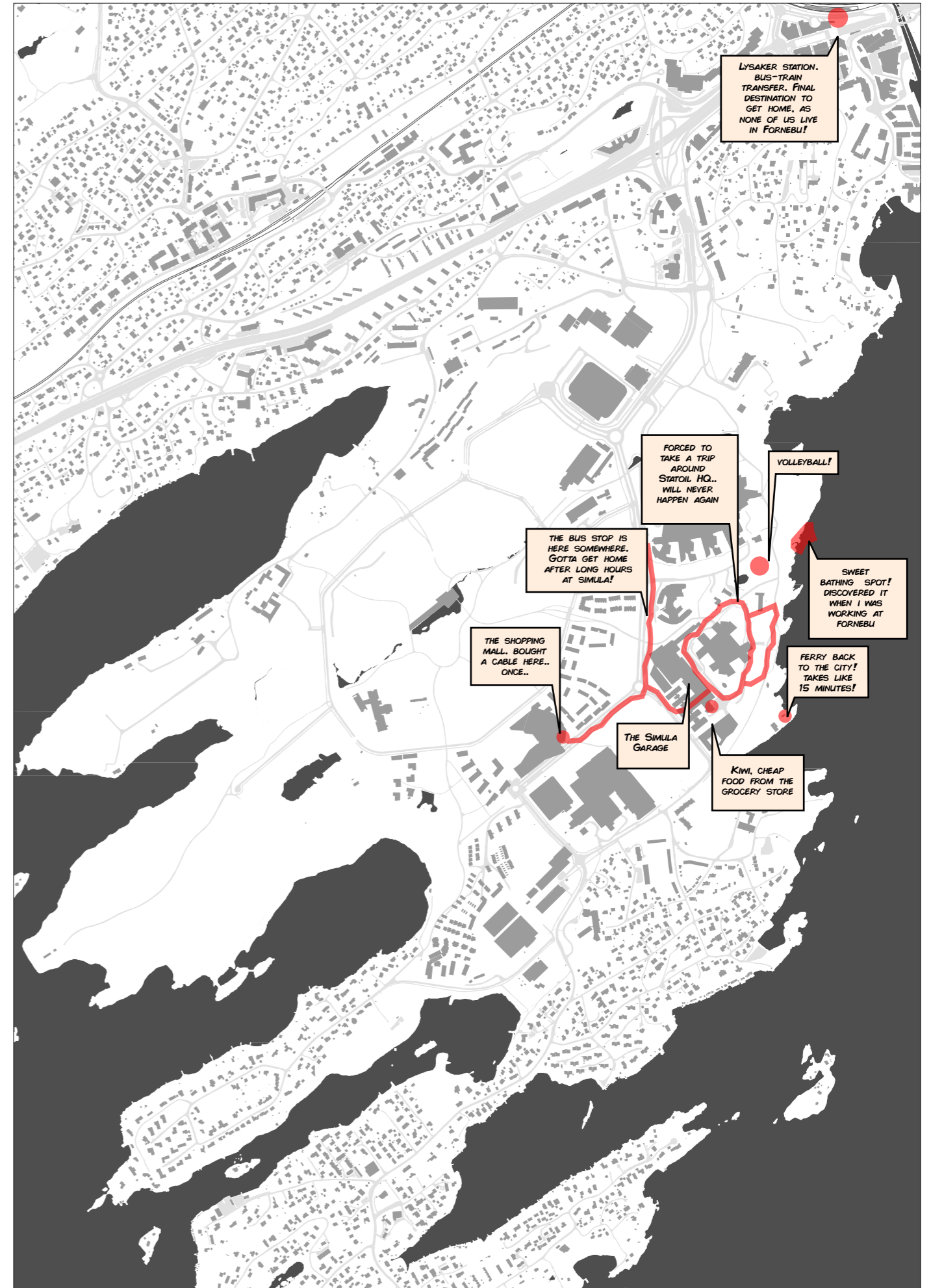
- Work - Pleasure**
- pleasure
 - work
 - work/pleasure



