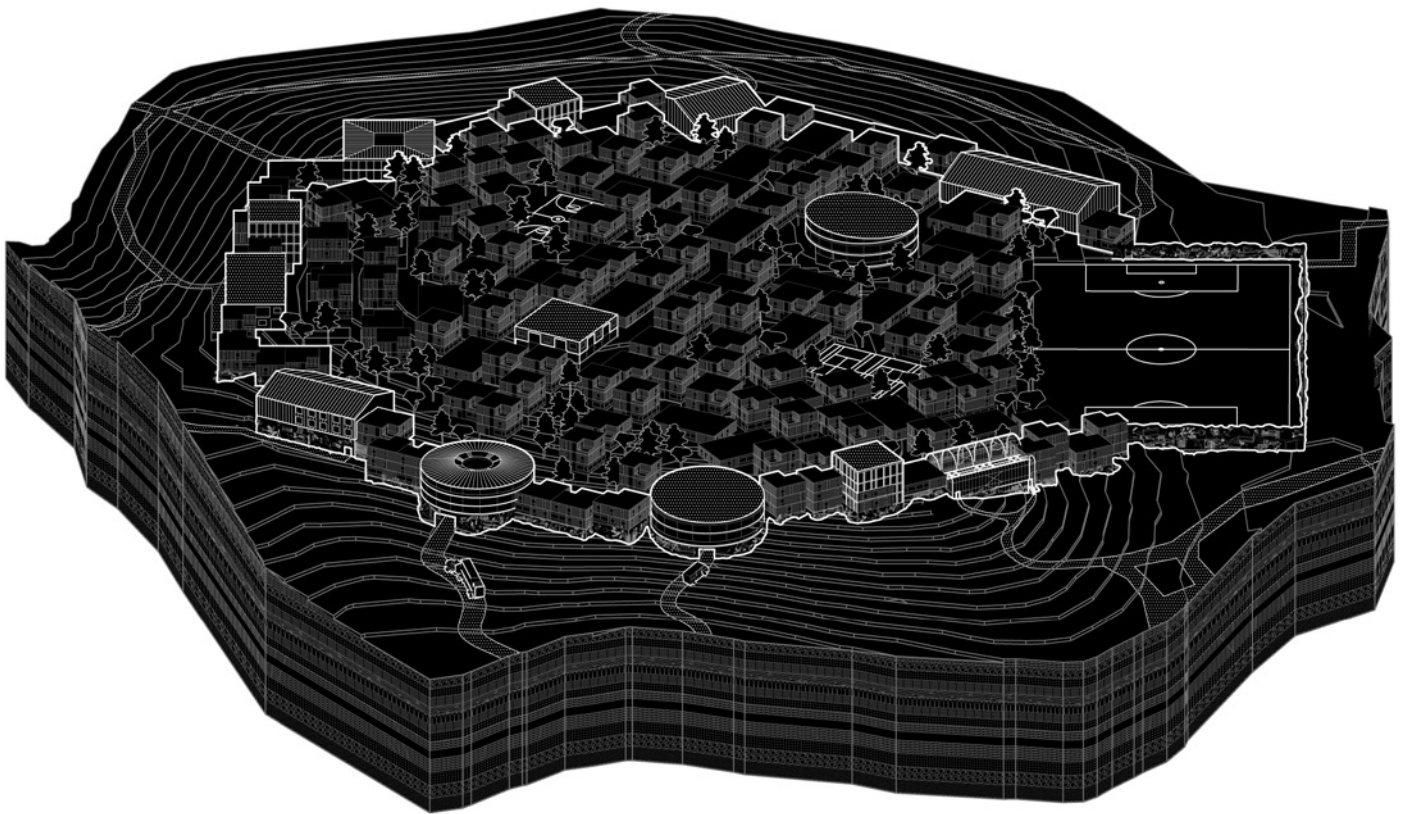


garbage prison

exposing unwanted phenomena in society through an encircled town on top of a dump



spring 2021

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Thank you,

Daniel Norell,
Matter Space Structure,
family and friends!



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Abstract

As unwanted phenomena in society the capped dump and the prison often behave like isolated islands. Both phenomena are part of large infrastructures which remove objects and individuals from public consciousness. The dump and the prison are alien and alienate the objects and individuals associated with them.

Garbage Prison uses simple geometric shapes to make up the plan layout. The simplicity of the plan provides order and orientation as a foundation for a safe environment for both clients and staff. Clients live in houses which are separated from work and leisure activities. The houses are close to each other to enable an urban situation.

The prison mimics life outside by taking shape from the notion of a town. But the town is enclosed, the space of the wall creates a shock of an unfamiliar space which poses the question of its connection to society.

Prisons can be seen as marginal. At the same time imprisonment has been emphasized by Rem Koolhaas, Elia Zenghelis, Madelon Vriesendorp, and Zoe Zenghelis as a modern spatial experience in the project “Exodus, or the Voluntary Prisoners of Architecture” (1972).

Imprisonment as a condition is combined in Garbage Prison with an idea of acceptance of the unwanted, sparked by the question posed by Kevin Lynch “Can we accept that we are part of a universal wasting stream, and see in that our place and our connection?” (1990).

This project is represented in plan-, isometric- and perspective drawings. These drawings create their own universe of drawn and traced buildings, objects and individuals. The representations create a fluid and surreal expression within the reduced language of architectural drawings. The aim of the drawings is to capture how we perceive a world in dichotomy and how architecture can be both beautiful and ugly.

To live imprisoned on top of a dump there has to exist positive- along with negative aspects of the unwanted. Garbage Prison reflects a contradictory existence where the project only functions when the conditions it tries to acknowledge are already addressed.

Keywords: garbage, prison, town, unwanted, dump

Background

We continually produce waste, Kevin Lynch define waste as a parallel phenomena to society’s change (1990: 1). We are disgusted by waste so we throw it away, and society have built a infrastructure managing the waste, when this infrastructure is working as designed then trash is removed from the public consciousness as soon as we put it in the bin. In a sustainable society we want to reduce waste, but we will most probably never be free of waste, in fact it could argued to be limiting in trying to achieve a society free of waste, because then we have already deleted waste from our tool-set and try to achieve an utopia, so how could waste be a tool?

A dump is a final destination of waste, it is the last resort in the waste management hierarchy established by Swedish law; when waste can not be prevented, reused, recycled or transformed into energy then it is collectively stored away at a location.

Brudaremossen is the site of this project, it is a hill located in the city of Gothenburg, the hill lies in the nature reserve of Delsjöområdet. The whole nature reserve is a popular recreational area and Brudaremossen attracts skiers, exercisers and bird watchers. The hill is a capped dump which was active between 1938 - 1972, you can visit the hill without knowing it is an old dump, but if you pay attention you find different traces and indications of its constructed innards.

This project is a Critical Design, it cares about space and aesthetics, it tries to express complex emotions within design, it questions status quo, it is speculation.

Tom Wilkinson describes two prison typologies (which both can be found in one complex) where one proclaim its function and deter the citizen, the other hides a city-beyond-a-city (Wilkinson 2018: 94-97). **Old prison buildings become incorporated in the urban tissue by the growing city while modern prisons usually find a location outside of the city, both acts as parallel enclaves in urban society.**

Prisons are extreme institutions and they remove individuals freedom. This creates some of society’s most dominating architecture and vulnerable individuals. Maybe because of this Prisons as an idea is such a strong image. Michel Foucault used the Panopticon, designed by Jeremy Bentham in 1791, to describe contemporary surveillance society in the 1970s. Bentham designed Panopticon like a rational machine which would watch all the inmates and bend their behavior.

Rem Koolhaas, Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis designed a Metropolis with the notion of imprisonment. The project *Exodus, or the Voluntary Prisoners of Architecture* (1972) was a fiction and a commentary on contemporary society.

The program of this project is a prison. The aim is to propose a new prison typology which resembles society. This result in a town which can be perceived as familiar or unfamiliar, it offers variation of morphology and events.

Garbage prison is a comment on the parallel condition of prisons and dumps, it is also an imagination of habitation on top of a dump which is given sculptural qualities.



Image courtesy Musées de Marseilles, 1993. *Garbage Wall*, New York (1970), Gordon Matta - Clark.

Thesis question

How can the notion of a town contribute to a new prison typology?

How can living along with waste be enhanced and highlighting material qualities?

How to design a building which provokes public debate and consciousness of unwanted phenomena in society?

Aim

To study unwanted phenomena with an architectural project.

Delimitation

The project attempts to design a prison but has to divide its attention in the search for this goal.

To get an understanding of a wide field of architecture, reading of text and drawings has been the a main source of information. Equally important has been to design, which test spaces, speculation and communication. The research has focused on the ideas behind a dump and a prison, how architects perceive, and deal with, unwanted phenomena. The understanding of the dump and the prison is from the outside, observing the inside. Interviews or study visit to a prison has not been conducted, it would have been interesting and given a different shape to the project, but it did not fit into the scope of the thesis. Because of the provocative nature of the project it has been important, for the author, to build an understanding and argumentation from theory, what feels like a birds-view. There was almost a site visit to the active dumps of Gothenburg run by Renova, and Renova was very positive and engaged by the idea. But due to covid restrictions this was postponed and finally never realized.

Index of terms

Capped dump: an area where garbage has been disposed, when the dump is capped it is sealed off by a thick layer of earth.

Client = convicted criminal sentenced to prison.

Correctional officer = staff within the prison providing order and safety

Defamiliarization: an effect of strangeness with familiar conditions. Can be used to let the perception linger and gain new perspectives.

Kriminalvården = the Swedish Prison and Probation Service (SPPS)

Morphology: the study of form or structure

Recidivism: relapse into crime

Strange: different from what is usual, it makes us at unease, it can be frightening or disgusting. It can be funny!

Typology: the classification of types according to their common characteristics.

Unwanted: is defined as hidden, matter-out-of-sight and thus also out-of-consciousness.

Theory

The dump and prison was chosen to work with as they shared the quality of being unwanted. Unwanted in the sense that both are hidden and alienate objects and individuals. If we adapt Kevin Lynch's position, then waste is all around us and part of the everyday.

Waste

Kevin Lynch observes: "Wastes are traditionally dumped at the edges of settlement - in areas where the powerless live, where land claims are weak, and where controls are soft. We find this phenomenon of the margin at many scales."...e.g. the house, the suburb. (Lynch, 1990: 115) The vocabulary of waste is found in many situations of our everyday, "there are waste things, waste lands, waste time and waste life." (Lynch, 1990: XI). Wasting can be both ugly and fun.

This thesis perceives waste as inevitable, the management of waste can always be refined but as a phenomenon we will gain more by accepting waste, rather than neglecting it.

Rania Ghosn and El Hadi Jazairy studied the waste management of Michigan in 2015 and they make the claim that we hide waste following a line of thought that waste needs to be reduced, removed and destroyed (2015: 10). If we can't destroy waste, the next best thing is to hide it until we can destroy it, removing it from consciousness is the aim.

Rania Ghosn and El Hadi Jazairy propose architecture which deals with waste, they "...seek to bring trash into public view, public consciousness, and public controversies." (2015: 12). They present a monument of trash but also habitation along with garbage. This platonic world is part of the context to garbage prison, the project wants to expand this platonic world with material and events.

Matter

Mary Douglas describes dirt as matter-out-of-place, a matter which is a by-product of a hierarchy in which humans perceive matter as pure or impure (Douglas, 1966: 36). Disrupting this hierarchy can be provocative and used as a rhetoric tool to challenge our pre-conceived perception of waste. Matter-out-of-place is alien, one experience stigmatization when one is associated with this matter. This provides insight into how stigmatization affects objects and individuals, as viewers one projects preconceptions but as individuals we also class ourselves.

Thoughts by Bruno Latour provide understanding of how critical design can move away from biased perception, matter-of-fact, towards matters-of-concern which aim to direct attention towards general concerns as for example "can we live along with waste?", "how are prisons connected to society?" (2004). As a designer unwanted phenomena can be given a seat at the table of the "gatherings" by giving it a form. 'Gatherings' (def. by Bruno Latour, (2004): 225-248.) are the constellations which make up society, the social tissue. The gatherings discuss matter-of-concern such as liberty, justice, truth and growth; they exist as long as we are interested in them, think and discuss them.

What started as an exploration of the unwanted became a strong provocative image when site and program were combined. The combination of a dump and imprisonment can be perceived as an idea, of imprisonment as a spatial experience as suggested by Rem Koolhaas in "Exodus", and "Koepel Panopticon Prison". But the combination of the dump and the prison is also a choice to emphasize a crack, to point out a problem of these phenomena being hidden.

Imprisonment

Exodus, or the Voluntary Prisoners of Architecture (1972) is the final project of Rem Koolhaas, Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis at the Architectural Association School of Architecture in London. The project was inspired by a study visit to Berlin in 1971 where Rem Koolhaas studied the Berlin Wall, he saw an autonomous object on an urban scale which ran through the city's different events, "he concluded that the beauty of the wall was proportional to its horror; that there was no causal relationship between form and meaning" (Lara Schrijver 2008: 238-239).

Exodus is a fictional metropolis and at the same time it is a metaphor of the present, the strip divides the metropolis into a Good Half and a Bad Half. The Good Half is a surrealist urbanism of fantastic imaginations enclosed within the evolving strip, the Bad Half migrates to the good half and the confluence of ideas and fantasies enables the strip's constant mutation.

The "Koepel Panopticon Prison" (1980) is a further interpretation on imprisonment, and how this relates to consumerism and observation. He found a problem in the prison typology's constant trendiness on behalf of its functionality (Overby, Whitten, 2015: 168-169). The function is the most important aspect thinks Koolhaas. The proposal combined the existing Panopticon with the function and morphology of a Galleria. The new prison would put guards and prisoners on the same floor and increase the flows, thus creating potential for more varied experiences. There would be control in the consumer culture, that clients would behave like in a Galleria.

Contradiction, defamiliarization and shock
In emphasizing that the phenomena are hidden, but can be combined to raise attention, contradiction has been a central notion. Venturi suggests, in some sense similar to other references, to address the problems by expressing them "If some problems prove insoluble, he can express this: in an inclusive rather than an exclusive kind of architecture there is room for the fragment, for contradiction, for improvisation, and for the tensions these produce" - Robert Venturi (1968: 24). Contradiction can evoke defamiliarization and shock, two terms used by Bernard Tschumi when he imagines methods to develop the contemporary city (1994: 246-248). Tschumi's observation of the city is that it outruns projects which are too conservative. One conclusion is to "...making an event out of urban shock, intensifying and accelerating urban experience through clash and disjunction" (1994: 248). This shock is a method to tackle an experience of indifference to differences of wills, ideologies and ideas of the city (Tschumi, Bernard, 1994: 236).

Koolhaas emphasizes the function within the walls of the prison and Tschumi emphasizes the event of the urban scale. The function and the event is interpreted as activities, socializing and learning.

The concepts mentioned are the theoretical framework of this thesis. The method has been to understand these ideas and use them within Garbage Prison. Critical Design and concepts-of-matter are found within Garbage Prison. Contradiction, defamiliarization and shock are suggestive qualities and have shaped the project.

Method

The project started with the aim to study unwanted phenomena with an architectural project.

The method has been to gather information about how architects deal with the phenomena of dumps and prisons. This thesis started designing parallel to reading and testing the findings from theory in the design.

Anthony Dunne & Fiona Raby have coined the notion of Critical Design, this uses speculative design to ask questions like “what if?”, to find new problems and answers (2021). They describe it more as an attitude than a method, many do it without putting a name to it. There is a balance between art and design, “If it is regarded as art it is easier to deal with, but if it remains as design it is more disturbing, it suggests that the everyday as we know it could be different, that things could change.” (Dunne, Anthony & Raby, Fiona. 2021). Garbage Prison is a speculative design, it tries to imagine new spaces.

Drawing,

has been used to speculate. It has been crafted in orthogonal space with isometric-, plan- and perspective drawings. This has made it possible to use 2d drawings and digital tracing within a 3d orthogonal space of rhinoceros 7.

Computer generated tracing, has been applied to hand sketches, images and, 3d rendered images. Computer generated tracing allows work with visions of collage, the tracing to vector graphic can seamlessly blend vector drawing and raster images. This method creates a coherent image language, where one can work with vector precision in orthogonal space and the noise of raster images.

This ends up in the ambition to use collage

to include different objects and individuals within the reduced language of architectural drawing.

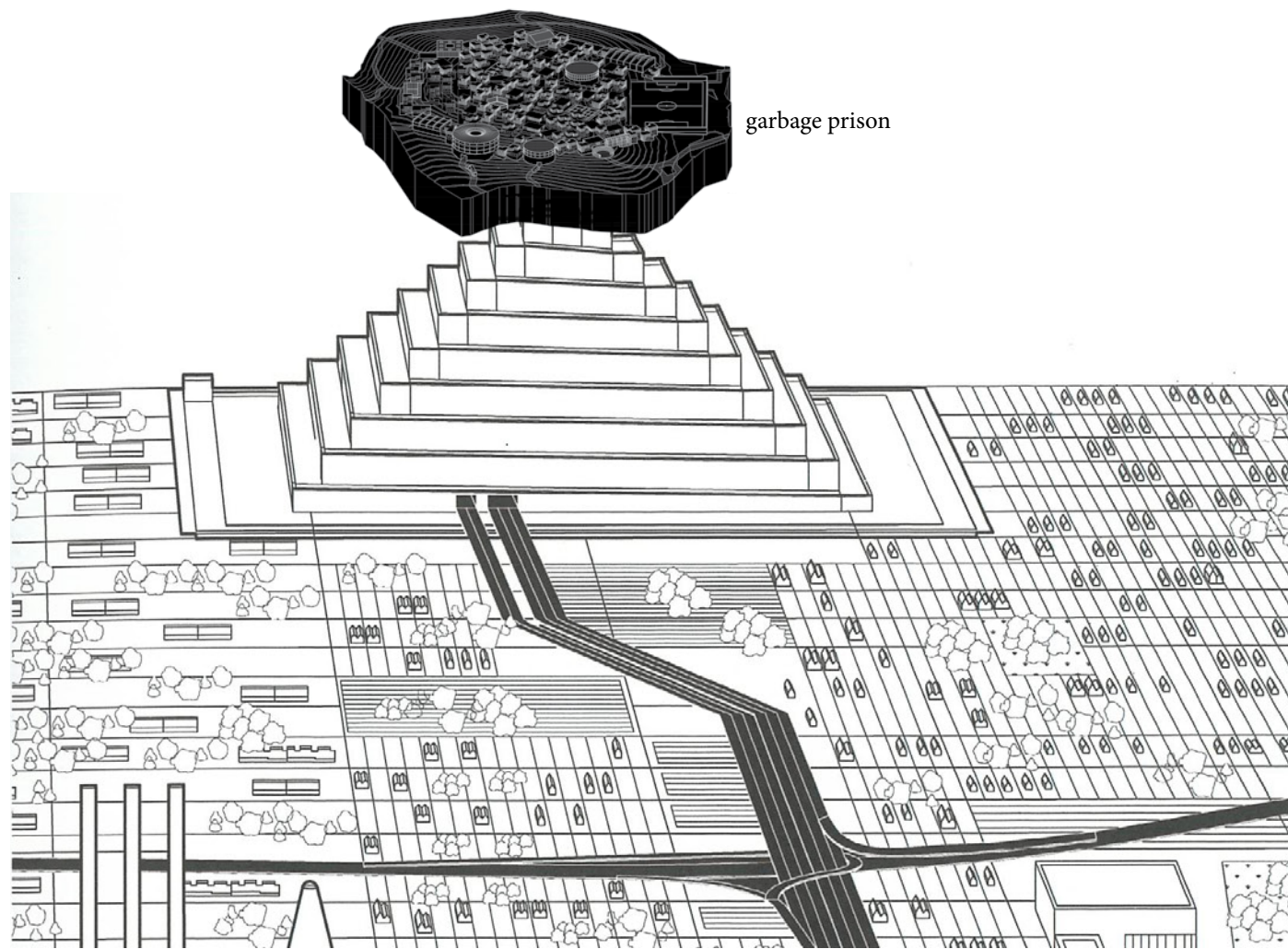
This world of drawings has been a method to develop the project and at the same time evaluate it.

