

MOTION ON THE WATER

Volume

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Cultural link “Motion on the water”

How are cities approaching the presence of a river and the use of this water by the public who live in the city? To what extent can city rivers and waterways be part of people’s daily lives and the way they enjoy the city? What is the relationship between the human body and water? Can the water surface be a connecting element, where people can gather, use it practically in their daily commute or as leisure? How can cities, connect their spaces, areas, its people, and its cultural activities by using the water in the city?

Abstract

This paper will examine the cultural link “Motion on the water”, which is set to connect two parts of the city of Rotterdam and the possibilities of it changing the physical and social setting in the surroundings. The background issue addressed in this paper is related to the connectivity and functionality of a cultural link. The main function is a center for cultural performing arts, which includes a vast public outdoor space and simultaneously serves functionally as a pedestrian and bicycle bridge for the resident of the city. The cultural link is more than just an object which is connecting two waterfronts and two parts of the city. The main idea is to use this cultural link as urban acupuncture, affecting the surrounding areas in the South of Rotterdam and bringing upliftment to its residents through culture, through connection to the city, and through functional daily use as a bicycle and pedestrian crossing.

Urban acupuncture.

Currently, the city of Rotterdam is segregated into a few parts, mainly by water. Connections and bounding elements are lacking between the different city districts which are separated by water. This is partly because of the Maas river, which is dividing the North from South parts of the city, running straight through. People and neighborhoods on opposite sides of the Maas river often feel disconnected from each other. There are no bounds in-between and access to the other side is currently limited. In the past water was functioning as a connecting element and Rotterdam had a vibe of a vibrant city full of boats and more active water life than it has now. Revising the history and previous lifestyles, some changes have to be made to bring back some of this vibrant water life. Especially when thinking about the Maashaven, which is a boundless water field that used to be busy with boats, an outdoor swimming pool, and a cable ferry. Now the Maashaven is simply a quiet and empty water field.

The Maashaven is an excellent urban acupuncture starting point. These major changes can bring back life on the water and connect the residents of the north and the south both socially and physically.

One of the urban acupuncture generators is Jaime Lerner. Lerner is known for transforming his city into a sustainable and livable community. From his pioneering work, we can learn that the intervention doesn’t need an enormous size to positively impact the city. His book, Urban Acupuncture (2014), contains many study cases showing that urban acupuncture can be done starting with one street, one person, and even one project, which then creates the ripple effect throughout their communities and uplifts city life.

As J. Southern, architect and professor from Los Angeles, stated: “Urban acupuncture is a surgical and selective intervention into the urban environment”. Southern explained that the urban acupuncture approach treats cities like a living organism. There are several ways to approach this idea and the interventions can vary from small to big scales. He also believes that residents can benefit from smaller parks or “urban lounges” that are enjoyed while they walk to “that favorite coffee place”.

Motion on the water.

The cultural link «Motion on the water» is urban acupuncture that changes the urban environment and connects the north and the southern districts of Rotterdam. It brings together local inhabitants and invites tourists due to its fascinating location and vast facilities because it acts as a multifunctional park – square on the water which is also serving as a physical connecting element between Tarwewijk and Katendrecht. From the Tarwewijk side, it is connected to the existing green square “Balkon aan de Maashaven” which local inhabitants like to use as a gathering point. And from the Katendrecht side it connects to Sumatraweg which leads to Deli plein square and further to the Rijnhavenburg. This link creates a natural and closer connection to Kop van Zuid and further to the Northside of Rotterdam

The architectural language of this intervention is inspired by inhabitant movement, dancer movements, waves, playfulness, and various activities. It is a merging and connecting element on the water. It will bring back the vibrant historical vibes that Rotterdam is known for but in a different and new intuitive way.

The main purpose of this urban acupuncture object is to connect society and give qualitative space for work or leisure. As an urban acupuncture object, it impacts the surrounding environment and helps to grow and develop it in a positive way by introducing outdoor activities, creating a space for young people to have their dance practices. Additionally, it creates a greater footprint in Rotterdam, as it will invite more visitors who will come to see the intervention and attend various events and festivals. This ultimately will increase the revenue streams of local shops, eateries, and businesses and will increase the visibility of the Rotterdam cultural scene.

The “Motion on the water” program includes various indoor and outdoor performances and activities. The circular shape allows visitors to experience an amazing 360-degree view. The bridges, rooftops, and ramps allow a change of view from the water level up to 6 meters above the water. There are several buildings on this platform and all of them have different functions such as rehearsal studios, multifunctional spaces, an info center, a snack bar, and a watersport activity center. The main building is an art performance center which is very flexible in the sense that it remains the idea of a black box and can hold different events and concerts inside of the building or on its vast roof terraces and surrounding dock platforms.

Space and story

Experiencing architectural space is like experiencing dance. It is about emotions and how they affect the mind and the story behind them. The story is everything. The site has a significant impact on a project and its result due to restrictions and materiality that can influence the design and developing process. A choreographer can adjust and include the specifics of the site into the story because space can be poetic and very demanding. The entire performance can have multiple twists and awaken our awareness and sensitivity. People are open and willing to play and test their emotions and senses. Water presence can play a significant role in such a performance because it becomes the main story element. It provides extra dimensions as reflection, light, and humidity.

The experience is the story. It builds up from small steps, different angles, and viewpoints. It allows for use no matter the weather conditions, time of day and includes activities to be seen in different settings, such as on the platform, buildings, or free-standing floating platforms. One can be in the middle of this boundless water surface and surrender. The middle element is symbolizing the sun in Latvian tradition, which translates as a symbol of fertility, eternal movement, and life.

“Motion on the water” is designed in such a way that everyone can find his spot either outdoor or indoor, in the water, or on the terrace. It is the space where people will connect and experience new emotions. It is a place where new stories will grow.

Site-specific. Space.

Koplowitz has said that “When creating a site-specific performance, one is dealing with multiple levels at once: the architecture of the site, its history, its use, its accessibility. I’m interested in becoming a part of the design and rhythm of the site and amplifying that”. (Koplowitz, 1997) This means that architecture can influence the dance, its movement, rhythm, and perception, and also emotions that dance can bring. Architecture can shape the entire dance performance. Contemporary dancers are constantly interested in trying something new; they like to meet the challenges and find new ways to perceive the space and include the audience in the performance. Architecture can control the performance, but it is also an integral part of the dance. Lefebvre explains it by saying that “Spaces are not just spaces, they have constructed environments that actively engage with their content, users, contexts, and environments to construct meanings. “Architecture consists of constructed environments. Those are indoor and outdoor spaces that can be further divided into semi-public, semi-private, and private. The architectural system is controlling transmission from one to another. There are multiple options for how dancers and people can use all different spaces and surfaces in this intervention. The project consists of indoor and outdoor areas which can be used according to performance or weather conditions. There is space for imagination and new challenges.

Space commands bodies, prescribing gestures, routes, and distances. Each space can influence the public and dancers in different ways. It can be done by external elements such as verticality, symmetry, color, numbers, and rhythms from windows, columns, doors, and other elements that might be important in the process. The meaning and specific architecture can also affect the space and movement—for example,

galleries, squares, and courtyards. Every architectural object and space give a context to and show an understanding of the space.

It is interesting to see how architecture influences the public, how much architecture can control the public and their view towards architecture, and most importantly, how, in return, the audience perceives the architecture.

The “Motion on the water” buildings are designed in such a way that they can challenge choreographers and make various site-specific performances. Locations on the rooftop, on the stairs, free-standing docks, or on the floating stages can be grouped in different sets.

One can come with his boat and receive a different kind of experience from a different viewing angle. This intervention is a big playfield and can be adjusted in many ways. It also has an opportunity to grow and adjust by adding more floating elements and architectural objects.

Architecture

“Motion on the water” is designed as a single loop of vast public space that includes a promenade with a panoramic view. The circular shape resembles the continuous and endless movement in a physical and psychological context. The free-standing docks on the horizontal level resemble the ripple effect. The distance increases between them and the center point. Additionally, the vertical waves create a visual notion of the motion of a constant movement. It gives the impression of an infinity walk and the experience of a 360-degree panoramic view. In some places, there is no sharp distinction between floor and walls, it continues as one whole band. The dancers and the audience can be on the pedestrian level or the top of the wave.

The entire deck and floating stages are made from recycled composite material. The pet bottles are collected from the waste throughout the whole country and recycled into new products. The color can vary from brighter blue to dark grey. It is nationally and worldwide known as one of the circular concept interventions for public use and in addition to the circular design as a closed circle concept, the circular use of waste into a renewed product adds to the circular concept sustainably.

The tinted glass walls in the main buildings are used to show the idea from a Danish - Icelandic artist Olafur Eliasson that color can change the perception of the interior spaces. It gives

new perspectives and understanding of the meaning of the colors in our daily lives and in this way shows the versatility and endless diversity of design as a whole.

When entering the circle, the main promenade is passing by a dance rehearsal studio, via series of steps and ramps, as it reaches roof terraces, and provides spectacular views. All performance and rehearsal spaces are transparent with tinted glass walls. This gives the possibility to everyone to see what is happening inside. Outdoor spaces are used as stages for concerts, performances, festivals, and art installations. Upon stepping on the “Motion on the water” viewing platform, it unveils the view towards the entire circular intervention. Magnificent.

Upon arrival at the Art Performance center, visitors enter the lobby where they can enjoy a significant view towards the harbor and can enjoy fine dining. On the same floor is a district size performing space with a maximum of 400 flexible seating configurations. The center provides rehearsal studios for artists, storage spaces, 3 generous roof terraces which can be adjusted for various events and performances.

Conclusion.

This intervention on the water is an excellent start for a catalyzing urban acupuncture. Rotterdam’s city needs to open up its water system and give people a chance to use the water as a public gathering space, a way to connect socially and physically, and a way to add value to their daily movement across the city. The cultural Link “ Motion on the Water” will do exactly this; bringing the water of Rotterdam alive again and bring more visitors and tourists to this area.

“THE SPECIAL EXPERIENCE IN ARCHITECTURE IS WHAT DETERMINES AND ALLOWS FOR HUMAN INTERACTIONS “ BASED ON SPECIAL EXPERIENCE THE MOTION ON WAS IS BORN

FOREWARD

The body is the common linkage between dance and architecture. I used the dance performing center as a catalyst for the entire intervention. By employing spatial concepts as perceived in dance to inform the design of architectural space. The creative process went through dance and space research to architecture and how these two art disciples can coexist and complement each other. In this logbook, I hope to give you an overview of my journey.

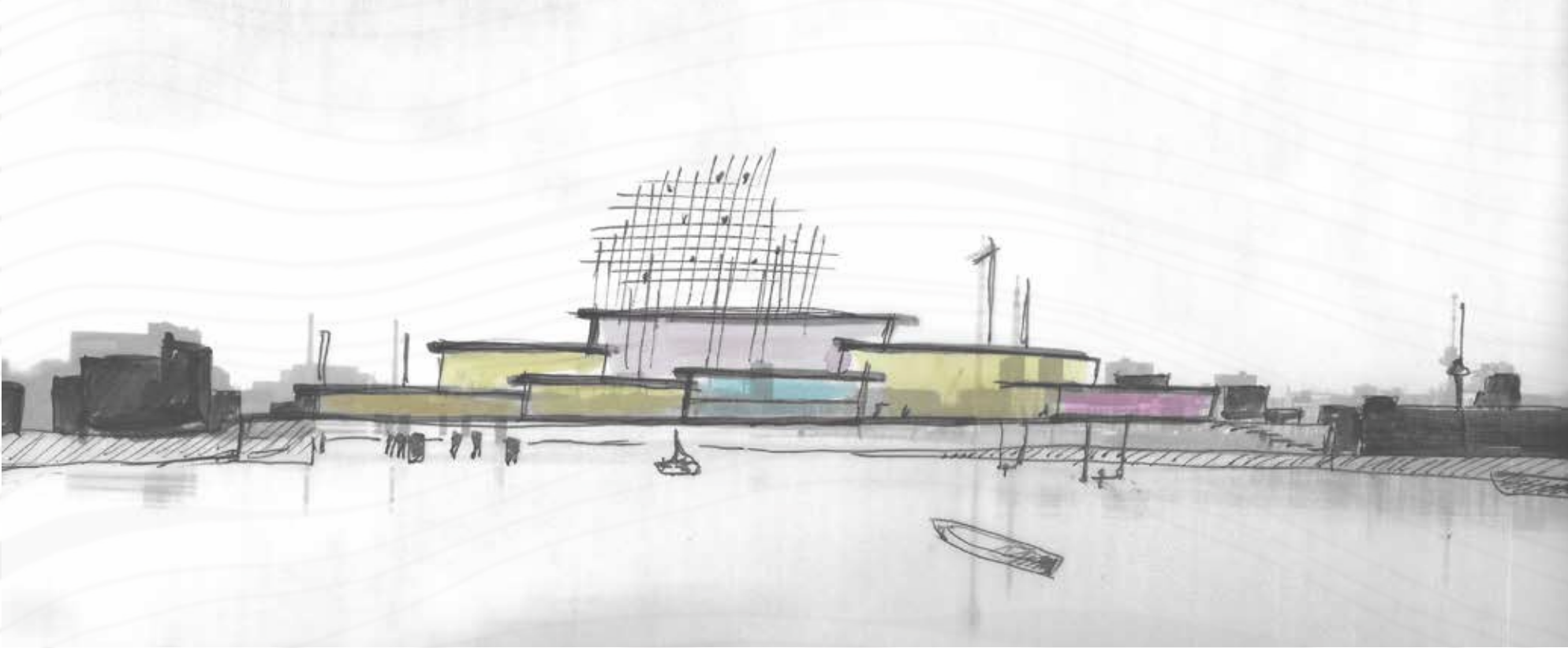
Hypothesis

If Masshaven harbor has a floating cultural performance hub with variable public space, then this venue would connect Katendrecht and Tarwewijk and activate surrounding areas and bring back the vibrant atmosphere from the past.

CONTENT

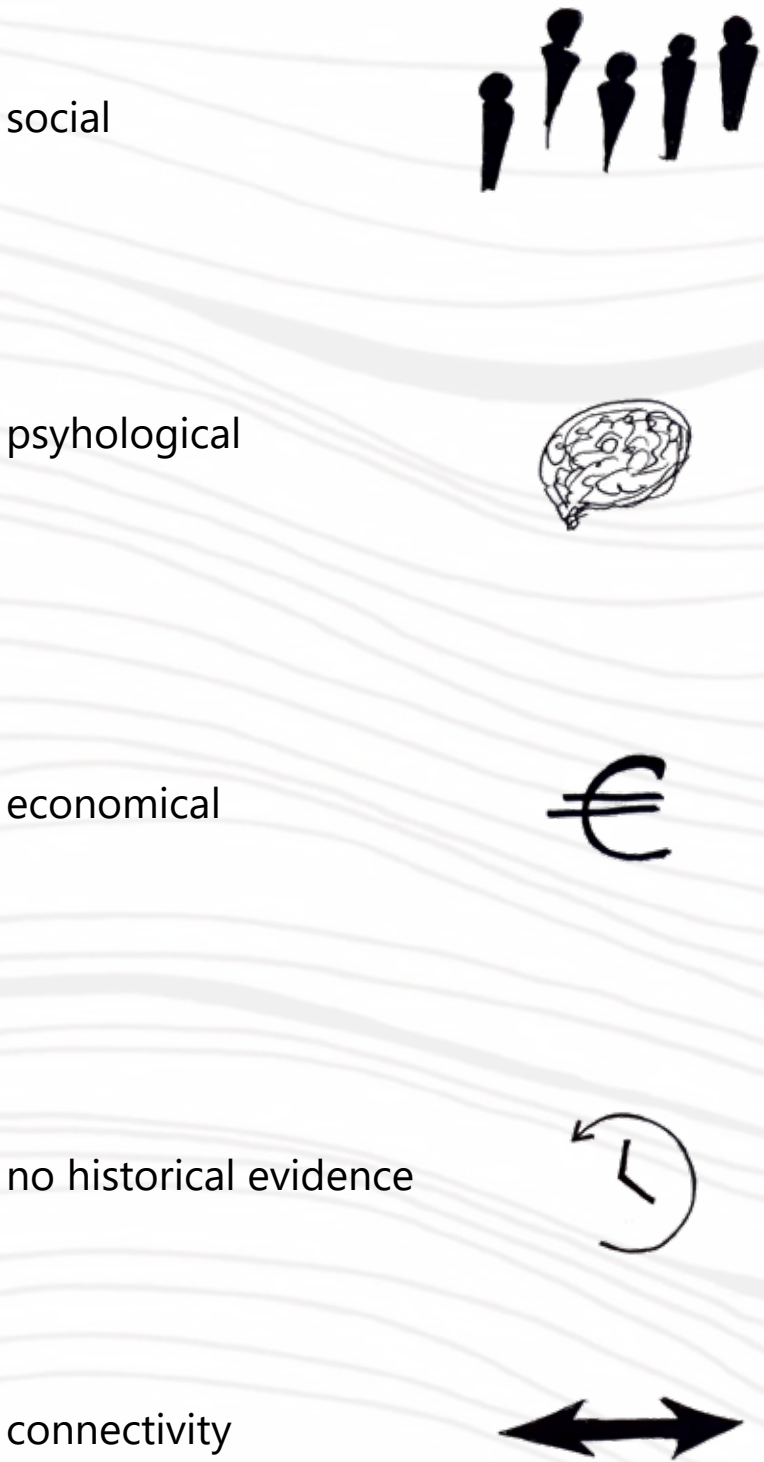
- INTRODUCTION
- CONCEPT IDEA
- THEORETICAL BACKGROUND
- FIELD STUDY
- CASE STUDIES
- 3 CONCEPTS
- DESIGN MANUAL
- PRELIMINARY DESIGN
- DEFINITIVE DESIGN
- CONSULTANTS
- LITERATURE