- Private - Common - Public**
- public
 - common
 - private
 - ▨ private/public
 - ▨ private/common



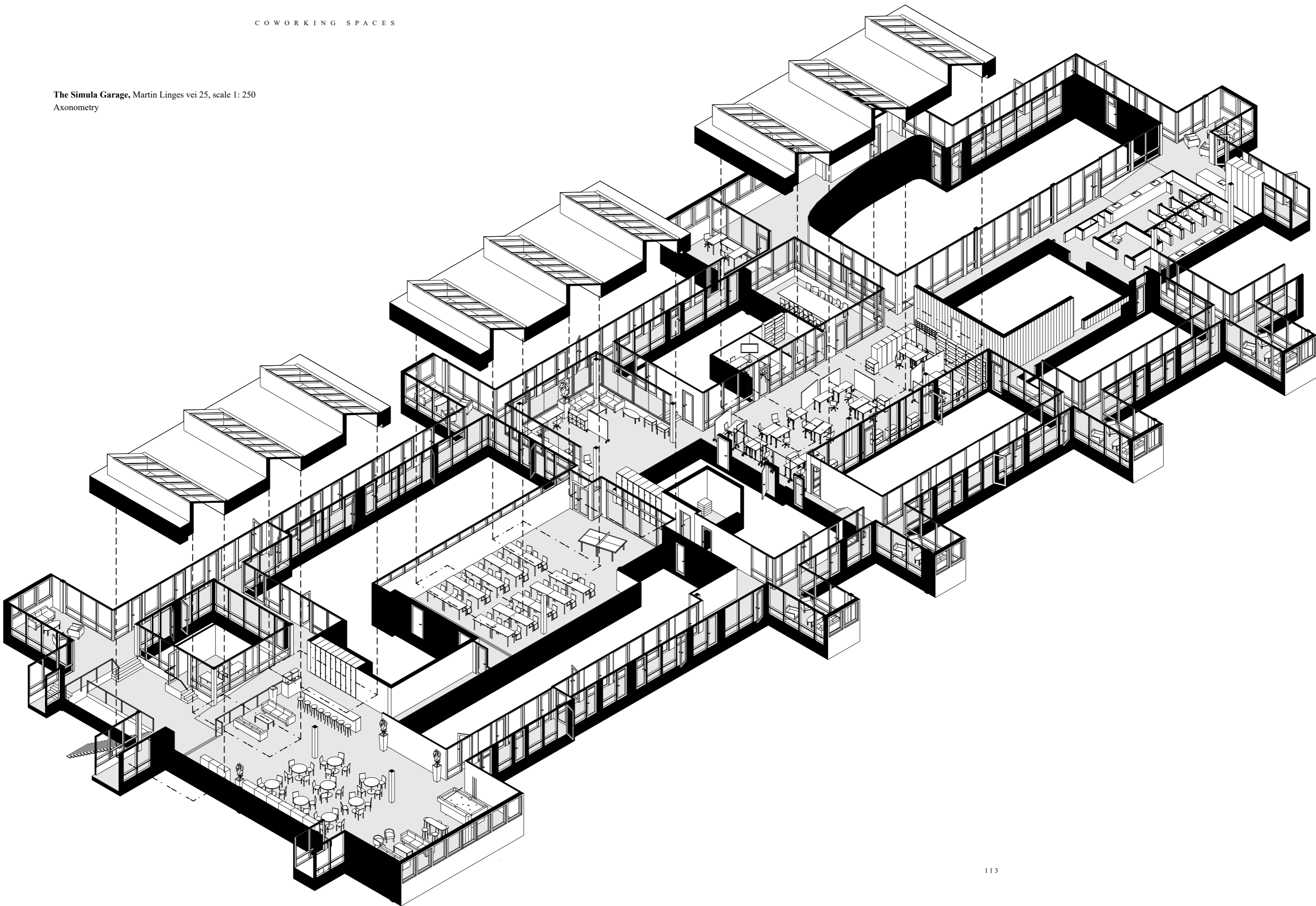
Spatial analysis 1:1000



Fornebu 1:15.000

From the perspective of the members.