The perspective drawings are important to the understanding of how can these spaces be experienced. Examples of experiences explicitly drawn are worlds of video games, a feeling of being observed, a detail to certain objects and individuals. These drawings are a combination of intention and subconsciousness, This becomes especially clear where tracing was used with intention of capturing uniqueness but also gave rise to surrealism and fluidity.

The isometric drawings has provided a zoomed out experience of the prison and its morphology. This has been guiding in variation, coherence and scale.

The plan drawings has been fruitful in combination with the perspective drawings in imaging events. And the plan drawings together with isometric drawings has curated variation, coherence, distances and scale. Working with plans in the beginning of the project was a good limitation to establish a plan layout. But the neglect of detailed sections has limited the exploration of terracing the terrain.

The drawings has a will to convey the suggestive thought of “the necessary and paradoxical relationship between architecture-as-creativity and nihilism.” by Stephen Cairns and Jane M Jacobs (2014: 204). For this thesis this means finding creativity within a spatial experience which can be perceived as imprisoning.



Design Earth: Rania Ghosn & El Hadi Jazairy. 2019: 57.



“shoes are not dirty in themselves, but it is dirty to place them on the dining table” (Mary Douglas, 1966: 36-37).

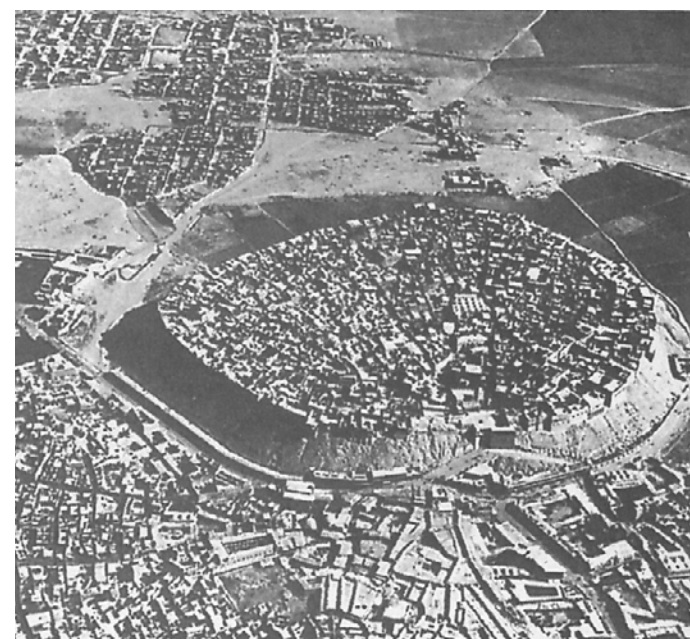
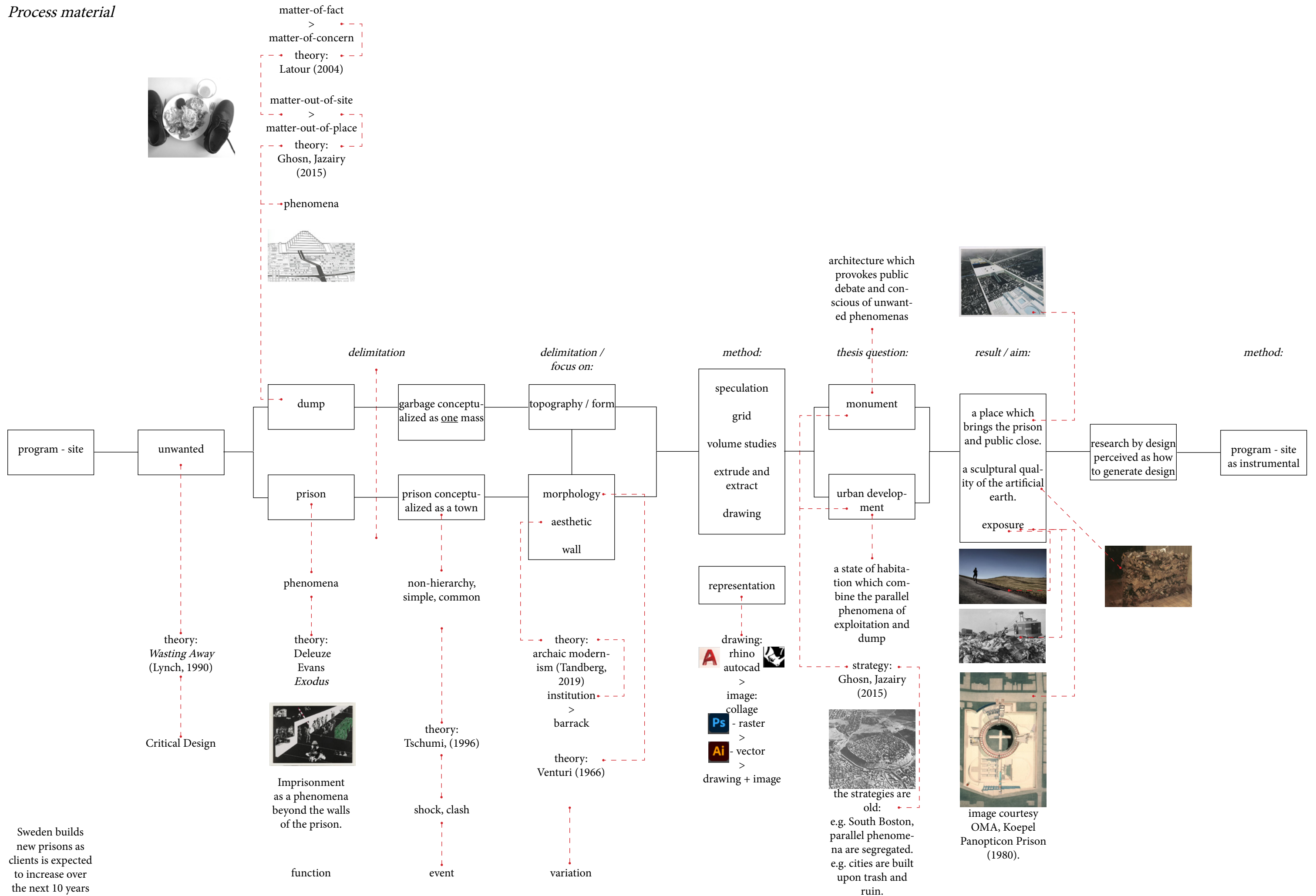


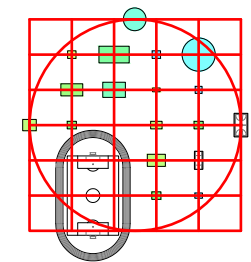
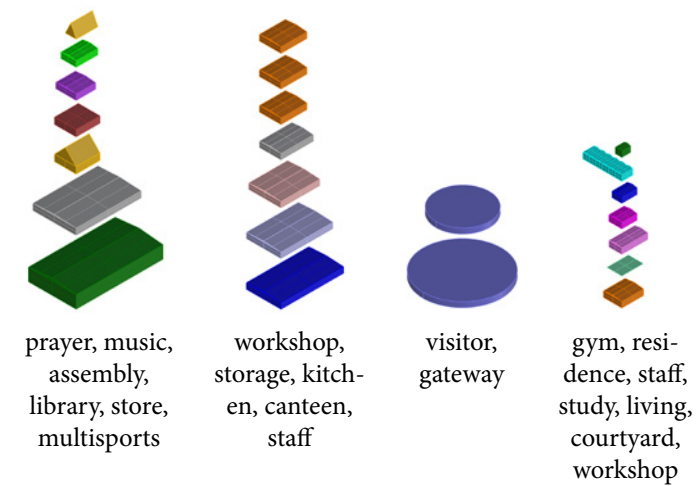
image courtesy to Aerofilms Ltd. published in Kevin Lynch. 1990: 122.

Protraced wasting in modern-day Arbil, Iraq.

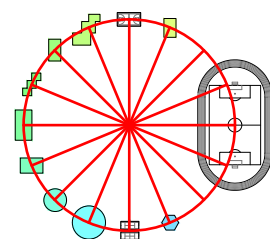


Process material

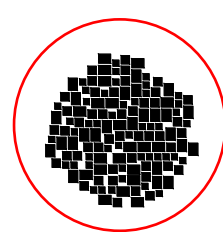
Storstrøm Prison, Denmark (2010 - 2017) by C.F. Møller Architects was a starting point for the project, the study provided the functions of the prison and the volumes, from there I pulled the volumes apart. Storstrøm Prison have 250 clients and a size of 32.000 m².



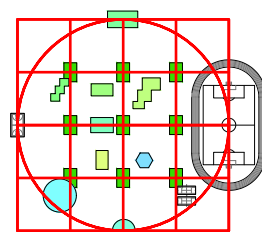
functions distributed evenly throughout the area.



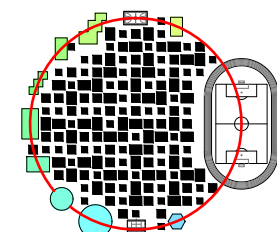
functions distributed evenly along the perimeter.



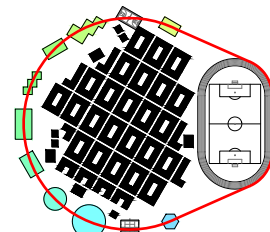
irregular layout



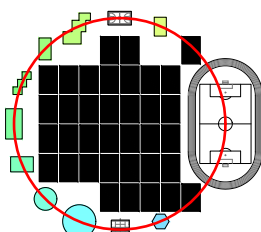
courtyards evenly distributed



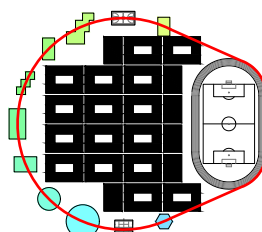
17 x 17 grid



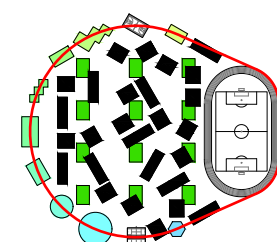
24 x 36 : Priene / 2



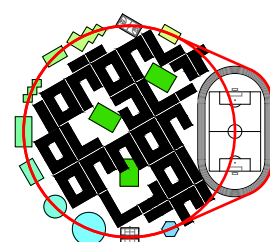
24 x 36 : Priene / 2



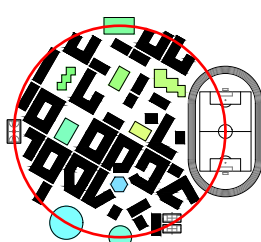
36 x 49 : Priene 352 b.c.
courtyard : 12 x 25



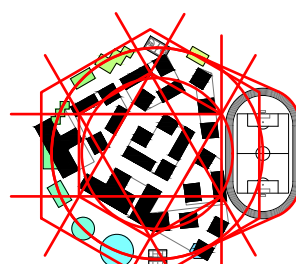
lamelle & point house



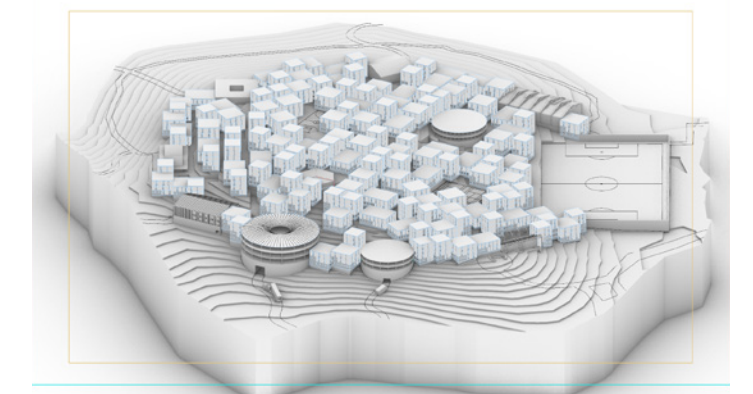
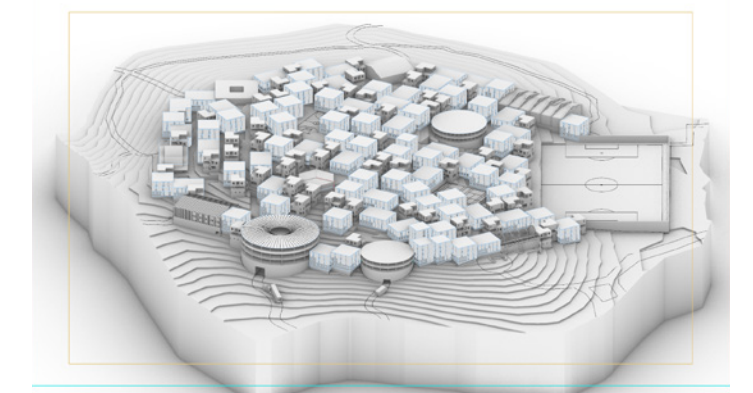
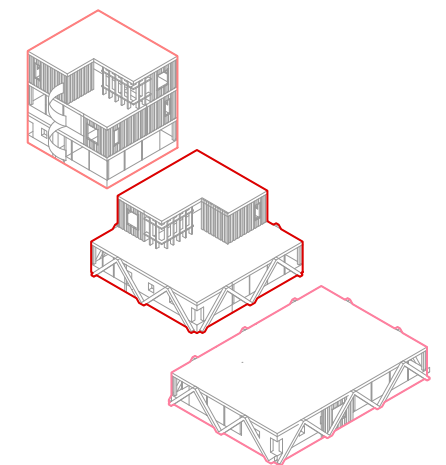
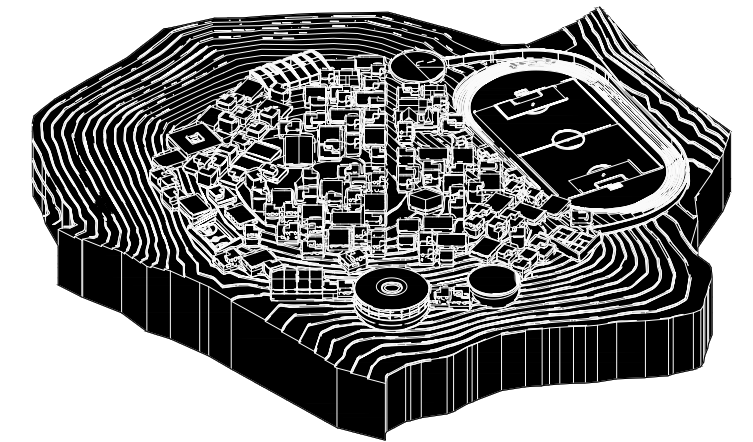
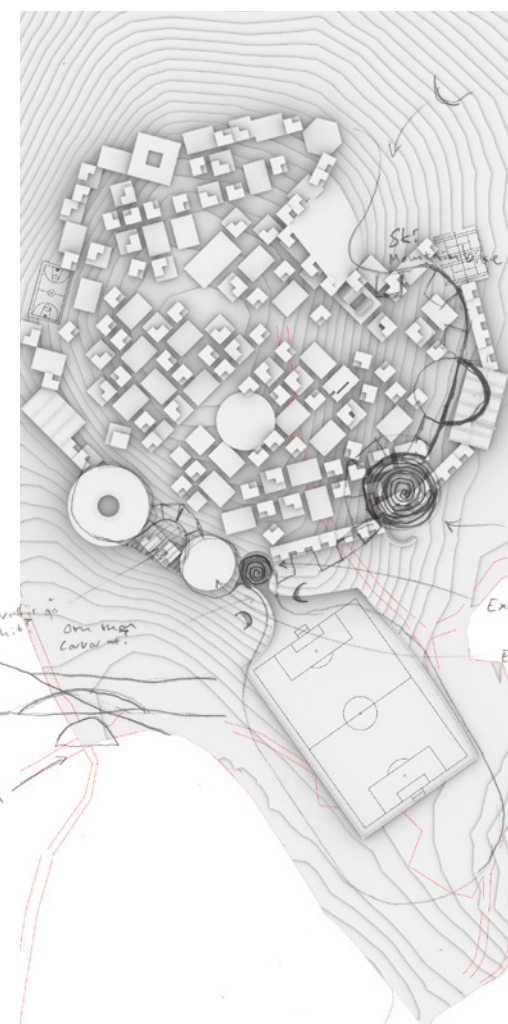
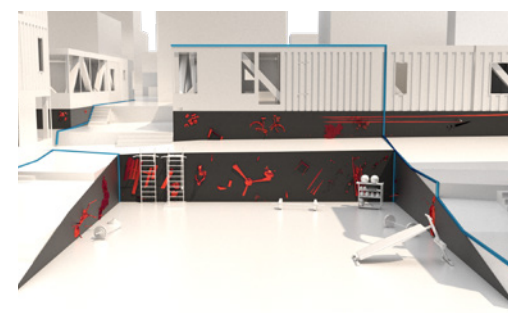
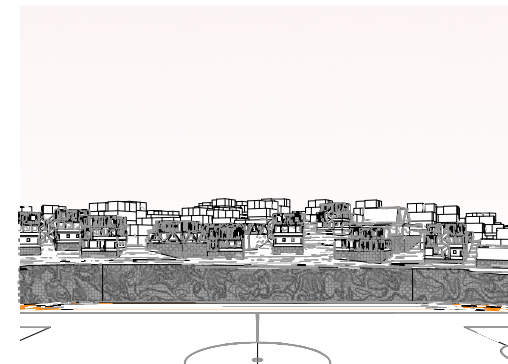
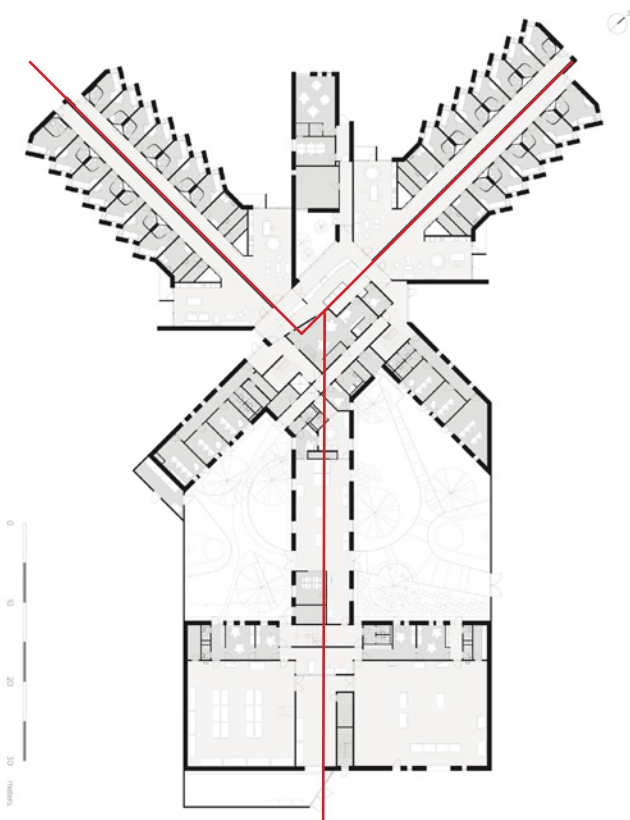
big parks



36 x 49 : Priene 352 b.c.



Nansenbyen (2017), Studio Vatn, Jørgen Tandberg, LPO Arkitekter



Understanding of a dump

Dumps are furthest down in the waste-management hierarchy, dumps remove waste from the circulatory system, the hierarchy is enshrined in Swedish and European legislation (Naturvårdsverket, 2010: 15).

Contemporary dumps have carefully selected materials, this was not the case for earlier dumps such as Brudaremossen.

In 2015 there were 265 active dumps in Sweden (*Deponering av avfall i Sverige* 2020).

In 2018, 4.1 million tons of waste were dumped in Sweden of the total 35.2 million tons waste produced, excluding waste from the mining industry which is a total of 104 million tons, which of 48% is dumped (Naturvårdsverket, 2018: 8, 26, 38.).

When a dump is capped it is covered by a 1-3m thick layer which is to prevent water from entering the dump and become leachete. Finally plants are planted, which do not harm the sealing layer, and the dump is hidden and can be used as a park.

Design Earth is a practice lead by Rania Ghosn & El Hadi Jazairy, their project *Geographies of Trash* identifies five strategies for designers to develop waste management (2015, 88-129).

