The Public Bath & Community

Public space, inclusion and safety in Bogotá.

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Acknowledgments

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ABSTRACT

The communal bath has a long and complex history. While the bath in modern times is used primarily for practical and hygienic reasons, communal bathing has been a vital aspect of many cultures throughout history, serving not only as a means of hygiene but also as social and therapeutical space, promoting exchange of ideas, health and general well-being.

In the context of informal settlements, access to water and sanitation is an important issue. Besides the obvious life threatening risk that a lack of access to drinking water entails, a lack of facilities for hygiene and sanitation can become a factor in social exclusion of already marginalized groups. By serving as a source for clean water and also a communal space for socialization the public bathhouse can help foster relationships among residents and strengthen communal identity.

The following work will analyze historical and contemporary references for communal bathing and investigate how we can design for inclusive and democratic spaces. The project takes base in the ideas of feminist city planning in how to design for groups in the periphery. The result is a suggestion for a bathhouse and a community center in the settlement of El Mirador, a spontaneous settlement in the outskirts of Bogotá. The aim of the project is to serve as a potential generator for the neighborhood by creating new ways of inhabiting the social- and public space and strengthening the community.

View of the bath. Own image.

Introduction

Method

The aim of this project is to create suggestion for a permanent node for the local community of El Mirador in Bogotá.

To achieve this the project aims to answer several questions regarding safety and wellbeing and how to design for change. These are based on statistics from the World Bank and my own general observations from doing site visits in the neighborhood of El Mirador and similarly structured areas in the Bogotá metropolitan region.

The project responds to two main threats regarding safety. The issue of access to water and hygiene in spontaneous settlements and the issue of protection from physical harm and violence areas experience. Often as a combination of several complicated matters e.g. lack of public infrastructure, lack of presence from governmental institutions and lack of activity. Instead of creating new walls, fences and divisions that are common in many places in Bogotá the project aims to instead create safety through inclusion and the removal of physical boundaries.

The public bathhouse I think provides a beautiful example of how an institution for physical health and well-being can also serve as an place for community and social interaction. In this report I will be analyzing and reviewing historical and contemporary examples of places for bathing as well as using existing theories about inclusion in public space to present a suggestion for a bath and community center that can strengthen and give increased dignity to the community and neighborhood of El Mirador.

Private, public &
spaces for inclusion

Access to water is a basic need for every individual. In communities where the access to water is scarce issues with hygiene and disease become a problem. Due to a lack of infrastructure people in these communities might also be forced to spend more time and money to access drinking water, and facilities for laundering, showering and other daily needs.

Like in many other parts of the world it is most often the women in the Colombian family that become responsible for maintaining these responsibilities of the household. Providing facilities for a bathhouse in vulnerable communities would serve to improve general health and hygiene. As well as empowering women by giving more time for leisure and creating a social setting tied to daily routines.

Public and private is a very binary scale that we often tend to use to describe space and its impacts on our cities and communities. The word *public* is often used synonymously to describe places which are open, inviting and democratic. As a contrary *private* perhaps often gets misused to describe exclusionary spaces.

Many communities in Bogotá, especially the more vulnerable ones have a lack of access to public areas and green space. For the social fabric of these communities private/social establishments, such as small bars, church and restaurants become increasingly important. Places like these, that are in the grey-zone between home and work; and private and public are by Oldenburg (1999) categorized as "third places". While these spaces are of course meant to be used by the general public there is a difference that is highlighted in "Planning for healthy aging: how the use of third places contributes to the social health of older populations" (Alidoust & Bosman, 2015). Marginalized groups such as elderly or women are often excluded or vulnerable in public settings, therefore it might be necessary to create spaces and functions where other people are excluded so elderly can socialize with other people with similar experiences and conditions. In Bogotá I saw it as even more important to create a social and public space that would enable women to increasingly occupy and appropriate the public sphere which is why I chose to work with the idea of a bathhouse for women and children.

Communal bathing &
the single household bath

The private bath, confined in a single apartment or house, is historically quite a new invention. While bathing has become more and more an issue of solely maintaining personal hygiene, the act of bathing has had significant value in many cultures throughout the history of civilization. Whether it be for religious rituals, leisure or for hygiene, communal bathing has served as important places for community and social exchange.

With the private bath the act of bathing has also become a solitary activity, a function meant to provide sanitation in day to day life with efficiency and haste. At the same time the multi-functional bathhouses of old have been replaced by luxurious spas that serve to provide relaxation and pleasure. The dismantling of the bathhouse and its social function in modern times is also a representation of the struggles that the cities and its people face as increasingly, the open and public functions of the city are replaced by commercial ones under neo-liberal global capitalism.
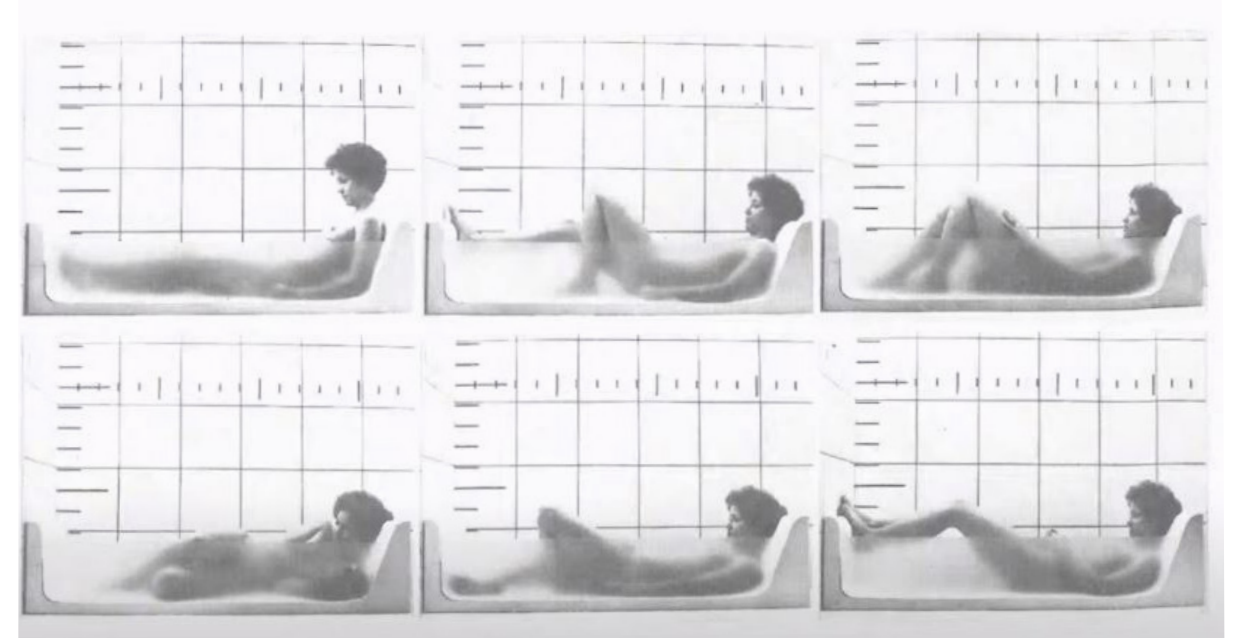

Positions in the bathtub. Kira (1976)

Gendered space

As much as the act of bathing and the architecture surrounding it is formed by prevalent societal rules and norms, the way we bathe is not only a reflection of society but also a part in shaping culture. As we enter the communal bath and undress we become not only closer to the materials and space that surrounds us but also closer to our own bodies and those of others. Exposed and aware of our surroundings, these spaces make the reflections of society's norms of gender, age and race very clear just by the fact of which users are inhabiting the space and how they do it.

Saunas, pools & beaches as much as they are places for community and socializing, they are also (historically and present) places for exclusion and separation. Mixed- or gender separated, divisions or openness, accessible or not, naked or clothed, communal spaces for bathing make it abundantly clear what the norms in these establishments are and if you conform to them or not. As we bathe, societal norms are laid bare and it's not only the user of the space that has to decide to abide or resist these norms, but also architects as designers of space must decide the same as well. In this sense baths are also a way to challenge and redefine notions and norms about communal space and culture. Through history the changes of societal norms can clearly be read in the architecture of places for bathing.
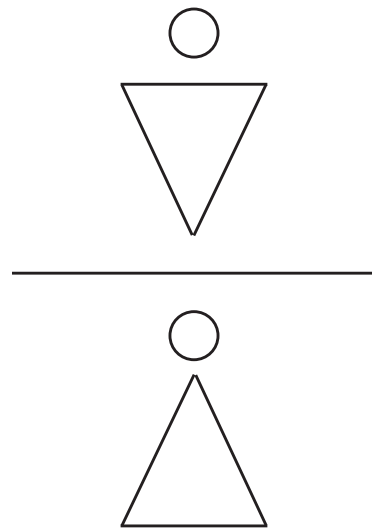
The Baths of Caracalla.

History of the Public Bath

Origin of the bath

It's difficult to define exactly what the definition of a bath includes and when communal bathing started. Before heated baths, people and cultures would mythicise and worship the healing properties of natural hot springs. Even animals such as the Japanese Macaques can be seen enjoying a bath together in the hot springs Nagano national park.

Invention

Thermalism, the use of water and hot springs for therapeutic purposes came to be practiced thoroughly by the population. The Romans also placed great importance on springs for cleanliness, cosmetics and health. With new technological advancements such as aqueducts, that allowed for fresh water to be accessed by even in central locations of cities, and the use of mechanical heating systems Romans truly ushered in an golden age for bathing culture, where the baths (Balnea) came to be important social spaces in the cities and housing a wide mix of functions.

Decline

The decline of the Roman empire during the middle ages and with the rise of Christianity, bathing came to be seen as hedonistic practice, which placing too much focus on bodily care and hence neglecting spiritual duties. (Tzedopoulos et al, 2018) As a result the complex use of the balnea and thermae came to be replaced by the more traditional institutions of hygiene and health made to be used in seclusion. During the Hygiene Movement of the early 20th century the public baths made a return as a response to increasing problems with health and disease in the overpopulated industrial cities of Europe and America. (Pearson 2020) While this marked a return towards our original connection to water, many of the historical and contemporary buildings meant for bathing were destroyed during the following two world wars.

While the original diversity of the Roman bath was partly lost in our contemporary versions and replaced by the private bath examples, both modern and historic examples of communal bathing can be found in all places of the world. Most notably the in the cultures around the Mediterranean, the onsen and sentos of Japan and the Saunas of northern Europe and Russia.

The Roman Baths
Sweat & public space

Landmark Buildings

For centuries landmark design in architecture have been centered around the fine arts. Museums, concert halls and theaters are common when a nation or city were looking for prestige and to make and impression. As the interest for finer arts has declined there have however been attempts to reinvent what conventionally have been rather exclusionary and closed buildings, into a part of the urban fabric and invite new functions into these buildings.

Similarly to these contemporary designs the Roman bath was truly a space with mixed function, that invited the public space into the building. Because of this reason the Roman bath served an important part in the daily life of Roman citizens, rich and poor. Roman rulers, politicians and merchants would therefore often construct or pay for bathhouse entrances hoping to gain popularity or extend their influence.

The people & the bath

The Roman people saw bathing as a way to treat and prevent illnesses and ache, much like in modern preventative care, thermalism combined with exercise was seen as necessary for good health and longevity. The Roman thermae was an intricate structure, enabled by the invention of the hypocaust system. By using underground furnaces heated air and steam was then transported in a controlled manner through hollow floors and walls. The advancement of heated pools and environments, available throughout the seasons, was what made the bath a cultural phenomenon available in different scales all throughout the Roman empire.

The public baths can generally be categorized into two groups, the Balnea derived from the Greek word Greek word βαλανεον meaning "bath", thermae, which comes from the Greek word θερμός meaning "hot". Balnae usually referred to smaller or private bathing facilities while thermae was used for the larger imperial bathing complexes.

Most of these baths were structured around three main bathing halls, the frigidarium, the tepidarium and the caldarium. The frigidarium was the heart of the thermae and consisted of an unheated room with a cold pool. The tepidarium was an indirectly heated room and the Caldarium, a hot room with directly heated air and basins.
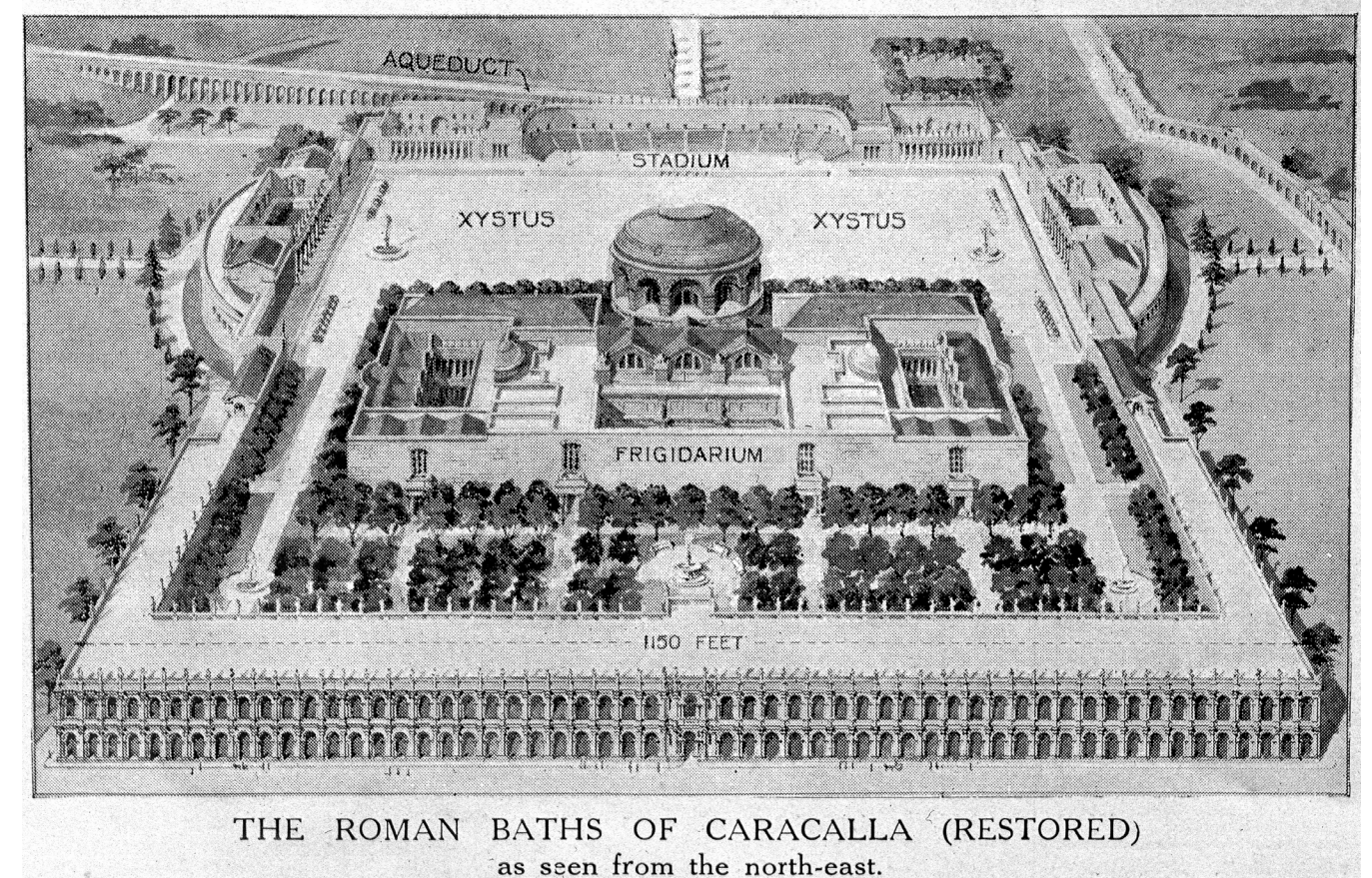
THE ROMAN BATHS OF CARACALLA (RESTORED)
as seen from the north-east.