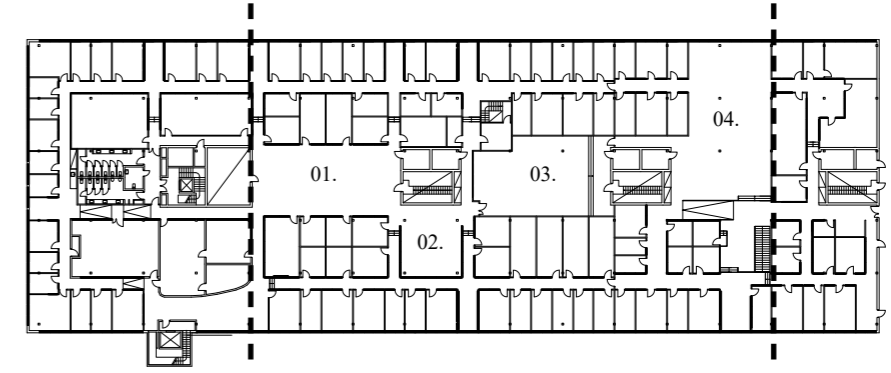
The Simula Garage, Martin Linges vei 25, scale 1: 250
Axonometry



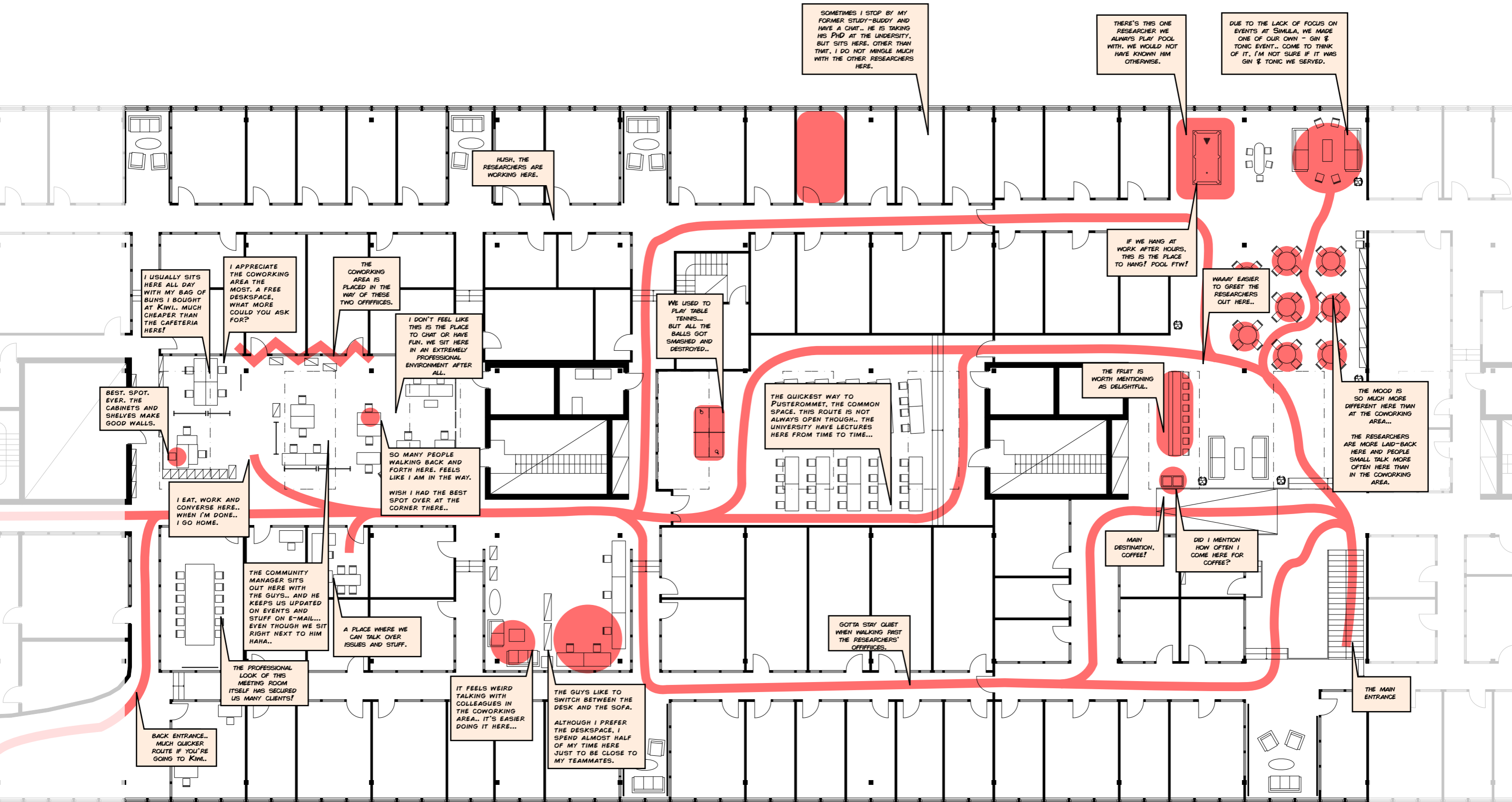
The Simula Garage, Martin Linges vei 25, scale 1: 200