Cap : views the construction of a dump as a possibility to construct a monument.

Collect : redistributes the recycling process from the corporations into the hands of the local neighborhood.

Contain : limits the transport of waste by integrating waste management with construction.

Preserve : emphasize decomposition and

composting, with the ambition of attracting wild life which respond well to those environments.

Form : “capped” landfills are identified as islands of an archipelago and the strategy combines those dumps physically to promote a new model for urbanism.

These thought provoking speculative designs were an early inspiration for this project, they sparked a will to come close to their designs and close to what waste ‘really’ is.

Three main characteristics of a dump are identified:

Shape

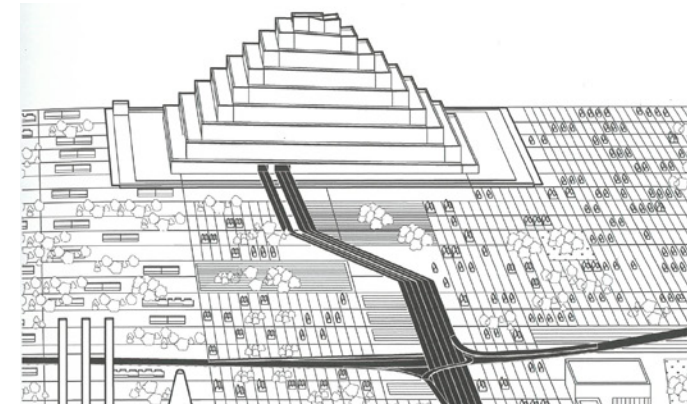
Contemporary dumps are constructed through cell construction where one cell is an open pitch with stable walls, the cell is filled by garbage in a couple of months, material stacking prevent scavenging animals and odor. The typical angle of a dump is 30 degrees and truck circulation is guiding in a rational design of the dump (Ghosn, Jazairy, 2015: 14). Dumps sag over the years because of material decomposing and moving.

Water - leachete

Water which has poured through the waste, leachete, can be contaminated and pose an environment threat. To prevent this modern dumps have a waterproof layer and a drainage layer beneath the waste. The dump should also be located on mountain or dense clay, so called geological proofing.

Fire - methane gas

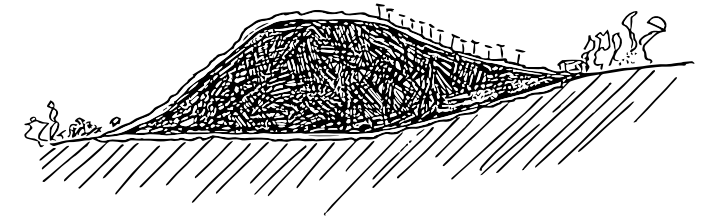
Organic material produce methane gas when it decompose. Today it is forbidden for households to dump organic material but previous dumps produce methane gas.



Design Earth: Rania Ghosn & El Hadi Jazairy. 2019: 57.



GT 1971-09-09
Brudaremossen in 1971



Perceived section of Brudaremossen



image courtesy Stefan Berg, published in GP 2019
Brudaremossen in 2019

Brudaremossen

In the 1926 the city of Gothenburg bought the area north of Delsjön, it was then decided that a new dump should be located close to Härlandamossen (Hallén, 2018: 62). The city of Gothenburg were inspired by Great Britain and the Netherlands by the concept of transforming the capped dump into gardens, fields of sport or cricket courts (Hallén, 2018: 63). But time changed the vision and environmental impact of the dump.

Brudaremossen was an active dump between 1938 - 1972, it was for many years the most frequently used dump of Gothenburg (Hård, 2015: 14). The dump was erected upon wet-

land and mountain + 88 m.a.s.l. and today its height is + 118 m.a.s.l. the dump has an estimated mass of 4 - 10 million m³ (Hård, 2015: 7). All kinds of waste were dumped at Brudaremossen, even hazardous waste. The dump were constructed the first 20 - 25 years by a method of layering, at its end the dump was covered in 0.5 - 1 m of heavy matter, covering layers has been added over the centuries (Hård, 2015: 7, 14).

Delsjöområdet have not been exploited since 1970 when the City Council determined the borders of the area (Hallén, 2018: 59). 1984 Delsjöområdet was established as a nature reserve.



Understanding of a prison

In modern time Sweden incarceration is the most severe form of punishment, the state has a monopoly on violence to uphold and execute the law which underpins and protects the values of society. One fundamental value is to respect the inherent dignity of all human beings. When an individual has broken the law society still has to honor the respect of that individuals inherent dignity, the inherent dignity of an individual who may well have disrespected the dignity and rights of others.

Imprisonment gained interest in the late 18th century, it was a response to a penal system which performed corporal punishment and imprisonment with bad hygienic conditions. There was also a belief that imprisonment could shape the human nature, the idea of the cell prison was sparked. Incarceration has been invented, experimented, iterated over and over to become what it is today.

Before the institution of the cell prison, incarceration was commonly carried out in the city gate or the cellar of a castle. Incarceration served to host criminals awaiting corporal punishment or execution.

Newgate was in the 1750s Englands most notorious prison and had the appearance of a city gate, Robin Evans observe the fact it being a prison had not generated a specific prison architecture (1982: 3).

Panopticon: the all-seeing eye

In 1791 Jeremy Bentham presented the drawings of an ideal utilitarian institution for an institution such as a prison, which was suitable because the design offered a system of control.

The prison was designed with a guard tower in the middle of a big space encircled by cells, this gave the guards possibility to constantly surveil the prisoners, the prisoners could not see the watcher, thus the prisoners was under a constant threat of surveillance where the inmates had no knowledge if the guard were watching or not.

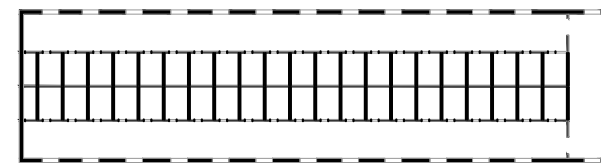
Robin Evans identifies 3 main differences of Panopticon from its predecessors: the prison was perceived as an utopia, through design and regulation a model community governed by reason alone arose (1982: 198). The 2nd was the emphasize on the guard tower, above all other principles. 3rd the explanation of the buildings function through a materialistic psychology of pleasure and pain, civilized society was thought to be achieved by controlling these 2 forces, previous prisons had been explained by Christian redemption.

Panopticon was original, but also part of the reform movement, Bentham become obsessed by the Panopticon and the philosophy intertwined with it, how human behavior could “be controlled and made certain by design?” (Evans, 1982: 196)

Jeremy Bentham was never able to build the Panopticon but it become a strong idea, of power and control, and it influenced the design of institutions and the cell prisons.

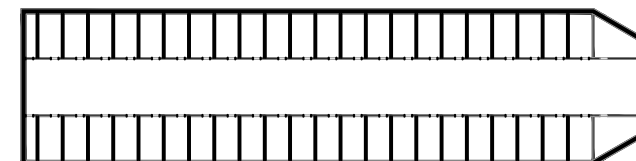
The Pennsylvania system,

was presented in 1787 and it completely isolated the inmates, the prisoners were to reach reconciliation through self-contemplation. The Pennsylvania system was inspired by the religious group of Quakers who believed in the inner light, to not disturb the inmates from finding their inner light they should not be distracted by other inmates or persons outside of the prison (Nationalencyklopedin. *Fängelsesystem*: 2021).



Auburn

Both the Auburn system and the Pennsylvania system were influenced by the belief that criminal habits were reinforced if inmates were free to socialize with each other (Nationalencyklopedin. *Fängelsesystem*: 2021).



The prison as an analogy of society

Foucault identified the societies of discipline in the 18th century and prevailing up until our time. The societies of discipline are entangled with their institutions, such as family, school and prison. The citizen move from one closed environment to another throughout her life, we are told what to do and learn through punish (Deleuze 1992: 3).

The societies of discipline are replaced by the societies of control, it is the modern time which brings with it the decomposition of the institutions. Society no longer need to tell us or punish us, we are monitored and our behavior is predicted and corrected before we are even aware (Deleuze 1992: 4).

Contemporary: restorative justice, abolition and refusal

If restorative justice were a building, it would have four corner posts (*What Is Restorative Justice?*, 2021):

1. Inclusion of all parties
2. Encountering the other side
3. Making amends for the harm
4. Reintegration of the parties into their communities.

Leopold Lambert, argue designers to not design prisons at all, society is not just and designers build in segregation in the urban tissue, total refusal is critical to provoke a new just system.

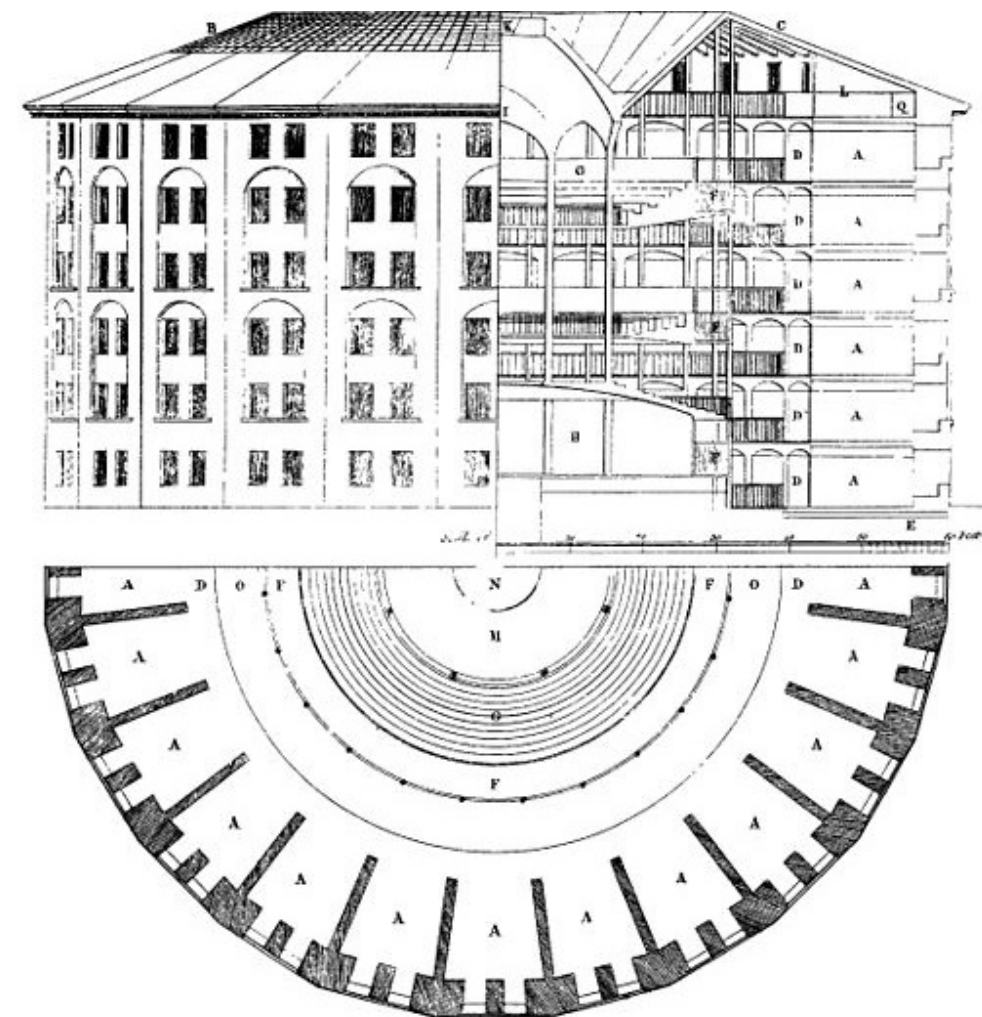
Contemporary architect Raphael Sperry influenced AIA NY to issue a statement which call on architects in NY, USA to not design cruel spaces/institutions (AIA NY, 2020).

Frank Gehry supervised a design studio “The Future of Prison” at Yale in 2017, Jolanda Devalle (M.ARCH II, ’18) was one of the students in Gehrys studio. Devalle writes in *Paprika!* a response to Bill Keller from The New Yorker about how the students changed the terminology and also aiming at replacing the typology of the prison (Devalle, 2018). Devalle’s text sparks the idea of the death of the prison typology, at the same time Leopold Lambert and Sara Sherif consider the students work at Yale as dangerous as it upholds the legitimacy of the prison and does not abolish its essence (Lambert, Léopold. & Moodley, Roanne, 2020).

Nordic prisons are referred too, in the American context, as better Prisons. But designing a prison one should aim at improving, proposing a better future.



The Newgate prison. Image courtesy: The London Rairey Shows, 1750. Guildhall Library, London. Published in Robin Evans (1982).



The Panopticon prison drawn by architect Willey Reveley in 1791 by contract of Jeremy Bentham.

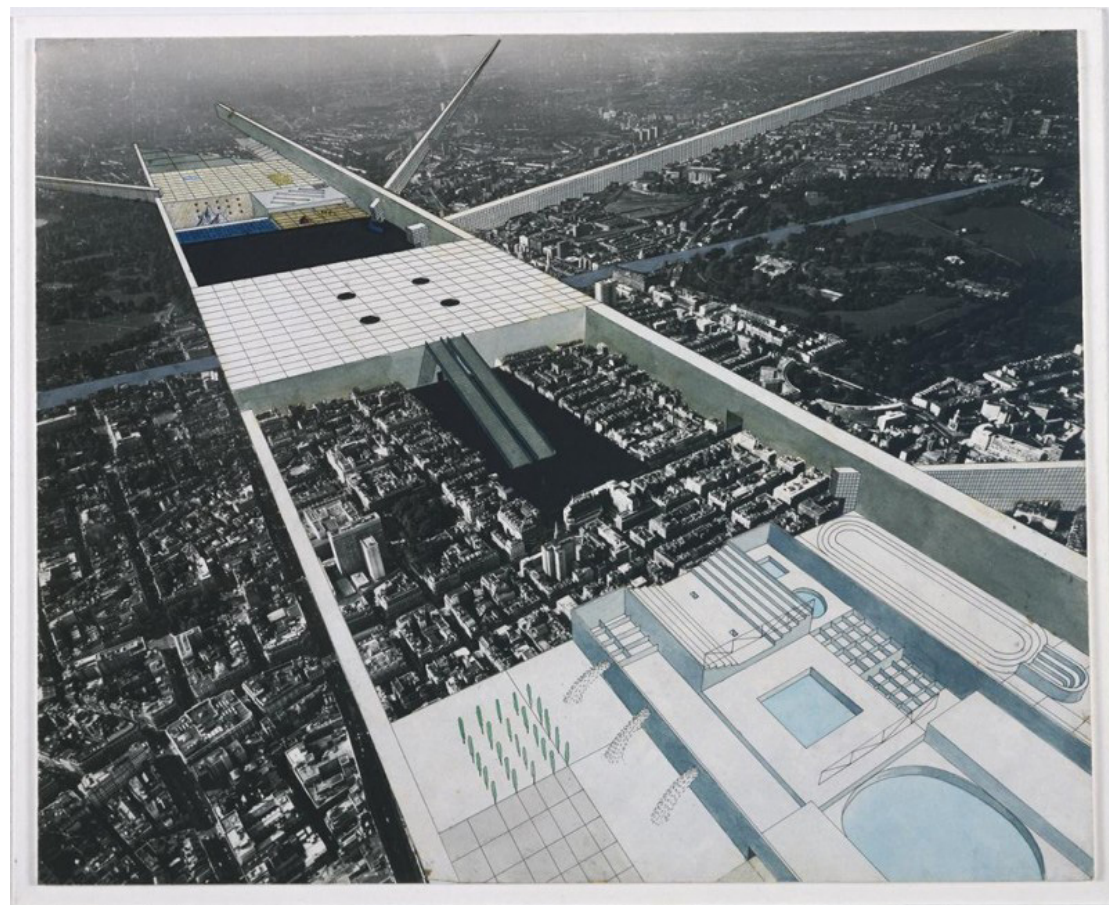


Image courtesy Rem Koolhaas, and Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis. MoMA Collection.
Exodus, or the Voluntary Prisoners of Architecture (1972).

Exodus, or the Voluntary Prisoners of Architecture (1972) by Rem Koolhaas, and Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis, consist of the following components:

The Good Half and the Bad Half, The Wall, The Voluntary Prisoners, The Reception Area, The Central Area, The Ceremonial square, Tip of the Strip, The Park of the four Elements, Square of the Arts, The Baths, Institute of Biological Transactions, Park of Aggression, The Allotments

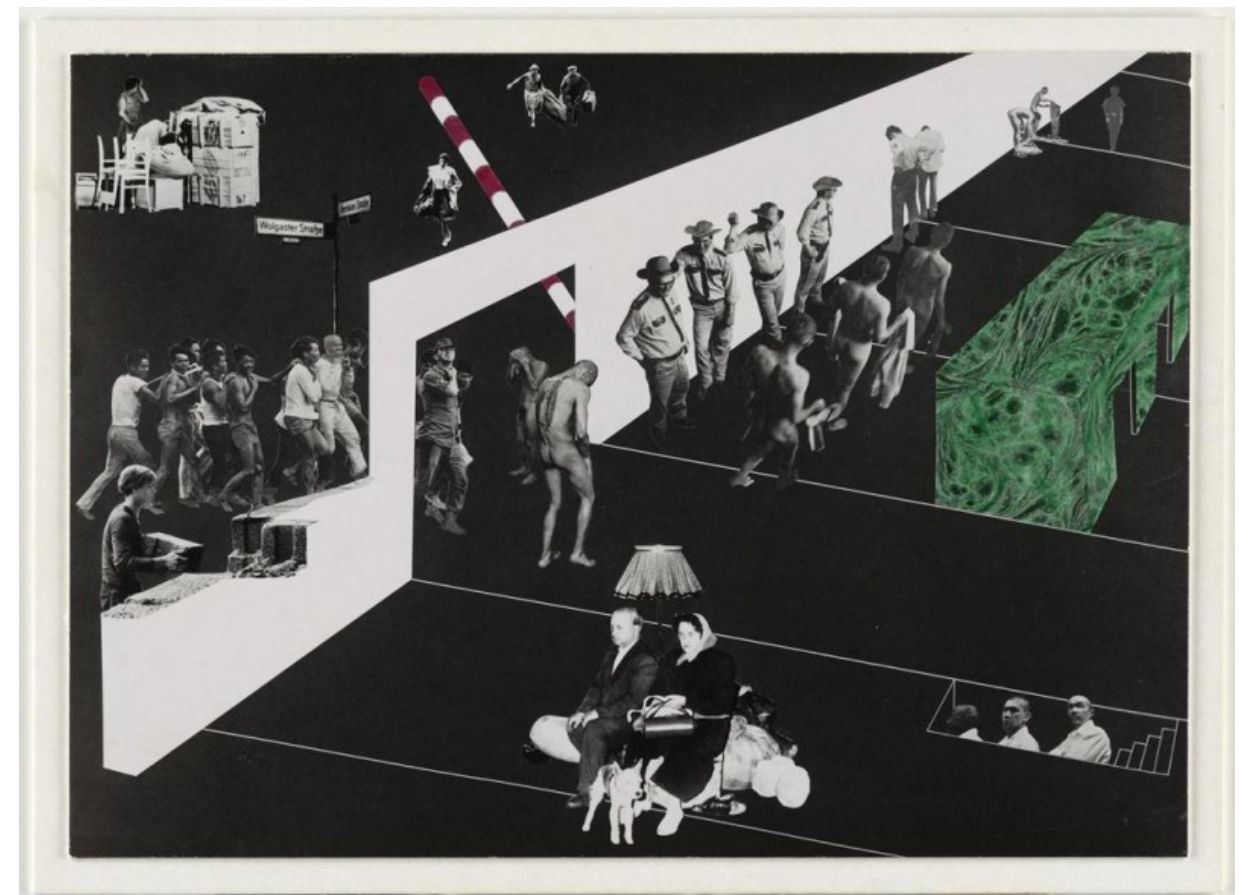


Image courtesy Rem Koolhaas, MoMA Collection.
Exodus, or the Voluntary Prisoners of Architecture (1972)

These environments and their surreal conceptualization inspire the creation of own captions to *garbage prison*. These captions and representations perform the features of *garbage prison*, they are instrumental to inhabit the project.