When analyzing the architecture of the Roman thermae the most apparent attribute is the size of the establishments. Much like the temples, the theaters and the arenas for fighting the size of the buildings were a sign not only of the power of the Roman empire and of the boisterous nobles and rulers who ordered and financed their construction, but of course also of the significance of the building for the city and its inhabitants. In the thermaes of grand Roman cities were not only spaces for cold- and heated pools for sweat bathing. Surrounding the area one would find gymnasiums and open areas dedicated to greenery and exercise. There were also lecture and meeting halls where citizens could meet, debate and exchange ideas. These establishments presented a multitude of primary and secondary uses which resulted in diverse public space. Only recently in modern times can we see examples of creating similar democratic spaces

The baths of Caracalla

One of the most impressive and well preserved thermae of this time is the Caracalla Bath house which was built in the beginning of the third century A.D. The location of the baths of the Roman cities also indicate well how important the baths were. Just a stone's throw away from the Forum Romanum and the Colosseum the Caracalla Bath was situated in the heart of the Roman Empire, and accessibility was very important as the majority of people visited the different baths of Rome daily. (Kleiner 2009)

The bath was an intricate system. Each room with a different function and sensory impression. From warm to cold, small to big, loud to quiet. Not only was each room an experience in itself but the act of traversing the building and how experienced the changes was well thought out. There were also several entrances to the gardens spread out in the building. In the vertical and horizontal axises of the building there is a straight section through the rooms allowing one to also visually experience the whole sequence of rooms.

apodyterium - changing rooms.

**palaestrae** - exercise rooms.

caldarium - hot room with several smaller heated waterbasins.

tepidarium - warm room indirectly heated with a warm pool, usually there would be several tepidariums with the most grandiose in the center of the building with access to all the other rooms.
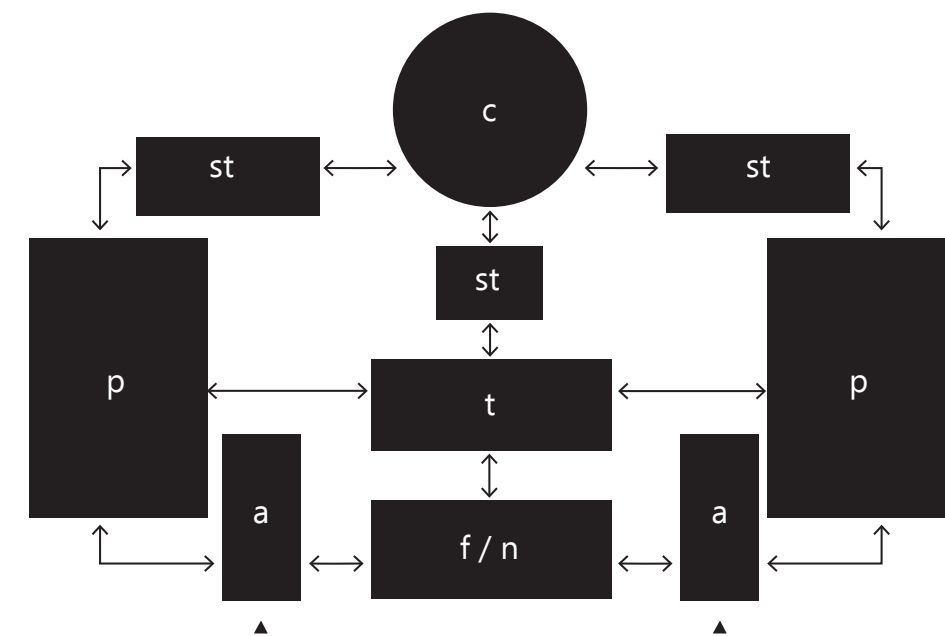
frigidarium - unheated and open air room

natatio - swimming pool

Additionaly you would find spaces for private baths, libararies, cold plunge-pools and smaller rooms for conversing, lecture halls, fountains, and outdoor gardens.
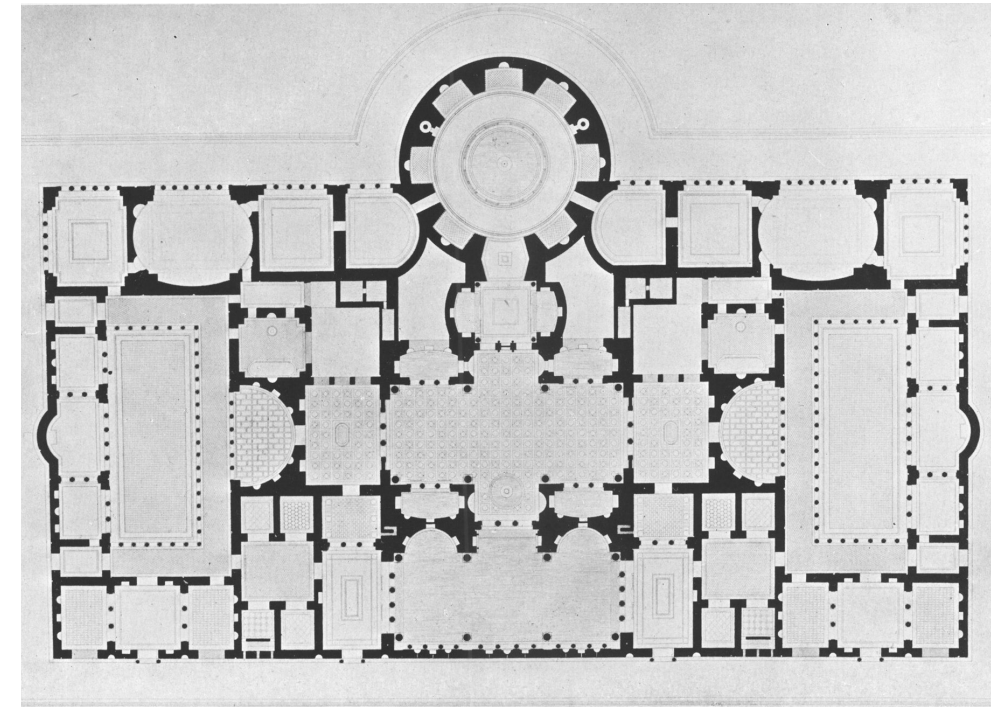
ILL. 25. — Plan of the Baths of Caracalla, Rome. (From Iwanoff)

a - apodyterium   t - tepidarium   st - steam rooms
p - palaestrae   f - frigidarium
c - caldarium   n - natatio

Social Impact

In an otherwise strictly hierarchical society, the bathhouse in Roman cities was a place where people of different backgrounds could meet. No matter what age, gender or class, Roman citizens could all enjoy the communal bathhouses. The system for bathing was even arranged so that the fee for using the facilities was determined based on the individual's class and wealth. People with more funds would pay a hefty fee while the poorest people in society would be able to use the baths without paying. Thus the bathhouse in the Roman empire was truly a diverse place, important not only for hygiene but as a part of the social fabric in the Roman society.

Diocletian baths

Many of the buildings from the Roman era has lived many lives and been recycled into new building & functions. An example of this is the Diocletian Baths was later re-purposed into a church, the Basilica di Santa Maria degli Angeli e dei Martir, which' interiors highlight the past importance of the building.

Conjectural reconstruction of the interior of the Baths of Diocletian

Basilica di Santa Maria degli Angeli e dei Martir exterior.

Basilica di Santa Maria degli Angeli e dei Martir Interior.

Nordic bathing cultures
Sweat and familiarity

While the rest of Europe started to forget about the balnea & thermaes of the classical antique, the culture of sweat bathing remained strong in Northern Europe. In the icy cold winters people of Finland and Russia would find solace and community in their saunas & banias.

With the spread of Christianity, sweat bathing and other forms of communal bathing had become increasingly associated with hedonistic behaviors and sin and in turn causing the decline of public bathing in Europe. What might have been a luxury in other parts of Europe was however a necessity of life in small villages of Finland and Russia. And while the luxurious bathhouses in Rome had covered dozens of acres the Saunas in Finland were made up of small log houses, sometimes freestanding, sometimes beneath the ground surface covered with dirt and planting for insulation.

The sauna was not a mixed development with several functions like the Roman thermae. It was however still just as important as a social space and in the way of life for the people of villages in the North. This can be seen as sweat houses in Russia and Finland were used for much more than bathing. They were deeply rooted in folklore and worship, and were an important part of rituals of passage. In the disinfecting steams of the sauna mothers would give birth to their children, spouses would undergo purification before wedding and the old would spend their last moments in the warmth of the Sauna. (Aaland 1980) (Pearson, 2020).

The idea is not to have the best sauna on the block, but to get the entire block in the sauna.

-Professor Harold Tier, President of Finnish Sauna Society
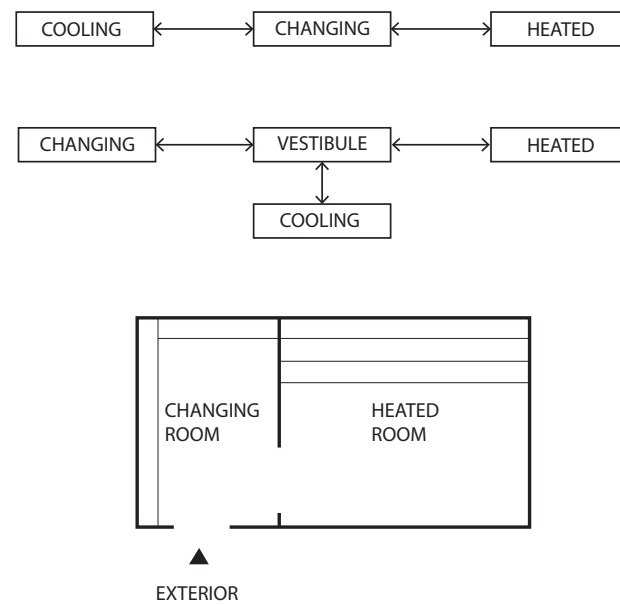

A traditional smoke sauna in Sweden.

Bathing in ice water.

What is needed for community?

The traditional Finnish sauna was perhaps not as grand as the bathhouses of the antiques, however they were certainly not lacking in community. Hundreds of years ago the Finnish peasants would each day take turns in heating up the village sauna and then make the rounds of invitation. It wasn't a lavish establishment or lifestyle but a necessity. If there were not a sauna available sometimes the leftover heat in a bread oven would make due with the addition of some linen and water.

Even with changing times and traditions the sauna has survived in the Finnish day to day life. Still however it's the make do attitude that I would say guides the Finnish sauna visitor. As it is a vital part of life, a shed in the middle of nowhere or a small basement in the corner of the street will do just fine. Only there is steam, company and possibly some beer.

Diagram of room sequence in the Sauna.

```
COOLING  <--->  CHANGING  <--->  HEATED


CHANGING  <--->  VESTIBULE  <--->  HEATED
                      ↕
                   COOLING
```

| CHANGING ROOM | HEATED ROOM |

▲

EXTERIOR

Nature & Skinship
The Japanese bathing culture

The Onsen

The Japanese people have an old and varied relationship to public bathing, it is a wild mix between natural and artificial, traditional and innovative. The onsen (traditional bathing houses located around thermal waters) and the sento (artificially heated bathhouses often located in cities)

Japan is located in a geothermally active region. Currently there are around 20.000 hot springs for bathing in the country. Due to the natural occurrence of hot springs the Japanese people have an old and varied relationship to public bathing. For as long as 3000 years there have been mentions of the springs being used for leisure and whole towns and resorts were established around them.

While we have learned to manipulate the natural environments of the world to an extent, as designers we often look for inspiration from the natural environment. Bathing architecture often seems to focus on the immersion of the individual into a complex landscape rather than the relationship to a single object. A Japanese onsen often makes good use of this dynamic, incorporating natural streams, rivers, pools and waterfalls and between the different waters there are landscapes assembled of plants, trees and stone for the bather to experience.

The concept of impurity and purity through ritual cleansing exists in both major religions of Japan, Shintoism and Buddhism. The majority of Japanese see themselves as both Buddhist and Shintoist. With Shinto being one of the few surviving major religions that is still based on Animism (Beliefs based on spirits of animals and nature.), this might help explain why the onsen and their visitors seem to value the connection to nature even more so than other cultures of bathing.

Takaragawa Onsen, Minakami.

Kusatsu Onsen, Kusatsu.

The Sento

Even in the smaller confines of the sento imitations and imagery are widely used to create a connection between the bather and nature. Instead of being integrated into the landscape the Sento tries to incorporate as many natural elements as possible into the bathing environment. In smaller and tangible forms the waterfall, hot spring and river are all included artificially into the sento. A common feature is also a pond for fishes or a small open air bath, lined with irregularly formed natural stones and plants, for one to cool off after the bath. Even though most people have their own private baths in their apartment or house, many people still go to the sento as they feel that this is the only place where one can truly clean themselves physically and spiritually. (James 2016) (ONLYinJAPANWAORYU 2018)

Ritual cleansing is an important part of Buddhist and Shintoist tradition and for many people the sento was an important part in daily routines. (Aaland 1980) In a way reminding of the Roman thermae the Japanese sento became an important space way for the people living in cities to keep hygiene, stay healthy and interact.

Division of space

While the contrast between the onsen and sento offers some insight into a interesting discussion about authenticity and imitation, I think the sento and onsen are also very different in the how the division of space is treated and how the individual experiences the sequence of functions of the bathhouse. The onsen focuses more on experiencing sequence of sensations and spaces, as the bather navigates between different rooms and springs.

The sento on the other hand is open. The barriers between different the rooms is not as expressed, and therefore how the space is used is more flexible and open for interpretation. The lack of physical divisions also allows for more interaction between the users of the space and the social and communal aspect of the sento is an important part of its identity. The open structure of the sento also offer a valuable question about the need for seclusion in spaces that would in western culture be seen as very intimate or private.
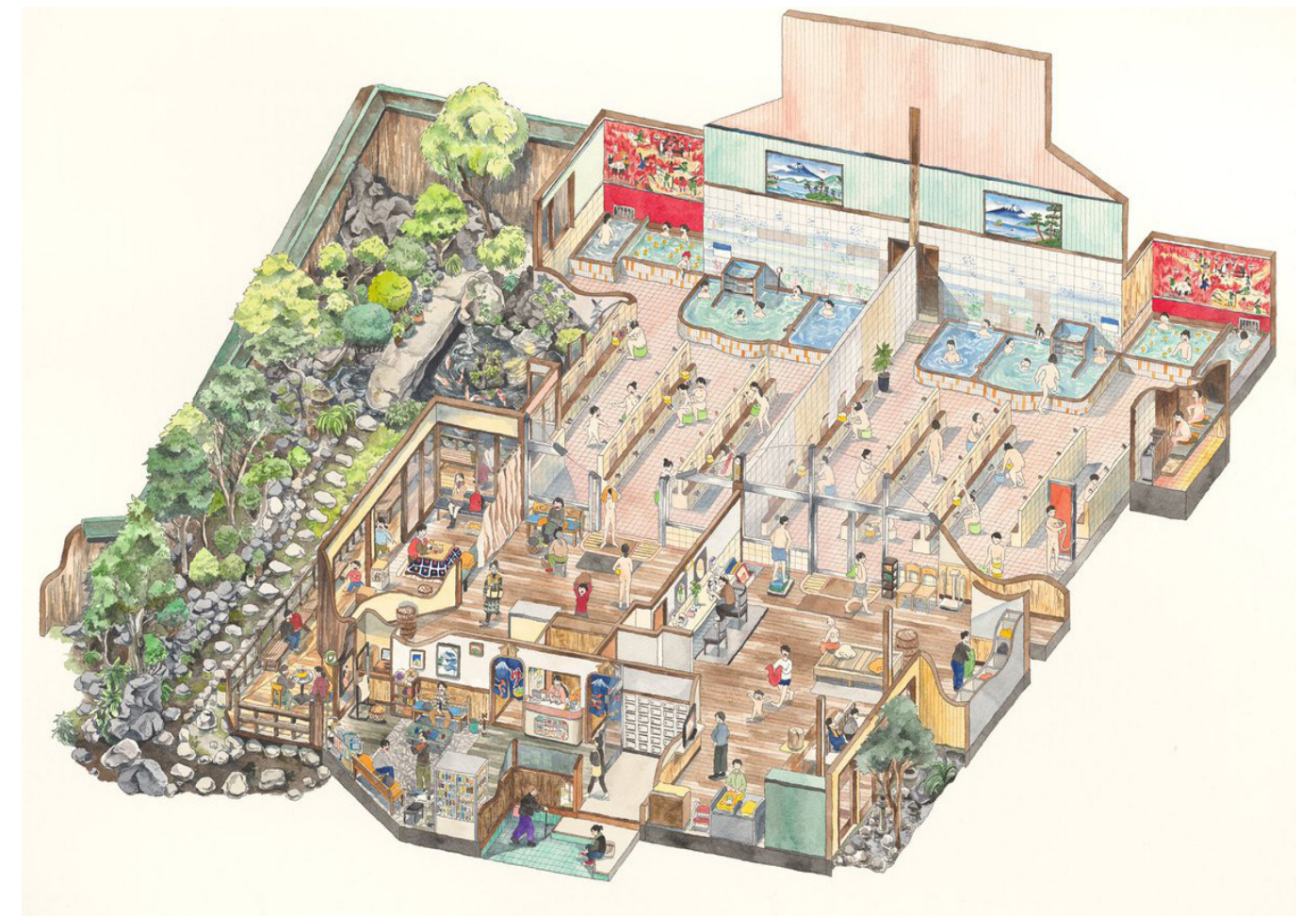
Japanese sento by Ehya Honami.