4th Floor

- 1. Coworking area
- 2. Lounge
- 3. Storstua, auditorium
- 4. Pusterom, common area
- 5. the community manager's desk
- 6. meeting room
- 7. Adam from the administrative unit
- 8. IT department
- 9. printer room
- 10. kitchen/coffee machine



The Simula Garage, Martin Linges vei 25, scale 1: 200
From the perspective of the members.





1.



2.



3.



4.



5.

1. Technopolis, seen from the Statoil HQ plot. The grocery store can be seen on the left corner of Technopolis
2. Simula, the entrance on 3rd floor leading to the 4th where the facility is
3. Pusterommet, or the common space
4. Common cafeteria for the entire Technopolis. The members of the Simula Garage is encouraged to eat here through discounts
5. Newly renovated toilets for the entire Simula community



1.

- 1. The lounge
- 2. Hallway seen from Pusterommet to the other end
- 3. Coworking area
- 4. Storstua, or the auditorium



2.



3.



4.

4.11 SPATIAL ANALYSIS

This spatial analysis will be discussed around three concepts important to how members and entrepreneurs actually perceive the physical layout at the individual coworking spaces, especially in relation to the management and working culture. In other words, the spatial curating performed by the administrative unit and how the members react to it. The three concepts are as following:

- Memberships.
- Work/pleasure.
- Private/common/public.

Memberships

From the outside, every coworking space may seem as any other generic open office landscape, in some cases, of even less quality than the conventional office space. The office space differs from coworking spaces in the curating of memberships, which greatly affects the use and perception of space. As mentioned in section 4.2, the conventional memberships of coworking spaces are usually divided between four main categories as following:

- Basic membership.
- Flexible desk.
- Fixed desk.
- Enclosed office space.

StartupLab and Simula Garage are conventional startup communities in regard to membership policies. StartupLab memberships convey the typical array of all four basic memberships, while Simula Garage only deals one kind of membership, which is the flexible desk. Both of these two case studies reveal the limitations of the flexible desk. We have to keep in mind that the flexible desk is the membership that relates most to the collective ideology of coworking. In many ways, it symbolizes the ever-changing, dynamics of a workspace leading to serendipity production. Although the flexible desk is the one that aligns most with the collective mentality of coworking and its dynamic changes, it also seems to be the least popular kind of membership. Simula Garage has only one type of flexible desk membership; the members proceed as if they were fixed desks. What is special with the Simula membership, is that the free-of-charge flexible desk membership also seem to affect how the members perceive their presence at the coworking space, as opposed to if they paid a rent; they might have a stronger sense of ownership to the Simula community. The physical layout of their desks seems also very random in comparison to MESH and StartupLab, where everything is aligned in columns.