The space of the wall, House of gatherings, The townhouses and the quarters, The courtyard, or the lungs of the quarters, Tranquil pool, Football field at the root of the hill Greenhouse of work and visit, A shop

The Swedish Prison and Probation Service

In Sweden the authority “the Swedish Prison and Probation Service” (Kriminalvården) carry out the penalties judged by the court of law through probation and prisons. Furthermore the SPPS runs the jails, perform transports and personal investigations in criminal cases.

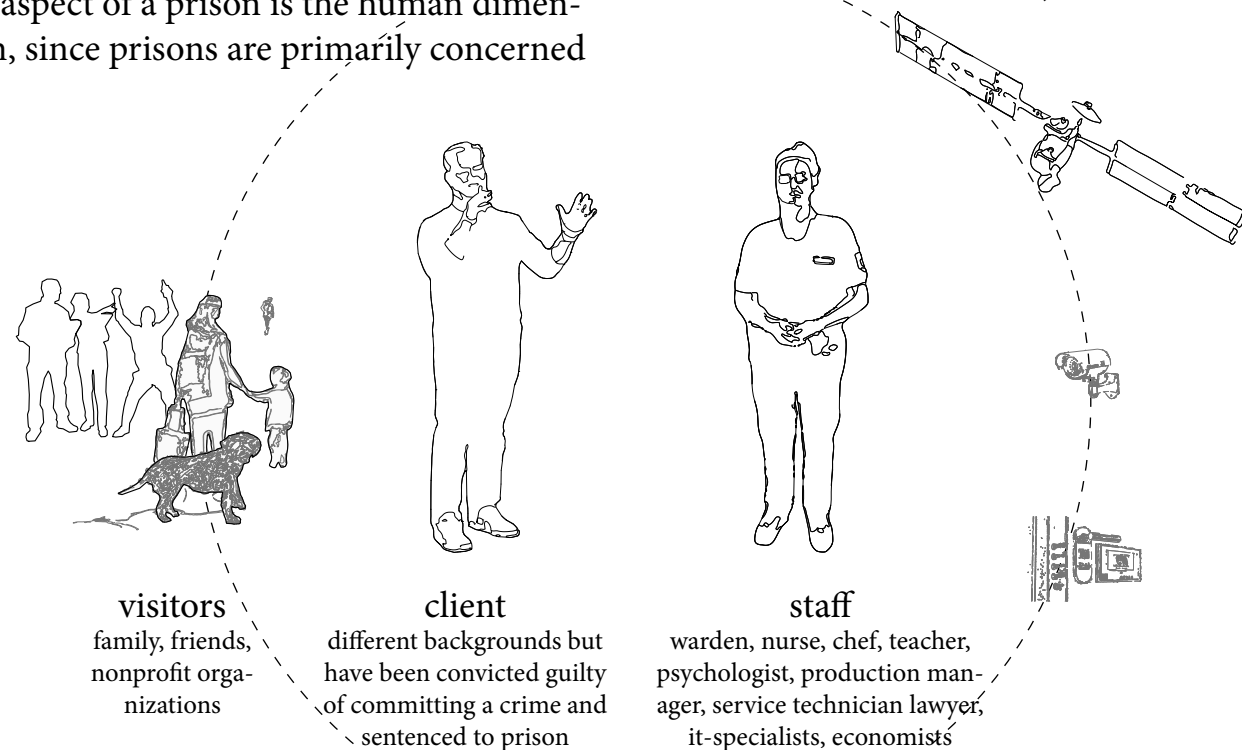
At the heart of a prison is the human interaction

“When people think of prisons they tend to consider their physical aspect: walls, fences, a building with locked doors and windows with bars. The reality is that the most important aspect of a prison is the human dimension, since prisons are primarily concerned

with people. The two most important groups of people in a prison are the prisoners and the staff who look after them. The key to a well managed prison is the nature of the relationship between these two groups.” (Coyle & Fair. 2018: 17).

Incarceration is a controlled environment. Walls, fences, alarms and cameras are used to provide safety, but SPPS emphasize the rules and attitudes of their staff who respect integrity and legal rights.

The SPPS security rest on the foundation of the staff’s education, attitudes and behavior. The daily security is materialized by risk evaluations, controls targeting narcotics, routines to prevent crime and violence (Kriminalvården. *Säkerhet*: 2021).



How is life different inside a prison?

- Limited freedom.
- Scheduled activities.
- Limited privacy.
- Secluded environment.
- Strong group affiliation of “we and them”, in-between clients and between clients and staff.
- You will eventually leave.

A prison creates friction between individuals, and the groups of staff and clients. Freedom is removed and activities are limited, clients

are put alongside people .

This project does not solve that friction but offers a fragmented institution, and a variation of spaces and activities within a controlled environment.

Clients can easily experience stigma as Felicia Fencke and Matilda Landin find in their interviews (2017). Within the prison there is a balance of power which easily result in a condition of “we and them”, those who control and those are being controlled (Jessica Beijar, 2013: 19-20).

aim of the SPPS (Kriminalvården. *Bättre ut*: 2007)

- . To reduce recidivism
- . To prepare clients to enter back into society
- . To carry out penalty in a safe and humane way



One day at the prison for a client, example given by SPPS (Kriminalvården. *En dag på fängelset*: 2021)

08:30 - work, within the prison all clients work.

Clients have 30 hour working weeks. “Krimprod” is a branch organisation of SPPS who create employment for the clients, work can vary from laundry, wood industry or textile. Employment can also be to study.

11:30 - lunch, many departments cook their own lunch.

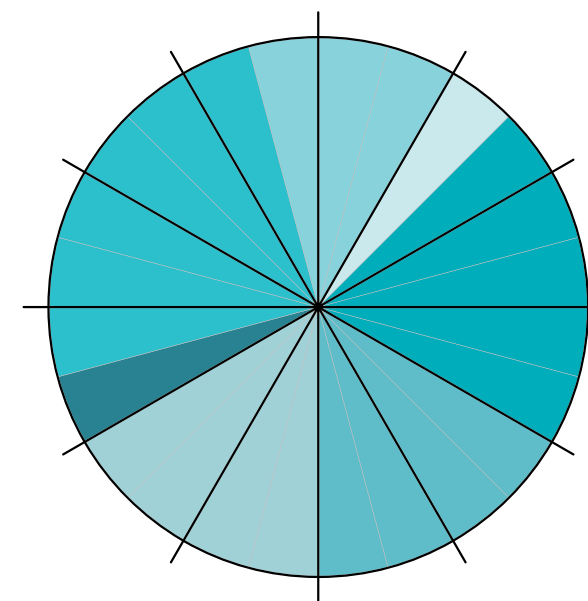
Some departments manage the household on their own, planning the budget, shopping grocery and to do the dishes. In these departments the clients also clean and do the laundry themselves. The budget for the daily meal is about 45 SEK.

12:30 - outdoor, all clients have the right to be outdoors every day.

During the winter the outdoor activity is usually a one hour walk at midday. During summer there is usually both a walk after lunch and at the evening. There can also be the possibility to play soccer or basketball.

08:00 - unlocking.

Staff open up the door to the clients residence. There is time to use the bathroom and take a shower before common breakfast.



13:30 - treatment program.

These programs are usually conducted in groups and by one or two leaders. These programs can target addiction or criminality. Through treatment the client are given tools to change and plan for a future without recidivism.

20:00 evening, during the evening the residences are locked.

During the evening the residences are locked. Clients can spend the time in the residence to read or watch tv. If a client need to go to the bathroom a personal needs to unlock the door.

18:00 - call home, after dinner many call their family.

The clients and staff can eat dinner together, and after dinner many clients call home. Mobile phones are not allowed. The store, which the client is allowed to visit once a week, sells phone cards. Many clients want to be able to call home every day, even if the family comes to visit the prison.

16:00 - spare time and visit.

After work there is time to play games with other clients, watch tv or work out. This time is also when clients have possibility to receive visits, during this activity the client and the visitor meet in an assigned visit-room where one can eat and talk.

Understanding of a town

Garbage prison propose new settlement where there is no prior settlement. The town is a dense interpretation of societies urban life, enclosed to function as a prison and designed following geometrical patterns.

A prison needs to offer the services of society such as a home, a place to work, healthcare, culture, spaces for religion, sports activities and events. Within a town these services can generate different buildings, with different forms the town can be given a playful morphology. Garbage Prison has many of these services in the “living-wall” of houses enclosing the town, on the border they provide a variety of spaces for the clients and visitors to meet within.

21st Century Museum of Contemporary Art, Kanazawa, Japan (1999-2004) by SANAA: Kazuyo Sejima & Ryue Nishizawa, has been inspiring in how they create variation within one building by pulling together volumes of different shapes. Within the building we find 4 courtyards opening up to the sky. The museum flow can also act as exhibition space. The web of streets of garbage prison aims to enable mix use of the streets, such that the controlled flows of the prison can also be spaces for a street party, kicking ball and strolling.

The layout of the plan to garbage prison have been done by ordering the shared buildings, courtyards and townhouses following simple geometric forms of the square, circle and hexagon. The relative small footprint of each building allow them to adjust to the topography.

Informal is an attribute garbage prison strive for, informality is associated with unplanned settlements, thus it seems like a contradiction

for the lone architect to achieve “...informality is best thought of not as a housing typology (or an economic sector) but as a mode of city building.” (Cairns & Jacobs, 2014: 186). The informality of the prison aims to normalize it, a humane scale but also aesthetic. The townhouses are given certain orientation by the geometric layout but their different footprint enables them to be clustered in a random and varying relation, thus making up a maze in-between them. The layout of garbage prison is inspired by “waste places” mentioned by Kevin Lynch “those screened, marginal, uncontrolled places where people can indulge in behavior that is proscribed and yet not harmful to others - are regularly threatened by clean-ups and yet are a necessity for a supple society.” (1990: 25)



image courtesy to Michael Southworth. published in Kevin Lynch. 1990: 24

image courtesy to Michael Southworth. published in Kevin Lynch. 1990: 126

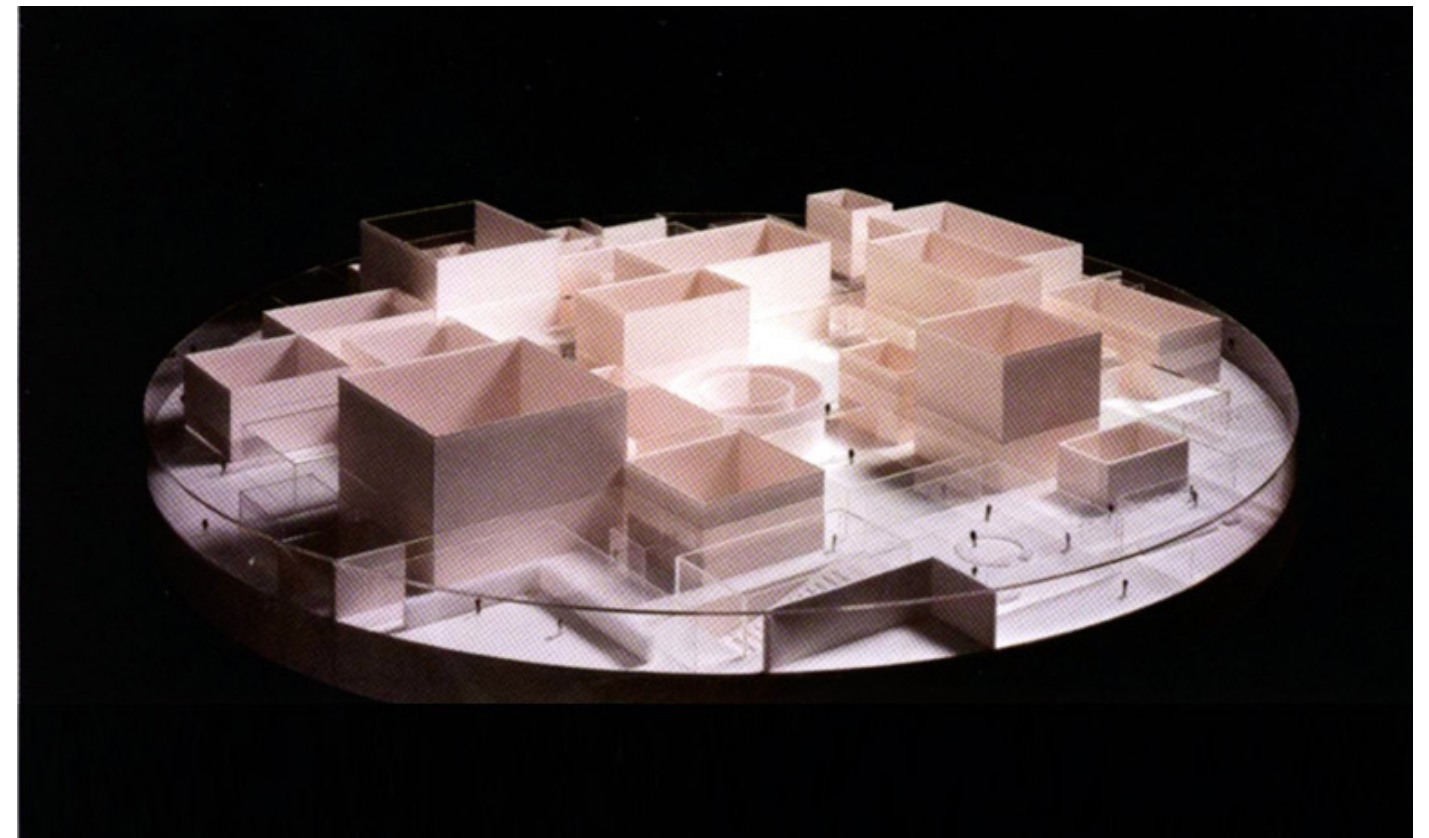
The morphology of the houses aims to be non-hierarchical, the townhouses vary in form but host the same sqm and the same is the case for the buildings of shared function.

The town mimics society where residence is separated from work and leisure, at the same time they all are connected by the town where the individual create their own world by the places experienced.

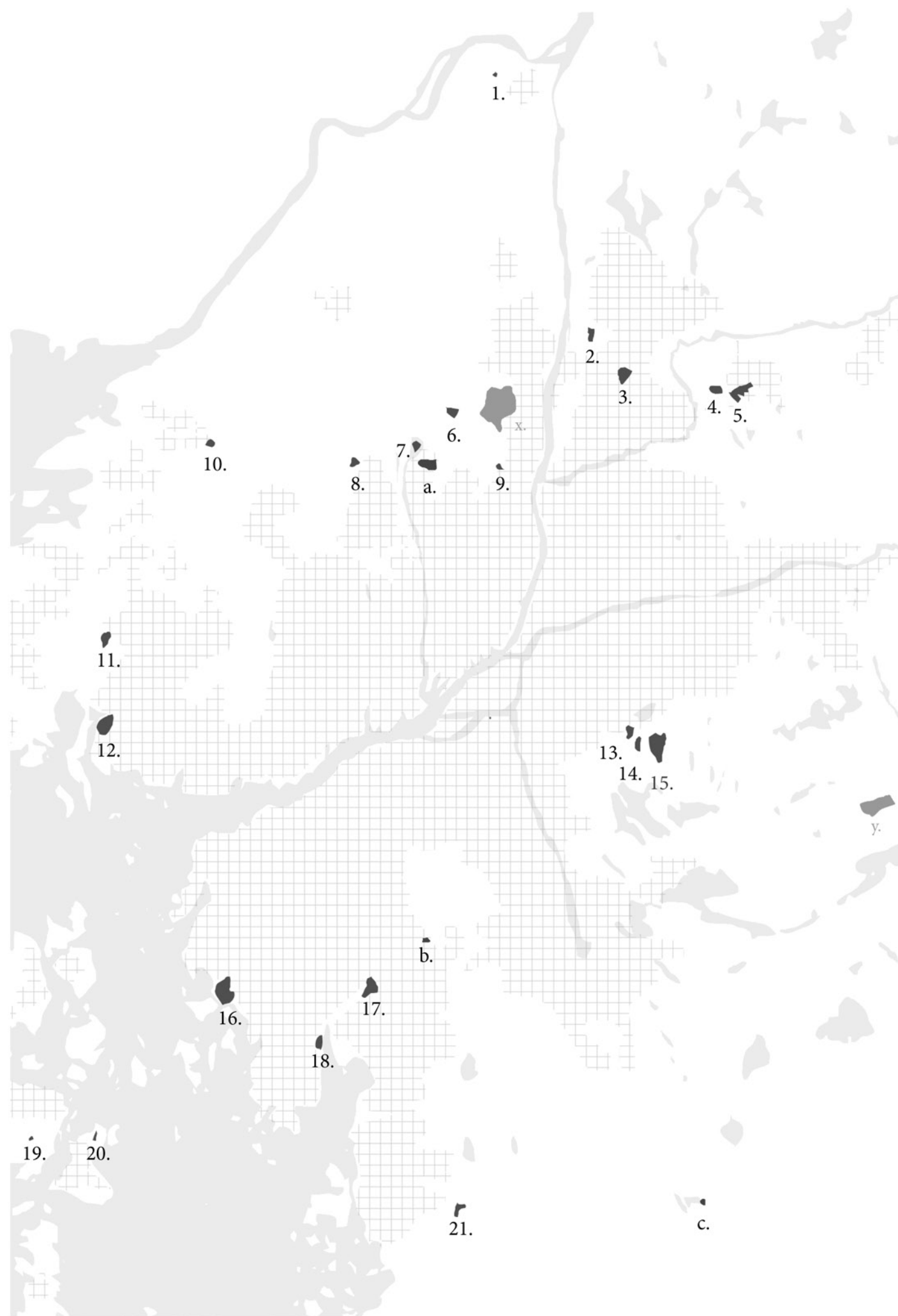


Nansenbyen, Fornebu, Norway (2017). Studio Vatn, LPO Arkitekter, Jørgen Tandberg Architecture.

This project wants to offer a more dense situation than present in Fornebu. Nansenbyen mix building typologies of city-villa, lamella and row-houses and combine cluster of houses with different urban floors. The whole area gain a common character while it retains different specific spaces.