Skinship

In Japanese there is an expression "Skinship" which refers to non-sexual skin contact between family members and friends that build intimacy such as breast-feeding, holding hands, hugging or bathing together. (Kido 2012) While physical touch and nudity are met with varied acceptance in different cultures it is a natural part in how building stronger relationships already from an early age.

Foyer and bar.

In Japan the entrance fee to all sento's should be the same, roughly one bowl of noodles, which in today's currency is roughly 500 yen. As a way to compete, the sento's offer quite unique experiences

As the amount of bathhouses and visitors have been diminishing many bathhouses in Tokyo have started incorporating different functions into the bathhouses.

Changing room.

Bars, live music and themed baths have been some of the ways to try to attract a younger crowd like in Koganeyu, a newly renovated bathhouse with a bar/lounge facing the street.

Plunge pool and access to courtyard.

Wall separating the spaces for men & women.

Takara-yu sento, Tokyo.

Before the reformation period in Japan in the end of the 19th century, many bathhouses were still gender neutral spaces. As the Japanese came to increasingly accept western standards and customs the bathhouses soon changed as well. (Aaland 1980) Some bathhouses still have some remembrance of the old ways with the wall separating the baths might not cover the whole distance to the roof but allow for light and sound to travel between the rooms.
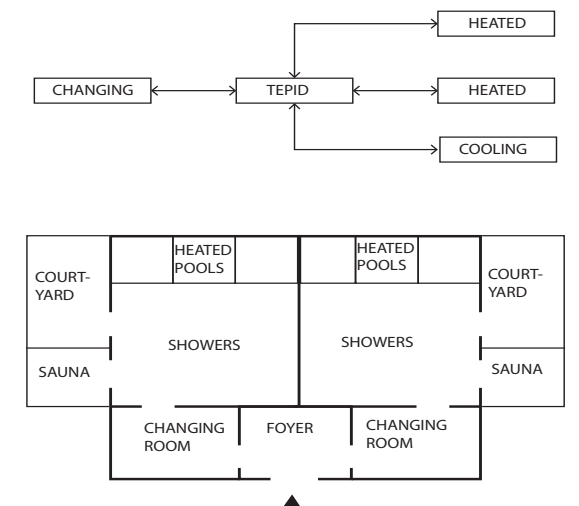

Diagram of room sequence in the sento.

Sensory & materiality

As part Finnish I have grown up with the culture of Saunas and sweat bathing. It's hard to describe exactly what a Sauna is exactly. I have vivid memories of how the snow cracked under my feet as I made my way out from the sauna. Rolling in the snow piles outside or taking a fast dip in the river that had been laid bare by a hole cut in the ice to cool down only to quickly return inside to the warmth. While Aaland (1980) likens the atmosphere of the Finnish Sauna to that of a church in our Sauna there was always murmur of voices that combined with the sound of birch twigs lashing out against exposed skin. Rather than the more solemn experience in a church the sauna was always filled with sounds, smells and materiality.

Contrast

Personally I would define contrast between different sensations as the essential part about sweat bathing.
Except for temperature, spatial experiences such as the contrast of enclosure, sounds and materials are important parts of what heightens the experience of bathing.
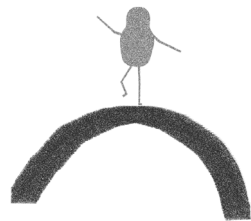
Open space.
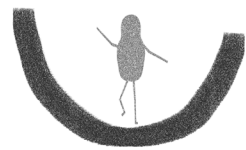
Enclosed space.

Experiencing temperature.

Sweat bathing in South America

As Colombia is located in geothermally active region, hot springs are quite a common occurrence in the mountainous regions. While in both north- mesoamerica sweat bathing was common both in rituals and leisurely purpose (Aaland 1980) I was unable to find any information of the practice of sweat bathing specifically by the native peoples of South America and Colombia.

During the 20th century some of the first tourist destinations for hot springs were established in Colombia. Currently there are over 20 establishments centered around services to provide access to natural hot springs known as Termales. During my stay in Colombia i was able to visit one of them, Termales de San Vicente.

While Colombia is rich in both thermal springs and has a good fresh water supply, for most people especially in the dense neighborhoods of Bogotá suburbs there aren't many options for bathing in nature or in bathhouses. As this project will focus on the communal aspect of bathing I decided that further studies on the termales resorts were not of further interest, but I find it worth noting that there is a culture existing and that the interest for them seem to only be growing and they have received recognition from the government as a valuable source for tourism.

Termas Geométricas i Chile av Germán del Sol.

A project made up of elevated wooden walkways and small cabins to rest,connecting to form a longer path of several hundred meters. While extensive the project also shows how simple materials can work well to create a very impactful environment.

PLANO GENERAL ARQUITECTURA

Termales de San Vicente.
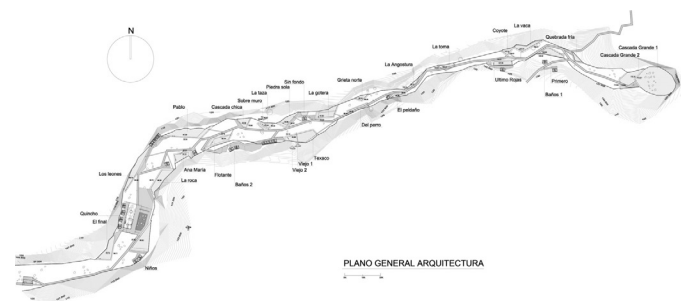
Termas Geométricas, Chile.

Context

Bogotá

The site for this project is located in Ciudad Bolívar, one of 20 districts in the capitol of Colombia, Bogotá. The project follows a four month exchange at Los Andes University. During this time I had the possibility to conduct several excursions as well as get an image of how the city functions. The project will be rooted in the ethnographic experience of my visit as well as some concrete social and natural threats that I will outline in this chapter.

With over 8.000.000 inhabitants Bogotá is one of the most densely populated cities in the world. According to the World Bank (2017) up 10.8 percent of the population in Colombia live below the poverty line of less than 2.15 USD per person. A number that most likely has increased with the influx of refugees fleeing Venezuela in the last years. Over the period of 2017-2023 over 2.5 million people arrived from Venezuela. (Crisis Group, 2022)

To combat the problems of densification there are two systems that have been implemented that have impacted the city widely. The Transmillenio is a Rapid Bus Transportation system (RBT) with dedicated lanes which allows for easier movement in the otherwise very congested city, and specifically allows people in the poorer suburbs better transportation when commuting to the central parts of the city.

Secondly, the more controversial system of stratos, was implemented as a way to create subsidized taxing based on what area of the city you lived in. Being forced to pay less for infrastructure if you earn less money might make a lot of sense on the surface but many people express a system that categorizes people after income and area which in turn have created a negative spiral of wealth discrepancies, division and prejudice. (The Guardian, 2017)

"If I'm strata 3, that's who I am. How is someone from strata 1, living among strata 5, going to be able to afford to pay for milk?"

- Carlos Córdoba
(The Guardian, 2017)

Natural hazards

According to The World Bank up to 85% of Colombians live in areas that are exposed to two or more natural threats. The people who are the most at risk are people living in informal housing situated in the cities. Where dwellings are often constructed in areas that have been deemed unfit for housing and with inadequate material and construction methods. While the frequency of natural hazards caused by geological factors and seismic activity remain invariable over time, floods landslides and flash-floods have increased in extensive areas of Colombia due to human intervention and land-use in both urban and regional settings.

Urban and regional land-use planning, regulations and ecological actions are all tools needed to increase the country's resilience towards natural disasters. In general, these can be seen as systematic problems and require both economic and political action to have effect. Since many of the people most at risk from these hazards already live at least partly outside it can also make it difficult for changes to have an effect where they are most needed. Informal settlements are also usually lacking more in basic infrastructure and sanitation which make them even more susceptible to the risks of floods and heavy rainfall.

Site

The neighborhood of El Mirador, in which the site is located is a part of the District Ciudad Bolivar. The district is located south of the city center and has a population density of almost 6000 people per km² (Bogotá City Hall, 2022)

Like the RBT the cable car system (Transmicable) has been a initiative to connect and bring formality to parts of the city that previously had been segregated from the rest of the city. The cable cars connect to one of the main transportation hubs in the city which in turn allows for the inhabitants of El Mirador to reach the Bogotá center in about an hour. For a trip that could've taken several hours previously.

Many of the areas in the hillsides and mountains around Bogotá used to be considered informal settlements and fully or partly outside the city's jurisdiction. When the Transmicable finished construction in 2018 four stations had been built and around these the city also established new civic infrastructure such as a local office for the city hall and smaller museums and libraries. Besides directly connecting the inhabitants of this area to the metropolitan region of Bogotá, this was the first time that many of the inhabitants could access basic municipal and governmental authorities without having to commute for hours. (IFC.)

While these areas are still partly lacking in infrastructure such as plumbing, electricity, access to parks, education and healthcare the transmicable and other civic services show the intention of improving living situations for the city's poor, and besides helping in day-to-day life for the local inhabitants the transmicable has also helped provide business opportunities from visitors and tourists. An important part of the integration of these areas since economically many informal areas suffer from being closed of from the rest of the economic system.

Care center

Connected to the municipal office at the third station "Manitas" is "Manzana del Cuidado de Ciudad Bolívar" which is a governmental initiative that serves to promote women and children. In the care center one can access a wide variety of activities courses, complementary education for high school, laundry machines and leisurely activities such as dance classes and bird watching tours. (Manzana del Cuidado de Ciudad Bolívar.) While popular among its active users we were told that many still didn't know about the facilities. When talking to a visitor of the municipal office she was very happy to learn that they provided the use of laundry machines for free but also told us that she lived approximately 20 minutes away by foot.
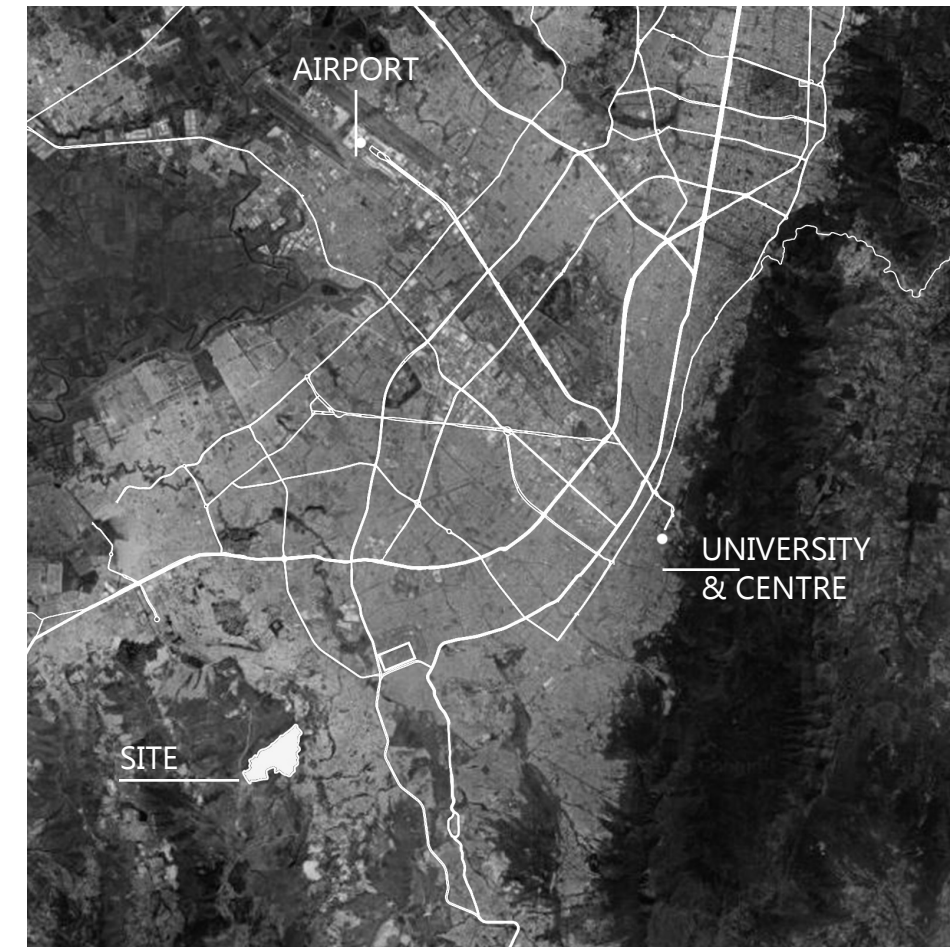
Baths.

Access & Public Space

Contrary to how many informal settlements are structured I was surprised to see how planned the environments in Parque Illemani was. While some streets and lots didn't adhere to the gridular plan of the neighborhood it generally followed a strict design with two main transversal roads allowing access with car and the local bus. Close to these roads there are a few public parks spread out featuring spaces for football, basketball and some equipment for outdoor gyms.

Most active was the square around the metro-cable station, featuring a center with access to local art installations, library and a green roof. Besides the metrocable an extensive park looking out over Ciudad Bolivar and Bogotá has been constructed with the hope of creating an attraction for visitors. However when visiting the area we were told not to go to the viewpoint as it was not considered safe.

Character

El Mirador is beginning to become more integrated into the city and the formal economy. It was however not long ago that the city recognized the people living in these settlements and allowed them to claim ownership over the land they had built houses on. The origin of these areas is that they mainly existed to provide the most basic shelter and habitations for people who were not able to live in the city. Therefor it is not surprising that the absolute majority of the buildings in the neighborhood are dwellings and there are few places for other functions such as public places or businesses.