CONCEPT IDEA



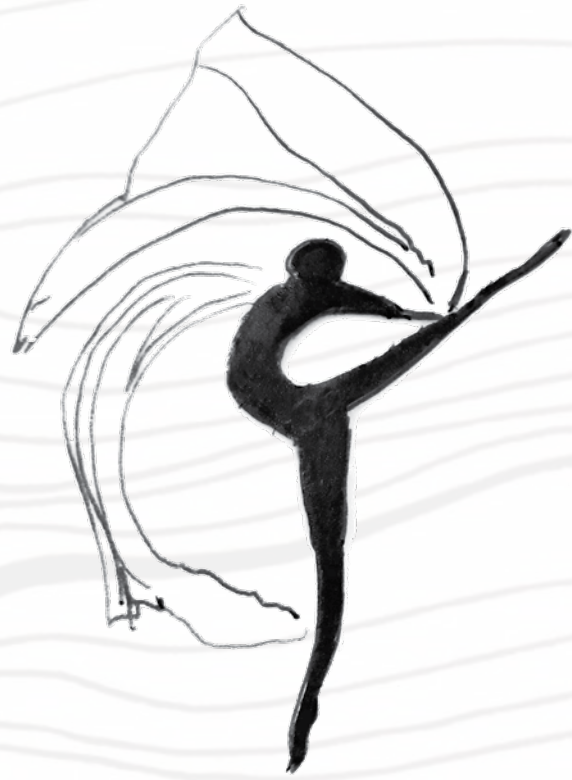
In the middle of Maashaven rises an eye catching building: a floating structures with great public space and cultural events. It is a unique project on water that connects art lover, artists, local inhabitants and tourists.

PROBLEMS - URGENCIES



CONCLUIONS:
Urban intervention can help to solve many of these problems and urgencies. Cul-
tural intervention with qualitative space is part of our future.

MOTIVATION



I have always been interested in dance and performing arts. In the last years, my focus is more on contemporary dance and choreography. I find it amazing how flexible they can be, their capability of repeating difficult poses and movements. After attending many dance performances my main observation is that that dancer's only tool to express all his emotions is his body. I'm intrigued by the way dancers take over space and how they communicate with the audience.

I believe that architects, designers, and set designers can learn about spatial harmony and spatial awareness from dancers and choreographers. These artists have a lot to tell. They have the **freedom** that architects do not have.



Dancing **on** the structure, **in** the structure, **under** or **above**? **Why not**? Dancers like challenges and they like to challenge themselves both in terms of dancing and in terms of environment and location. They are always striving for something new and expanding their capabilities and emotional boundaries. Such a design object would expand the opportunities for dancers.

Therefore an object on water is great challenge for dancers and audience to bring the motions and senses to the next level. And above all if this object is not a black box and hidden from a curious gazes but is open to the public and is playing and involving surroundings and people.



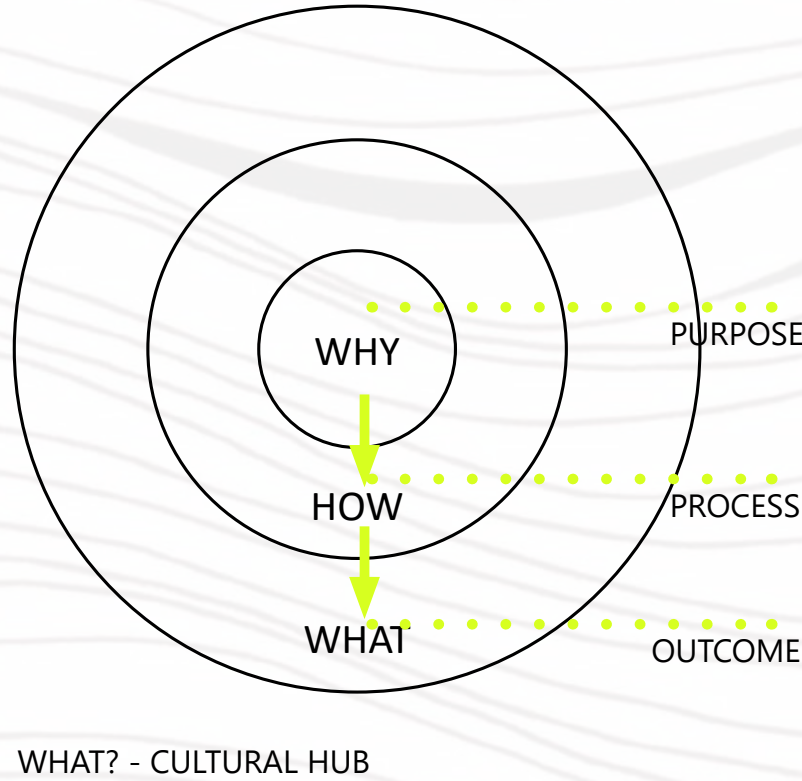
I come from Northern Europe where the weather is harsh and winters are cold. Nevertheless, almost every city in my country has an amphitheater type of open-air stage where people can gather and see various categories of performances. Such places have many advantages. Especially in situations when there is a necessity for the best ventilation and a safe distance from each spectator, such an open-air performance place has many positive aspects.

SPACE FOR EXPERIENCE



THE MAKING

SENSES- ARCHITECTURE - DANCE- PUBLIC SPACE
(motions)



HOW?

- By learning to better understand human – spatial relationship
- By finding the importance/ context
- By searching similarities in motion
- By creating harmony and awareness
- By connecting like- minded people and two sides of the water
- By introducing concept of body motion

WHY?

- Leads to richer, more meaningful design
- Design architecture that responds to human phenomena, context and site condition



Play with senses and spaces through dance.



Maashaven waterfronts
Water is the playground



Good public place that attracts, connects and invites people

CONCLUSIONS:

The intent is to find an architectural solution for the dance performance space that informs the users of dance and allows dance to inform the definition of the architectural space

THEORETICAL BACKGROUD

RESEARCH DIRECTIONS

DANCE

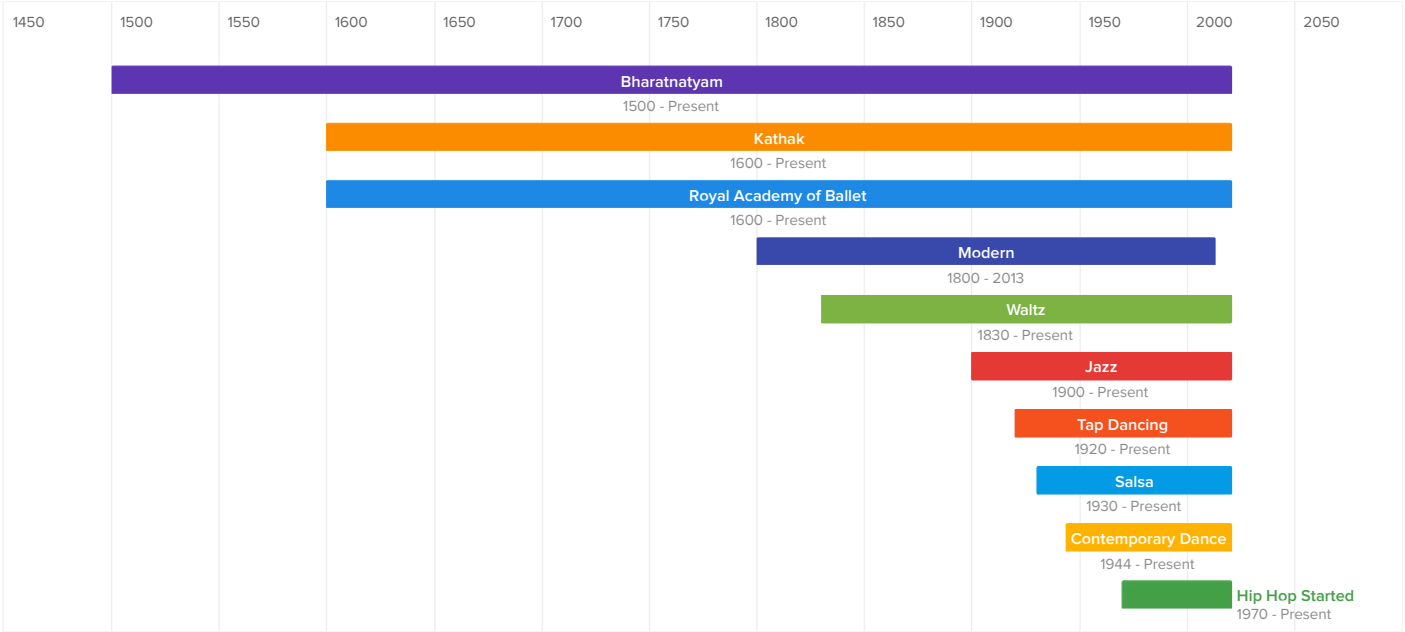
LOCATION

FLOATING ARCHITECTURE
(ARCHITECTURE ON WATER)



DANCE HISTORY

History of Dance



Events

| | |
|--|---|
| <div></div> <div>Bharatnatyam</div> <div>1500 - Present</div> | <p>Bharatanatyam is one of the oldest and most popular forms of classical dance that originated in Tanjore district in Tamil Nadu in South India. The origin of this dance can be traced to the sage Bharata Muni's Natyasastra.</p> |
| <div></div> <div>Kathak</div> <div>1600 - Present</div> | <p>Kathak, one of the eight forms of Indian classical dances, originated from India, traces its origins to the nomadic bards of ancient northern India, known as Kathakars or storytellers. Its form today contains traces of temple and ritual dances, and the influence of the bhakti movement.</p> |
| <div></div> <div>Royal Academy of Ballet</div> <div>1600 - Present</div> | <p>First school of ballet</p> |
| <div></div> <div>Modern</div> <div>1800 - 2013</div> | <p>Modern dance is a broad genre of western concert or theatrical dance, primarily arising out of Germany and the United States in the late 19th and early 20th centuries. Modern dance is often considered to have emerged as a rejection of, or rebellion against classical ballet.</p> |
| <div></div> <div>Waltz</div> <div>1830 - Present</div> | <p>This form was established in the 1830s by Joseph Lanner and the elder Johann Strauss, and from then the waltz was particularly associated with Vienna, although it was popular throughout Europe.</p> |
| <div></div> <div>Jazz</div> <div>1900 - Present</div> | <p>Jazz dancing, and its steps and style, originated from the dancing of African Americans that were brought to America as slaves. Later it was brought from vernacular to theatrical</p> |
| <div></div> <div>Tap Dancing</div> <div>1920 - Present</div> | <p>Tap dancing has evolved considerably to become the art form we know today. Before there were tap shoes, dancers wore soft shoes, or clogs. Tap dancing originated as Juba, a kind of dance practiced by African slaves. It melded with Irish dancing and continued to alter as it encountered the influence of jazz dance.</p> |
| <div></div> <div>Salsa</div> <div>1930 - Present</div> | <p>Salsa represents a mix of Latin musical genres, but its primary component is Cuban dance music. The roots of salsa originated in Eastern Cuba (Santiago de Cuba, Guantanamo) from the Cuban Son (about 1920) and Afro-Cuban dance (like Afro-Cuban rumba)</p> |
| <div></div> <div>Contemporary Dance</div> <div>1944 - Present</div> | <p>Although originally informed by and borrowing from classical, modern, and jazz styles, it has since come to incorporate elements from many styles of dance. Due to its technical similarities, it is often perceived to be closely related to modern dance, ballet, and other classical concert dance styles.</p> |
| <div></div> <div>Hip Hop Started</div> <div>1970 - Present</div> | <p>Hip-hop dance refers to street dance styles primarily performed to hip-hop music or that have evolved as part of hip-hop culture. It includes a wide range of styles primarily breaking which was created in the 1970s and made popular by dance crews in the United States.</p> |

NOTES:

Dance history shows that there are many different dance styles and they are taking space in performance art. That means that these dancers need a space for their rehearsals and performances. Some of them are more particular and specific to the stage setting and floor material than others.

READER

ARCHITECTURE AND DANCE

WHAT IS DANCE?

Dance is the most intense way of moving through space. It is a challenge to translate the feeling that is present in dance to the field of architecture. Architecture professor Zehra Ersoy believes, “We can all be dancers as long as we can develop an exquisite consciousness of our bodily experiences and movement in space.” (Haris, 2014) Lalitaraya writes such words from her dancing practice.

Dance, when you’re broken open.

Dance, if you’ve torn apart.

Dance in the middle of the fighting

Dance in your blood.

Dance, when you are perfectly free.

(Whatley, 2015)

Dance is an art form that showcases movement. But not only by telling a story it also delivers a message to the audience. The body is the tool to express and show feelings. Dance can bring out various emotions ranging from happiness, excitement, and gratitude to sadness, hurt, and exhaustion. But it all belongs to the story, and the same happens in architecture, where each building has its own story.



NOTES:

Dance is a motion that drives humans and brings a lot of emotions and experiences. Think how spectators and tourists will experience this space.

MOTION CAPTURE DIGITAL TECHNOLOGY

Motion capture is digital technology that transposes the surface of a moving body into numerical data. Optical motion capture is able to record the three dimensional trajectories of markers connected onto tight fitting motion capture suit or directly onto the skin.

INVITE SPECTATORS

I would, however, like to mention that in most cases a powerful motivation for creating dance is a desire to affect spectators, to invite them into a deeply embodied experience (Hansen)

JUST DARE TO THINK IN ALL DIRECTIONS. DO WHAT YOU THOUGHT OF DOING. JUST TRY IT OUT (BAUSCH)

SPACE IS BOTH “PRODUCT AND PRODUCER” (LAWSON)

PERCEIVING SPACE



CONCLUSIONS:

“Lawson argues that human spatial experiences are managed by architects, designers, and town planners in particular ways.” The aim is to research to what extend it is possible to manage the space. What are the tool and elements that help to reach it?

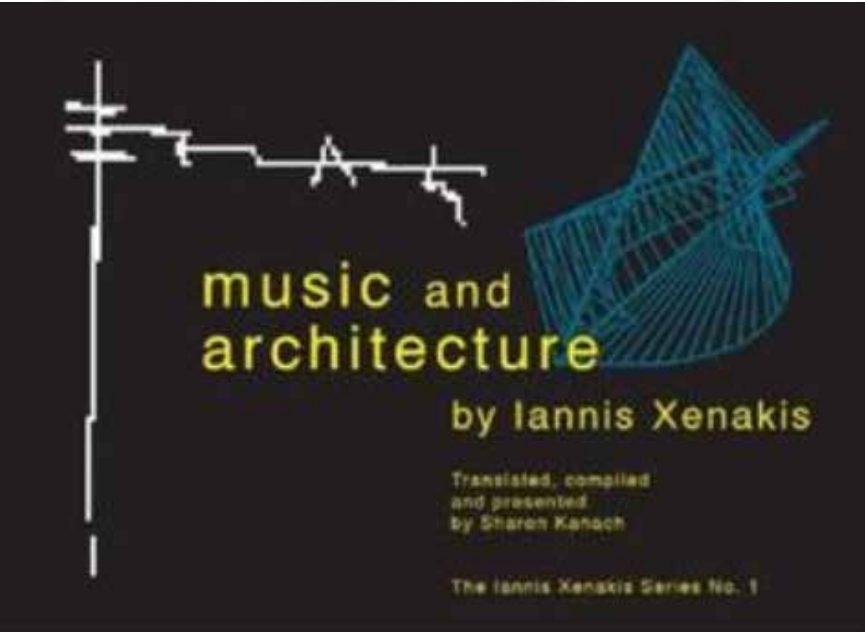
READER

PLACES AND SOURCES OF AUDITIONS AND SPECTACLES

1. The audience (spectators, listeners) must be able to see and hear all video and visual sources without any obstacles.
2. The receptacle-or envelope - in with this pair “audience - source” exists must. The chosen scale must establish an immediate relationship with respective proportions: a large receptacle for large sources, a large receptacle for a large audience.
3. The type of receptacle, is capacity for creating three dimensional space, meaning both the purely geometrical and architectural forms, plus the type of materials used to produce it, must also represent the best solution for the “audience-sources” relationship.
4. Mechanical and electronic devices as well as computers, must be used to optimize the “audience-source” relationship. For example: application for acoustics or light installations as well as quality controls.
5. There is no such thing as one, unique, universal solution that can be generally applied to the “audience-source” relationship.