21st Century Museum of Contemporary Art, Kanazawa, Japan (1999-2004). SANAA: Kazuyo Sejima & Ryue Nishizawa.



a. Skogome



b. Högsbo



c. Sagsjön

prisons



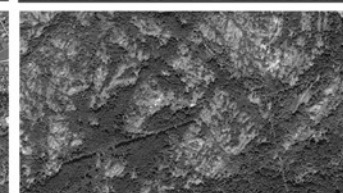
x. Tagene deponi



y. Fläskebo deponi

active dumps

Capped dumps

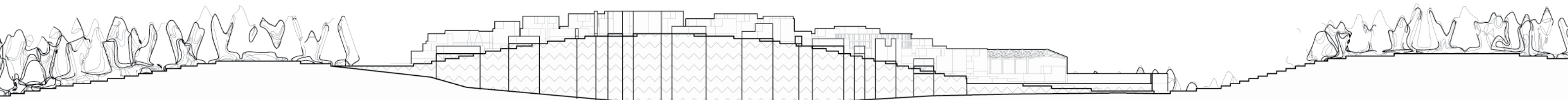


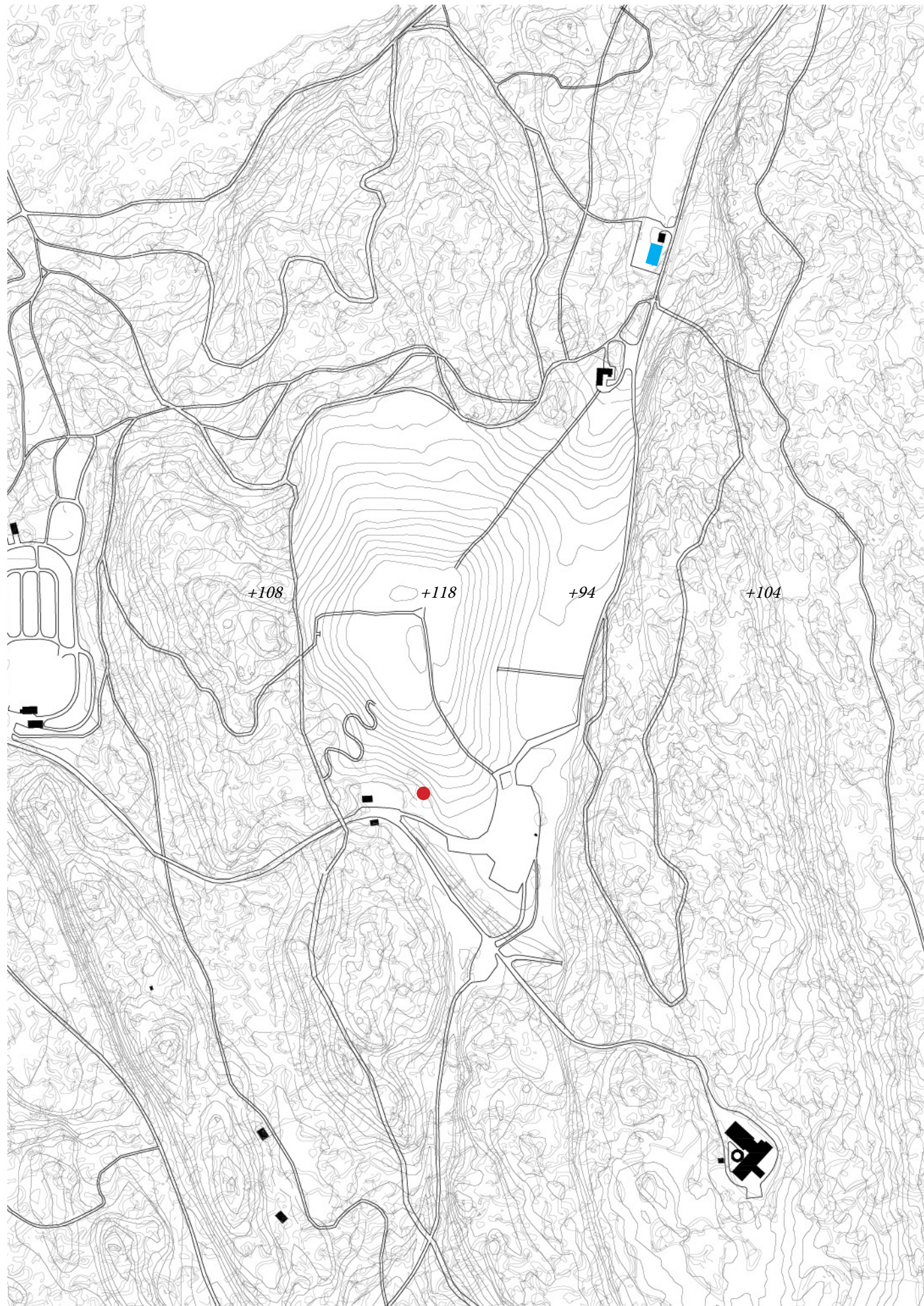
1. Rödbo
2. Gårdsten
3. Rösered
4. Ekered + Paddocken
5. Äspered
6. Bönered

7. Skogome Östra
8. Tuve Sörgård
9. Brandkärr västra
10. Hovgården
11. Syrhåla
12. Arendal Råøskär

13. Skatås fotbollsplaner
14. Björkdalen
15. Brudaremossen
16. Sjöbacka
17. Välen reningsverket
18. Välen mudder

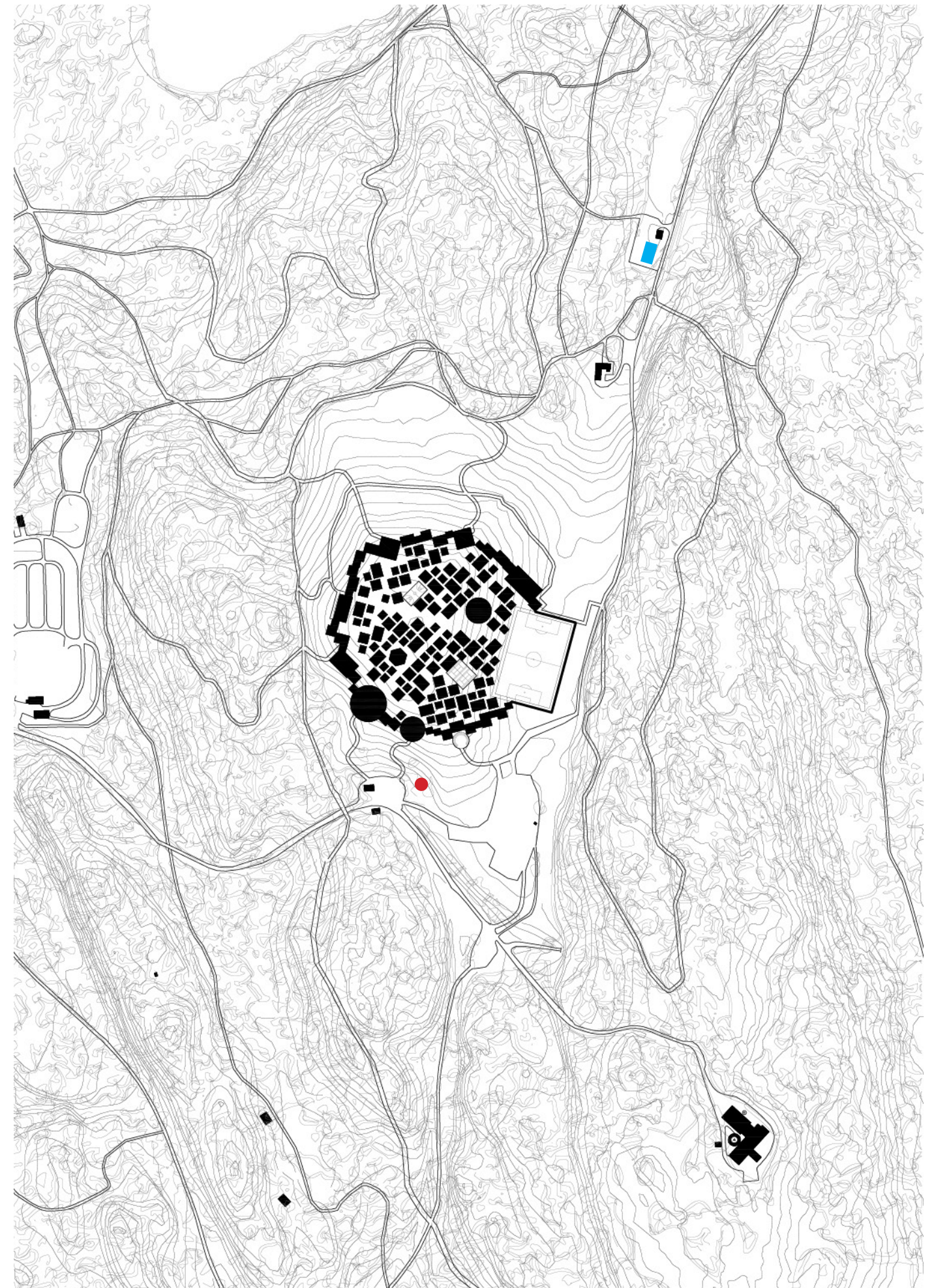
19. Styrso
20. Donsö Lurken
21. Årekärr





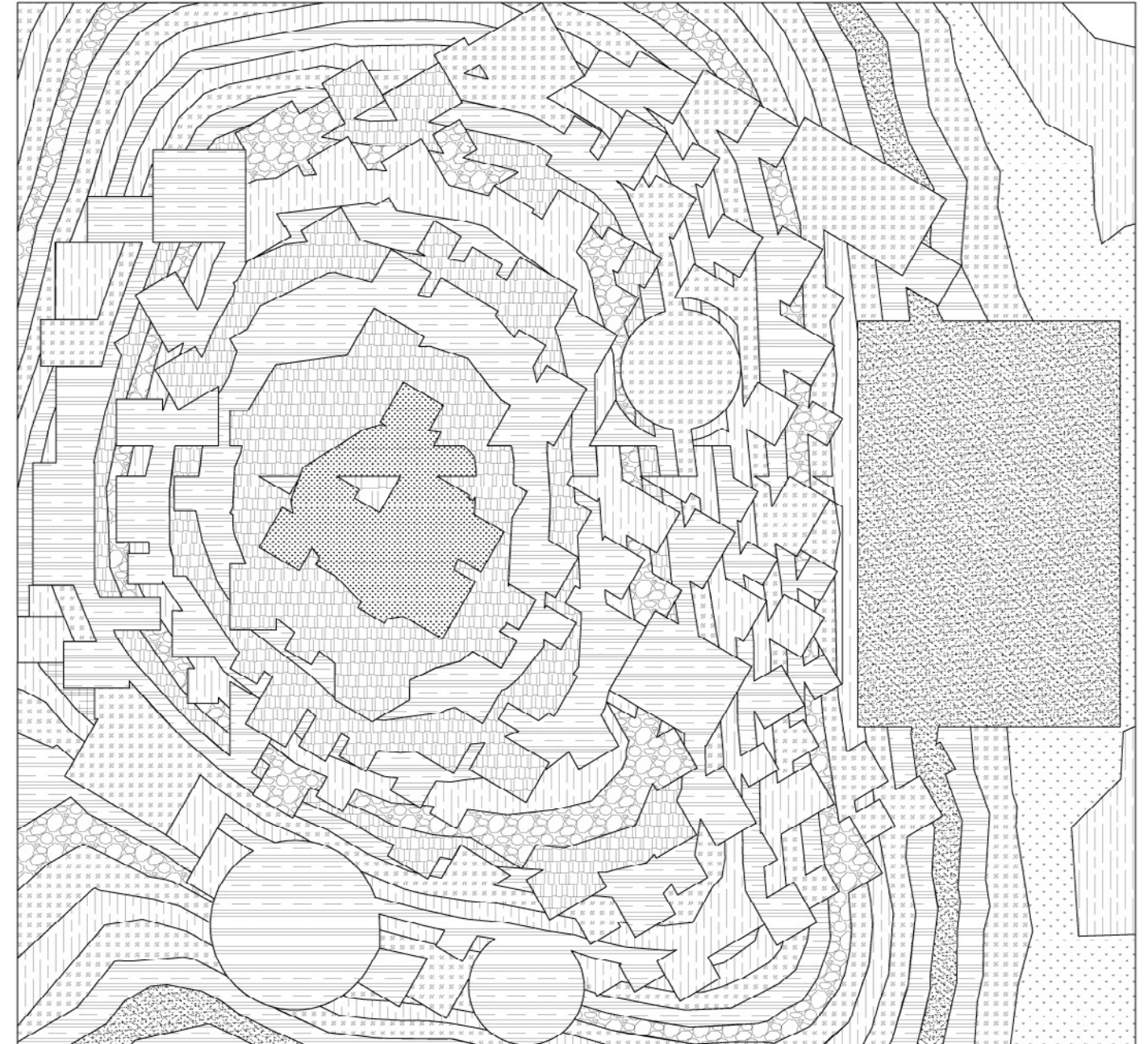
● burning of methane gas

■ treatment plant cleaning leachate



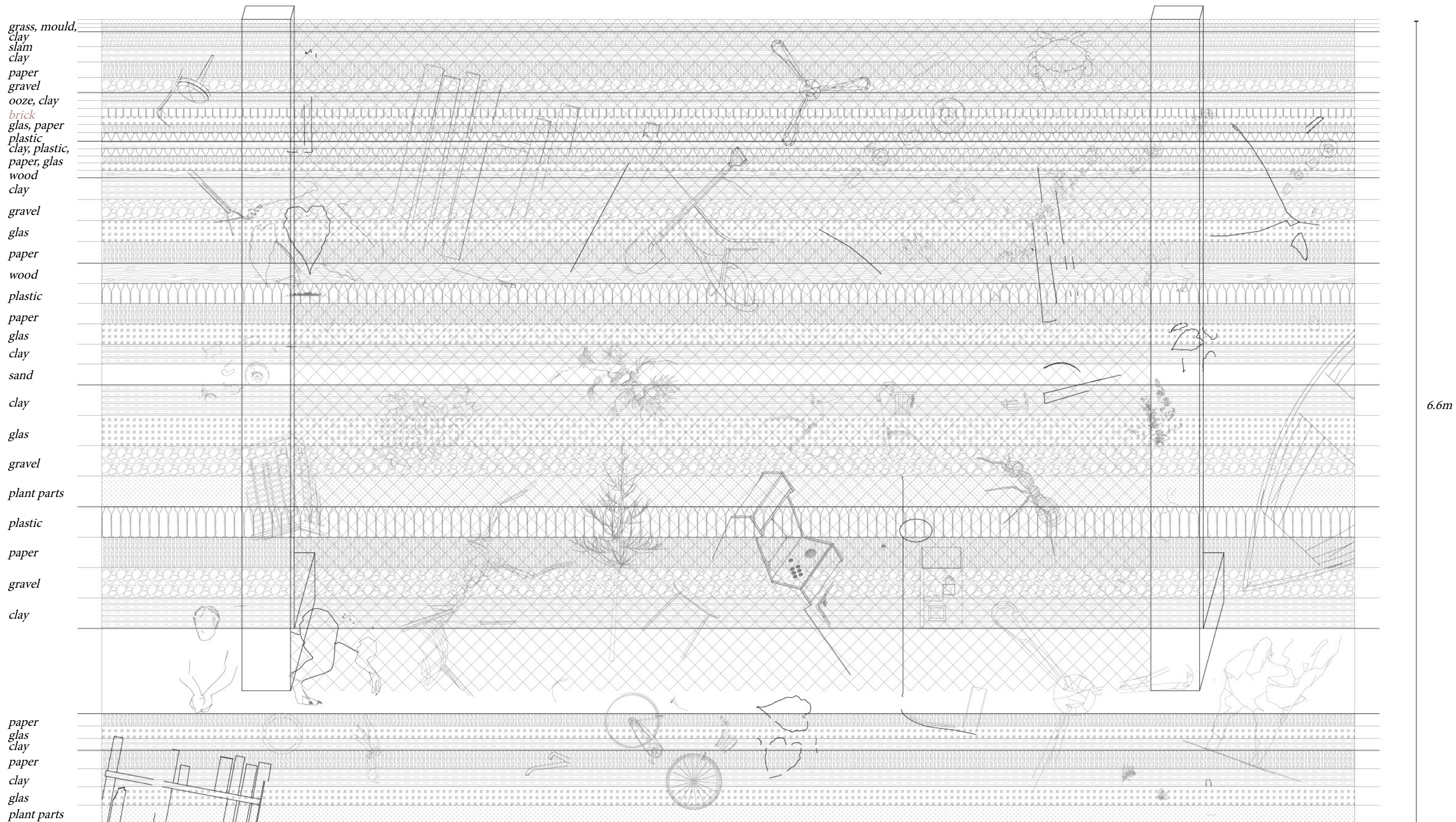


The old dump is an artificial hill, created by the garbage dumped over the course of years. This hill is unstable mass, it is soft and easy to remodel into a terraced foundation for the new prison.



The topography and the garbage wall (on next page 38-39) are interpreted into objects from our everyday life and imagination.

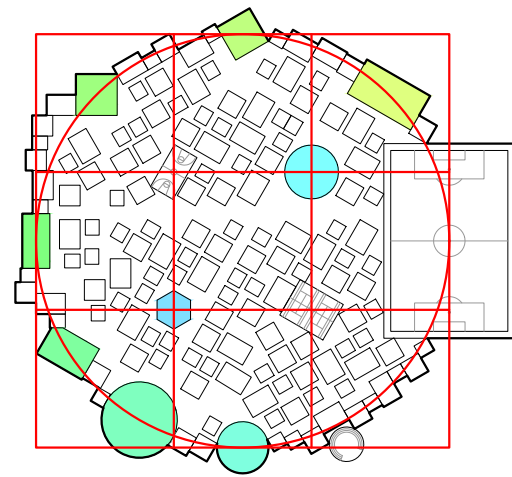
These wasted materials have gained a sculptural quality by their mass. The materials can spark the imagination of a previous context.



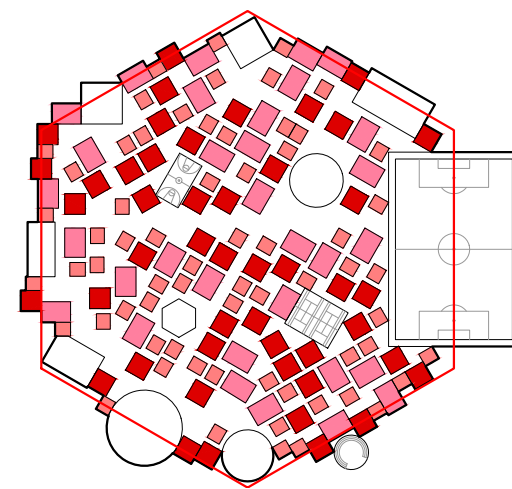
1:30
drill-hole 1981

The section through Brudaremossen reveals a rich materiality.

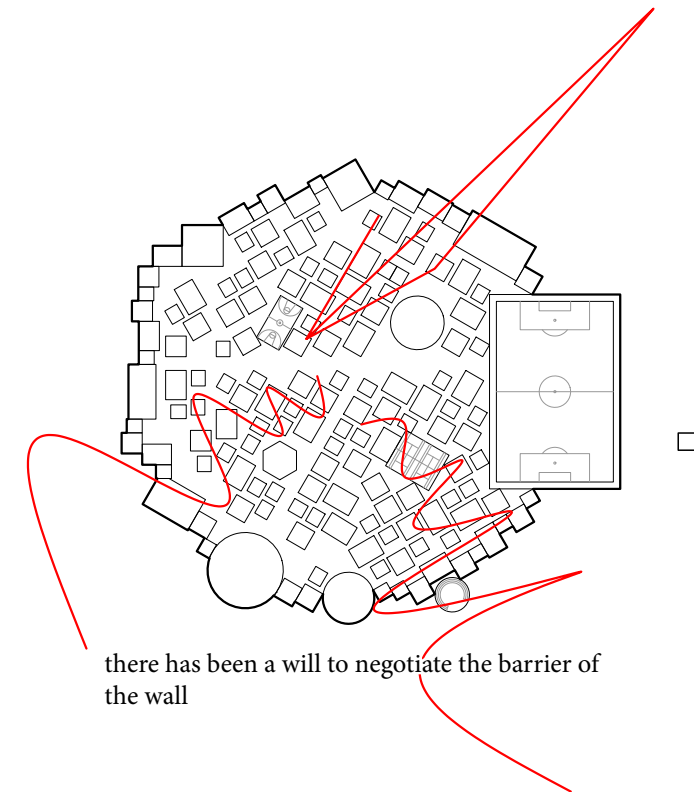
Geotekniska Byrån, Gatukontoret Göteborg (1981). *Geotekniskt utlåtande över grundförhållandena soptippen Brudaremossen. 5.*



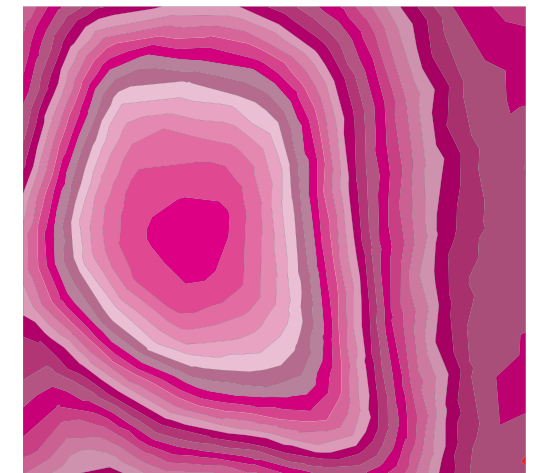
shared facilities within the prison placed around the perimeter of a circle, and within the prison area in the intersections of a grid.



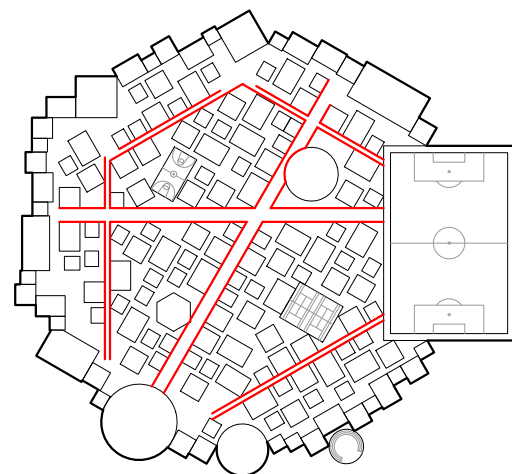
a carpet of houses is laid out within the perimeter, the houses orientation are given by a hexagon.