This in turn creates a very monotonous urban fabric with a lack of activity and empty uninviting streets. In turn as streets become less safe I noticed that it was a common occurrence in Bogotá to close of the facades facing the streets even more which in El Mirador created a negative spiral where many streets immediately did not feel very safe to walk through.
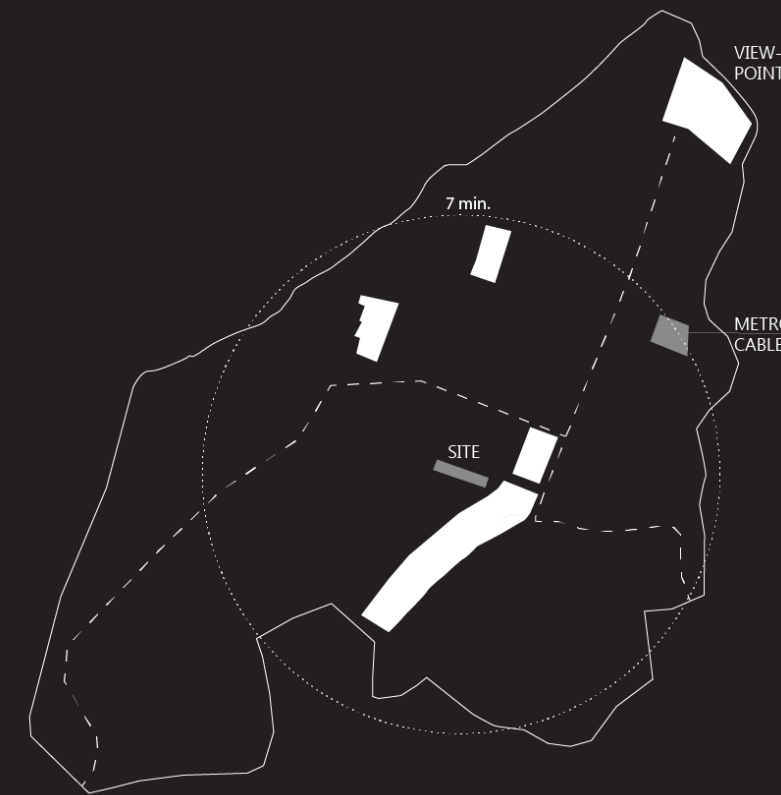
Getting there

The most common way to access the neighborhood of El Mirador is the Transmicable. This is made apparent when analysing the functions of buildings, since almost all income generating activities are located along the path leading from the cable car station. The new public transportation has served to create both new investments into other public facilities in the area and there is also hope to bring more tourists eventually as has happened in the Commuto 13 area in Medellin. The site which is situated closely to this main walkway has the ability to both serve as a connection to the other parts of the community and prioritizes the strengthening of pedestrian use.
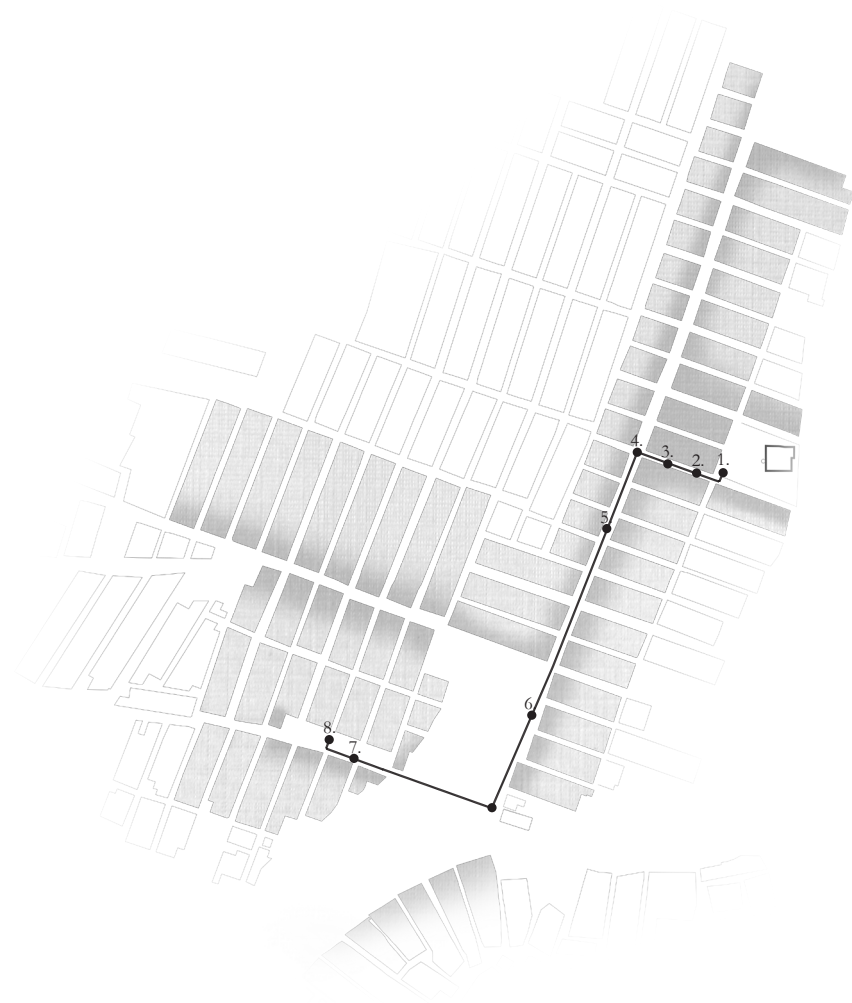
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Chapter 4.
Analysis
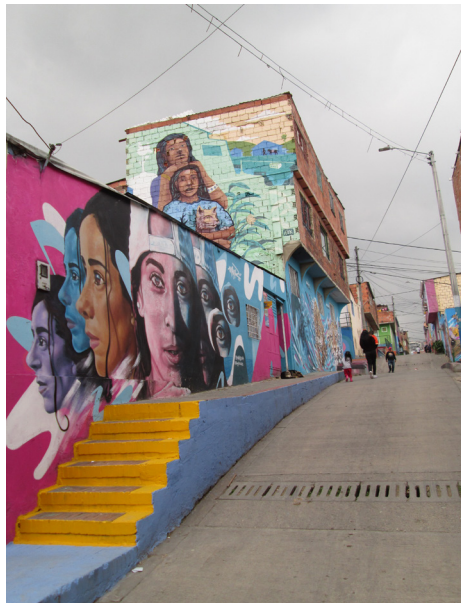
Reflections on public space & safety

The strength of a community can sometimes be hard to define or see for a visitor in a neighborhood, and sometimes it is very apparent. At the beginning of this thesis my intention was to work with strategy and water management on a larger scale and to investigate new solutions for providing water and sanitation for people in informal settlements of Bogotá. However, during my four month visit in the city of Bogotá one thing that increasingly started to interest me was the use of public space or the lack thereof.

Famous for their nightlife and clubs one would expect the streets to be bustling with life during the darker hours of the day. This is possibly true during weekends as many parts of the city become destinations for bar and clubbers, young and old alike. During weekdays however a completely different picture takes place.

The explanation that I have been given is that Colombians are familiar people, after spending a long day at work, and what can be described as an eternity in the congested traffic of the city, most people are looking to spend their evenings with their family. As a result a lot of public institutions, restaurants and even bars are not major nodes that generate movement and activity throughout the week.
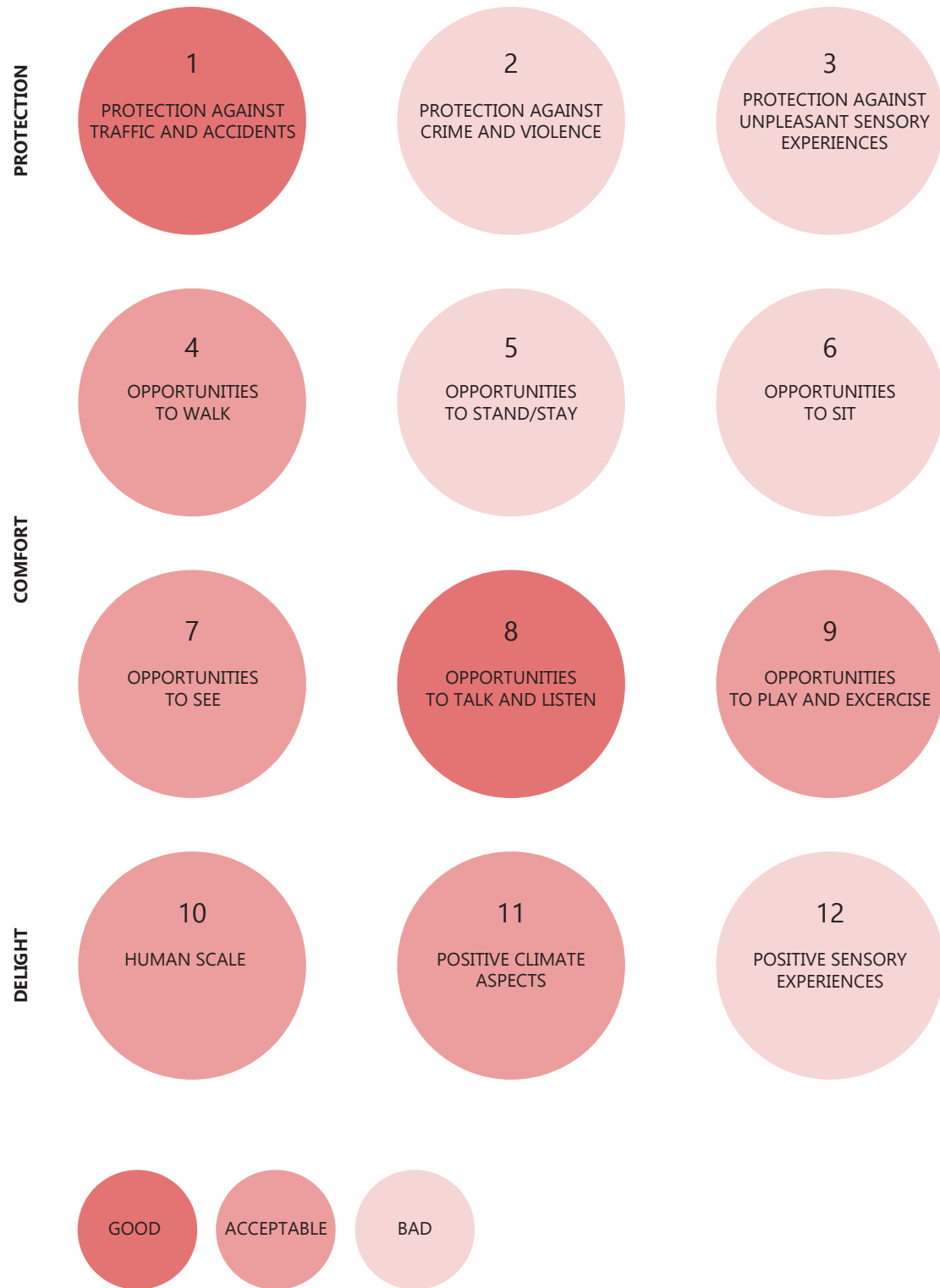
This certainly is one factor but Bogotá also suffers from a similar fate as that of many American cities, which is that the car is for many the main mode of transportation. As the streets are by many considered unsafe, cars, for those with the means, become the main method of transportation. Unless you have a very specific goal or location in mind it is not common to venture the streets. And when the watchful eye of good neighbors disappears the streets in turn become all the less safe.

It's not uncommon to see streets or large neighborhoods where all the windows on first, or even the second or third floor have been supplied with metal bars (or even closed off completely) do deter any thought of intrusion.

The lack of mixed-use and development is even more apparent in the low rise informal settlements of the hillsides of Bogotá. While Parque Illemani and the main street of El Mirador is bustling with activity during the day, the lack of dedicated public space, especially public buildings become very apparent as the inhabitants migrate into their dwellings, shutting the door to the street.

44
45

Gehl analysis of the site

Except for in front of the church where some bushes and flowers had been planted there was not any apparent sign of care for the maintenance of plot and the adjacent streets as well as building facades. To summarize my subjective experience of the site visit and what areas existed for improvement I chose to use an analysis method presented by Jan Gehl.

PROTECTION

1 — PROTECTION AGAINST TRAFFIC AND ACCIDENTS

2 — PROTECTION AGAINST CRIME AND VIOLENCE

3 — PROTECTION AGAINST UNPLEASANT SENSORY EXPERIENCES

COMFORT

4 — OPPORTUNITIES TO WALK

5 — OPPORTUNITIES TO STAND/STAY

6 — OPPORTUNITIES TO SIT

7 — OPPORTUNITIES TO SEE

8 — OPPORTUNITIES TO TALK AND LISTEN

9 — OPPORTUNITIES TO PLAY AND EXCERCISE

DELIGHT

10 — HUMAN SCALE

11 — POSITIVE CLIMATE ASPECTS

12 — POSITIVE SENSORY EXPERIENCES

GOOD   ACCEPTABLE   BAD

1. Since the streets are not paved there is not a lot of traffic safety of this sort is not an issue.

2. Currently the plots are abandoned and do not seem to be managed, creating a lack of overlapping functions and "eyes on the street".

3. Outside two of the small businesses on the street there is some cover for rain and shading. Besides this the site is severely lacking in protection against environmental factors.

4. Since there is a quite steep slope on the site and there is no paving the ground is uneven and has a lot of holes, making it difficult for people with impaired mobility to access the site.

5. A general problem on the site and generally in the streets of the neighborhood is that there is not any variation in the street-scape and no places that encourage the user to stay and interact with the street.

6. No seating on the site except for the stairs outside the church.

7. The plan grid structure in the neighborhood create long but narrow streets which does not convey a feeling of excitement or safety.

8. No existing problems with noise pollution.

9. The street connecting the lots is wide enough so that it could be used for play and other activity however there was no current activity of the sorts when visiting the site.

10. Since most buildings are at least constructed partly self-constructed and with simpler methods the general building height in the neighborhood rarely exceeded ten meters. Since the first floor in the building was almost always closed the scale seemed less adapted to people.

11. Less risk of flooding as the site is elevated and since its an open area with low rise buildings the site has good access to solar heating.

12. No existing greenery, water specific materials that allow for sensory experiences.

Periphery:
El Mirador viewed from the Cable car.

Site:
View of site from Google Maps(2019)

Site:
View of church entrance and west plot.

Site:
Street towards north.

Site:
Main street of the site. View from west

STRENGTHS

Need for access to water & sanitation
Secluded & Calm
Daily household needs
Centrally Located
Simple construction
No flooding

WEAKNESSES

Lack of local references
Privacy - Religion
Gender separation
Energy use

OPPORTUNITIES

Age & Gender inclusive

Building confidence & Community

Strengthening secondary functions

No competition
Creates discussion

THREATS

Sightlines
No fences gates - hard to control access

Lack of local references

Programme

Need
The idea of a bathhouse works well in the context of existing issues with access to water and hygiene. Creating secluded and spaces where people can meet in a more intimate setting for conversation I believe is also important to strengthening interpersonal relationships. Benefits of bathing for problems such as bathing also naturally promotes age inclusion as it is a space where children, adults and elderly can all share.

Users
The main challenges I believe is a lack of local references, therefore the bathhouse will not only serve as leisure space but will integrate other functions such as drinking taps for the public and possibility for laundry for the users.

While the idea of gender separating the bath is not something that initially seems beneficial I believe it to be necessary in the contemporary social context. Because of cultural and religious norms it would be difficult to create a mixed bath. Instead I decided on creating a single bath serving women and children. This decision is based mainly on the idea of promoting marginalized groups in public settings, in this case women, since it became very apparent to me that the main users of public space, especially during dark was adult men.

Privacy
There exists a direct contradiction in the sections of the bath that require privacy and the idea of providing facades that allow for "eyes on the street". As a response to this the project uses the natural slope of the site to create elevated platforms and a combination of semi-transparent materials and patterns. This makes it possible to have a higher freedom in how the users of the interior space can interact with the exterior public sphere.

Energy use
While there is an obvious energy use of heating the baths and indoor environments the climate in Bogotá is quite beneficial and during the day the temperature usually ranges between 15-25°C. Using semi-transparent extruded polycarbonate plastic in the building allow for a greenhouse effect during the day.