“MUSIC TO BE SEEN”

“MUSIC INSPIRES ALL SORTS OF FANTASTIC IMAGININGS”



CONCLUSIONS:

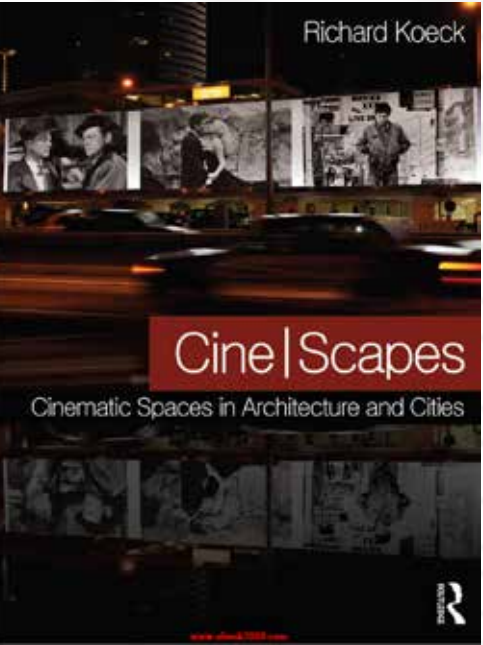
Xenakis suggests doing the calculations and mathematically improve the architecture. It is worth giving a try to include such an option and experience something unpredictable.

CINEMATIC LANDSCAPES

MAIN FEATURES:
- informal
- multipurpose
- offering opportunities for community engagement

CHALLENGE

Human dimension how to connect.



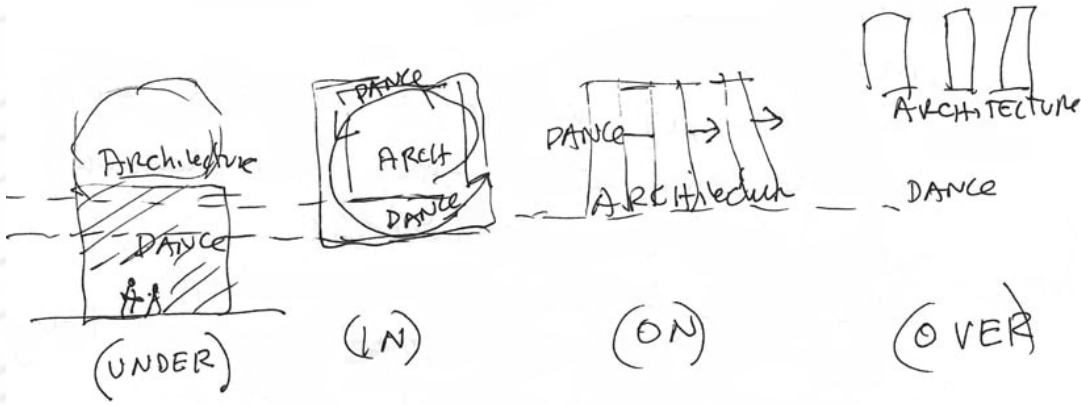
CONCLUSIONS:

Long waterfront lines are “screaming” for intervention and light effects.

READER

Develop Steven’s Holl concept

1. Dance



“ARCHITECTURE IS ABOUT THE MOTION”.... IT HAS POTENTIAL TO MAKE YOU CRY... IT MAKES ME CRY

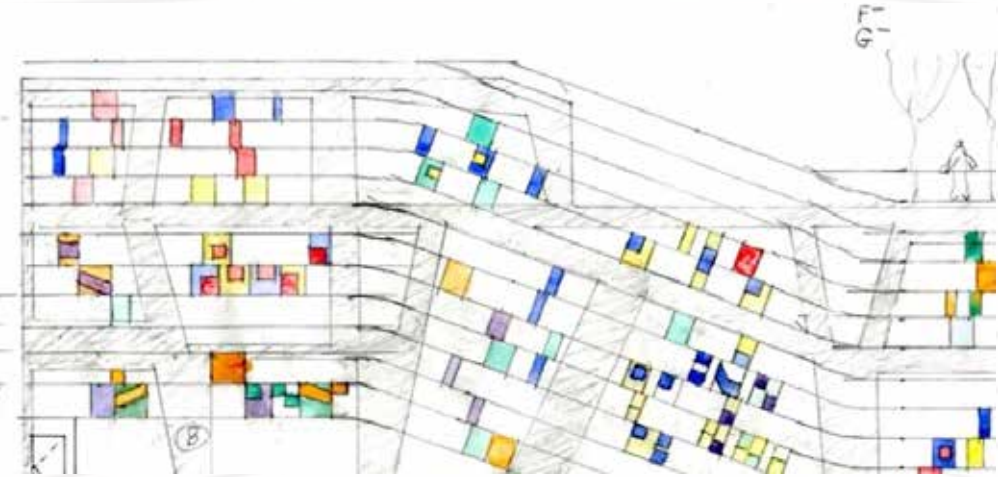


Steven Holl Architects

CONCLUIONS:

Continue Steven Holl’s concept idea. Dancers are under, in, on, and over the surface or object. Play with these spaces and develop new options.

2. Music



Cancers care center

NOTES:

The case studies on Steven Holl’s buildings and his approach to music elements and spaces. He is using transparent and tinted glass to bring playfulness to the building.

SITE - SPECIFIC DANCE PERFORMANCE THAT USES ARCHITECTURE

Koplowitz has said that “When creating a site-specific performance one is dealing with multiple levels at once: the architecture of the site, its history, its use, its accessibility. I’m interested in becoming a part of the design and rhythm of the site and amplifying that” (Butterworth, Wildschut 2018). This means that architecture can influence the dance, its movement, rhythm, and perception, also emotions that dance can bring. Architecture can shape the entire dance performance. Contemporary dancers are constantly interested in trying something new; they like to meet the challenges and find new ways of how to perceive the space, how to include the audience in the performance. Architecture can control the performance but it is also an integral part of the dance. Lefebvre explains it by saying that “Spaces are not just spaces, they are constructed environments that actively engage with their content, users, contexts, and environments to construct meanings” (Butterworth, Wildschut 2018). Architecture consists of constructed environments. Those are indoor and outdoor spaces which can be further divided into semi-public, semi-private, and private. The architectural system is controlling transmission from one to another. Space commands bodies, prescribing gestures, routes, and distances. Each space can influence the public and dancers in different ways. It can be done by external elements such as verticality, symmetry, color, numbers, and rhythms from windows, columns, doors, and other elements that might be important in the process. The meaning and specific architecture can also affect the space and movement. For example, church, galleries, squares, and courtyards. Every architectural object and space are giving a context to and showing an understanding of the space. It is interesting to see how architecture is influencing the public, how much architecture can control the public and their view towards architecture, and most importantly how in return the audience perceives the architecture.

PUBLISHED KNOWLEDGE



Conny Janssen is one of the Dutch choreographers who likes to experiment and challenge her dancers. Her performance **Mirror, mirror** is a good example that shows that she is open to change the environment and adjust to site-specific situations.

NOTES:

The site helps to create a specific performance. It has a unique story to tell. The intervention has a great deal in this newly written story.

SYSTEMS

FOUNDATION

Dance and architecture both need an extremely steady foundation

FORM

Dancer is creating a form and shape so does architectur

SPACE

Without harmony in space, there is just chaos

AXIS

The architect needs to keep his axis in line. Whether it is the walk- ing axis through building or axis of building elements. The dancer has his inner axis which is aligned to avoid any kind of collisions.

CONCLUSIONS:

Architecture and dance have systems. These are the tools, that help to create a framework for architecture and dance. Most important is to bring harmony in the space

DANCE AND ARCHITECTURE. SIMILARITIES

Experiencing architecture is not just a static visual interpretation. To fully understand and appreciate the architectural space one must engage with and observe it. Observing happens by way of movement, movement through space and that requires time and patience. Move- ment includes other processes that humans will have to experience while passing through, interacting with other humans as well as par- ticipating or watching performances and activities within the space.

COMMON TERMINOLOGY

Architecture has a long history and multiple styles and the same can be said about dance. Both go far back in centuries. Some of the terms are the same but they do not necessarily share the same meaning.

- repetition



MT Gap Dance Company

SPACE AND STORY

Experiencing architectural space is like experiencing dance. It is about emotions. How they affect the mind and what is the story behind them. The story is everything. The site has a big impact on a project and its result due to restrictions and materiality that can influence the design and developing process. A choreographer can adjust and include the specifics of the site into the story because space can be poetic and very demanding. The entire performance can have multiple twists and awak- en our awareness and sensitivity.

NOTES:

Space and performers create the atmosphere. Such performance has a story to tell and will create memories.

MEANING

VISUALIZE THE MOTION

Indeed , despite many experiments with motion capture and dance that have evolved in the field of dance practice and research , there are not many tools available that help to interpret or visualize the mo- tion data of dance movements in a meaningful way. (Jo Butterworth)

INVITE SPECTATORS

I would, however, like to mention that in most cases a powerful moti- vation for creating dance is a desire to affect spectators, to invite them into a deeply embodied experience. affect spectators perceptual habits, invite unexpected connections and associations, trigger mo- tor memories, resonate at a sensory and proprioceptive level, push through discomfort to a place of togetherness, invite participation,

BUILDINGS AND SPACES

Lefebvre (1991) and Lawson (2001) suggest that environments and spaces are constructed in a variety of ways. Lefebvre considers con-

cepts of “socially” and “personally” constructed

space, as “real” or “mental” space. Linked to this is the practice of architecture itself. Whilst many architects are assigned or assign themselves to a particular architectural “school” or movement, few provide a concise, generic definition of the term “architecture”. Buildings do not simply appear: they are subject to complex process-

es of planning, designing and re-designing, eventually culmi- nating in construction and realization.

Likewise, towns and cities, largely speaking, are subjects to planning

rules and regulations. They are constructed environ- ments and, as such, dictate and influence how we experience and interpret them. (Jo Butterworth)

UNDERSTANDING OF SPACE

Social construction of space develops through associations and con- notations assigned to particular environments and spaces. Thus cities,

spaces and environments are “constructed” on a number of physical and social levels, influenced by ideology. Such factors can influence our interactions with and experience of spaces. However, the material construction and design of spaces and buildings directly dic- tate the manner in which we physically engage with space.

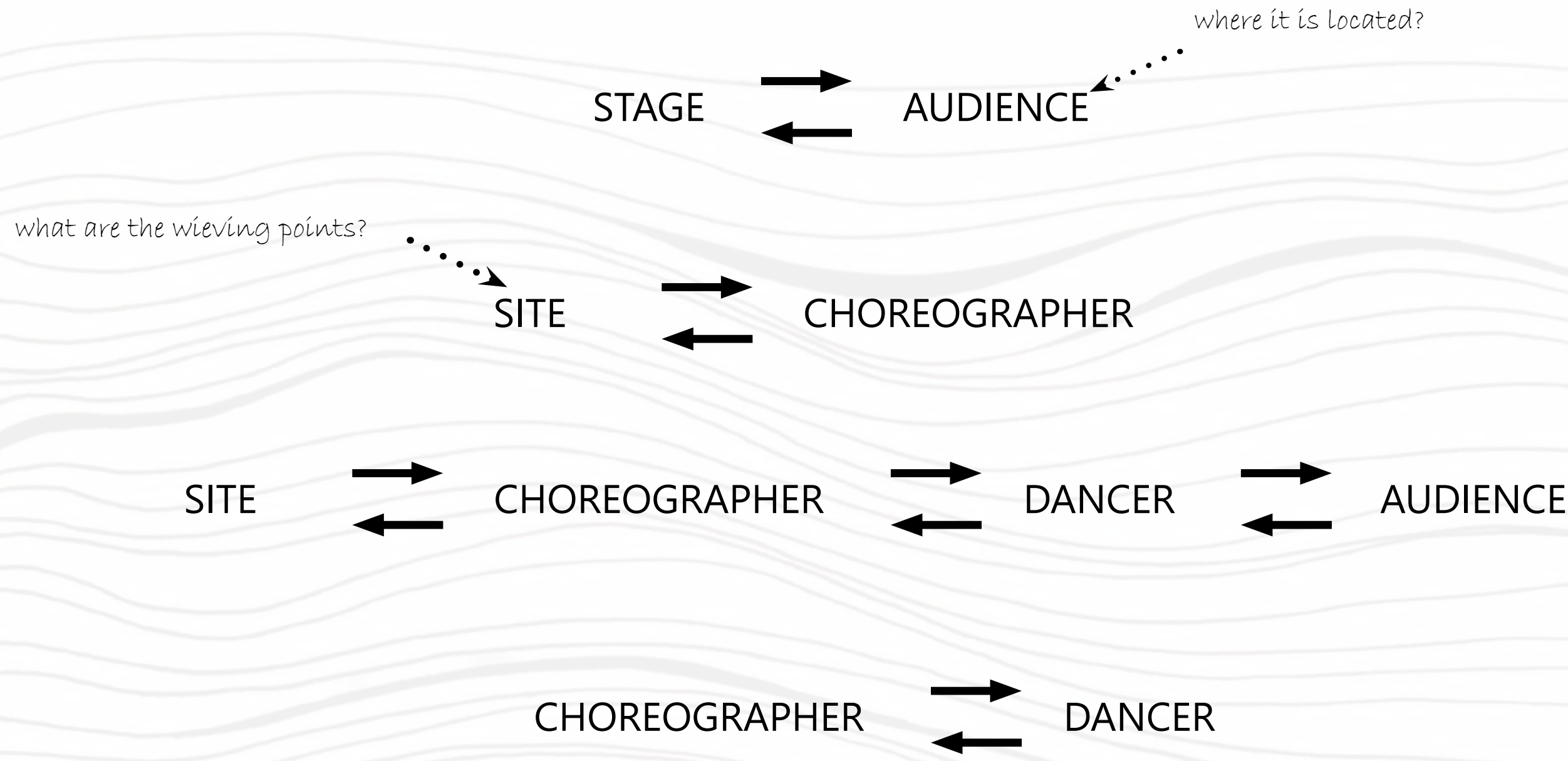
Constructed environments by Lawson:

- Verticality
- Symmetry
- Colour
- Number (of windows, columns, doors, etc)
- Meaning (labels, church, gallery)
- Context (our context when entering a space)

CONCLUSIONS:

The design has to be inviting and transparent, which triggers dancers and specta- tors. The intervention itself capture the motion. These guidelines are a good start- ing point to design the intervention. They will help to better understand the space from all points of view.