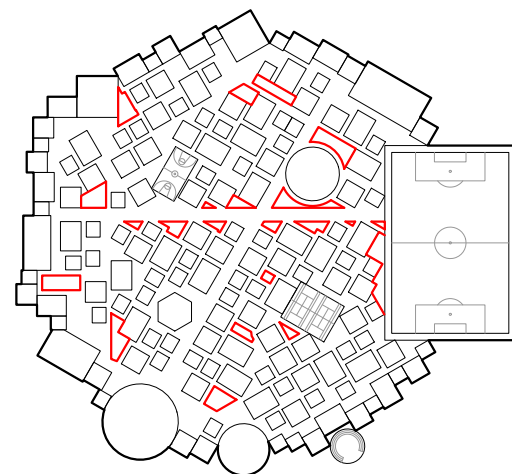
there has been a will to negotiate the barrier of the wall



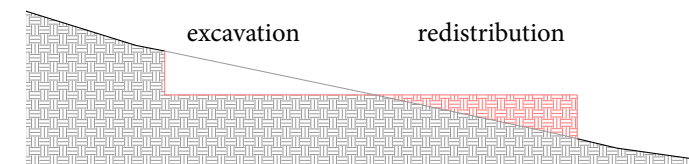
f. existing height curves.



a few main roads provided axes for orientation.



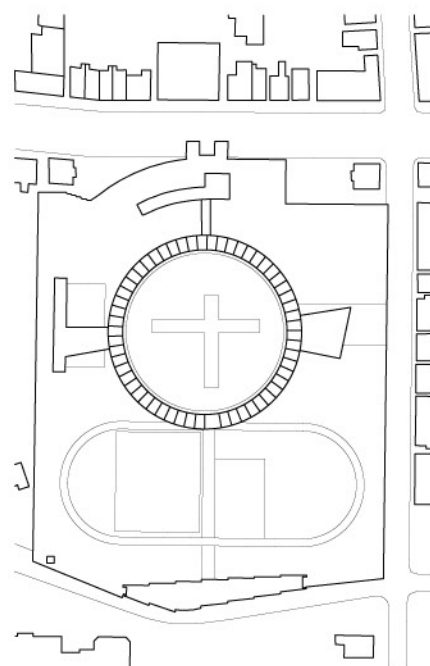
pocket spaces are excavated out of the dump, creating courtyards.



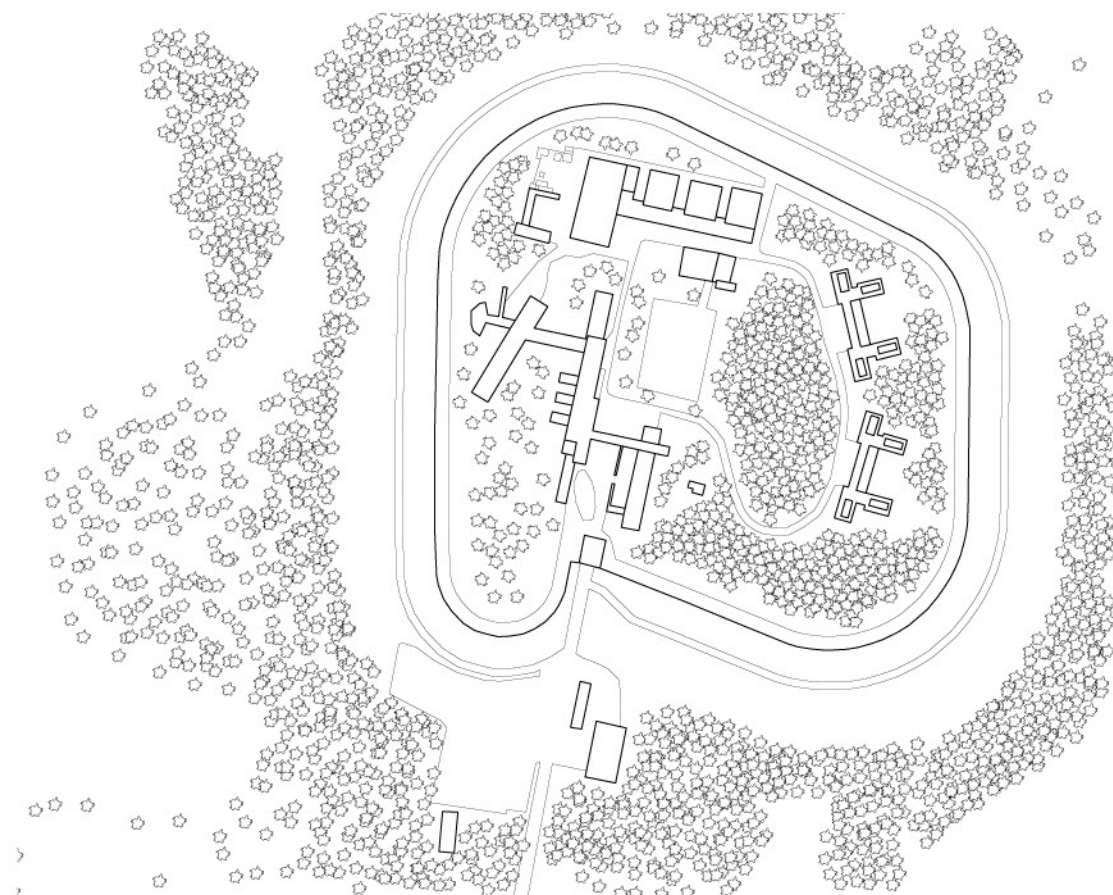
g.



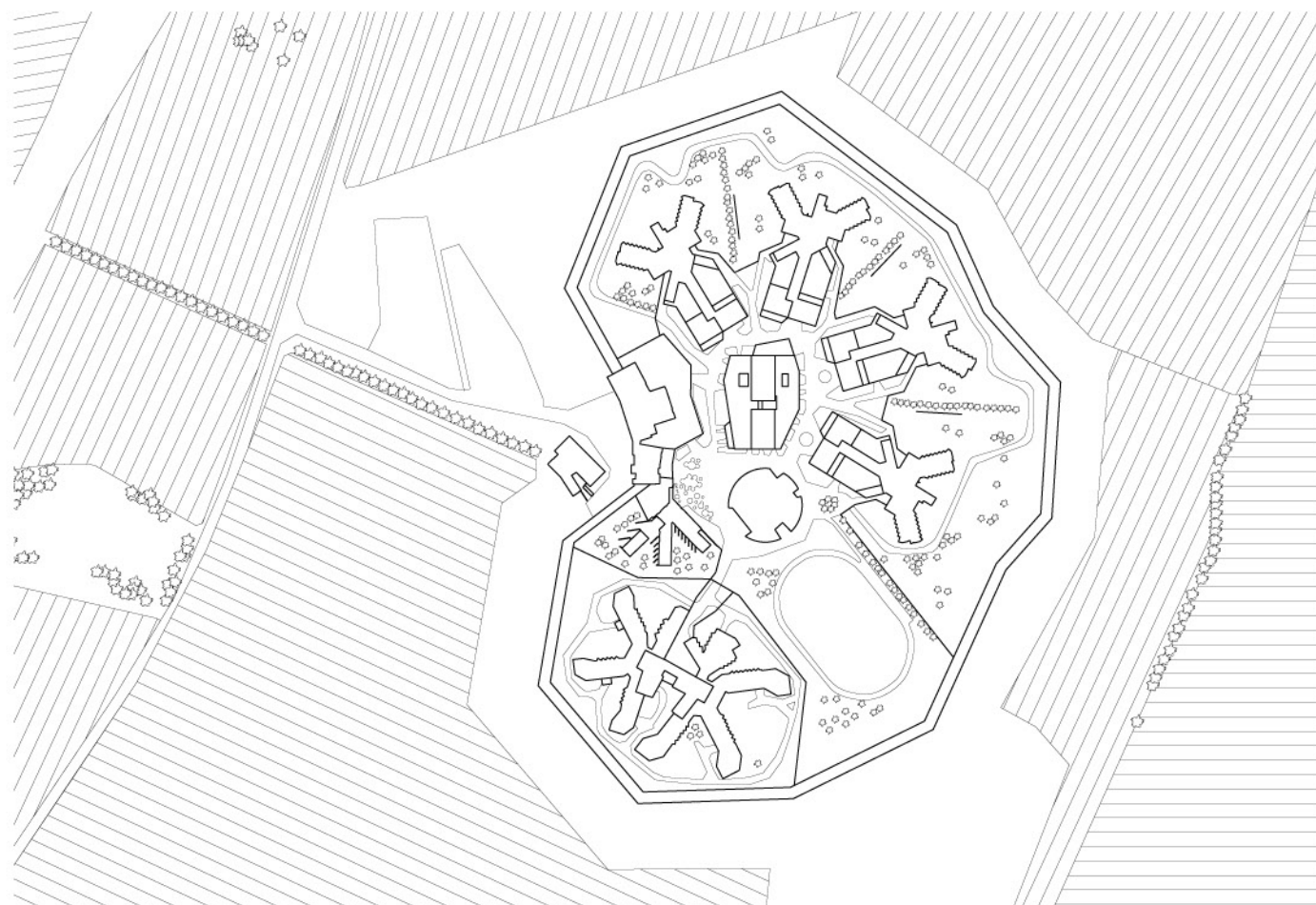
h. height curves are being modeled by extract and extrude.



1:2500
Koepel Panpoticon Prison, Arnhem, Netherlands (1980 - unrealized), OMA



1:5000
Halden Prison, Norway (2001-2010), Erik Møller Architects & HLM Architects



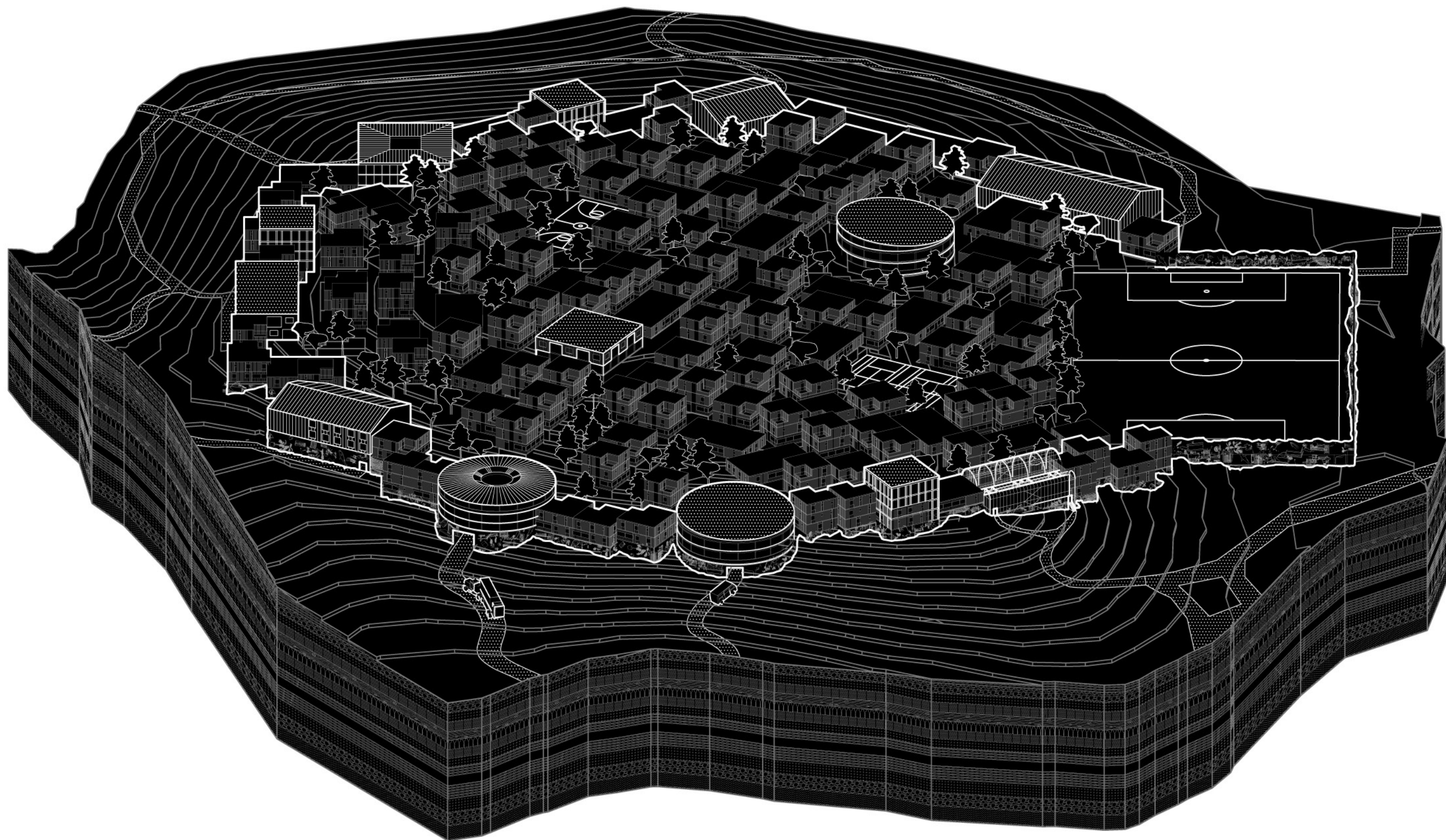
1:5000
Storstrøm Prison, Denmark (2010 - 2017), C.F. Møller Architects

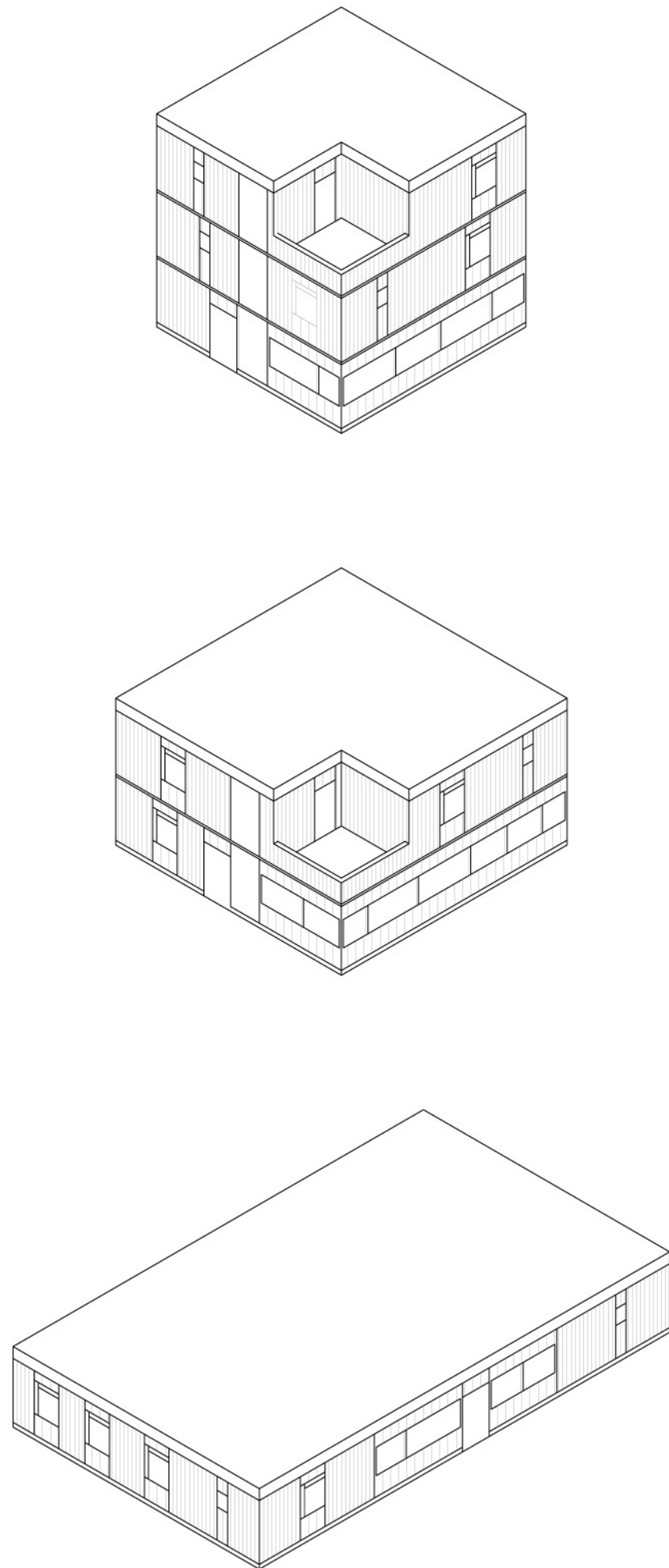


1:5000
Garbage Prison (2021 - unrealized)

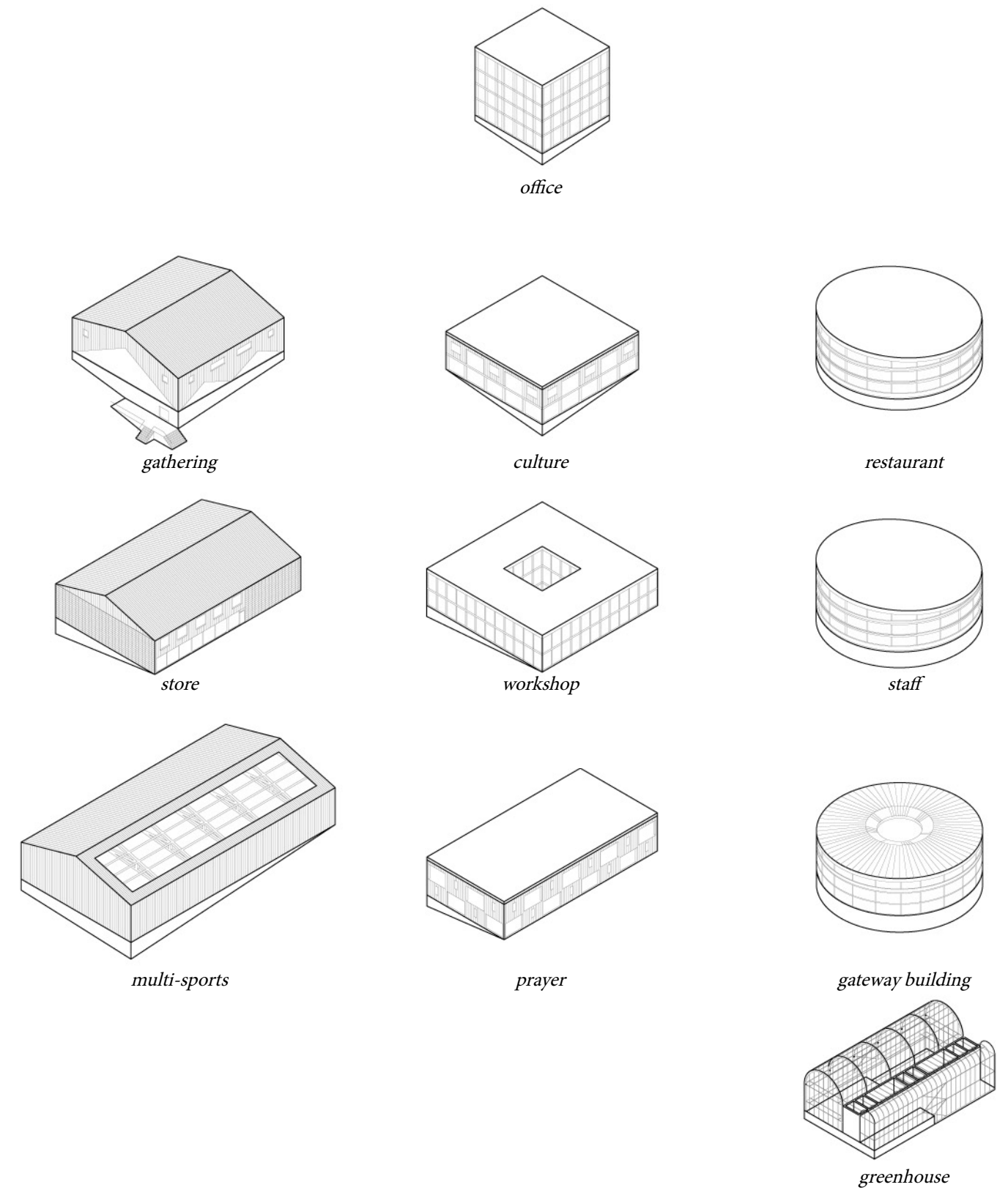
- a. workshop
- b. office
- c. gathering
- d. multi-sports
- e. prayer
- f. restaurant
- g. store
- h. culture
- i. gateway building
- j. staff
- k. greenhouse