References

In both building materials my intention was to use readily available materials and traditional building techniques. The lighter brick is present in all parts buildings of the project and creating a gradient with more dense use it the bath. Guado a type of Colombian bamboo is used in the project for doors, screens and load-bearing columns for the lighter buildings. While it is not very commonly used its relatively cheap, sturdy and sustainable. In contrast to the warm tones of the brick and wood is the semi-transparent plastic used in the indoor pool and the community center. As well as concrete for the pools and construction details.
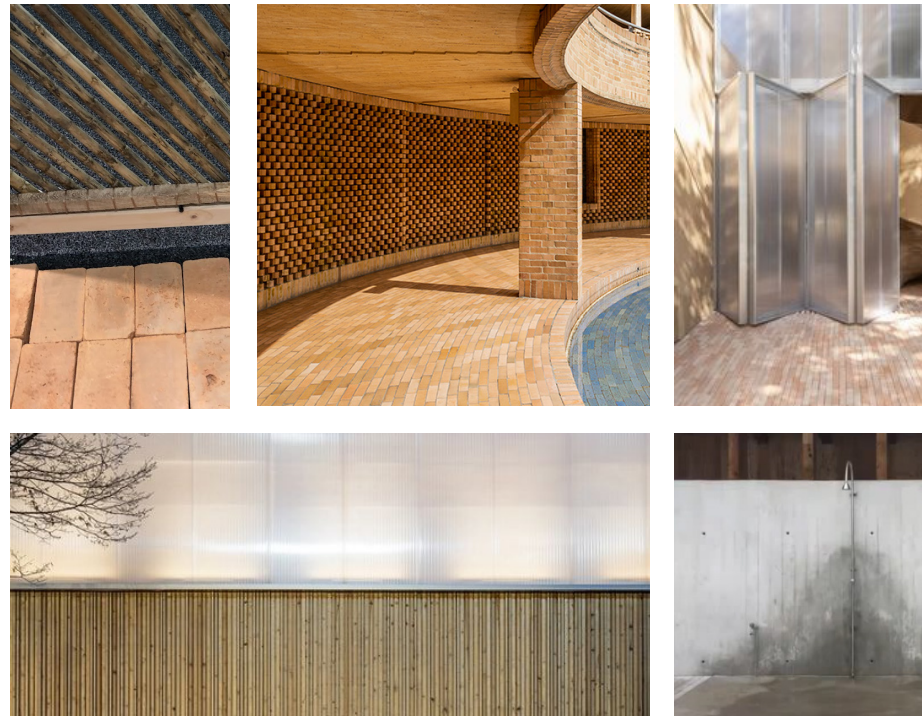
The Virgilio Barco library by Rogelio Salmona has a striking geometrical shape designed to blend into the natural landscape. The curving spaces create for interesting and enticing movement and sightliness, creating contrast in how the building opens up to courtyards and the park. Integrated into the structure are systems for water management and secluded spaces on the rooftop with theaters and spaces for conversation.
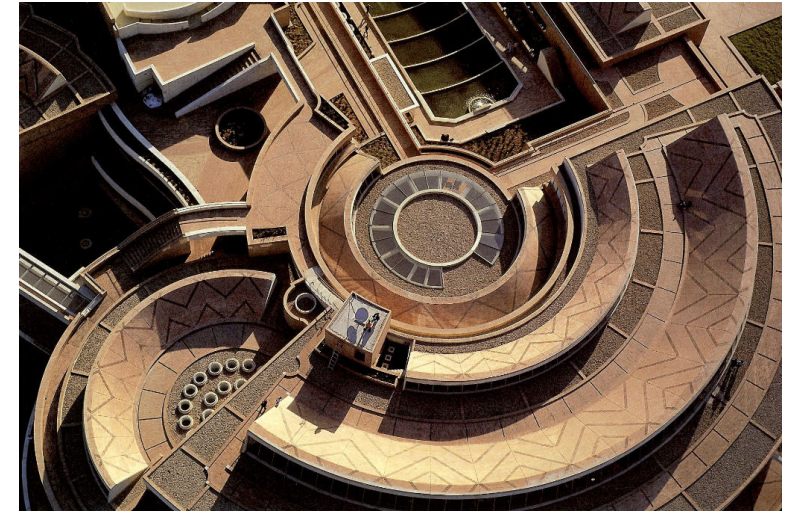
Aerial view of Virgilio Barco library.

Arquitectura Expandida is a ideologically driven architecture office in Bogotá. The office mainly do work in acupuntural architecture, engaging in communities and using methods of self-help building. Each always adapts to the site, and the needs and skills of those living in the neighborhood.

Top left. Modular stage with rain cover.

Bottom left. Cinemateque on a steep slope using Guado and opaque plastics.

Discussion

Using mainly my own observations about public space and safety, as well as talking to people living in Bogotá, my perception is that there is a general lack of safety and a fear of being subject to crime and violence amongst the population. According to Numbeo (n.d) which is a crowd-sourced site for data, safety during the night was also reported as being very low. What I noticed was also that the fear of violence not only caused people to use the streets and public spaces less but also in many examples completely shut out the visual and physical connection between public and private with unnecessary walls, placates and fences. Which create desolate rooms in the urban fabric rather than inviting public spaces.

A sentiment that guided me in my whole design process is the notion that public spaces that are designed for everyone, with no one in particular in mind, tend to be less successful as stated by (Jacobs, 1961)(Alidoust & Bosman, 2015). Since completely public places tend to replicate existing power structures in society and therefore make them less accessible and safe for marginalized groups. Feminist city planning is not only about promoting women in public settings, but in general being aware that design without awareness of existing power structures and the social context will most likely contribute to these systematic issues. Alidoust & Bosman (2015) talk explicitly about this issue for the elderly population. That if they, as a vulnerable group, are not provided with a specific place for gathering adjusted to their needs, they are a group of people that easily become isolated. With this in mind I chose to mainly work with promoting the groups of women and children that otherwise are more likely to feel less safe and included in completely public settings. I also chose to incorporate functions and spaces that could serve as gathering points for other groups in the community, such as elderly and movement impaired.

I also found out that in many of the poorer communities there already exists examples of attempts to promote vulnerable groups. An example is the "Manzana del Cuidado de Ciudad" (care centers) where women and children can get assistance with household needs/ chores and at the same time participate in lectures, workshops and pursue educational and leisurely activities. I think the functions these care centers provide serve as a good guide for my own project but the buildings in themselves seemed to not be well integrated into the existing communities and therefore not as accessible for the intended users.

A major area of investigation for my project is the dichotomy between public and private or dwelling and street. Grundström (2009) notes that the idea of the private sphere or dwellings as feminine space, and public areas as masculine spaces are even more present in areas with higher rates of crimes. Due to a lack of natural places to gather or enjoy public settings women are increasingly forced into the "protected" private sphere.

The dichotomy of private and public, protected and unsafe asks several questions. Can a public setting be protected? How would this be achieved? What will the users reaction to a project that disrupts these existing notions of what spaces are safe - unsafe?

These questions are what lead me to the idea of designing a bathhouse, specifically meant for women and children. From historical and contemporary examples showed in this report I think that there is a clear, although intangible, aspect to communal bathing that make it a good way to meet and interact. It might be that it can easily be integrated into daily routines. Because it is a natural leveler where one can remove otherwise clearly visible social signifiers. One reason might also be connected to the Japanese expression of skinship, that we through life are used to skin to skin contact with family and friends which automatically makes interpersonal connections easier to form in this environment. Pearson (2020) also writes that bathhouses tend to naturally be democratic public spaces that encourage user participation and where the community often are more vocal in how the space is used and by whom.

To encourage the use of the bathhouse and to better integrating it in the day-to-day life of the users I choose to include several functions of convenience. With this I am referring to laundry machines, water taps, places for reading/studying and places for preparing food that might incentivize the use of the building since it would save time and effort for the users. Besides that there are spaces for workshops and lectures, and a smaller building for bike-repairs and planting.

Chapter 6.
Proposal
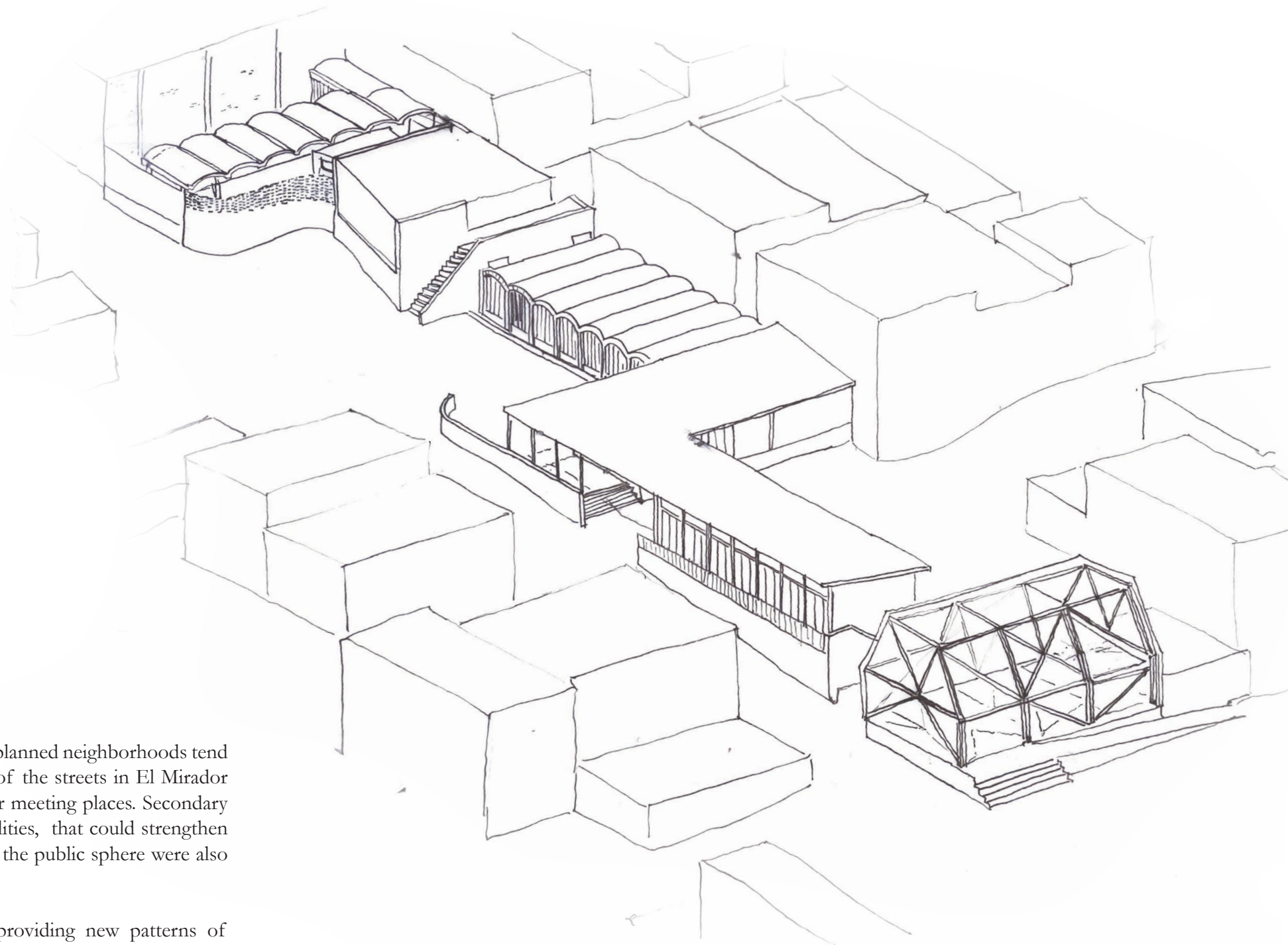
Instead of the natural sprawl that unplanned neighborhoods tend to have, the monotony and rigidity of the streets in El Mirador presented almost no natural stops or meeting places. Secondary functions, such as businesses or facilities, that could strengthen the community and bring activity to the public sphere were also lacking because of this.
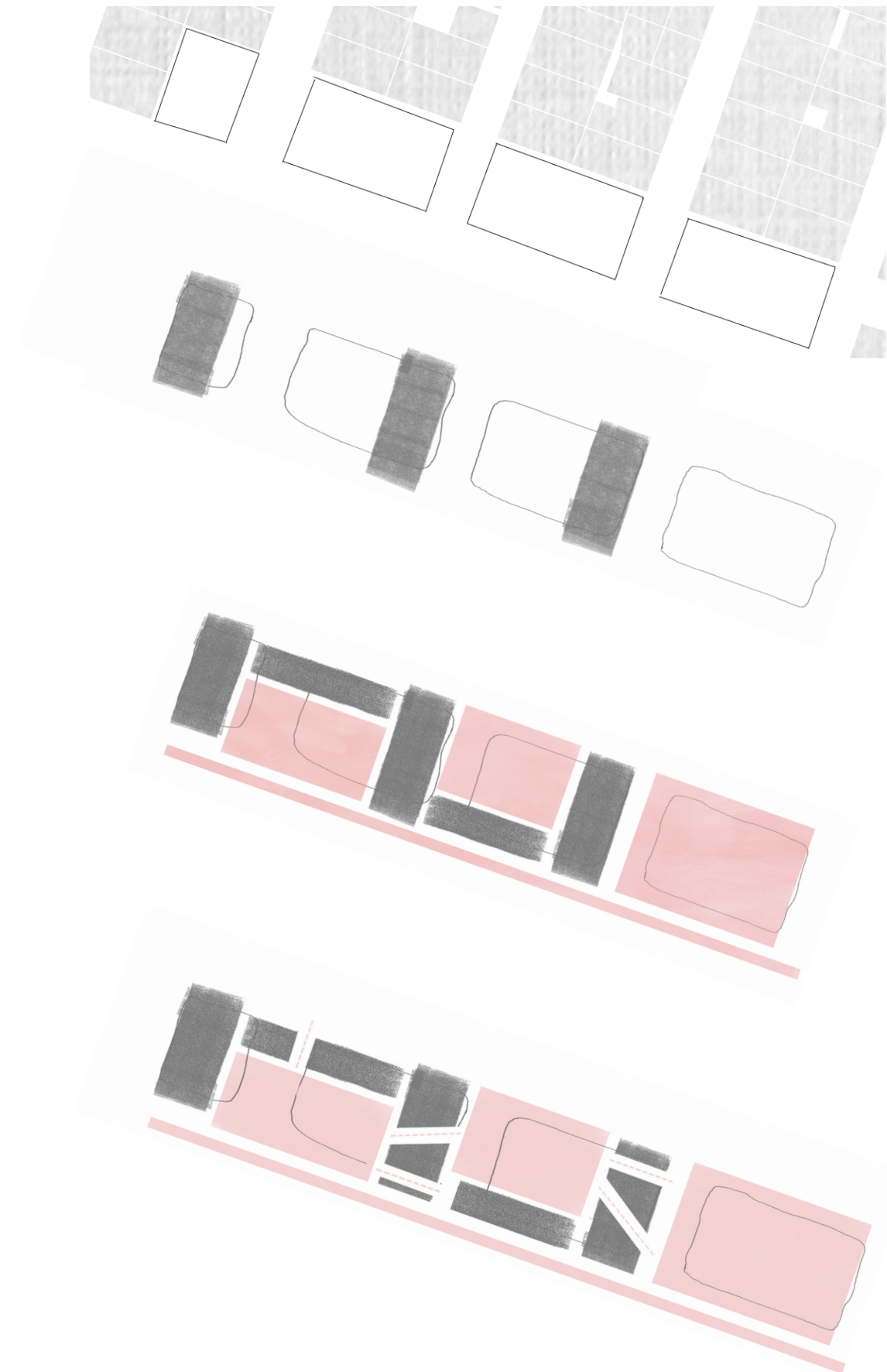
Not only in a physical sense of providing new patterns of movement and ways of experiencing the neighborhood, I also saw a need for creating new opportunities for inhabitants to interact with each other. In this sense the project as a whole and specifically the bathhouse, are meant to disrupt and question the established norm on how the built environment in settlements similar to that of El Mirador is percieved and used.

PARKING

CHURCH

GYM

Existing site with
vacant lots.

Segmenting the
street and creating
rhythm.

Creating variation
of enclosure and
public space.

Making visual connection
possible between both indoor
and exterior space.

Connections

The four plots that I've chosen to work with are directly
connected to the main plaza where most of the activity in the
neighborhood happens. With dedicated pedestrian pathways
and space for vendors and storefronts this place is bustling
with activity during the day. Along these paths there are also
an outdoor gym and dedicated spaces for exercise. Right next
to the site there is also a church, which generates activity in the
street. One of the few parking lots in El Mirador is located
adjacent to the site.

The short distance to the outdoor gym makes it an ideal location
for people using the bathhouse to combine it with exercise.