RELATIONSHIPS

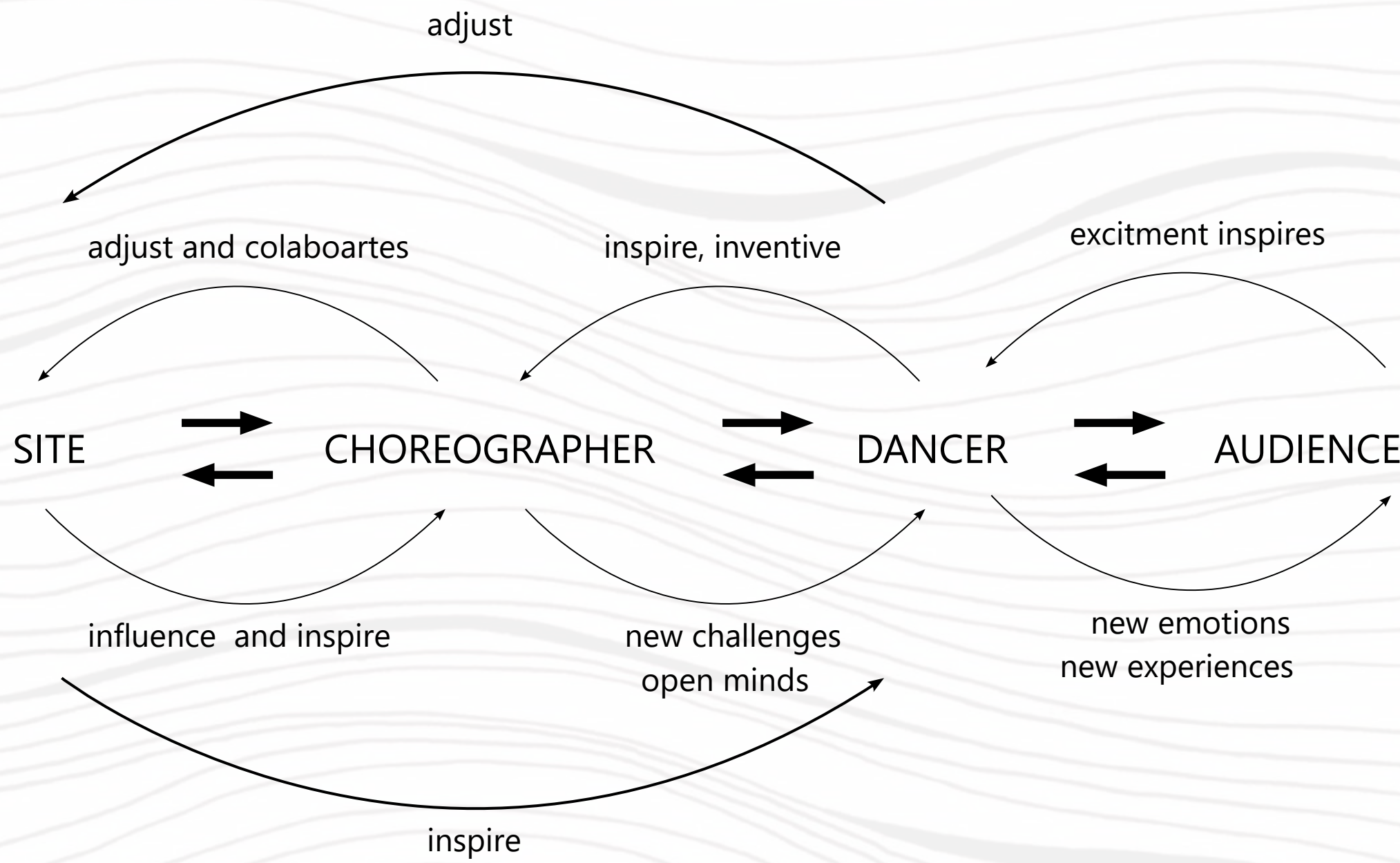


Relationship between the site and the creative process in site – specific dance performance, interrogating the nature of the interaction between site, choreographer, performer and audience. How we experience, perceive and interact with spaces (Jo Butterworth)

CONCLUSIONS:

The connection's strength and bond between the audience and performers depends on how far the audience is from the stage

CONNECT GROUPS



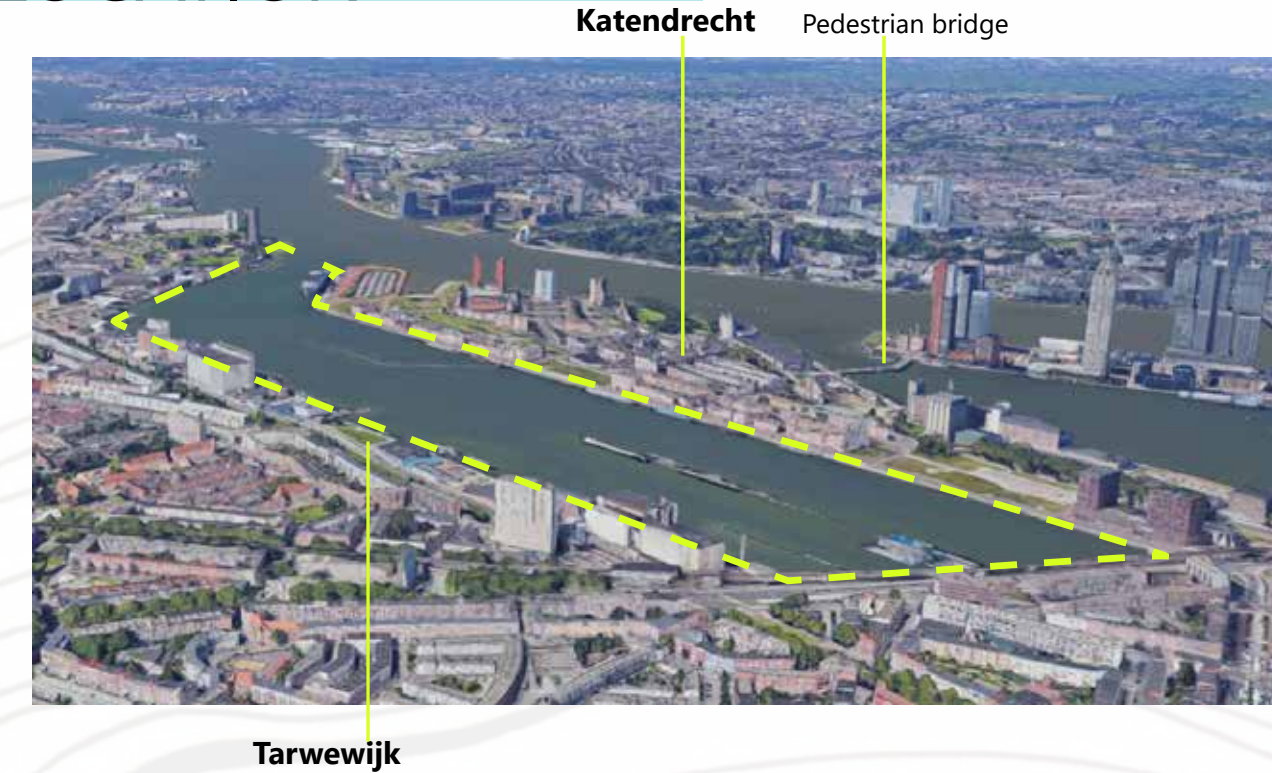
CONCLUSIONS:

It is reflective work and groups resonate with each other.

FIELD STUDY



LOCATION



CONTEXT

Rotterdam is known for its creativity, great size, and innovative projects. It is a vibrant city with a vast water system. Where in this case water is an obstacle between districts. Most of the city parts are quickly accessible but some places do need some improvements.

“ The ability to see the performance and the city together will allow the audience and performer the means to compare the scale, texture, and space of the dance, the architecture, and the city”



It is interesting to look at the South part of Rotterdam because it used to be a vibrant and active part of the city. Nowadays it is a fairly dense living area with poorly designed public space and bad connections between districts. Tarwewijk inhabitants feel disconnected from the rest of the city.

CONCLUSIONS:

Maashaven is disconnecting the city physically and mentally. It doesn't have a theme like the rest of the harbors. It is challenging due to its enormous size and dimensions.

HISTORY



1896



1910 green waterfronts



1960 Connections between districts, outdoorswiming pool



1993 industrial water-



2019 More housing and enterntainment proj-



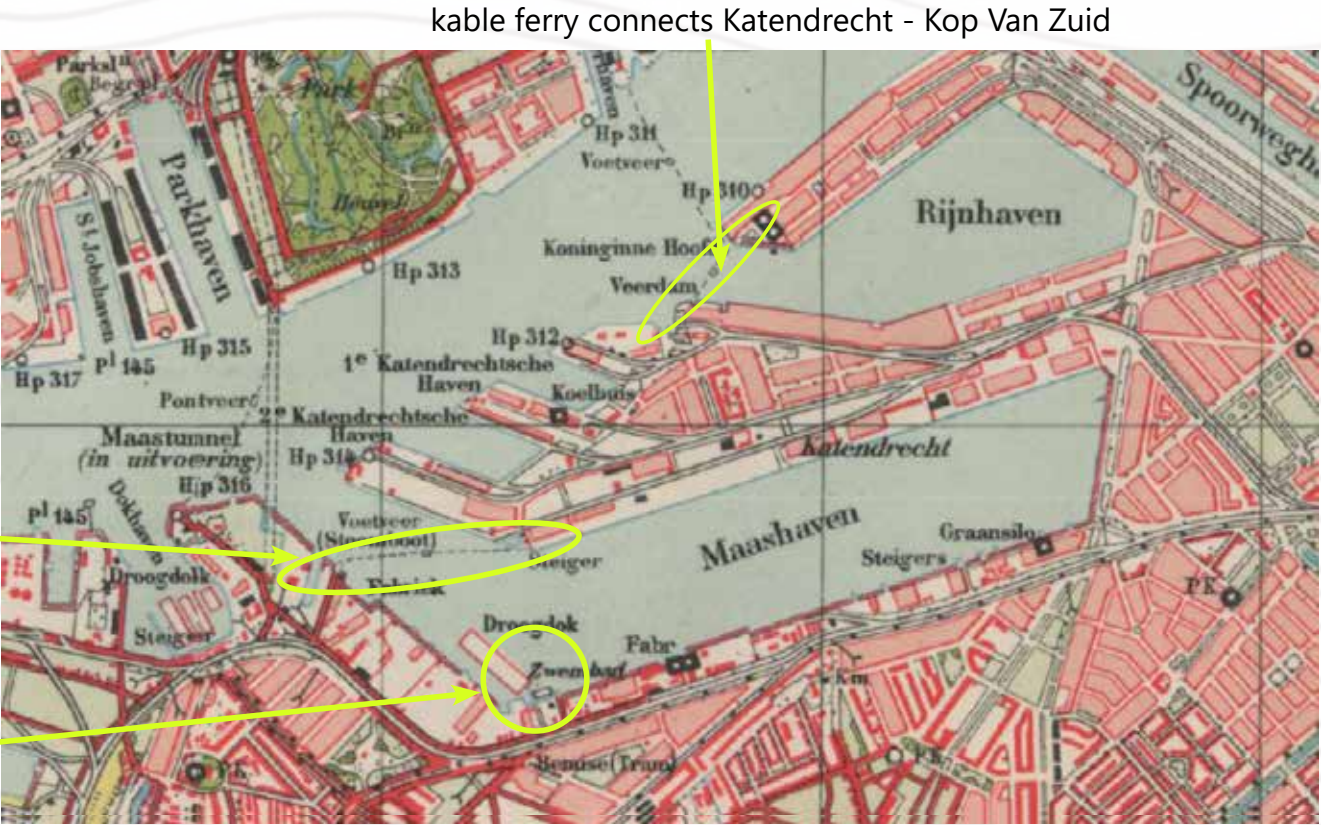
1939

In the middle of the previous century harbor and its waterfronts were accessible to residents. With green waterfronts, cable ferry connections between districts, and an outdoor swimming pool. It changed during the decades. The situation is improving, people can access the waterfront but there is no sensation that there used to be a vibrant harbor and busy waters.

NOTES:

Lifestyle changes, silent and empty harbor

FINDINGS



1. kable ferry connects Katen-drecht - Charlois

2. Outdoor swiming pool



Maassilo and drydocks

CONCLUSIONS:

Lifestyle changes, silent, and empty harbor Charlois was better connected to Katendrecht. Local inhabitants in the past had better outdoor activities such as an outdoor swimming pool. Nowadays just walking along the water edge.

ANALYSIS - SPACE WATER FRONT

EMPTINESS



CONCLUSIONS

Local art proves that people need space to express themselves and to inhabit the emptiness of this space.

LOCAL ART



CINEMATIC LANDSCAPE



On the road while passing by extensive water surface during the day. Empty. Wind and waves

Durring the night. Beautiful reflection from surrounding buildings

ANALYSIS - WATER FRONT



ACCESSIBLE WATERFRONT

The pedestrian route reaches almost all around the harbor except the industrial area , which should be under consideration in the future.

CONCLUSIONS

Promenades are wide. In some places, there are few benches grouped. Overall, the waterfront is lacking good public space where people could gather. Especially knowing that the population in these neighborhoods is growing.



Boats



ANALYSIS - NIGHT SPACE



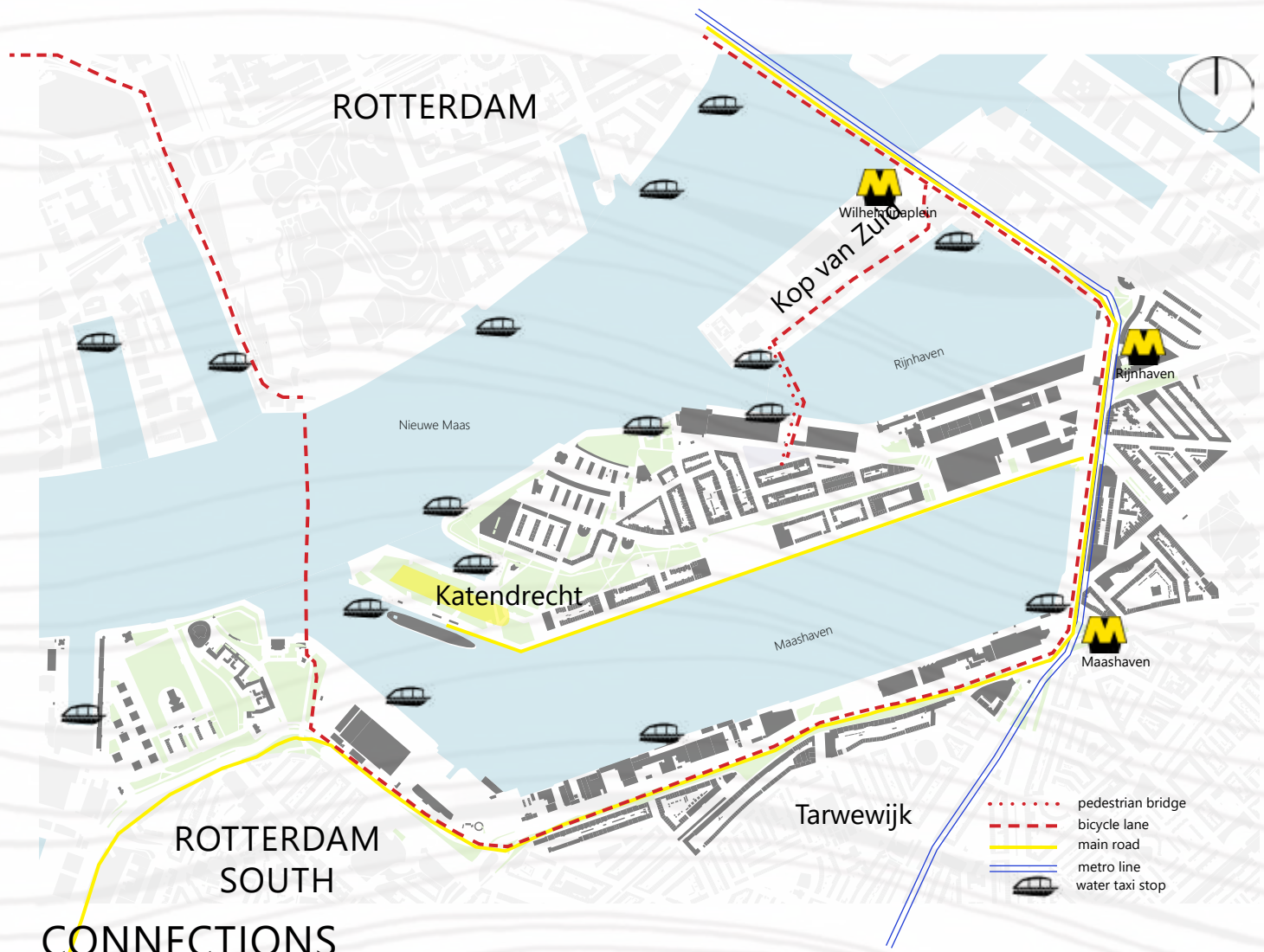
Durring the night. Beautiful reflection from surrounding buildings



CONCLUSIONS

Boundless water field. That gives an impression of no man's land. During late evenings, it is not the safest place to walk.

ANALYSIS



CONNECTIONS

Fairly good public transportation connections, including water transport. Easily accessible area via pedestrians and cycling lanes.



Metro



Water taxi



Boats



Water buss

CONCLUSIONS

Poor water transport usage. That shows that this location is not that demanded. Good opportunities to expand it.

ANALYSIS



FUNCTIONS - HOUSING

Most housing buildings are 3 to 5 floors high. The newly built housing projects are higher than the old ones and have good scenery over the harbor. Some inhabitants use their front doorstep as their private outdoor space due to a lack of qualitative outdoor space.