MESH is currently the only case study that truly challenges conventional membership types of coworking. In accordance with structural changes in the economy, membership types change and blur. The programmatic changes at MESH the last four years can also be perceived as MESH being a testbed for hybridization, in search of the best possible hybrid. This has resulted in their free-of-charge community membership (basically

the use of a café/bar/restaurant/event space). This membership taps directly into the urban fabric, possibly generating an unprecedented amount of serendipity production between citizens and the paying members at MESH. Another invention of MESH is their work lounge membership, which allows the temporary work of travelling businessmen and global lone eagles to be a part of the MESH community. These two are decisive memberships changing the entire dynamic and also how MESH is perceived as a coworking space.

The aspect that is quite alarming though, is the high number of enclosed office spaces in MESH and StartupLab. MESH even has an extra facility across the street for major startups (some of them leasing even two separate enclosed office spaces), which house giants in the startup circuit such as Über and Kahoot etc. We have to ask, does the coworking space differ from any other workspace when the majority of its members are working in secluded spaces from each other? It differs because the members with the enclosed office spaces actually have dual ideologies embedded in this membership. Enclosed office space has strong connotations to the corporate mentality, but being in a coworking space means that one has a choice between corporate and collective ideology at any given time. Or to put it bluntly, if you need seclusion or if you want to join in the collective community, the choice is in your hands.



For example, is the work lounge open for MESH members between 08:00 – 17:00, and is transformed into event and mingling space after hours. The 1st and 2nd floor is a mix between private, public, semi-private and semi-public, which is quite a radical feature, yet it is in line with Moriset’s observations of the current hybridization of coworking spaces. This is a feature not present in the other case studies. StartupLab has a clear separation between private and the common spaces, even though the entire space is an open office landscape. The desk space is very much a private entity. Whereas, the analysis of the Simula Garage reveals that the members are in fact working in a common space since the coworking area is located right in front of the entrance doors to two offices. This of course poses quite a friction in the expected researcher-entrepreneur symbiosis that the Simula community is supposed to have.

4.12 TØYEN STARTUP VILLAGE: THE FUTURE OF COWORKING SPACES?

What is Tøyen Startup Village?

Tøyen Startup Village (TSV) is a development strategy and a brand for a startup cluster in Tøyen, based on the local values of Tøyen district and hands-on experiences from Hackney, the world’s second largest startup cluster, after Silicon Valley. The hands-on experience being Charles Armstrong of the social enterprise, The Trampery in Hackney. TSV was initiated by ICT Norway³ in the summer of 2015, with Heidi Austlid and Fredrik Syversen at the helm. The facilities that ICT Norway have based their pitch on is owned by Entra. Tøyen itself is a residential area between Gamle Oslo and Grunerløkka city borough in Oslo. The area has 8264 citizens (12,8% of Oslo). Most of Tøyen’s facilities is under 30-40% below the general price in Oslo (Brattbakk 2015: 7-8).

The initial proposal

What is the coworking properties of TSV and how does it mark a shift of development of the coworking concept? The initial pitch of TSV was a direct reference to the discussion of the lack of a unified startup front in Oslo. The proposal is to establish a multitude of tech-related startup communities in close proximity to each other, hence the term, a startup cluster. An important aspect to discuss is why the choice fell on Tøyen for a startup cluster, and not on Kvadraturen where there are tendencies of startup communities clustering. According to Fredrik Syversen, the director of business development at ICT Norway, the choice was simple. Tøyen is currently receiving an annual 50 million NOK from the state and the municipality to increase the urban life and social quality locally. It is also partly due to the relocation of the national landmark, Munch Museum, from Tøyen to Bjørvika. Meaning if TSV is a viable development strategy for Tøyen, portions of the sum would go to the development of TSV. There were many other initiatives in Tøyen before TSV trying to the better the urban quality and social aspects of the district, such as Tøyenløftet, Tøyenkampanjen, Tøyen Unlimited, Deichmanske libraries etc. These will be referred to as the local initiatives in the 4.11 section.