Public Space Strategy

To create more active and safe public areas I identified strategies that would bring more people to the area. Using a few main principles for design, mainly referring to Gehl's principles and Jane Jacobs ideas about public space the aim is to disrupt the current monotony of the neighborhood and create active and inviting streets. The programme of the projects presents several problems in how to approach the need for privacy while still maintaining a connection to the street-scape. A key design issue was the duality in creating space that allows for interaction while still maintaining a degree of privacy.
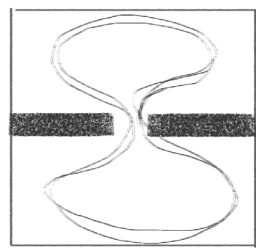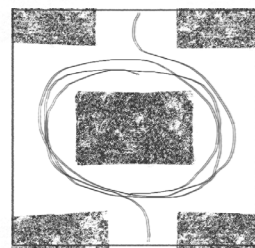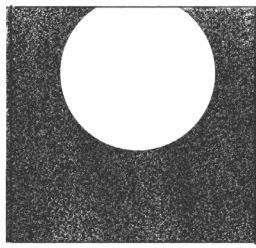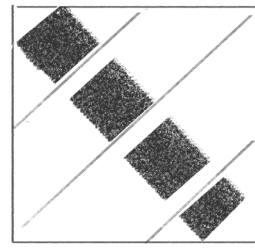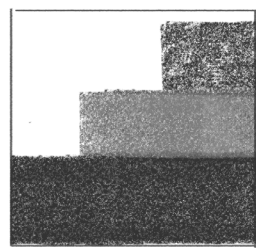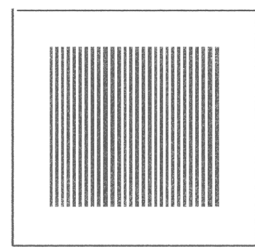
Continuous
Tying together exterior and interior space.

Disruptive
New patterns of movement and creating space for rest.

Intimate
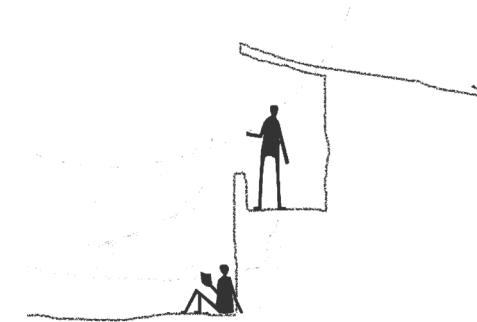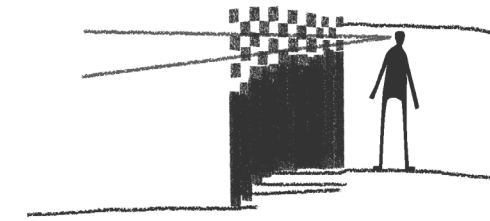Creating a degree of separation from the public.

Segmented
Allow for connection through the built environment.

Stepping
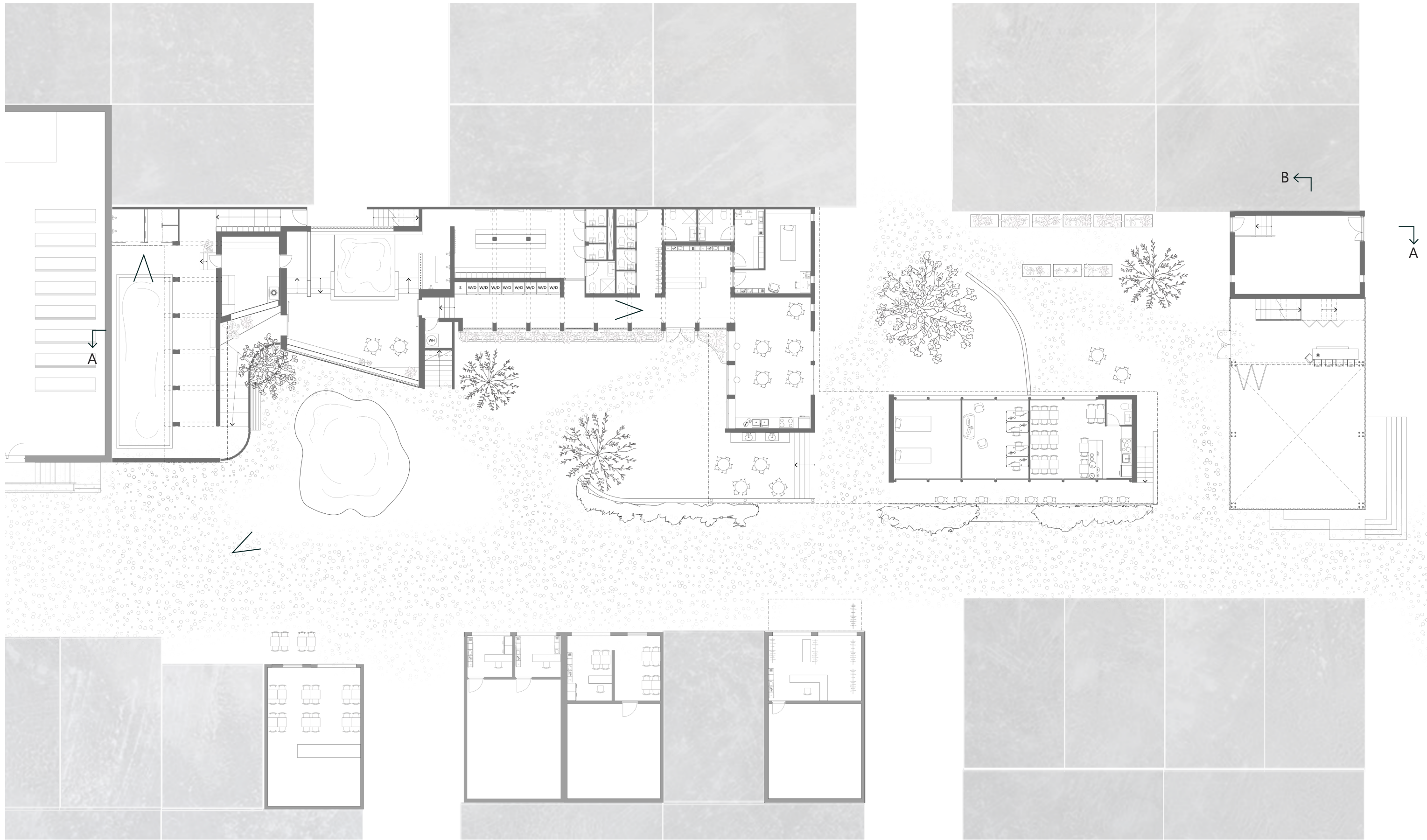To create separation instead of isolation.

Transparency
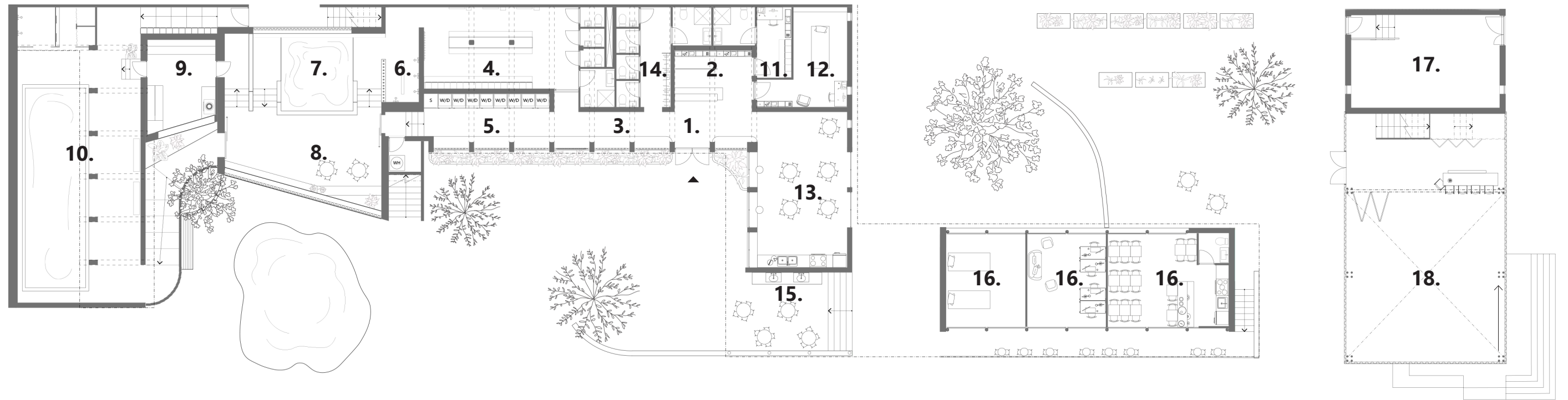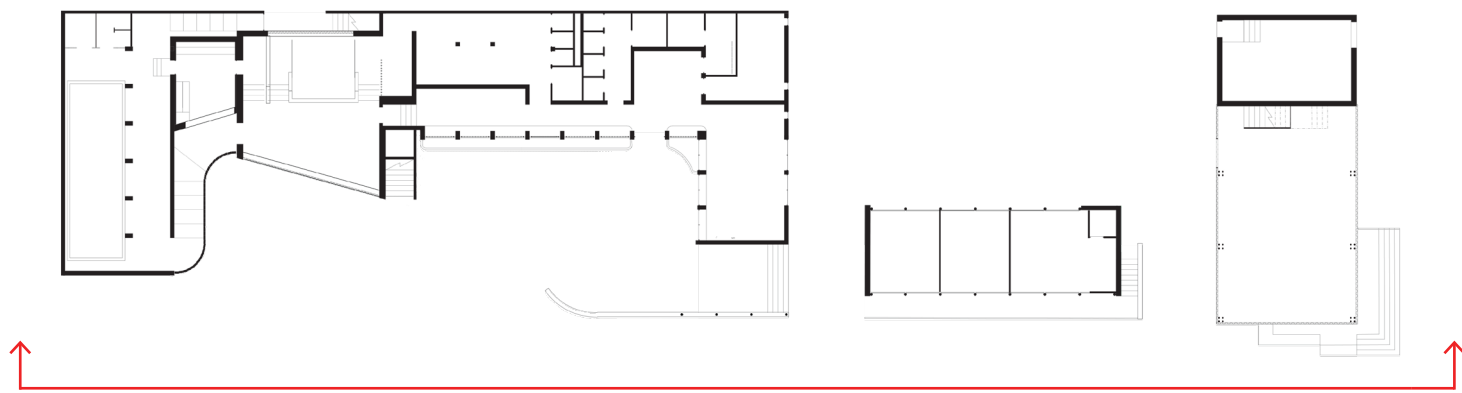Communicating the interior functions.
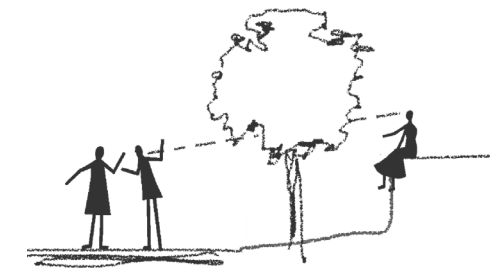
Soft borders

Borders that allow for a small degree of interaction between spaces while still allowing users of the space to separate themselves from the public with ease if they want to. In this project the natural slope of the site was used to create vertical separation and vegetation, perforations and semi-transparent materials were used to create visual filters.

View of entrance situation.

Plan of plot. Scale 1:200

1. Entrance
2. Reception
3. Access to baths
4. Changing room
5. Hallway & Laundry
6. Showers
7. Heated Pool
8. Social Hall
9. Sauna
10. Outdoor Pool
11. Staff room
12. Massage room
13. Lounge
14. WC
15. Public water tap
16. Rentable spaces
17. Workshop/Terrace
18. Community Centre

The project connects to the street by providing different layers of separation. Differences in height, wall height and transparency of facades allows users of the space to experience different level of enclosure and choice in how much to participate in the public space.

The street is also treated with the same respect and has a sequence with different levels of enclosure to create varied spaces along the street. Spaces for seating and resting with protection from sun and rain have also been placed to enable spaces that communicate with the existing functions of the businesses along the street.

South-west elevation. Scale 1:200
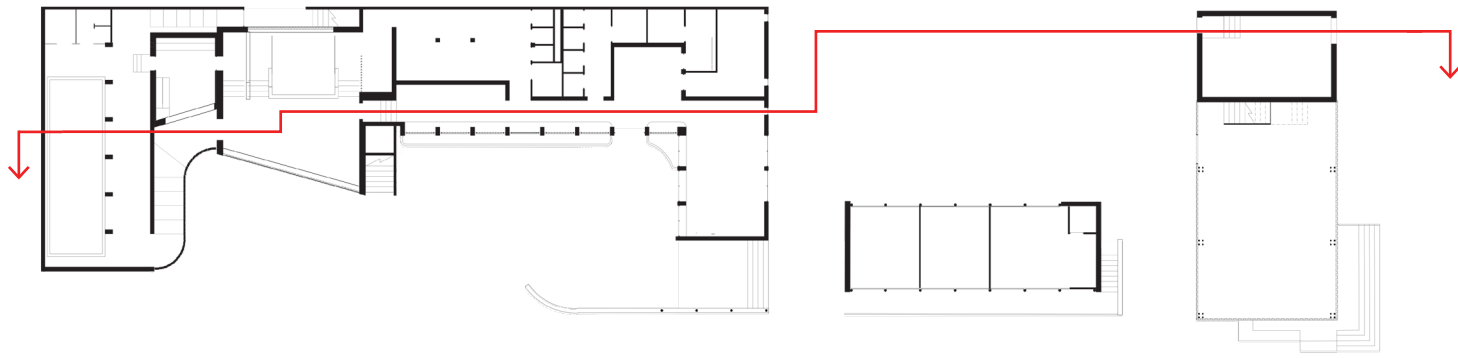
The idea is to create a flow where movement and sight lines between the difference functions and spaces of the project is made possible, creating ambiguity and interaction between different programmes. While movement between the buildings is made easy there is also room for the user to separate themselves where its wanted or required.

Section A. Scale 1:200

The social bath

My idea for the bathing areas was to create an intimate yet social and open environment. The idea that a social and active environment has to be public or open to everyone is in a sense harmful by default since a social space that is completely public/open will likely replicate the prevalent power dynamic that exists in society. Which means that groups such as for example elderly, women, children and non-binary tend to be more at the periphery and feel less safe in these spaces. (Alidoust & Bosman, 2015) (Grundströmmer, 2005) As we undress we also remove social signifiers and the bathhouse becomes a more neutral space where people from different groups and class can feel more community.