CONCLUIONS:

By building new projects the need for qualitative outdoor space is increasing.

ANALYSIS



FUNCTIONS - INDUSTRIAL

The left side of Maashaven is mostly an industrial area with an industrial look. With a small patch of greenery. Not everywhere water edge is accessible.



Industrial area



Maassilo



Production



Production

CONCLUIONS:

This area needs an extra function to make it more welcoming. At the moment it is more car orriented.

ANALYSIS



VENUES

Most know cultural organizations are located in this area. They are not welcoming for people with a small income. There is no space for public outdoor performances in this area.

CONCLUSIONS:

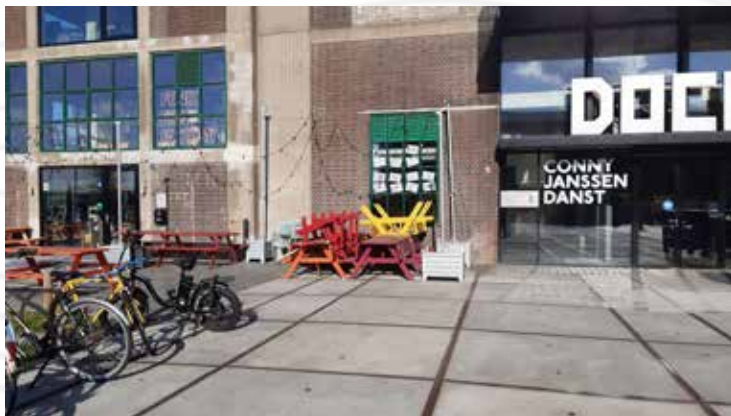
Cultural venues are scattered all around the area and are lacking common space where to show their performances. They are closed and behind walls. Invisible.



SS Rotterdam



Amusement park

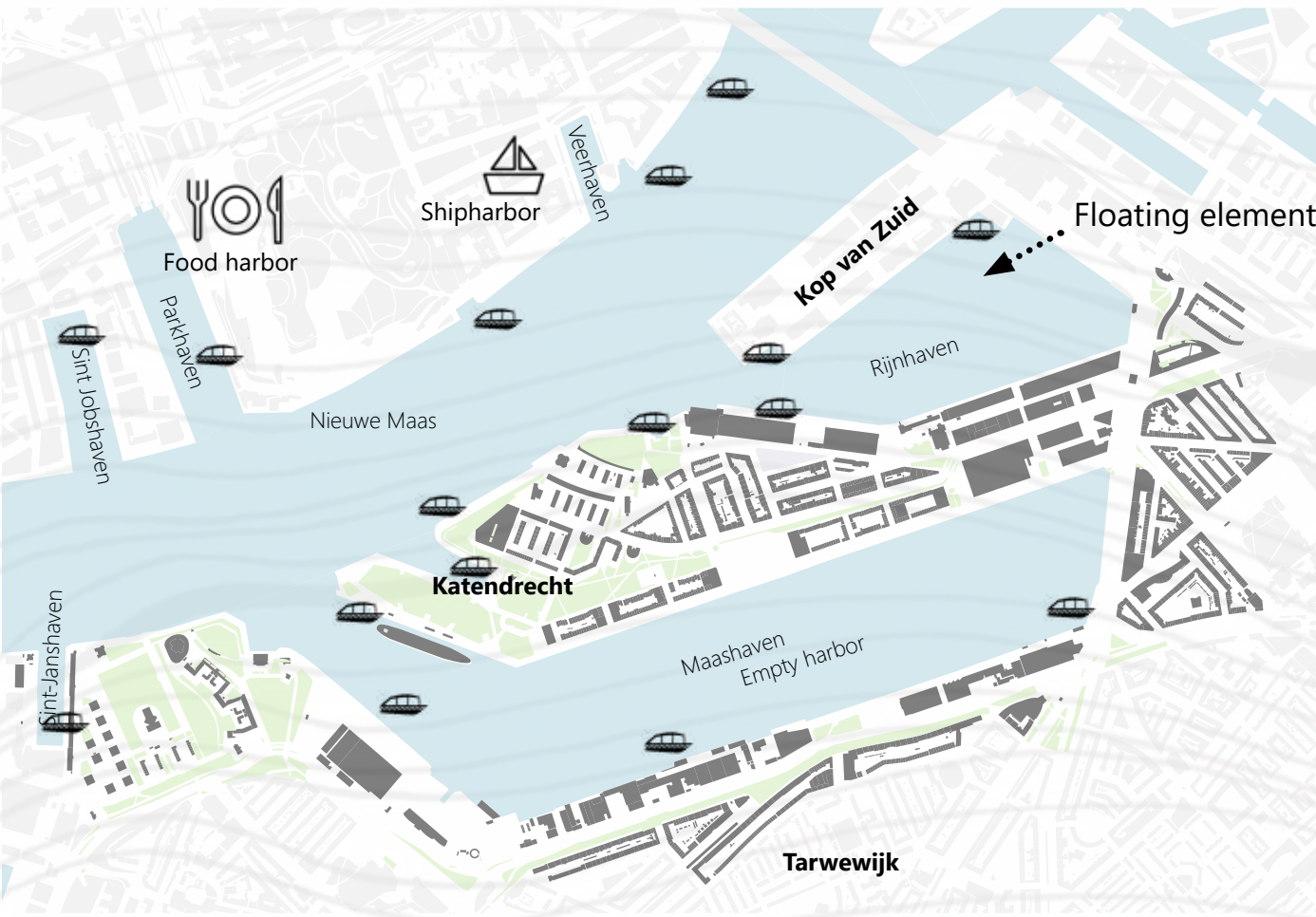


Cony Jansen Danst



Maassilo

ANALYSIS



THEME HARBORS

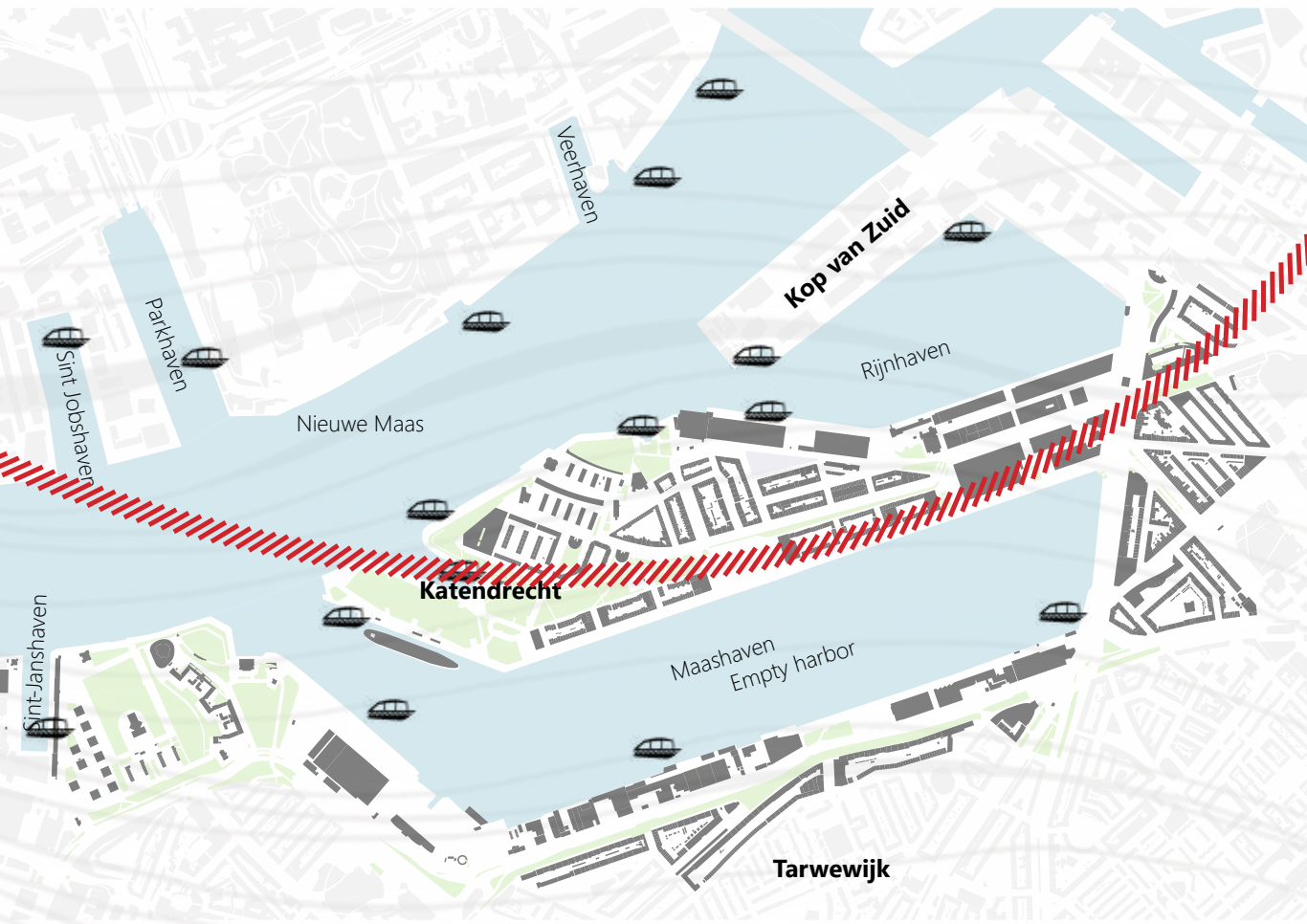
Each harbor has a specific function. Either it has moored ships and boathouses, or services, or it is empty. Water taxi provides good connections with all the harbors



water taxi stop

CONCLUIONS:

People from the North part are not going to the South part, they have a mental barrier in their minds that nothing is happening in the South part and it is dangerous.



MENTAL MAP

Mental map shows the border line which Rotterdammers and visitors do not want to cross because they think Rotterdam South is not friendly and safe area with bad social environment and bad reputation.

QUESTION:

Can water surface became a play field and connectivity element?

ANALYSIS

QUAY BUILD UP IN LEFT SIDE

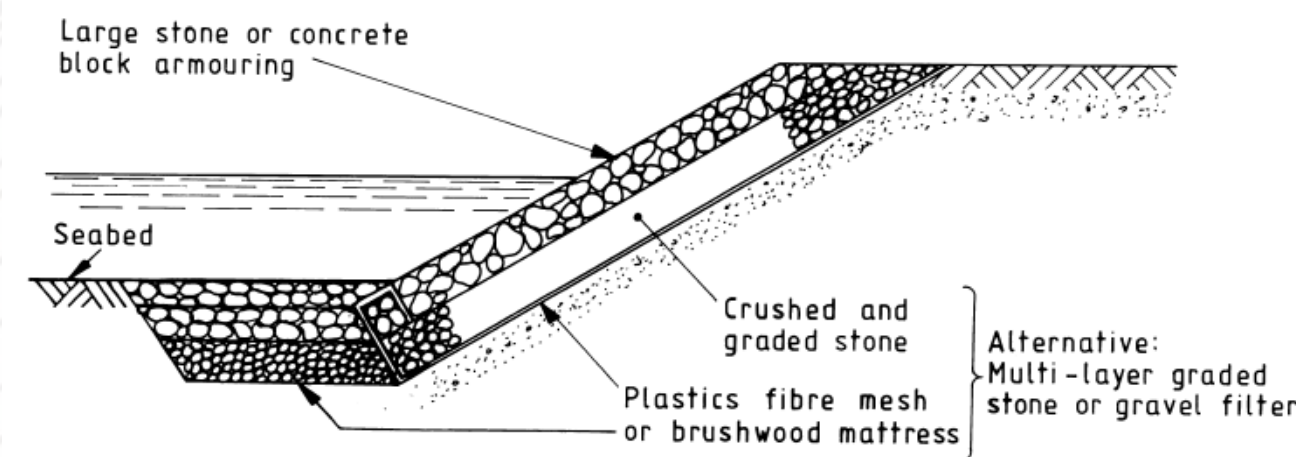


Figure 68 — Slope protection by rock or concrete armouring backed by filter layer

CONCLUISONS:

During ebb, the water is 10m away from the quay what is affecting the design. There have to be some connecting mooring elements or adjustable pier. No passage option for any water transportation. The necessity to rethink the design. Can not have any floating elements along the quay in this side of Masshaven

QUESTION:

How does ebb will affect design. How this quay part will be used?

QUAY BUILD UP IN RIGHT SIDE

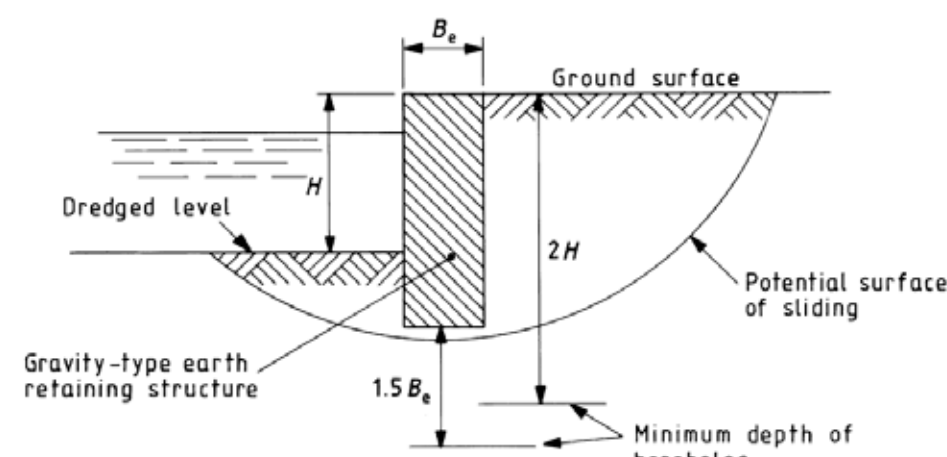


Figure 39 — Depth of boreholes in relation to retained height of soil and width of quay wall

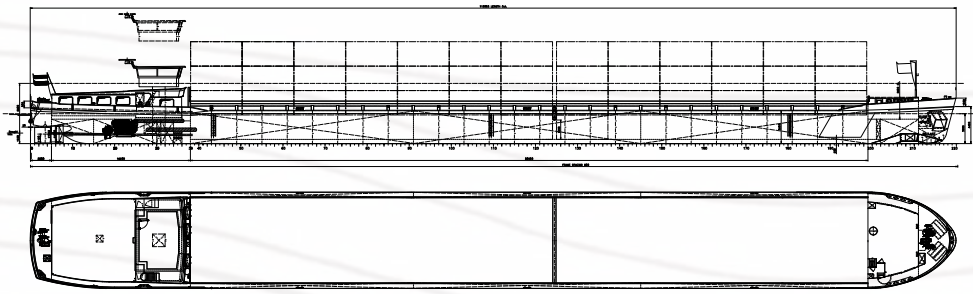
CONCLUISONS:

Only the right side of Maashaven is available for mooring. Can be used for future developments. Due to different quays design proposal needs to follow these regulations. The initial design needs to be symmetric.

QUESTION:

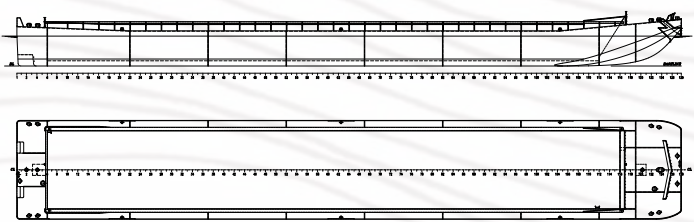
Is this quayside suitable for new floating architecture?