TØYEN
STARTUP
VILLAGE

³ IKT-Norge is the interest group for the Norwegian ICT industry. We represent the full range of the spectrum from the major players down to small entrepreneurial companies.



The current proposal

Initial proposal was met with resistance by the locals and the different initiatives. Syversen notes that much of the resistance was attributed to the early rhetoric of TSV being the savior of Tøyen. Since then, TSV has redirected its marketing focus from savior to standing on the shoulders of giants very quickly. From a focus on only tech-based startup communities to include socio-entrepreneurial collaborative, in line with the profile and virtues of the existing initiatives in Tøyen. Which is to increase the cultural, social and commercial value of Tøyen. ICT Norway, the owner of the brand TSV and the local initiatives poses today a unified front for the development of Tøyen. It is a beneficial union, since the local initiatives have most of the support by the local residents, while ICT Norway is a much more vocal on the Oslo scene and in attracting regional interest. To increase the feasibility of the development strategy, ICT Norway has also hired Einar Kleppe Holthe of Fuglen to secure an expertise in developing TSV to become of cultural significance to Tøyen. Holthe is known for his anti-corporate business ideology and the development of many highly successful coffee shops in Oslo and abroad.

The socio-entrepreneurial or civic cluster

TSV may resemble Porters model of a cluster of interconnected firms, suppliers, related industries and specialized industries. But the union is mainly attributed to the combination of the startup community and the socio-entrepreneurial profile TSV has adopted by the local initiatives. The profile fits on every aspect the urban life of Tøyen, from the youth activity house accommodating knowledge workers, to the Deichmanske

youth library with a partial makerspace embedded in it, or even how Tøyen Unlimited⁴ has taken the step from organization to coworking space, TUBen etc. The local initiatives have been influenced by TSV as TSV has been influenced by them. Here the cluster as a mere observation differs. As Porter's model is very vague on which firms should interact locally, the case of TSV properly defines every player within the cluster, through a bottom-up approach and user involvement through public meetings and discussions on how to develop Tøyen. It is a cluster based on the foundation of existing local life, businesses and activities etc. TSV has become what Vivek Wadhwa the tech entrepreneur is criticizing the clusters for, which is a cluster based on increasing the knowledge of how to start a company, the focus on the people within the cluster, incentives from the government towards community making etc.

Branding and events

TSV markets itself as a popular umbrella organization for all the other Tøyen initiatives. What ICT Norway actually develops, is a coworking space for another enterprise to manage in Hagegata 22 and 23. ICT Norway themselves will only develop and manage a 200m² reception/workbar in that same address, a public coworking coffee shop with a very visible reception as the physical presence of TSV as a brand. TSV's presence is mainly present in their digital footprint and public appearance. ICT Norway are increasing their popularity not only through different newspapers, but by hosting high-profiled events, such as the X Games 2016 in Tøyen, Oslo. This was in fact a cooperation between ICT Norway, Kahoot⁵ and Oslo Business Region to also promote startups in Oslo. According to Syversen, this easy-to-follow startup and socio-entrepreneurial brand has led to other Oslo-based developers show interest and wanting to be part of the TSV brand, from Økern, Grønland, Hovinbyen etc. With the support of the local initiatives, this makes ICT Norway of TSV the key orchestrator of the Tøyen development. The popularity of TSV as a brand may indirectly put TSV in charge of overseeing all the development activities in the area since the policy makers and developers are willing to readjust and be part of the TSV development strategy.

⁴ Tøyen Unlimited is an independent and socio-entrepreneurial organization to support local individuals with ideas on how to solve welfare issues on a local level.