The bathhouse in El Mirador emulates the complex sensory sequence of the Roman thermae and incorporates functions such as conversation halls. Tepid - Cold - Warm. Moving between these spaces and also entering and exiting the bath is supposed to be a part of the sequential experience of contrasts. Between these spaces there is always a sense of direction, by using long sight lines and axises in the otherwise quite compact building.
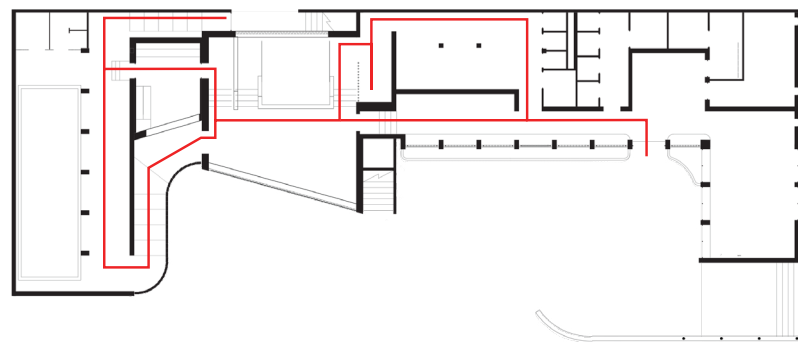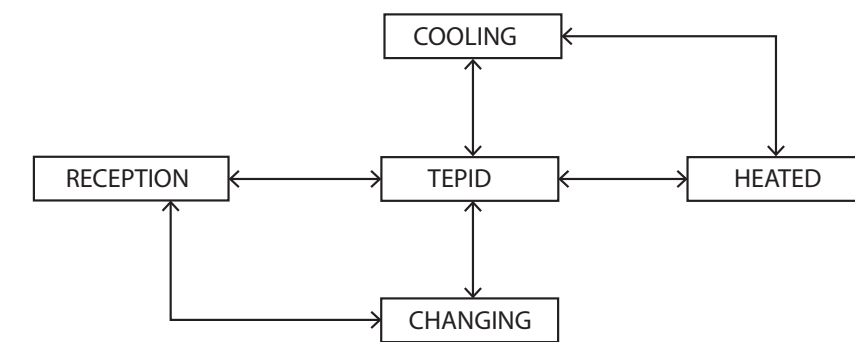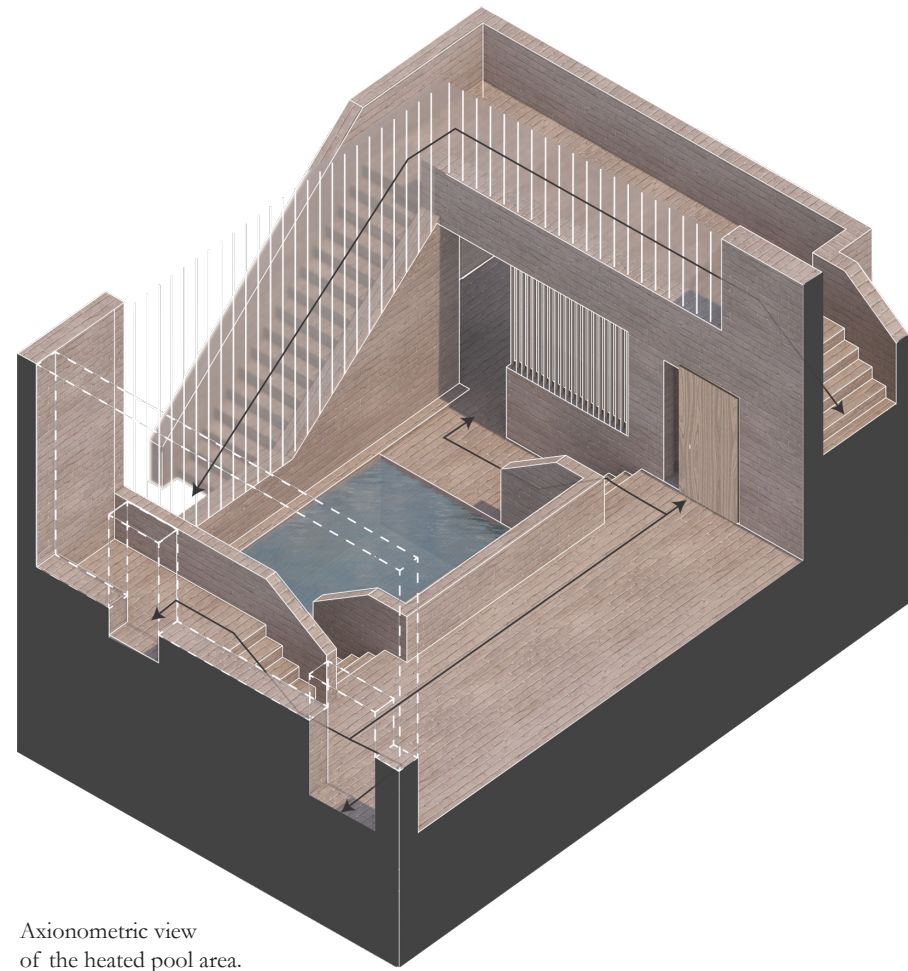
Comparison of room sequence in the thermae and proposal.
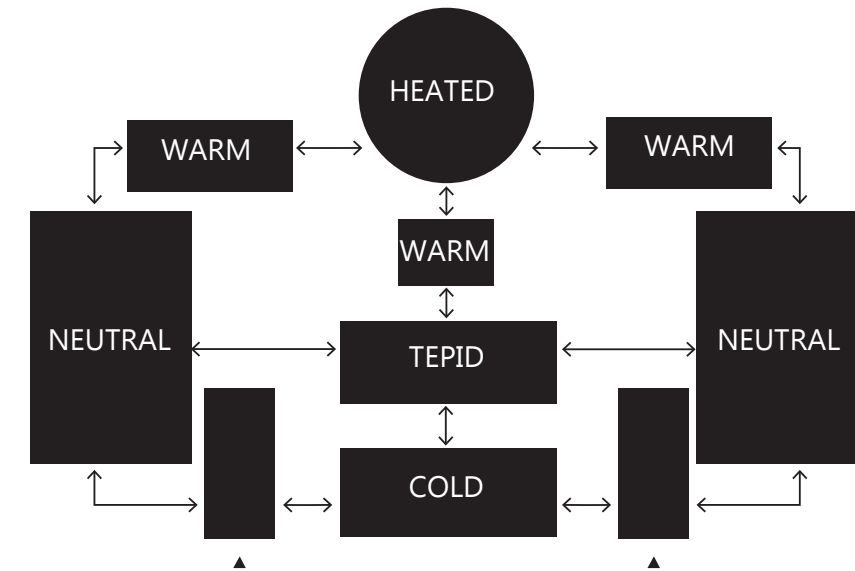
Sequence of thermae.

Traversing the bath.

Sequence of the bath.

Axionometric view
of the heated pool area.

The heated pool area serves as the central space for the bathhouse. To the exterior it serves to create a visual cue for direction and the elevated pathway creates a viewpoint overlooking the area of El Mirador.

The interior combines spaces typical separated into one single room with a steam room, a pool, shower area and importantly serves as a conversation hall. Instead of walls separating the different uses the natural elevation of the site allows for subtle stepping to differentiate the space and connect to the sauna and the outdoor pool.
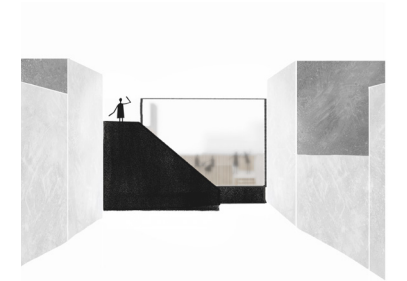
The semi-transparent wall lights up the street facing north.
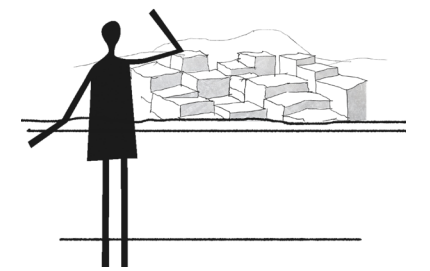
A contrasting view over the low-rise community after climbing a set of stairs.

Section of bath. Scale 1:80.
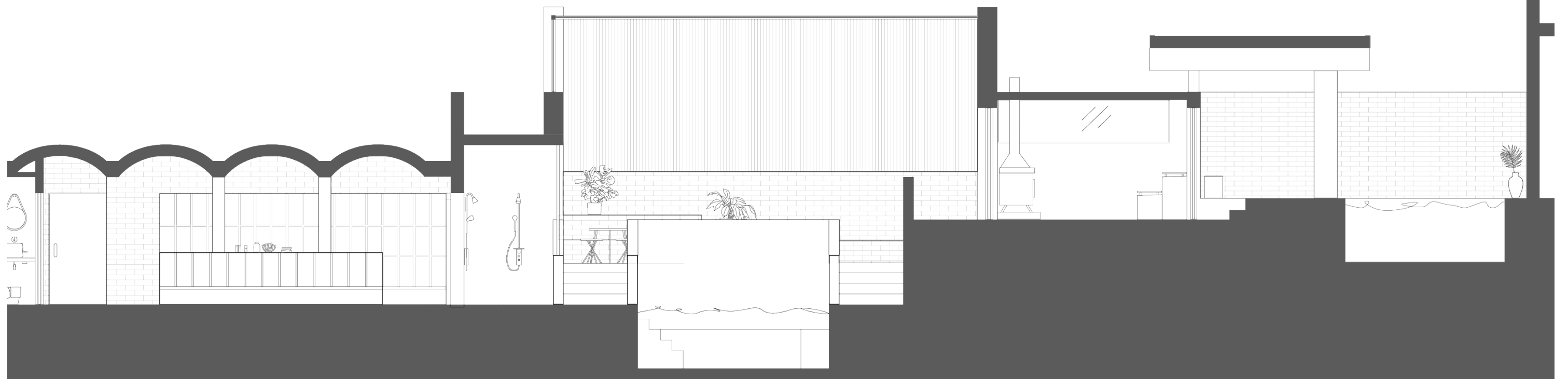
Community center

Complementing the functions of the bathhouse, the community center aims at creating a singular node where the whole community of the neighborhood can gather. Besides the function as a place for political organization it can be used as a rentable space for events such as wedding receptions (using the proximity to the church) concert hall both indoors, and being able to open up towards the public square.

From the neighborhood park it also serves as a entrance & gateway to the more private functions of the project, creating a soft transition of public to private.
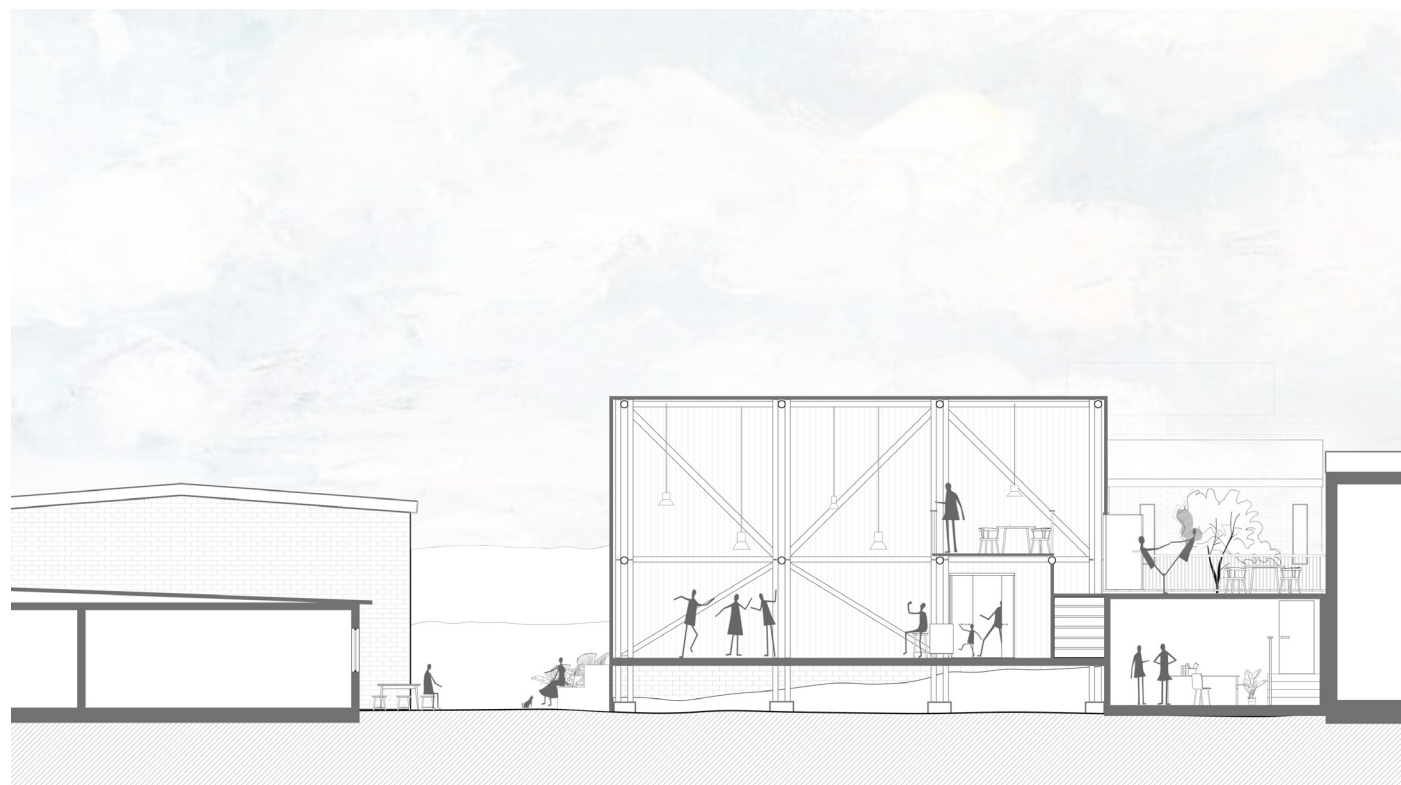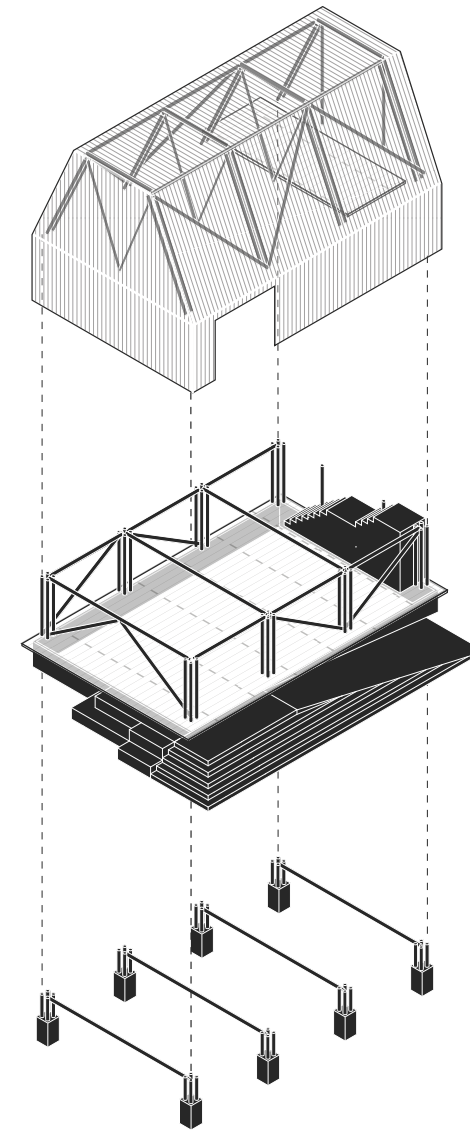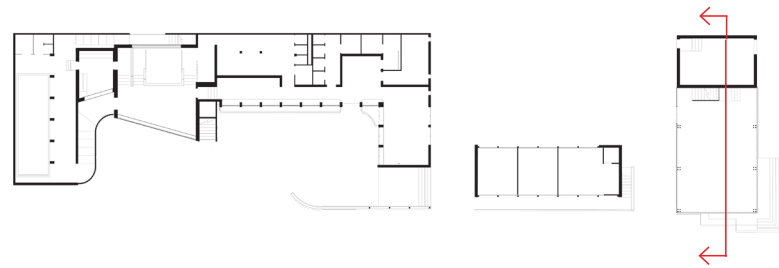
Section B.
Scale 1:200

The community center connects to a smaller building with a patio
and a workshop space for gardening and bike repairs.

View of outdoor pool.
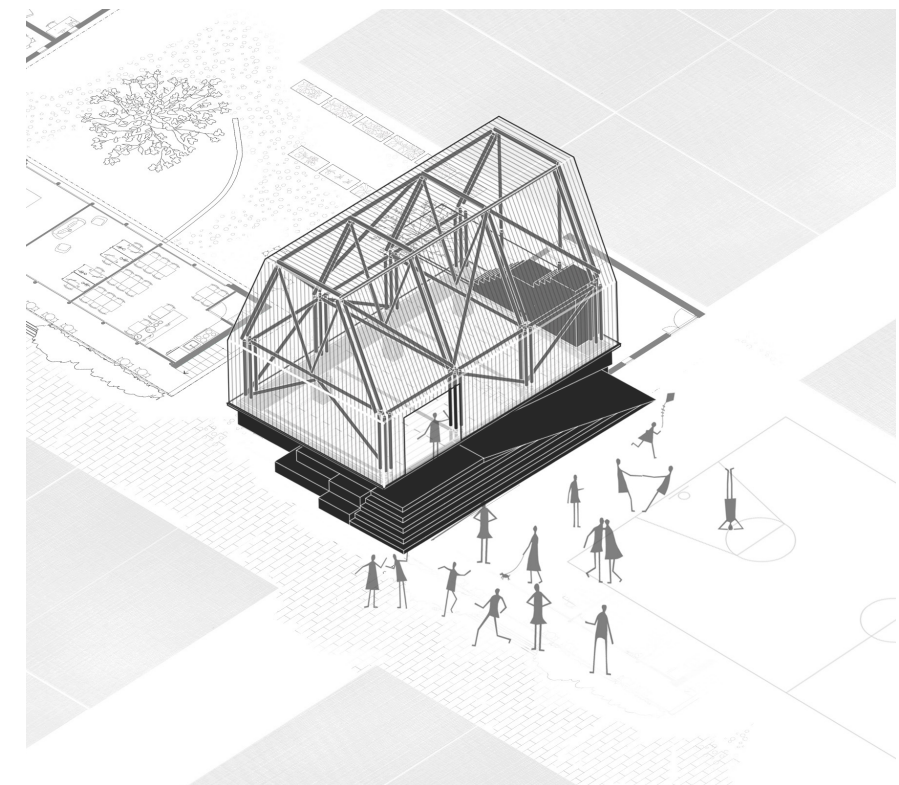
Chapter 6.
Conclusion

Although four months is indeed some time to experience a culture and create a meaningful analysis, it is important to state that I as a person and designer am still an alien to this context and to the physical and social environment that the intended users of the project are exposed to. I don't imagine that this project will solve all the issues that I myself could notice less so the ones I could not see or experience, but the project I believe can still serve as an important reflection on existing norms and power structures.