SHIPS AND TANKERS



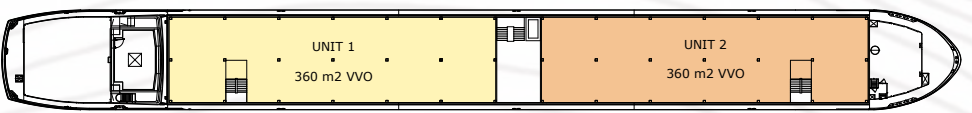
Containership Govert Sr. III

110 m long x 11,4m wide



Pushbarge Severnav

76,5 m long x 11,4m wide



Container ship

80 m long x 10m wide

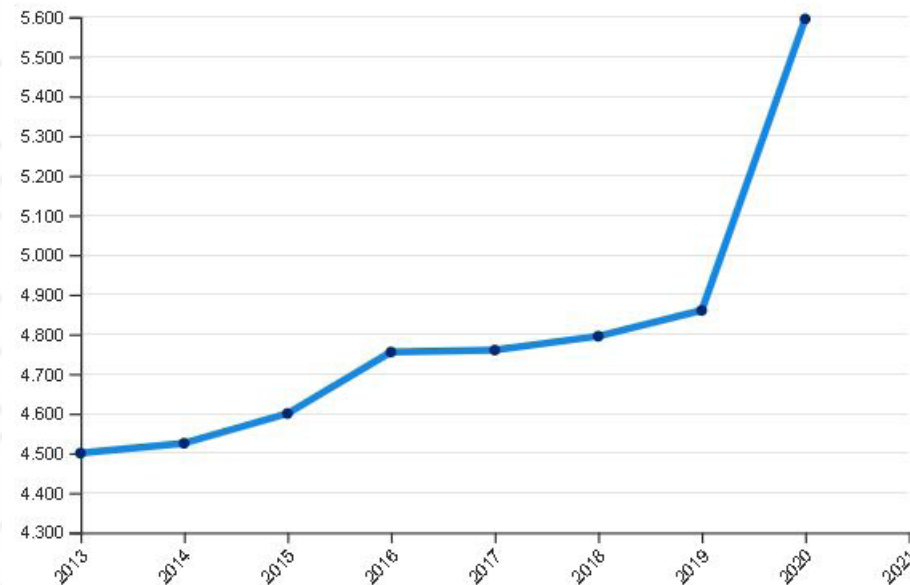
CONCLUIONS:

Some tankers and ships can be redesigned and adapted for performing use or as a public space. It can be a part of the project. Further research is needed.

ANALYSIS KATENDRECHT

Population numbers per year

The number of inhabitants in neighbourhood Katendrecht in Rotterdam in the Netherlands

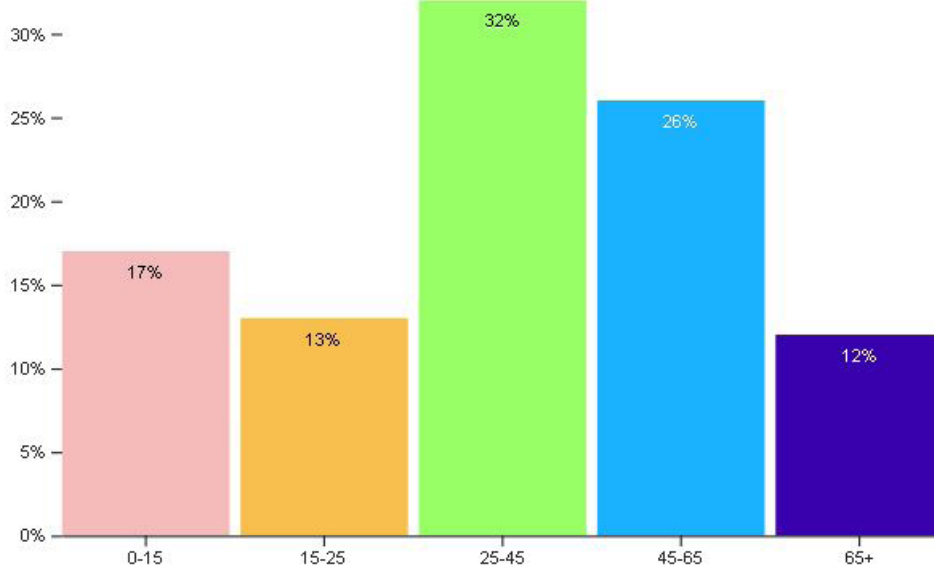


Population numbers in neighbourhood Katendrecht in Rotterdam in the Netherlands for the years 2013 thru 2020.

The number of inhabitants is the number of persons as registered in the population register on January 1st.

Population per age group

The percentage of inhabitants per age group in neighbourhood Katendrecht in Rotterdam in the Netherlands



Neighbourhood Katendrecht, 2020, age groups.

Population, age groups: percentage of inhabitants per age category.

Data about more than 100 topics!

The table below shows data for more than 100 topics as most recently available for neighbourhood Katendrecht in Rotterdam in the Netherlands. Select a category to display the related topics:

| Category | | | |
|-----------------|-------|-----------------------------|------|
| Population | Value | Unit | Year |
| Inhabitants | 5.595 | number | 2020 |
| Men | 2.790 | number | 2020 |
| Women | 2.805 | number | 2020 |
| Ages 0 - 15 | 975 | number | 2020 |
| Ages 15 - 25 | 730 | number | 2020 |
| Ages 25 - 45 | 1.780 | number | 2020 |
| Ages 45 - 65 | 1.435 | number | 2020 |
| Ages 65 and up | 680 | number | 2020 |
| Not married | 3.380 | number | 2020 |
| Married | 1.530 | number | 2020 |
| Divorced | 525 | number | 2020 |
| Widowed | 165 | number | 2020 |
| Births | 45 | number | 2019 |
| Births relative | 9 | number per 1000 inhabitants | 2019 |
| Mortality | 30 | number | 2019 |

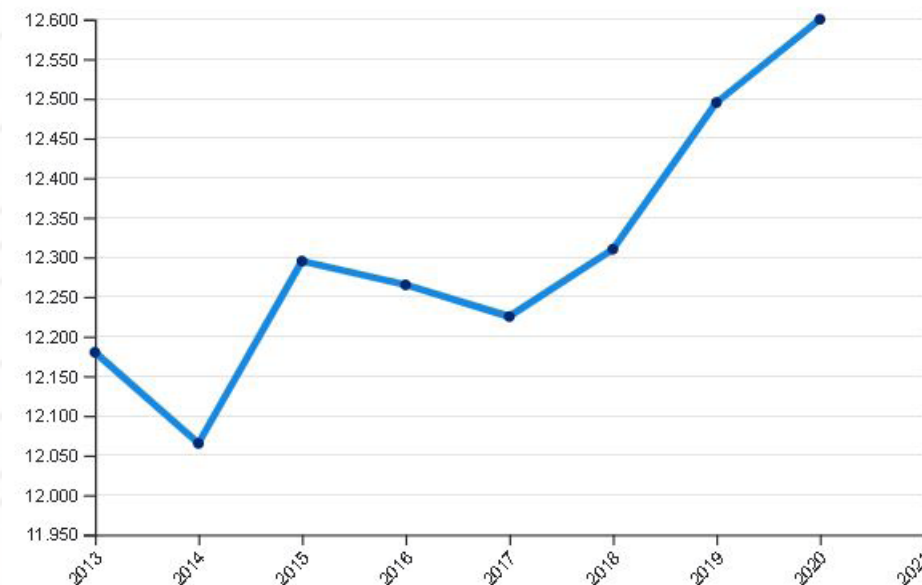
CONCLUIONS:

The graphics show that the population in Katendrech is growing. More new families are moving into this neighborhood. That means there is a need for good outdoor public space where people can spend their free time

ANALYSIS TARWEWIJK

Population numbers per year

The number of inhabitants in neighbourhood Tarwewijk in Rotterdam in the Netherlands

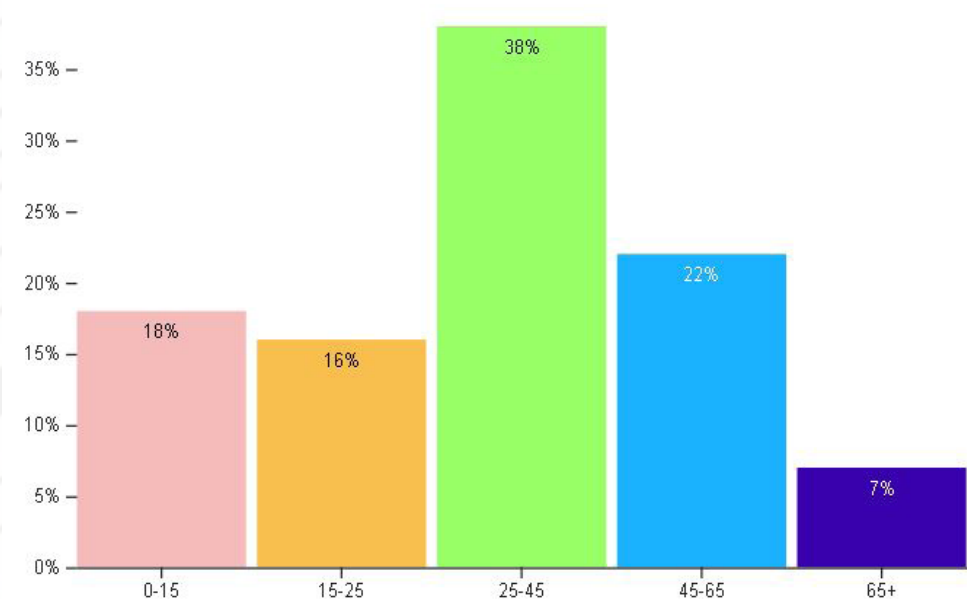


Population numbers in neighbourhood Tarwewijk in Rotterdam in the Netherlands for the years 2013 thru 2020.

The number of inhabitants is the number of persons as registered in the population register on January 1st.

Population per age group

The percentage of inhabitants per age group in neighbourhood Tarwewijk in Rotterdam in the Netherlands



Neighbourhood Tarwewijk, 2020, age groups.

Population, age groups: percentage of inhabitants per age category.

Data about more than 100 topics!

The table below shows data for more than 100 topics as most recently available for neighbourhood Tarwewijk in Rotterdam in the Netherlands. Select a category to display the related topics:

| Category | | | |
|-----------------|--------|-----------------------------|------|
| Population | Value | Unit | Year |
| Inhabitants | 12.600 | number | 2020 |
| Men | 6.555 | number | 2020 |
| Women | 6.045 | number | 2020 |
| Ages 0 - 15 | 2.230 | number | 2020 |
| Ages 15 - 25 | 1.980 | number | 2020 |
| Ages 25 - 45 | 4.755 | number | 2020 |
| Ages 45 - 65 | 2.790 | number | 2020 |
| Ages 65 and up | 845 | number | 2020 |
| Not married | 8.370 | number | 2020 |
| Married | 2.815 | number | 2020 |
| Divorced | 1.220 | number | 2020 |
| Widowed | 205 | number | 2020 |
| Births | 175 | number | 2019 |
| Births relative | 14 | number per 1000 inhabitants | 2019 |
| Mortality | 35 | number | 2019 |

CONCLUIONS:

The graphics show that the population in Tarwewijk is growing. More new families are moving into this neighborhood. That means there is a need for good outdoor public space where people can spend their free time. And the need for direct connection with the rest of the city is essential.

ANALYSIS - FOOTPRINTS



Distance between Tarwevijk and Katendrecht



SS Rotterdam ship



Fenix food factory



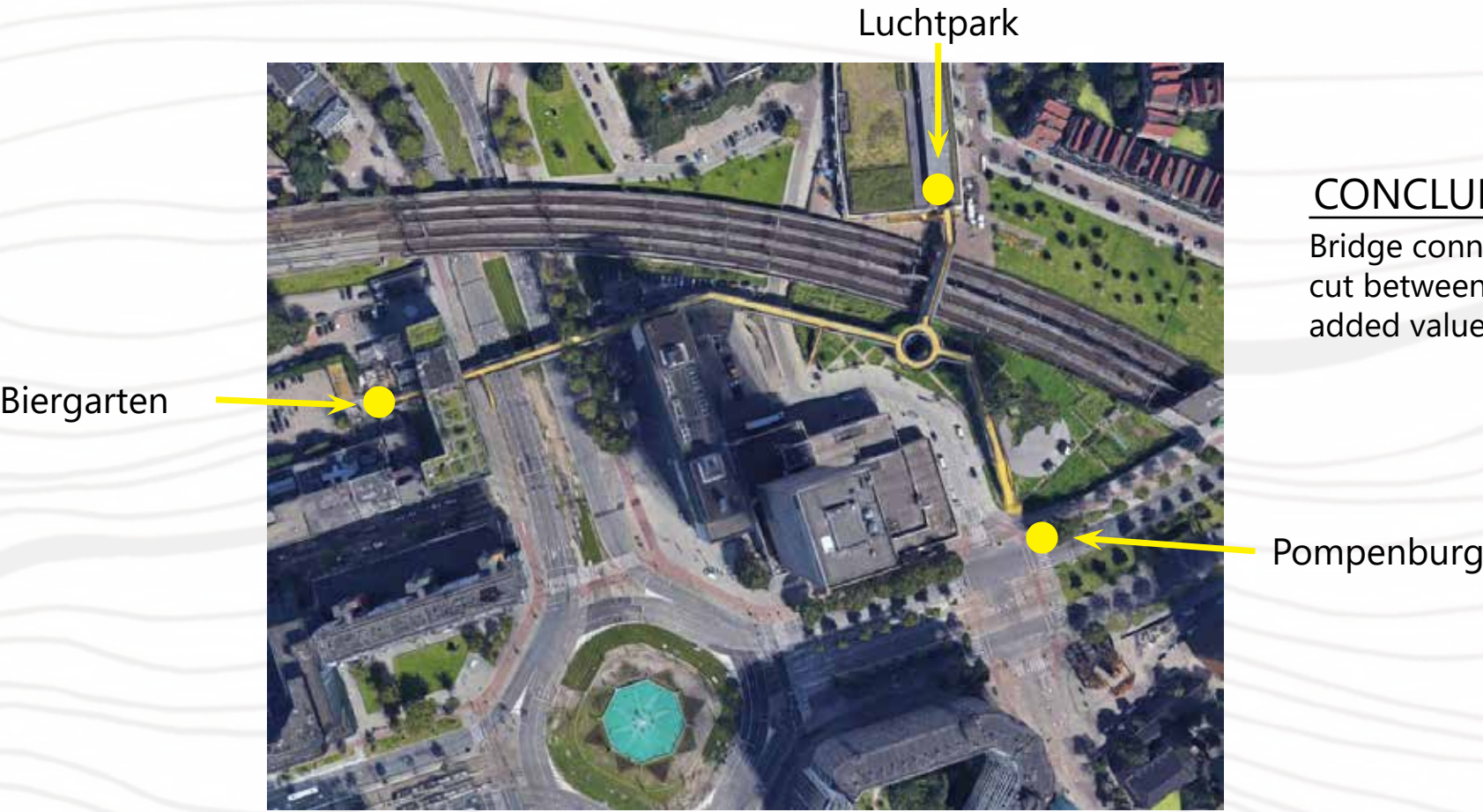
Maassilo - concert hall

CONCLUSIONS:

The impressive distance between Katendrecht and Tarwevijk, makes one think about what is suitable for this place and the program needs to be attractive enough to invite more people to this area. What kind of activities would find a place in this footprint?

ANALYSIS - OTHER CONNECTING OBJECTS

1. LUCHTSINGEL - YELLOW BRIDGE ~



CONCLUIONS:

Bridge connects 3points. Biergarten, park, and the street level. It creates a short-cut between these points. The usage of it is little and it doesn't bring expected added value.

2. PEDESTRIAN DOCK ~ 550M LONG



CONCLUIONS:

The dock is very busy during the summer days. Sometimes it is too narrow if there are a lot of people. In some places there are benches. People feel comfortable sitting on the dock and have a close connection. I will follow the same principle in my design. People feel good because they are not restricted to benches. Never the less 'Motion on water' needs to have benches when thinking about the elderly.

REFLECTION

People need good public space. They want to connect with other people and belong to a place. They also need better connections with the rest of the city. Most important-ly Rotterdam is a harbor city which means that water should be the one that connects people not disconnects. We need to think about our future and the next generations. We need to give them opportunities to find the place where they belong and feel at home by creating a good environment.