⁵ Kahoot is widely considered as one of Norway's most successful startup companies.



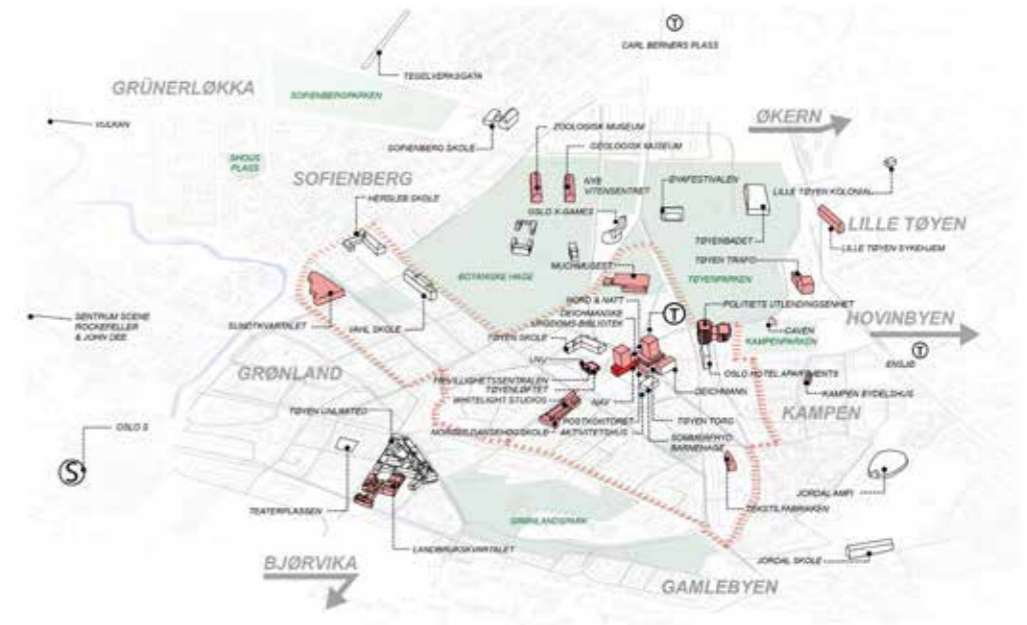
X Games Tøyen 2016.
Hosted by TSV, Oslo Business Region and Kahoot.
Credit: TV2.

Transformation possibilities

TSV did start and engage in another discussion, which is the transformative possibilities that the coworking concept might be in possession of. In the initial proposal in the summer of 2015, ICT Norway who heads the TSV brand, pointed out the vacant facilities that Tøyen with transformative potentials for their startup cluster proposal, such as the towers at Tøyen civic center (Tøyensenteret), structures at the Botanical Garden, the original Munch Museum, Tøyen Nursing Home etc. (Teknisk Ukeblad). This discussion has received less and less focus in the current proposal. Yet it is an important discussion which will be mentioned in chapter 5 – discussions.

Development in which direction?

TSV enters complex aspects in the understanding of the coworking concept and urban discussions. The main questions are: What is the focus of TSV? Is it urban planning? Is it community development? Or is it to exploit an untapped source of innovation, the startup front, mainly IT companies? TSV is a complex development in Tøyen which relies heavily on pulling existing forces together into a common goal, either it be a better city district or a knowledge district, it is still in the best interest of Tøyen. TSV marks how the appeal of coworking can be a development tool for policy makers, through local qualities, user involvement to get the inhabitants and local initiatives on board with a radical proposal in comparison to renovating a library or developing an activity house. There is also the question of ICT Norway's true purpose, since it is in fact an interest organization for the Norwegian IT industry and is not directly invested in socio-entrepreneurial discussions. Another perspective can be that ICT Norway understand how the local forces are vital in the physical planning of startup clusters and the IT industry.



Site analysis of Tøyen.
ICT Norway has visualized the possibilities of a startup cluster in Tøyen.
Credit: Fuglen.