The main problem that I faced was that due to a lack of access and personal limitations, conducting social studies amongst the intended users was difficult. I believe for the project to be successful or any project for that matter it is important to have an approach where the intended users can be a part of the design and also construction. A group that does this very well is the organization Arquitectura Expandida that design and assist in the construction of projects aimed increase safety and give dignity to the people living in vulnerable urban conditions. Since I did not have good first hand sources I based a lot of my decisions on how other architects and organizations like had worked in similar contexts. Using locally available bricks inspired by architects the works of German Sampér and Rogelio Salmona. Both with materials and socially Arquitectura Expandida and Atelier Architecture Autogérée were great sources for inspiration. Another important question is that of privacy.

Although I was able to talk to people outside El Mirador about these issues, again i wasn't able to gather and first hand information from people living in the area. My understanding is that being nude in a group setting is not a common occurrence, which again was a part in my decision to make it separated based on gender. While I wanted to encourage the communal aspect I also chose to include private showers in the project for this reason. Of course the decision for the bathhouse to be nude or not is also not necessarily a permanent decision but one that the users themselves are free to decide.

One of the main questions I was faced with in this project is how to design a project that disrupts without alienating. In the design process we as architects are always faced with the option to conform or to question existing norms and structures and its important to be aware of how the answers will be present for as long as the building stands. In the project I decided to not create a mixed-bathing facility or a building that had separated baths for the sexes. One reason for this is to create a haven for women and children separate from the public street. The building and its functions could then serve as an anchoring point for continuing development to create a more inclusive and safe public setting.

As much as the decision to incorporate facilities for "traditional household task" are meant to ease day to day chores for the caretakers of the household (Most often women.). It also risks reproducing the image of women as responsible for these tasks. In this way of bringing what is usually done in the private of the dwelling into a more public setting my hope is that the project could serve as a setting that could create a mix and blur the boundaries between what is private and public. At the same time also questioning the traditional view of the "private" as feminine and "public" as spaces that are dominated by men.

Lastly the project uses vernacular and readily available materials. While I couldn't delve deeper into construction materials and techniques my intention was for the project to be built with community involvement as I believe this is an important part of creating ownership for the users. Hence I've chosen to work primarily in a one-story building and with materials such as brick and bamboo that area readily available in the Colombia and can easily be assembled without the need for advanced machinery.

Citation

Aaland, M. (1980). Sweat: The Illustrated History and Description of the Finnish Sauna, Russian Banya, Islamic Hammam, Japanese Muro, and American Indian and Eskimo Sweatlodge. Photographs by the author. Pomegranate Artbooks. ISBN-13: 978-0938661029

Alidoust, S., & Bosman, C. (2015). Planning for healthy ageing: How the use of third places contributes to the social health of older populations. Ageing and Society, 35(3), 589-612. https://doi.org/10.1017/S0144686X1800071X

Croutier, A. L. (1992). Taking the Waters: Spirit, Art, Sensuality (1st ed.). Abbeville Pr.

Crisis Group. (2022, December 12). Hard Times in a safe haven: Protecting Venezuelan migrants in Colombia. Retrieved January 25, 2023, from https://www.crisisgroup.org/latin-america-caribbean/andes/colombia-venezuela/hard-times-safe-haven-protecting-venezuelan

Gehl, J. (2010). Cities for people. Island Press.

Grundström, K. (2005). Gender and Use of Space. Lunds Tekniska Högskola. Department of Architecture and Built Environment, Lund University. Retrieved January 30, 2023, from https://lup.lub.lu.se/record/628581

Grundström, K. (2009). Periferins micrópolis - genus, rum och fattigdom i Costa Rica. [Doctoral dissertation, Lunds Tekniska Högskola]. Department of Architecture and Built Environment, Lund University.

IFC. (n.d.). Bogotá Cable Car: A New Link to Social and Economic Progress. Retrieved May 3, 2023, from https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/cm-stories/bogota-cable-car

Jacobs, J. (1961). The death and life of great American cities. Random House.

Jarnes, M. (2016, November 5). Washed up? Tokyo's iconic communal bath houses face an uncertain future. The Japan Times. Retrieved January 9, 2023, from https://www.japantimes.co.jp/life/2016/11/05/lifestyle/washed-tokyos-iconic-communal-bath-houses-face-uncertain-future/

Jessel, E. (2017, November 9). 'if I'm stratum 3, that's who I am': Inside Bogotá's social stratification system. The Guardian. Retrieved January 25, 2023, from https://www.theguardian.com/cities/2017/nov/09/bogota-colombia-social-stratification-system

Kido, T. (2012). Skinship. PhMuseum. Retrieved January 29, 2023, from https://phmuseum.com/takakokido/story/skinship-be8c0f9223

Kleiner, D. (2009, September). 17. Bigger Is Better: The Baths of Caracalla and Other Second- and Third-Century Buildings in Rome. [Video]. YouTube. https://www.youtube.com/watch?v=zhon2e3vfTo

Localidad de Ciudad Bolívar. (n.d.). Bogota.gov.co. Retrieved January 25, 2023, from https://bogota.gov.co/mi-ciudad/localidades/ciudad-bolivar

Manzana del Cuidado de Ciudad Bolívar. (n.d.). Sistema Distrital de Cuidado - Bogota. Available at: https://sistemadecuidado.gov.co/manzanasdelc

Mingoia, J. (n.d.). Baths of Caracalla – Smarthistory. Retrieved January 14, 2023, from https://smarthistory.org/baths-of-caracalla/

Numbeo. (n.d.). Crime in Bogotá. Retrieved March 7, 2023, from https://www.numbeo.com/crime/in/Bogota.

ONLYinJAPANWAORYU. (2018). Inside Tokyo's bath houses. [Video]. YouTube. Available at: https://www.youtube.com/watch?v=XDo9IGDVgsw&list=LL&index=3&t=5s (Accessed: January 25, 2023).

Pearson, C. (2020). The Architecture of Bathing: Body, Landscape, Art (Illustrated). The MIT Press.

Tzedopoulos, Y. (2018). THERMALISM IN GREECE: AN OLD CULTURAL HABITUS IN CRISIS. Retrieved January 14, 2023, from https://www.redalyc.org/journal/5536/553658822005/html/

World Bank. (n.d.). Colombia Data. Retrieved January 25, 2023, from https://data.worldbank.org/country/colombia

Figures

Presented in order of appearance.

Kira, A. (1976). The bathroom. Viking Pr.

Medeiros, A. (2022). Steam coming out from soil. [Photograph] Retrieved March 8, 2023, from https://www.pexels.com/photo/steam-coming-out-from-a-soil-13293909/

Alma-Tadema, L. (1899). The Baths at Caracalla. [Painting]. Public Domain. Retrieved March 8, 2023, from https://upload.wikimedia.org/wikipedia/commons/0/0e/The_Baths_at_Caracalla.jpg

Wellcome Collection. (u.d.). Baths of Caracalla, Rome, seen from N-E, restored [Photograph]. Retrieved March 8, 2023, from https://wellcomecollection.org/works/evxbgntq?wellcomeImagesUrl=/indexplus/image/M0007348.html

Penn State University Libraries. (2006). Baths of Caracalla: Plan. [Photograph]. Flickr. Retrieved March 8, 2023, from https://www.flickr.com/photos/psulibscollections/5781162437

Paulin, E. (1880). Conjectural reconstruction of the interior of the Baths of Diocletian in a watercolor. [Painting]. Retrieved March 8, 2023, from https://colosseumrometickets.com/wp-content/uploads/2018/10/Conjectural-reconstruction-of-the-interior-of-the-Baths-of-Diocletian-in-a-watercolour-by-E.-Paulin-1848-1915.-810x450.jpg.webp

La Pizza, G. (2019). Basilica di Santa Maria degli Angeli e dei Martiri in Rom. [Photograph]. Retrieved March 8, 2023, from https://upload.wikimedia.org/wikipedia/commons/3/3c/Basilica_di_Santa_Maria_degli_Angeli_e_dei_Martiri_-_22-11-2019.jpg

Jordiferrer. (2016). Santa Maria degli Angeli (Rome). [Photograph]. Retrieved March 8, 2023, from https://upload.wikimedia.org/wikipedia/commons/c/ca/2016_Santa_Maria_degli_Angeli_e_dei_Martiri_08.jpg

Keyland, N. (2016). Värmland. Östmark socken, Övra Busken, från nordost. Belägen ett stycke norr om Röjdåfors [Photograph]. Digitalt Museum. Retrieved from https://digitaltmuseum.se/021016955627/varmland-ostmark-socken-ovra-busken-fran-nordost-belagen-ett-stycke-norr

Norberg, O. (1953). Fo157348 [Photograph]. DigitaltMuseum. Retrieved March 8, 2023, from https://digitaltmuseum.se/021016102866/fo157348

Hellstén, J (2016) Cooling off outside of Kotiharju sauna [Photograph]. MyHelsinki. Retrieved March 8, 2023, from https://edit.myhelsinki.fi/sites/default/files/styles/column_full/public/2017-05/kotiharju_sauna_in_helsinki_photo_jussi_hellsten_visit_helsinki.jpg?itok=-F8abnsH5

John Cramer. (2002). Takaragawa Onsen Rotenburo [Photograph]. Retrieved March 8, 2023, from https://www.flickr.com/photos/johngcramer/6793919631/

Huynh, H. (n.d). The author prepares for a soak at Kusatsu Onsen Otakinoyu Awaseyu Partition Baths [Photograph]. Lonely Planet. Retrieved March 8, 2023, from https://lp-cms-production.imgix.net/2020-09/Kusatsu%20Onsen%20Otakinoyu%20Awaseyu%20Partition%20Baths%20-%20Hai%20Huynh.jpg?auto=format&q=75

Honami, E. (n.d). Illustration of Takara-yu [Painting]
Retrieved March 8, 2023, from https://pbs.twimg.com/media/FOpcT89UcAUZgRi.jpg

Schemata Architects Plus & Jo Nagasaka. (2020). Koganeyu. [Photograph]. ArchDaily. https://www.archdaily.com/947215/koganeyu-schemata-architects-plus-jo-nagasaka/5f5637e5b-35765fa56000667-koganeyu-schemata-architects-plus-jo-nagasaka-photo

Schemata Architects Plus & Jo Nagasaka. (2020). Koganeyu. [Photograph]. ArchDaily. https://www.archdaily.com/947215/koganeyu-schemata-architects-plus-jo-nagasaka/5f563795b35765fa56000661-koganeyu-schemata-architects-plus-jo-nagasaka-photo

Schemata Architects Plus & Jo Nagasaka. (2020). Koganeyu. [Photograph]. ArchDaily. https://www.archdaily.com/947215/koganeyu-schemata-architects-plus-jo-nagasaka/5f563743b3576574520004d1-koganeyu-schemata-architects-plus-jo-nagasaka-photo

Schemata Architects & Jo Nagasaka. (2020). KOGANEYU Wellness Centers [Image]. Archello. https://archello.s3.eu-central-1.amazonaws.com/images/2020/09/09/schemata-architects---jo-nagasaka-koganeyu-wellness-centres-archello.1599667698.0711.jpg

Souteyrat, J. (2013) Japanese males enjoying a hot bath at Takara-yu, a sento in the Kita-senju area, Adachi ward. [Photograph]. Retrieved March 8, 2023, from https://www.jeremie-souteyrat.com/image/I0000sWjOGjCMNuE

Textures.com (n.d). SNOW0158 [Photograph]. Retrieved March 8, 2023, from https://www.textures.com/download/Snow0158/122090

Pixabay (n.d.) River between trees. [Photograph]. Pexels. Retrieved March 8, 2023, from https://www.pexels.com/photo/nature-forest-waves-trees-2438/

Pixabay (n.d.) Brown Surface Beside Body of Water in a Distant of Mountains Under White Clouds during Daytime. [Photograph]. Pexels. Retrieved March 8, 2023, from https://www.pexels.com/photo/brown-surface-beside-body-of-water-in-a-distant-of-mountains-under-white-clouds-during-daytime-163992/

German del Sol. (n.d.). Geometric Hot Springs [Image]. ArchDaily. Retrieved March 9, 2023, from https://www.archdaily.com/4190/geometric-hot-springs-german-del-sol/500eefe-028ba0d0cc7000e8e-geometric-hot-springs-german-del-sol-image

German del Sol. (n.d.). Geometric Hot Springs [Image].. ArchDaily. Retrieved March 9, 2023, from https://www.archdaily.com/4190/geometric-hot-springs-german-del-sol/500eefb-628ba0d0cc7000e84-geometric-hot-springs-german-del-sol-image

Nino, J (2021). Aerial View of a Metropolitan Area. [Photograph]. Pexels. Retrieved March 8, 2023, from https://www.pexels.com/photo/aerial-view-of-a-metropolitan-area-9824368/

magdalena.paluchowska (2014). View of Ciudad Bolivar. [Photograph]. depositphotos. Retrieved March 8, 2023, from https://se.depositphotos.com/44367905/stock-photo-view-of-ciudad-bolivar.html

Illimani Park. (n.d.). Google Maps. Retrieved March 9, 2023, from https://www.google.com/maps/place/Illimani+Park/@4.5478435,-74.1627585,3a,75y,117.41h,89.01t/data=!3m6!1e1!3m4!1svHoR9oqpmLfOF4LEpLi9UA!2e0!7i13312!8i6656!4m6!3m5!1s0x-8e3fa1d7c2169d4d:0x4b922b8c94b562c2!8m2!3d4.5478388!4d-74.1611822!16s%2Fg%2F-11b7hl7l16

Lure Bogotá. (2018). [Photograph of Teatro Nacional]. Retrieved March 9, 2023, from https://www.lurebogota.com/wp-content/uploads/2018/06/Nacional2.jpg

Gerlach, F. (2016). Östermalm's Temporary Market Hall / Tengbom. [Photograph]. ArchDaily Retrieved March 9, 2023, from https://www.archdaily.com/788616/ostermalms-temporary-market-hall-tengbom/574e4877e58ece87b2000094-ostermalms-temporary-market-hall-tengbom-photo

Klotz, A. (n.d.). Dois Trópicos by MNMA Studio. [Photograph]. Architonic. Retrieved March 9, 2023, from https://www.architonic.com/fr/project/mnma-studio-dois-tropicos/20188698#&gid=null&pid=19

Pearson, C. (2020). [Photograph of outdoor shower at Naturbad Riehen]. Retrieved March 9, 2023, from https://www.christiepearson.ca/wp-content/uploads/2020/09/004_005-outdoor-shower-naturbad-riehen-2048x1536.jpg

Sociedad Colombiana de Arquitectos. (2015). [Photograph of the Salmona building]. Retrieved March 9, 2023, from https://sociedadcolombianadearquitectos.org/home/wp-content/uploads/2015/11/salmona-sca-post-1.jpg

Arquitectura Expandida. (2022). [Photograph of El Bicho building]. Retrieved March 9, 2023, from https://arquitecturaexpandida.org/wp/wp-content/uploads/2022/08/el-bicho-feat-1038x576.jpg

Arquitectura Expandida. (2016). [Photograph of La Potocine building]. Retrieved March 9, 2023, from https://arquitecturaexpandida.org/wp/wp-content/uploads/2016/07/La_Potocine_cb-35-1038x576.jpg