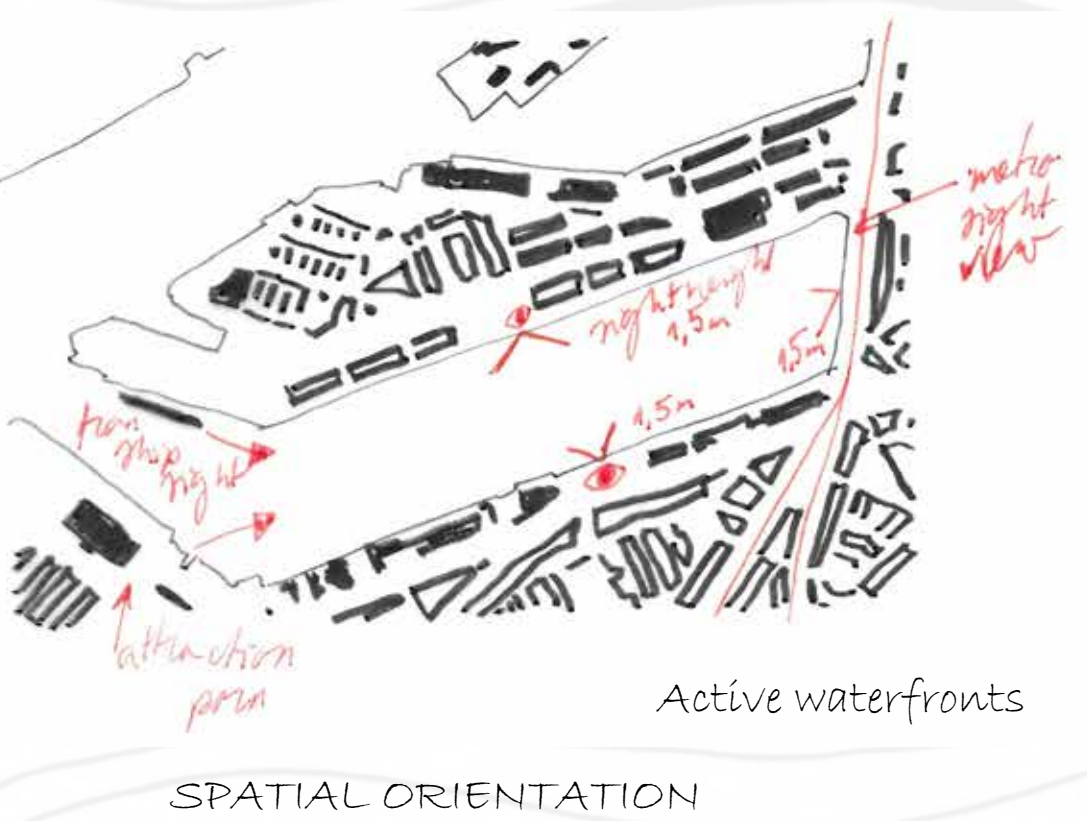
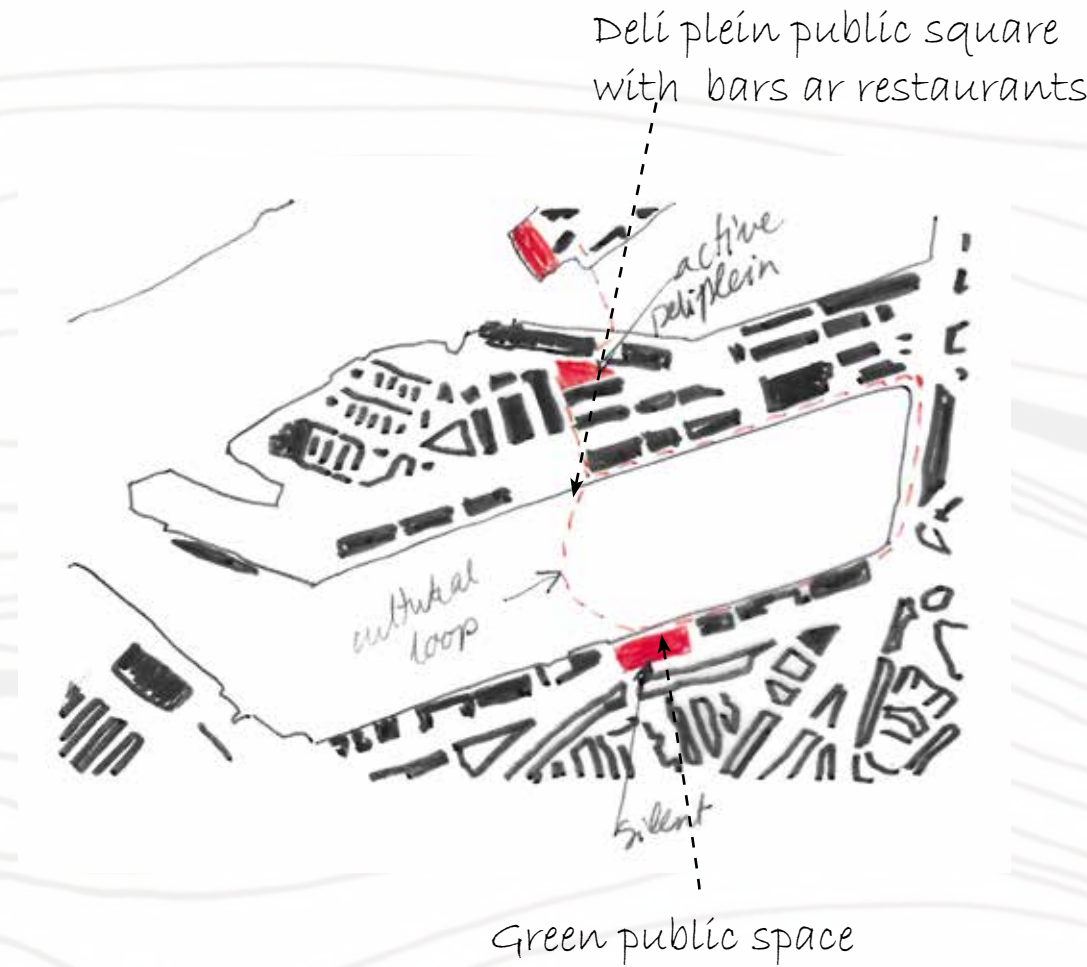


QUESTION: _____
Can water surface become a play field and connectivity element?

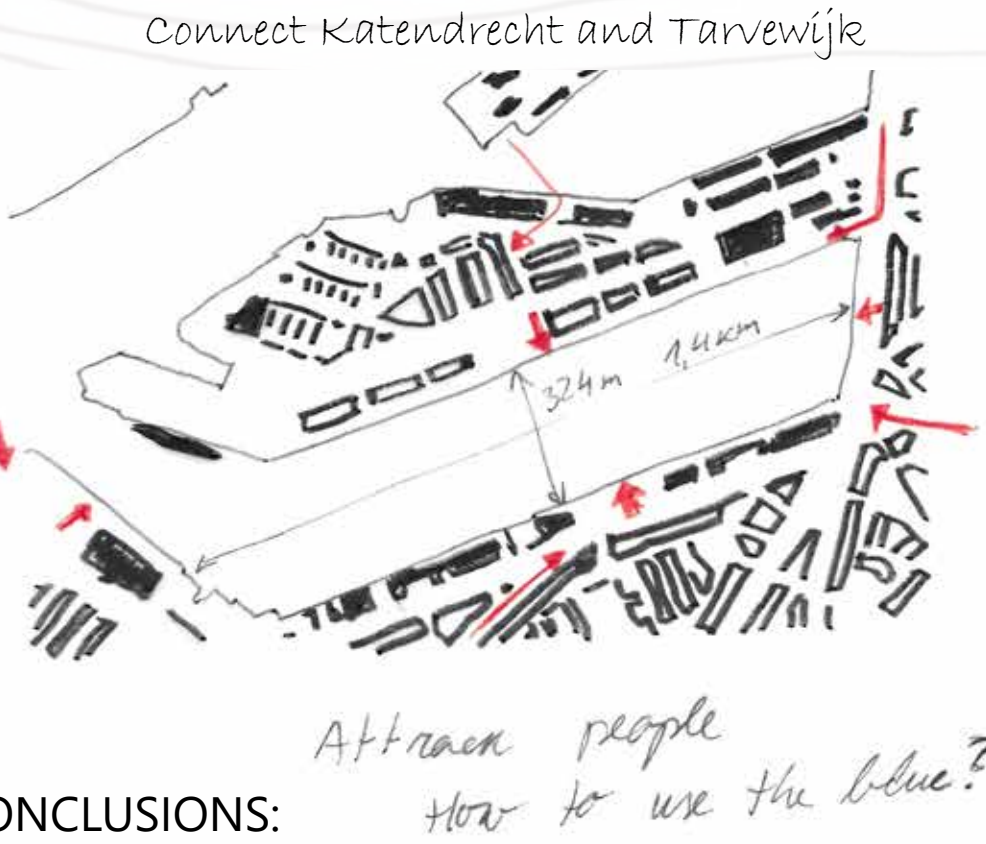
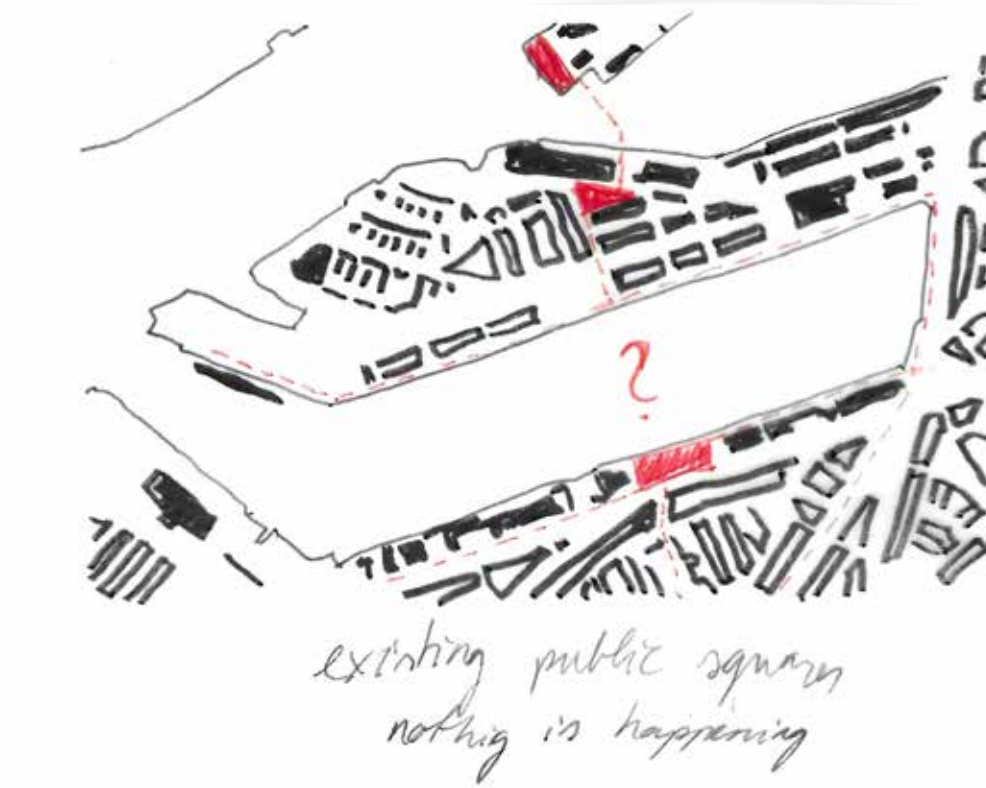
What to do with empty space ?

What strategies can affect and regenerate this area?

APPROACH



Can the water surface be transformed into a central beating heart where people come together ?



CONCLUSIONS: _____
This area needs urban planning that would improve the social and physical connection.

RELEVANCE

Maashaven is part of the big harbor of Rotterdam. The active part of the harbor has moved westward and for the last years both harbors Rijnhaven and Maashaven have been empty without any functions and activities. The municipality of Rotterdam has made development plans for Rijnhaven with high-rise buildings and public space with extra functions and flexible pontoons on the water. Whereas in Maashaven the spatial and functional qualities are having ongoing debates to create a city park on East part of Maashaven for recreational purposes. It has a lot of potential in terms of space, opportunities, and development. Maashaven harbor could serve as a learning and creative public space for local inhabitants and tourists. It has a rich history of being an active harbor and vibrant space. Local authorities wish to remain it as a port. Connectivity is the second relevant point for this project. It would help to uplift both areas.



by De Urbanisten



De Maashaven krijgt een nieuw groen stadspark aan de rivier

Door Anne Klepmuts · 16 juli 2020



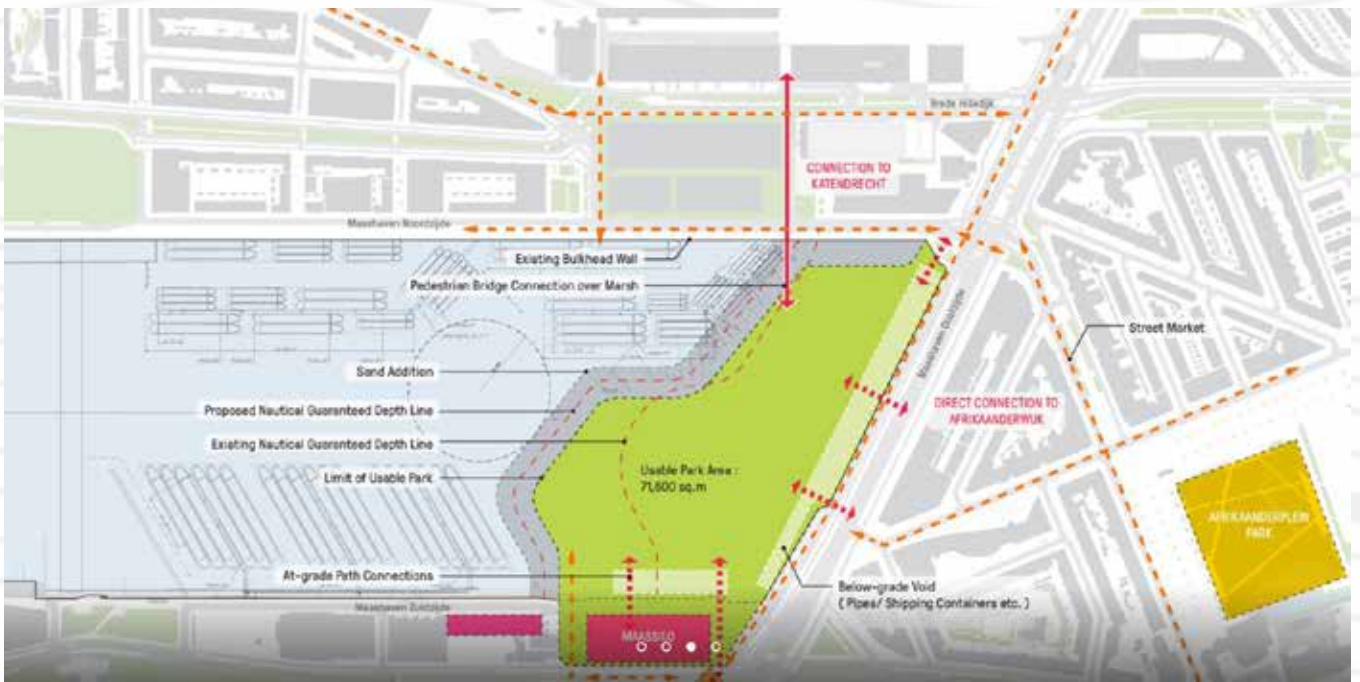
Een groot park van zeven hectare aan de Maas waar ook festivals gehouden kunnen worden: dat zijn de **plannen** van de gemeente om de Maashaven groener te maken. Doordat de binnenvaartschepen in en uit varen, blijft je het havengevoel hier houden.

Het Maashavenpark bestaat uit drie onderdelen: het park, het plein tussen metrostation Maashaven en Maassilo en de boulevard van de Maashaven-Oostzijde. Als het volgens plan verloopt, is het park in 2026 klaar.

Het park

Het park bij de Maashaven wordt één groene plek met grasvelden en allerlei soorten bomen en planten. Door het park heen lopen wandel- en fietsroutes. Het doel is dat buurtbewoners naar het park komen om te wandelen, te sporten, te zonnen en te ontspannen. Twee heuvels zorgen voor hoogteverschil in het park en ze zijn de perfecte plek om over de Nieuwe Maas richting Rotterdam-Zuid te kijken. Aan de oever van de Maas groeien verschillende natuurlijke planten waardoor twee keer per dag het getij te zien is.