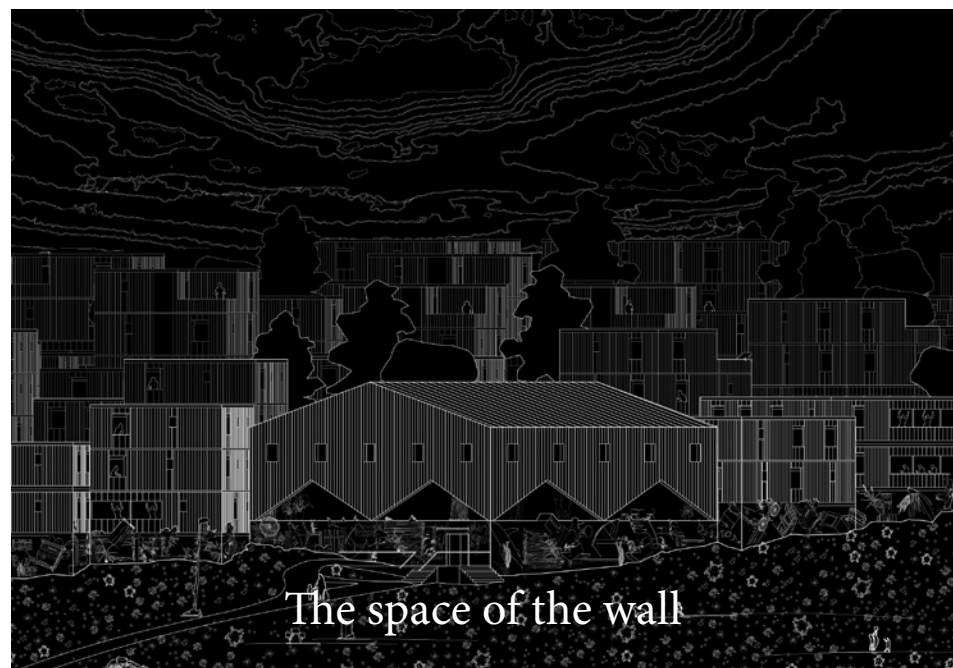
1:250



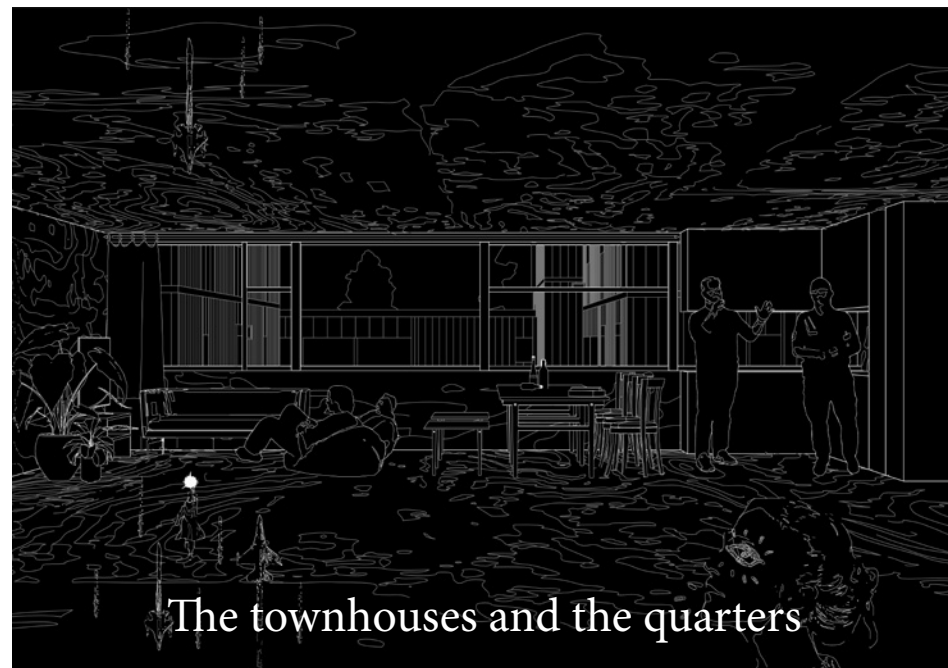
The small houses keep the same area of 240 sqm but vary in footprint and levels. This creates a coherent carpet of townhouses, in which one can experience variation. The big

houses is given a more unique expression to express the different functions hosted within them. All houses are still simple.

1:1000



The space of the wall



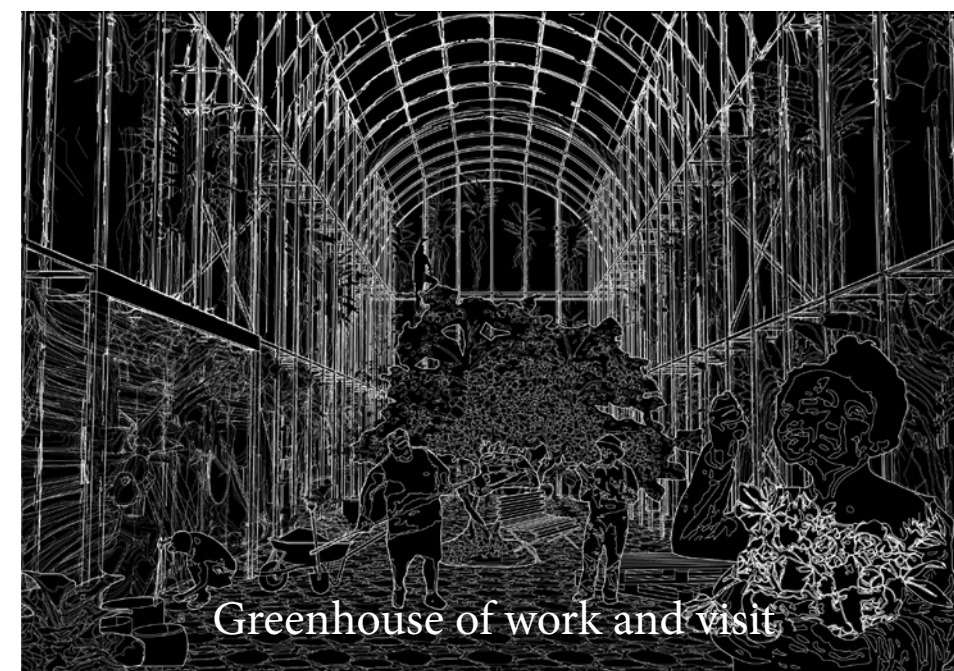
The townhouses and the quarters



House of gatherings



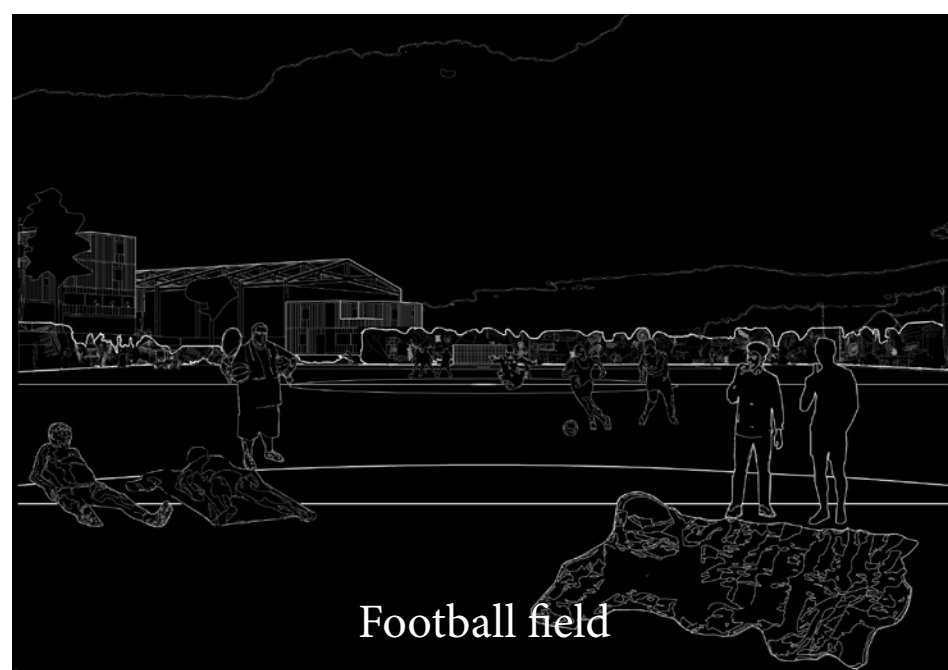
Tranquil pool



Greenhouse of work and visit



The courtyard, or the lungs of the quarters

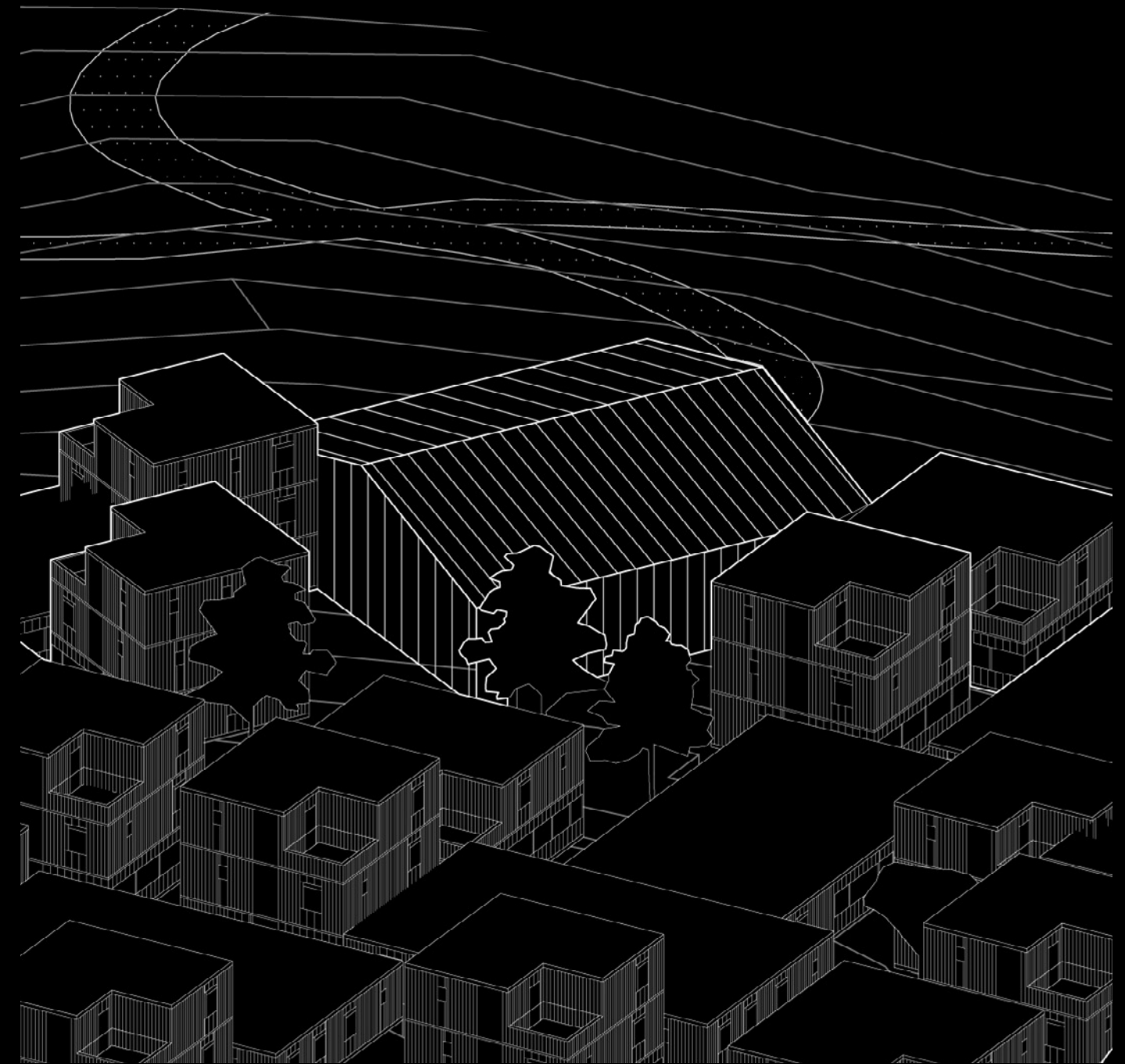


Football field



A shop



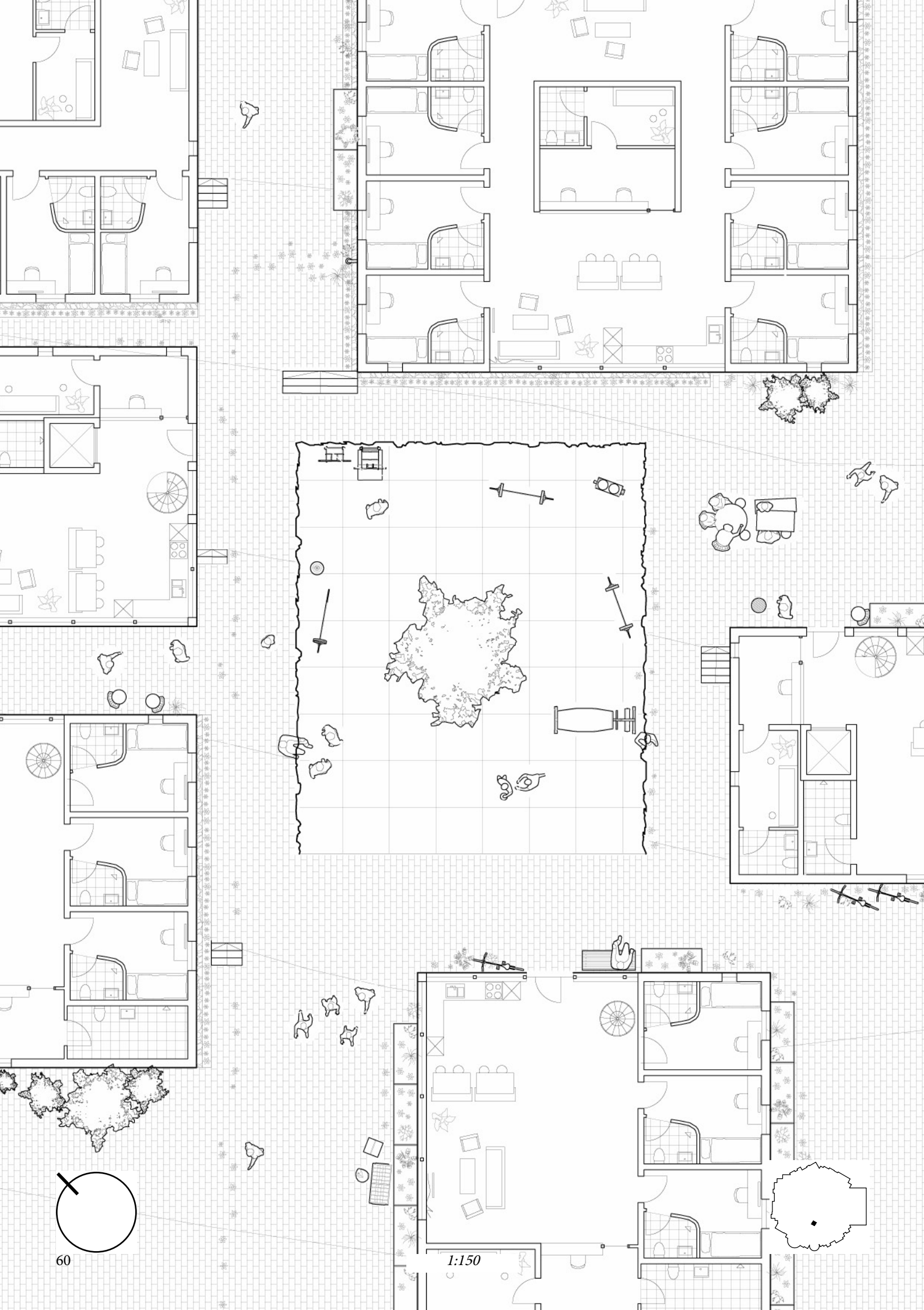


House of gatherings

Arriving to the prison there are many roads with different entrances leading to different spaces for both clients and visitors. The House of Gatherings has one reception area, which clients and visitors arrive to from different sides of the wall.

There are rooms for formal or informal activity. The house of gatherings is one of the spaces where clients and visitors can meet in different constellations. The gatherings can be hosted by the clients, non-profit organizations or authorities.





The townhouses, the courtyards and the quarters

In the townhouses clients have their private space. Living-room and kitchen are shared by a small group of clients, Correctional officers have desks adjacent to the shared spaces of the clients. The courtyard is an excavation of the

dump, this place interrupts the web of streets and opens up.

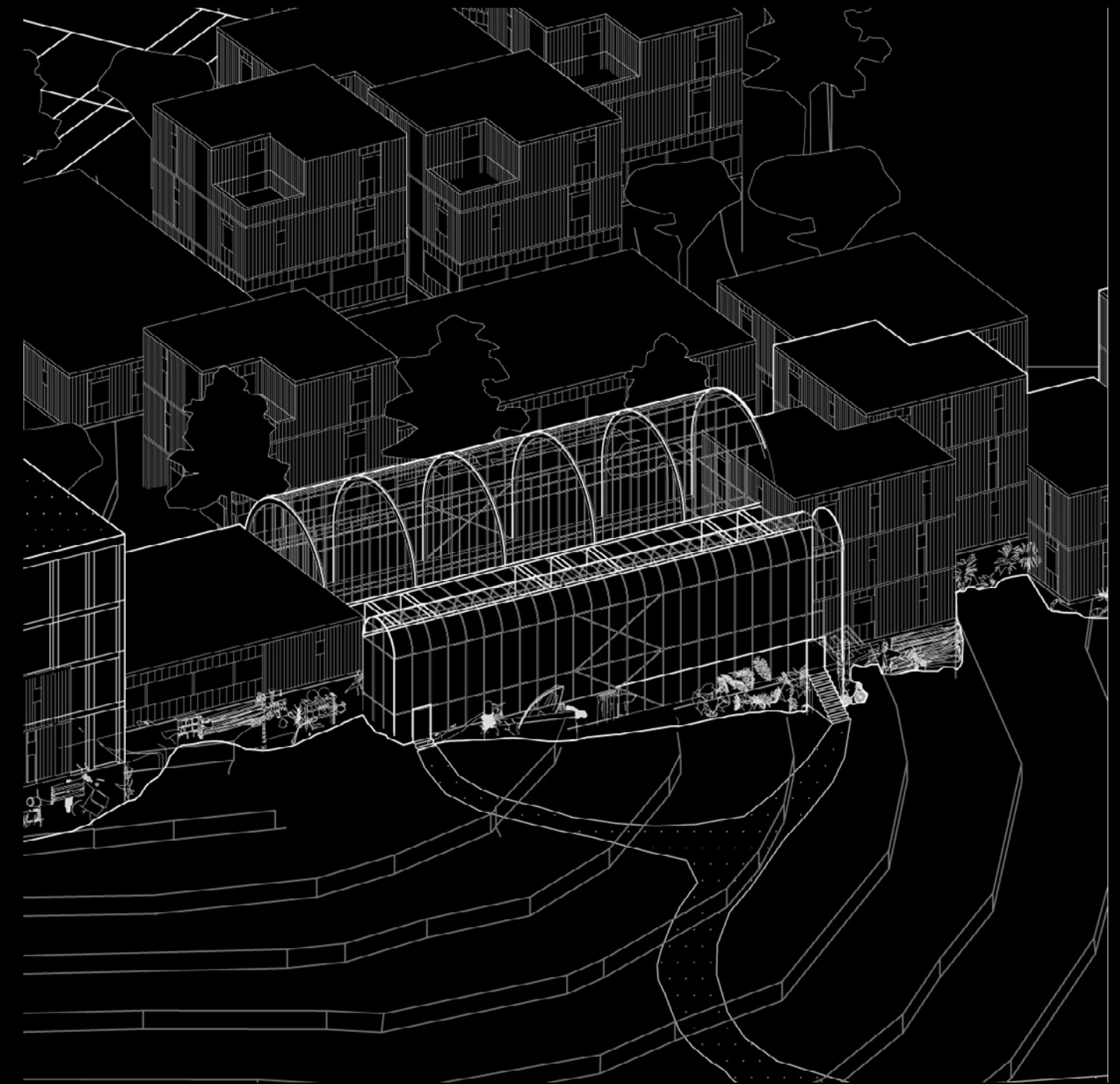
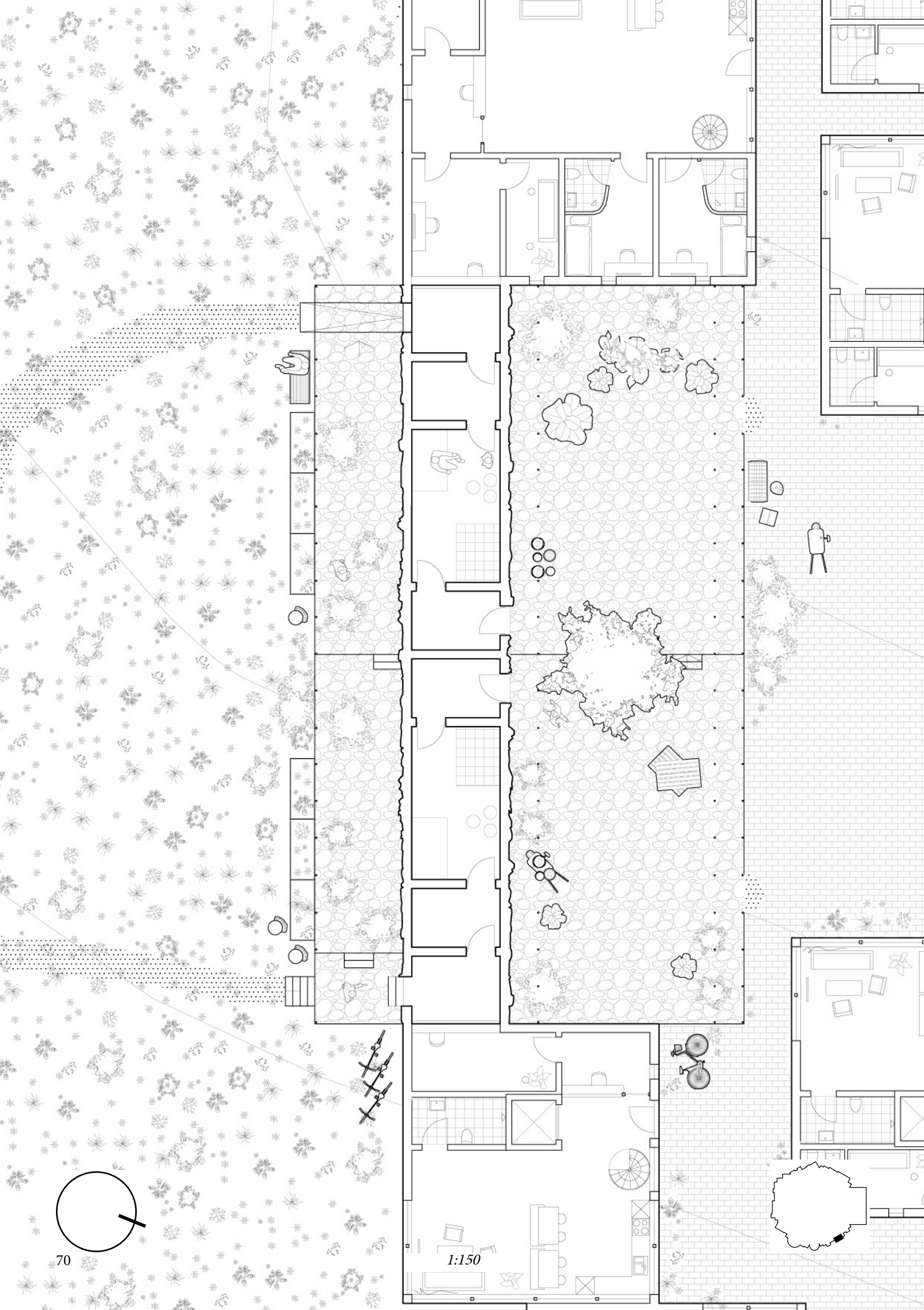
The streets create an urban feeling, but moving in a prison one is only allowed certain hours following a schedule and correctional officers.







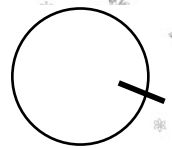




The greenhouse of work and visit

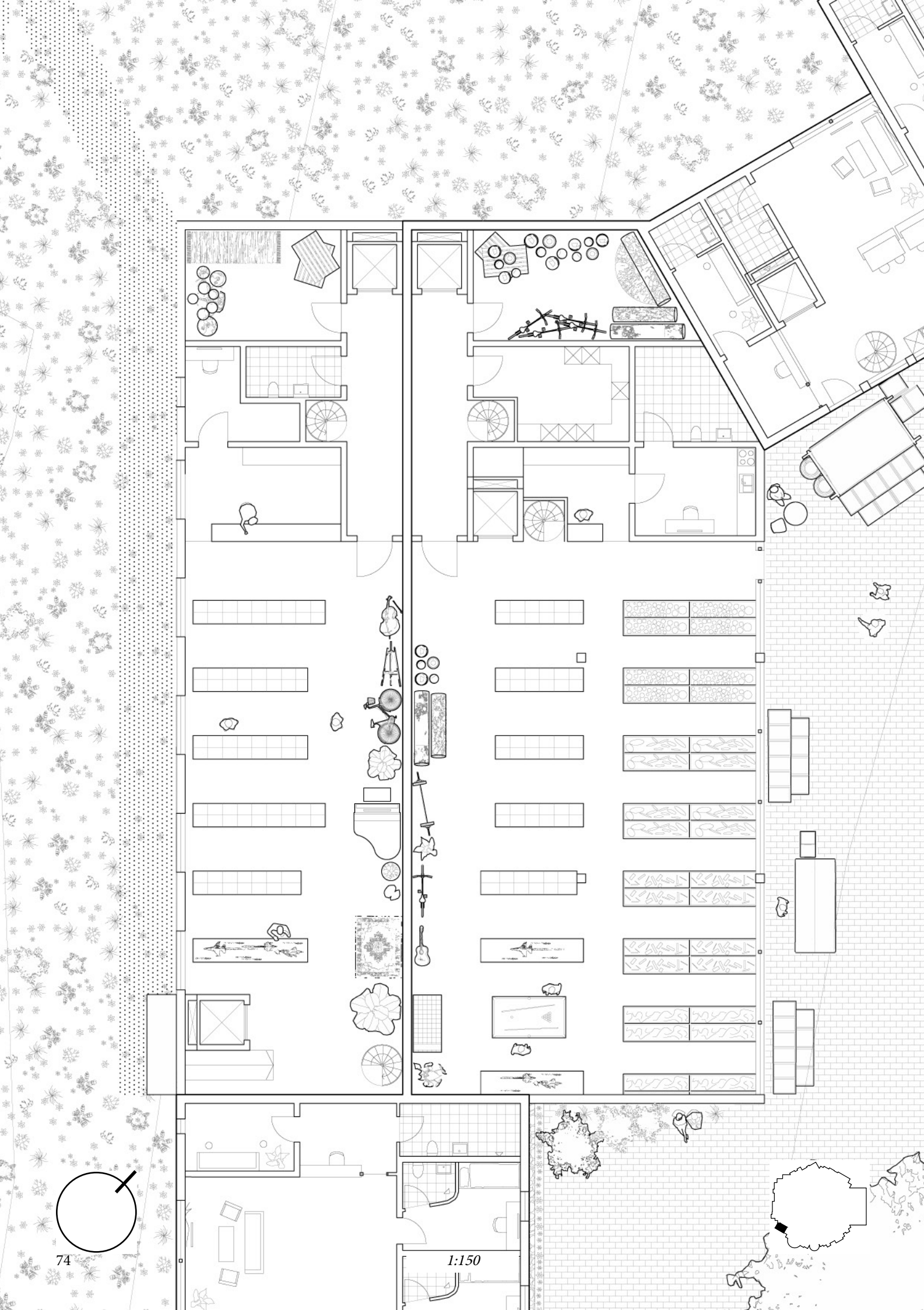
This is the greenhouse, it exists on both the inside and the outside of the prison. Within the wall clients and visitors can meet in an enclosed and safe space. The outer wall has the garbage texture while the inner is smooth. The only window is the ceiling.

The greenhouse is one of many spaces where clients can work 30 hours a week. Others are wood- and textile -workshops or one can choose to study.



1:150





A shop

The shop is regular. The store sells individual works from either side of the wall and thus mediates what's going on on the other side.

The facade shows what's inside of the building. An Informal aesthetic emphasizes that this prison is similar to society.



Discussion

The project wants to strengthen the link between the prison and society, thus create an expression inside and outside of the prison that the condition is dealt with by “inclusion rather than seclusion”, -Robert Venturi (1968: 24).

The phenomena are unwanted because they are different, they contain problems we can't solve. These places do not behave like normal places and they ask difficult questions to us. So they become hidden, society's infrastructure **remove them from consciousness**. But this creates seclusion, stigmatization and lack of knowledge to how these places function.

Both the dump and the prison function by separating, but this can be negotiated. **The dump is designed to express waste. The prison expose its shared functions and activities with the outside. Clients return back into society after served time, and this passage aims to be mitigated, in order to not be so abrupt.**

To live inside of Garbage Prison, along with exposed waste, one has to perceive positive aspects of the garbage-wall, a richness of materials, a sculptural mass or a variation of the earth one walks. Garbage Prison proposes a sculptural mass of estranged objects. The garbage wall makes it evident that there is power in objects. Garbage Prison remains an idea of the waste all around us, we are imprisoned by waste, and thus waste is part of our tool-box and everyday.

The notion of a town has generated a more dense and varied typology of a prison. The layout is less hierarchical than the compared projects. The separate townhouses express heterogeneity within the complex of a prison. The junction of the dump and the prison is in this project a space where architecture expos-

es the different worlds within the city. Different worlds have to exist **parallel** to each other but they also integrate and this space of the border can mitigate seclusion and strengthen the city's understanding of itself. If the prison receives attention this will also create the event it aspires to, when visitors and clients activate the living wall of the project.

The project has designed an alien world, it imagines an alternative perception of a dump and a prison, but it also emphasizes the current conditions of these phenomena.

The drawings is a way to expand the architectural language of drawings, with surrealism, defamiliarization and contradiction.

Process

The provocative nature of the project has directed much attention to the junction between the dump and the prison. This has generated knowledge and understanding of matter-out-of-place and stigmatization.

The representations of a surreal town might have helped us, the viewers, to understand some aspects of a prison and the effect of stigmatization. Stigma is created by the viewers projection, but also the individuals who class her- or himself.

The project **emphasizes the clash** of familiar and unfamiliar conditions, defamiliarization and shock can be qualities to dealing with problems where one finds the need to enhance the perception of a space, this method is adapted from Bernard Tschumi (1994: 227-259). The process has centered around the ideas of the phenomena. The simple and rather dumb task of “prison on top of a dump” has been given depth by the theoretical framework. The project has remained in speculation, while finding inspiration in actual designed projects.

Where there is most room for improvement is in study-visits and interviews. This is not to say what one should do or that there is a correct way in being creative. But this has been a burden, and it remains a challenge to explore.

Student background

Master of architecture 2019 - 2021: Chalmers University of Technology

Matter, Space, Structure 3
Architectural Heritage & Transformation
Building Climatology for Sustainable Design
Architectural competition
Matter, Space, Structure 1

Bachelor of architecture 2016 - 2019: The Oslo School of Architecture and Design

Pernbys målarskola 2015 - 2016: Art, painting

Human sciences at LU, SU and KTH 2012 - 2015, total of 157.5 HP.

History of ideas
History of film
Ethnology

Bibliography

articles, journals

The Architectural Review, 1452, CCXLIV, June 2018, Power and Justice.

Deluze, Gilles. Postscript on the Societies of Control. *October*, Winter, 1992, Vol. 59 (Winter, 1992), The MIT Press. <https://www.jstor.org/stable/778828> pp. 3-7

Devalle, Jolanda. (2018). Prison Talk: A New Lexicon. *Paprika!*, 3(12). <https://yalepaprika.com/folds/nomenclature/prison-talk-a-new-lexicon>

Keller, Bill (December 21, 2017). *Reimagining Prison with Frank Gehry*. The New Yorker. <https://www.newyorker.com/news/news-desk/reimagining-prison-with-frank-gehry>

Latour, Bruno. "Why Has Critique Run Out of Steam?" *Critical Inquiry* 30 no. 2 (2004): 225-248.

Lambert, Léopold. & Moodley, Roanne. (2020) Sherif, Sara (Ed.) On the physical violence of architecture. *Confinement*. e-flux Architecture & gta exhibitions, ETH Zürich. <https://www.e-flux.com/architecture/confinement/359904/on-the-physical-violence-of-architecture/>

Overby, Whitten (2015) A Multimedia Panopticon: Media, Translation, and History in OMA's S,M,L,XL and the Arnhem Prison, *Journal of Architectural Education*, 69:2, 167-177, DOI: 1080/10464883.2015.1063396

Schrijver, Lara (2008) OMA as tribute to OMU: exploring resonances in the work of Koolhaas and Ungers, *The Journal of Architecture*, 13:3, 235-261, DOI: 10.1080/13602360802214927

books

Cairns, Stephen. Jacobs, Jane M. (2014). *Buildings Must Die: A Perverse View of Architecture*. The MIT Press. Cambridge, Massachusetts/London, England.

Coyle, Andrew & Fair, Helen (2018) *A Human Rights Approach to Prison Management: Handbook for prison staff*. 3rd edition. Institute for Criminal Policy Research at Birkbeck, University of London.

Douglas, Mary. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. New York, Praeger, 1966.

Evans, Robin. (1982). The fabrication of virtue: English prison architecture, 1750-1840. Cambridge University Press, Cambridge.

Ghosn, Rhanian and Jazairy, El Hadi. (2015). *Geographies of Trash*. Actar Publishers. New York, Barcelona.

Ghosn, Rania, and Jazairy, El Hadi: DESIGN EARTH (2018, 2019). *Geostories: Another Architecture for the Environment*. Actar Publishers, New York, Barcelona.

Hallén, Per (2018). *Upptäck Skatås*. Universitas Academic Press

Koolhaas, Rem (1995). Field trip, A(A) Memoir. in *SMLXL* (pp. 212-233). Rotterdam, 010 publishers.

Lynch, Kevin (1990). *Wasting Away*. San Francisco : Sierra Club Books

Tschumi, Bernard (1994). *Architecture and Disjunction*. Massachusetts Institute of Technology.

Venturi, Robert (1968, 2nd print). *Complexity and Contradiction in Architecture*. The Museum of Modern Art N.Y.

reports

AIA NY. (2020). Criminal Justice Facilities Statement. Retrieved May 8, 2021, from <https://www.aiany.org/advocacy/aiany-criminal-justice-facilities-statement/>

Geotekniska Byrån, Gatukontoret Göteborg (1981). *Geotekniskt utlåtande över grundförhållandena soptippen Brudaremossen*.

Hård, Stig, uppdragsgivare: Kretslopp och vatten. *Förslag till åtgärdsprogram för Brudaremossen utkast* (2015-05-13)

Kriminalvården. (2007). *Bättre ut*. Kriminalvården. <https://www.kriminalvarden.se/om-kriminalvarden/kriminalvardens-uppdrag/kriminalvardens-vision/>

Naturvårdsverket (2010). *Effekter av deponiförordningens införande: En effektutvärdering*.

Naturvårdsverket (2018). *Avfall i Sverige: uppkomst och behandling*. <https://www.naturvardsverket.se/Om-Naturvardsverket/Publikationer/ISBN/6900/978-91-620-6932-2/>

websites

Deponering av avfall i Sverige. 2020, December 11. Naturvårdsverket. Retrieved May 07, 2021, from <https://www.naturvardsverket.se/Sa-mar-miljon/Mark/Deponier/>

Dunne, Anthony & Raby, Fiona. (2021). *CRITICAL DESIGN FAQ*. Retrieved May 30,

2021. <http://dunneandraby.co.uk/content/bydandr/13/0>

Kriminalvården. (2021). *En dag på fängelset*. Retrieved May 28, 2021, from <https://www.kriminalvarden.se/for-familj-och-vanner/en-dag-pa-fangelset>

Kriminalvården. (2021). *Säkerhet*. Retrieved April 24, 2021, from <https://www.kriminalvarden.se/fangelse-frivard-och-hakte/fangelse/sakerhet/>

Nationalencyklopedin. (2021). *Fängelsesystem*. Retrieved January 21, 2021, from <https://www.ne.se/uppslagsverk/encyklopedi/l%C3%A5ng/f%C3%A4ngelsesystem>

OMA. (2021) *Koepel Panopticon Prison*. Retrieved May 31, 2021, from <https://oma.eu/projects/koepel-panopticon-prison>

Resolute Bay, Ralph Erskine and the Arctic Utopia (January 8, 2021). Senses Atlas. Retrieved May 8, 2021, from <https://www.sensesatlas.com/territory/architecture/resolute-bay-ralph-erskine-and-the-arctic-utopia/>

thesis

Beijar, Jessica (2013). ”*Jag blir den du säger att jag är*”- *Intagnas upplevelser kring bemötande och maktutövning på kriminalvårdsanstalt*. UMEÅ UNIVERSITET. <https://www.diva-portal.org/smash/get/diva2:644744/FULLTEXT01.pdf> retrieved June 3, 2021.

Fencke, Felicia & Landin, Matilda (2017). *Life after a prison sentence: Ex-prisoners tell their own stories on how to leave the criminal life behind*. UMEÅ UNIVERSITET. <https://www.diva-portal.org/smash/get/diva2:1170500/FULLTEXT01.pdf> retrieved June 3, 2021.

images

21st Century Museum of Contemporary Art, Kanazawa, Japan (1999-2004). SANAA: Kazuyo Sejima & Ryue Nishizawa. <https://www.archiweb.cz/en/b/21st-century-museum-of-contemporary-art-kanazawa> retrieved June 3, 2021.

Berg, Stefan. *Historisk Miljösynd ger Framtida Huvudvärk*. (March 31, 2019). Text Filip Kruse. <https://www.gp.se/nyheter/g%C3%B6teborg/historisk-milj%C3%B6synd-ger-framtida-huvudv%C3%A4rk-1.14244429> retrieved June 3, 2021.

Musées de Marseilles (Ed.) *Gordon Matta-Clark*. Musées de Marseilles, 1993.

OMA, *Koepel Panopticon Prison* (1980). <https://oma.eu/projects/koepel-panopticon-prison> retrieved June 3, 2021.

The Panopticon prison drawn by architect Willey Reveley in 1791 by contract of Jeremy Bentham.. <https://commons.wikimedia.org/wiki/File:Panopticon.jpg> retrieved June 3, 2021.

Nansenbyen, Fornebu, Norway (2017). Studio Vatn, LPO Arkitekter, Jørgen Tandberg Architecture. <https://www.studiovatn.com/projects/nansenbyen> retrieved June 3, 2021.

Rem Koolhaas, and Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis. MoMA Collection. *Exodus, or the Voluntary Prisoners of Architecture* (1972).. <http://www.tehranprojects.com/Exodus-or-the-Voluntary-Prisoners-of-Architecture> retrieved June 3, 2021.