Lees verder onder foto's >



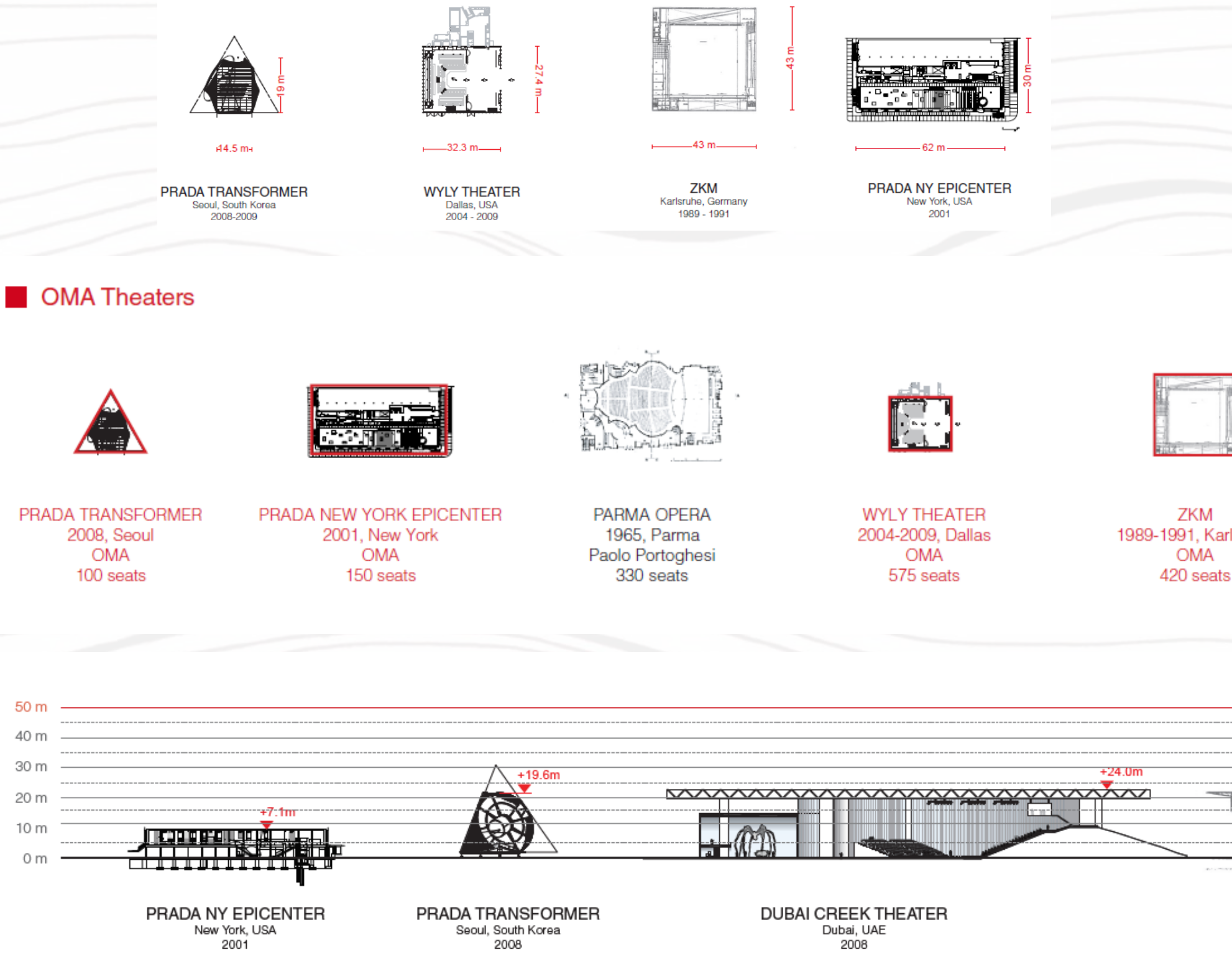
CONCLUSIONS:

The urban park is a great idea of how to start to develop this area and continue with “Motion on the water”

CASE STUDIES

THEATER
PUBLIC SPACE ON WATER

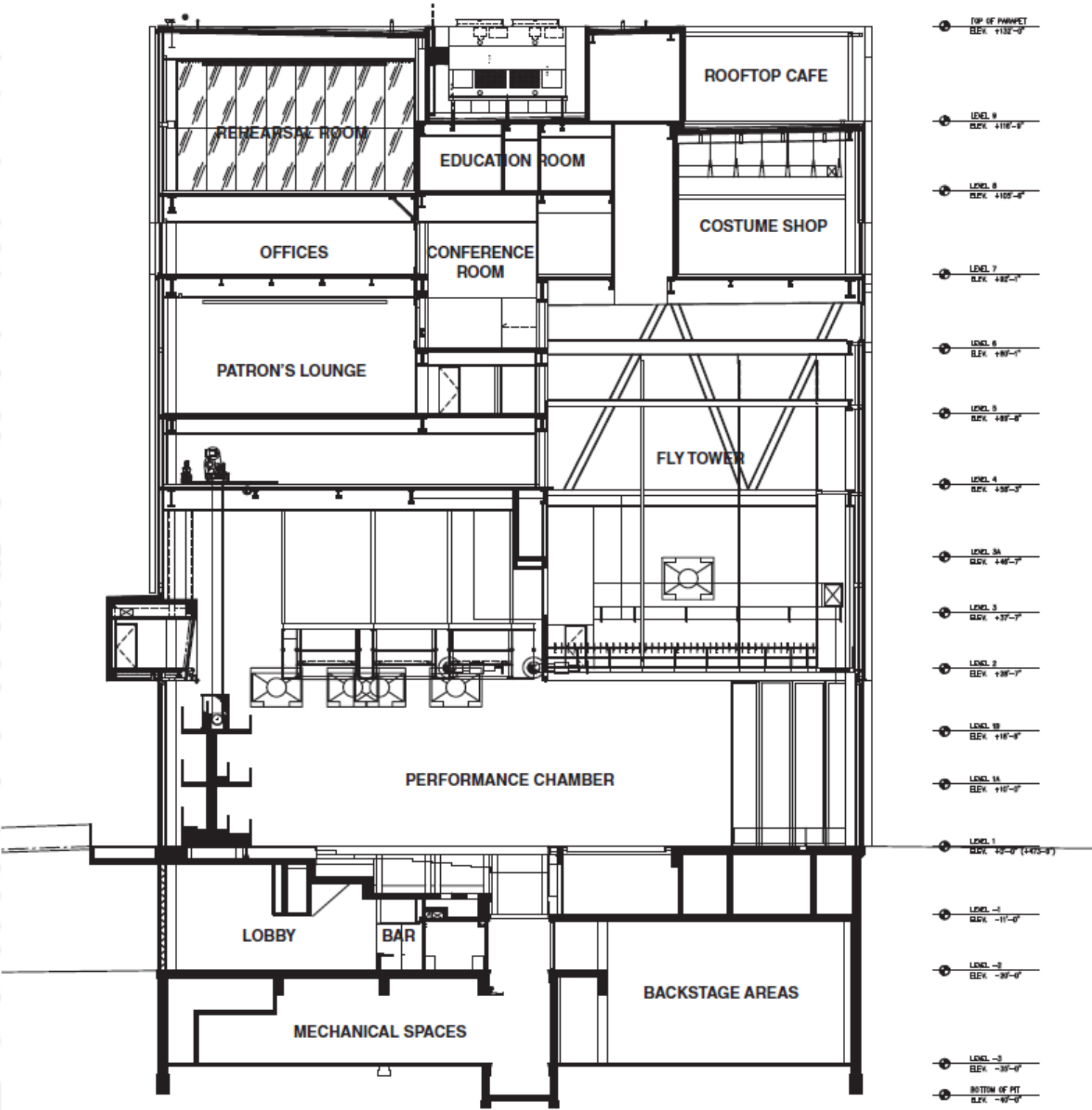
STUDY CASES



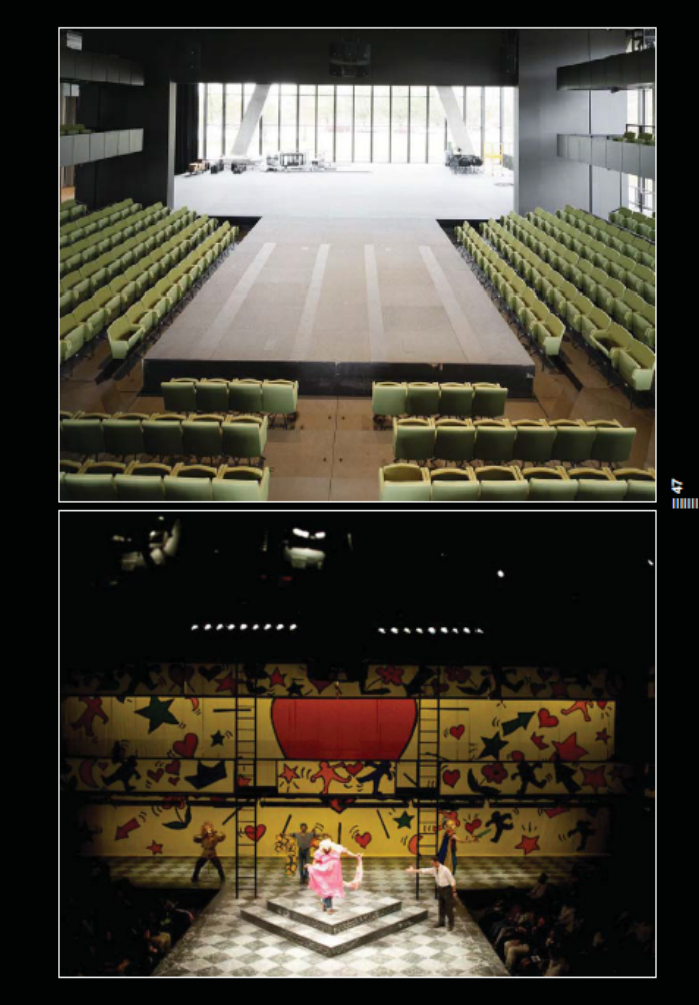
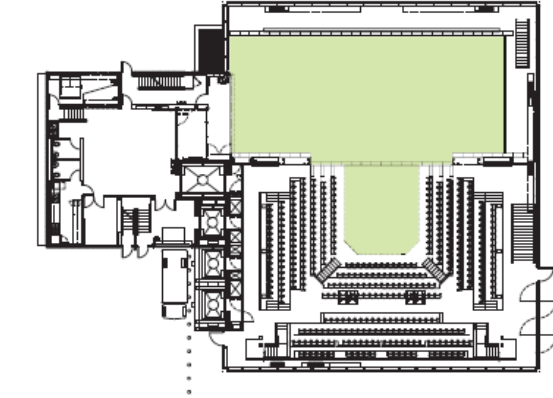
CONCLUSIONS:

Wyly theater is the most similar case study in sense of design and size.

WYLY - DALLAS BY OMA

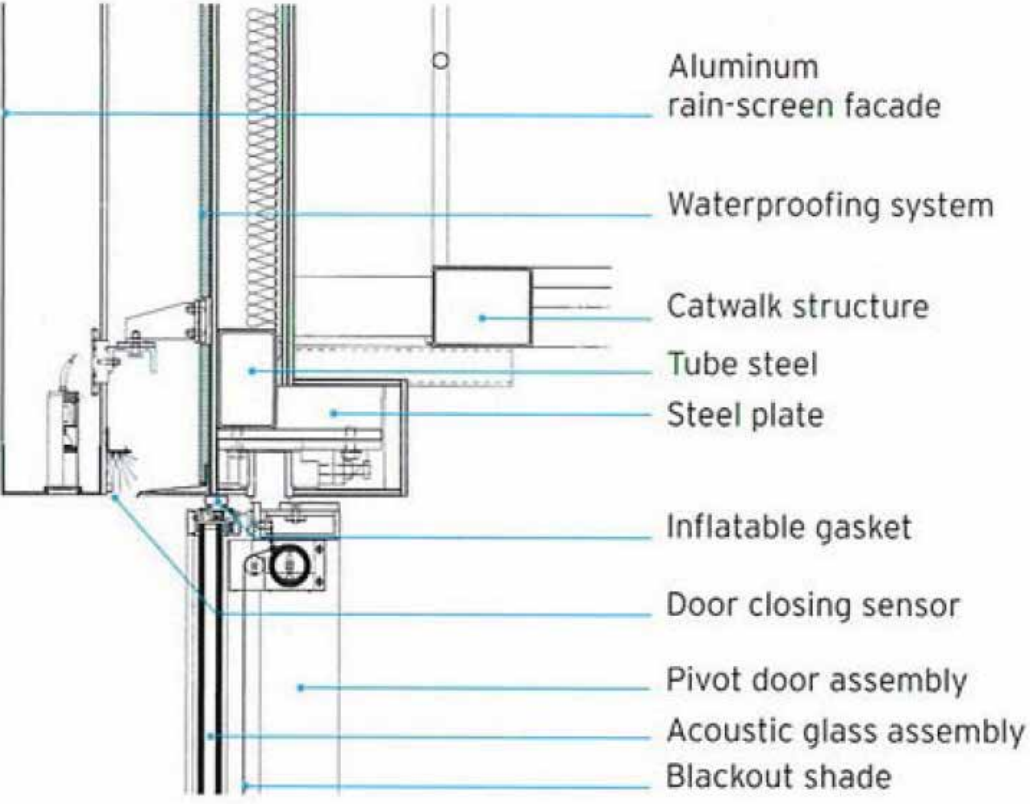


PERFORMANCE CHAMBER
Stage Flexibility: Thrust Stage



CONCLUSIONS:

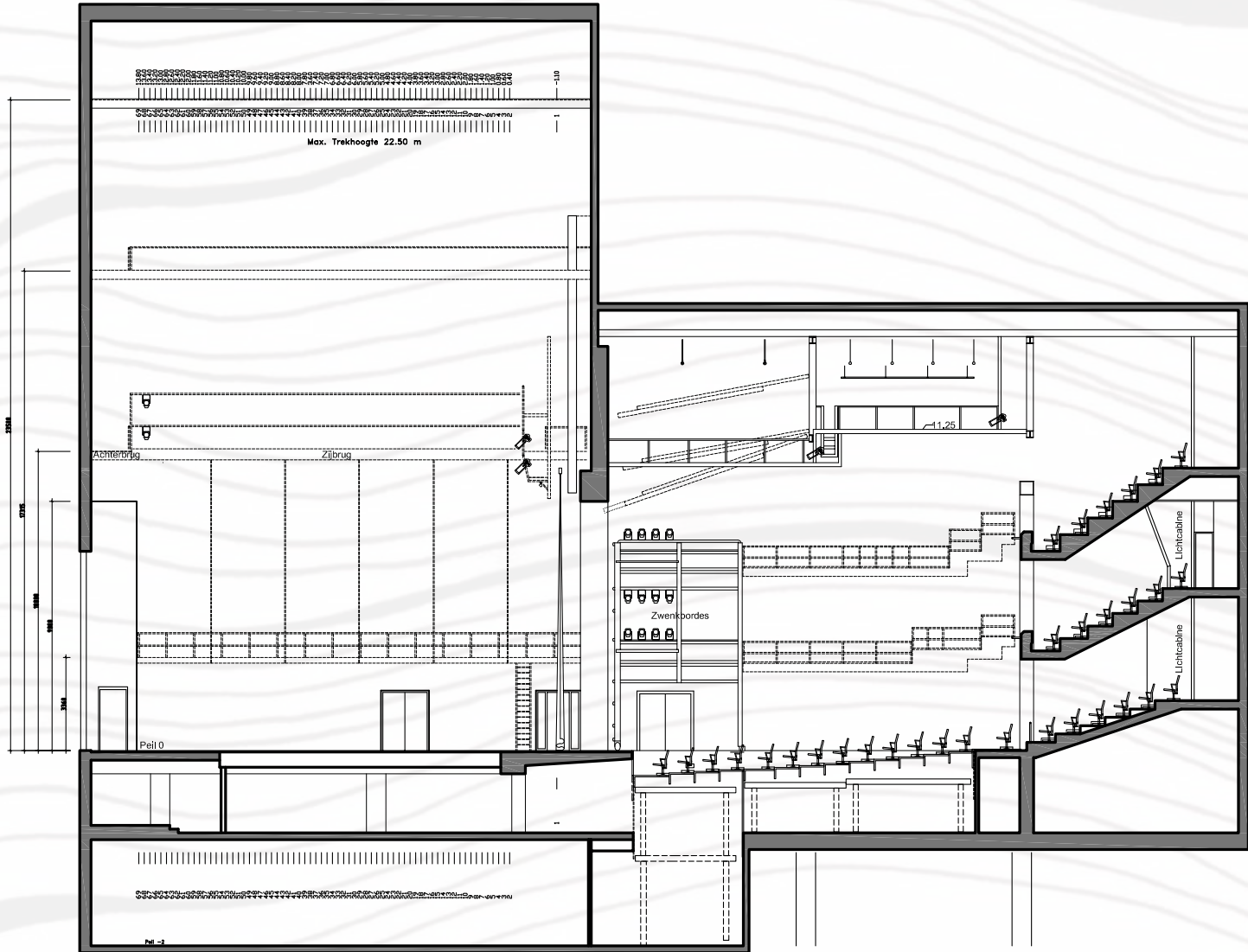
One of the examples that have many design similarities with my proposal. "Multi-form" theater with flexible seating and transparent backstage wall. Flexibility gives more opportunities for various events.



CONCLUSIONS:

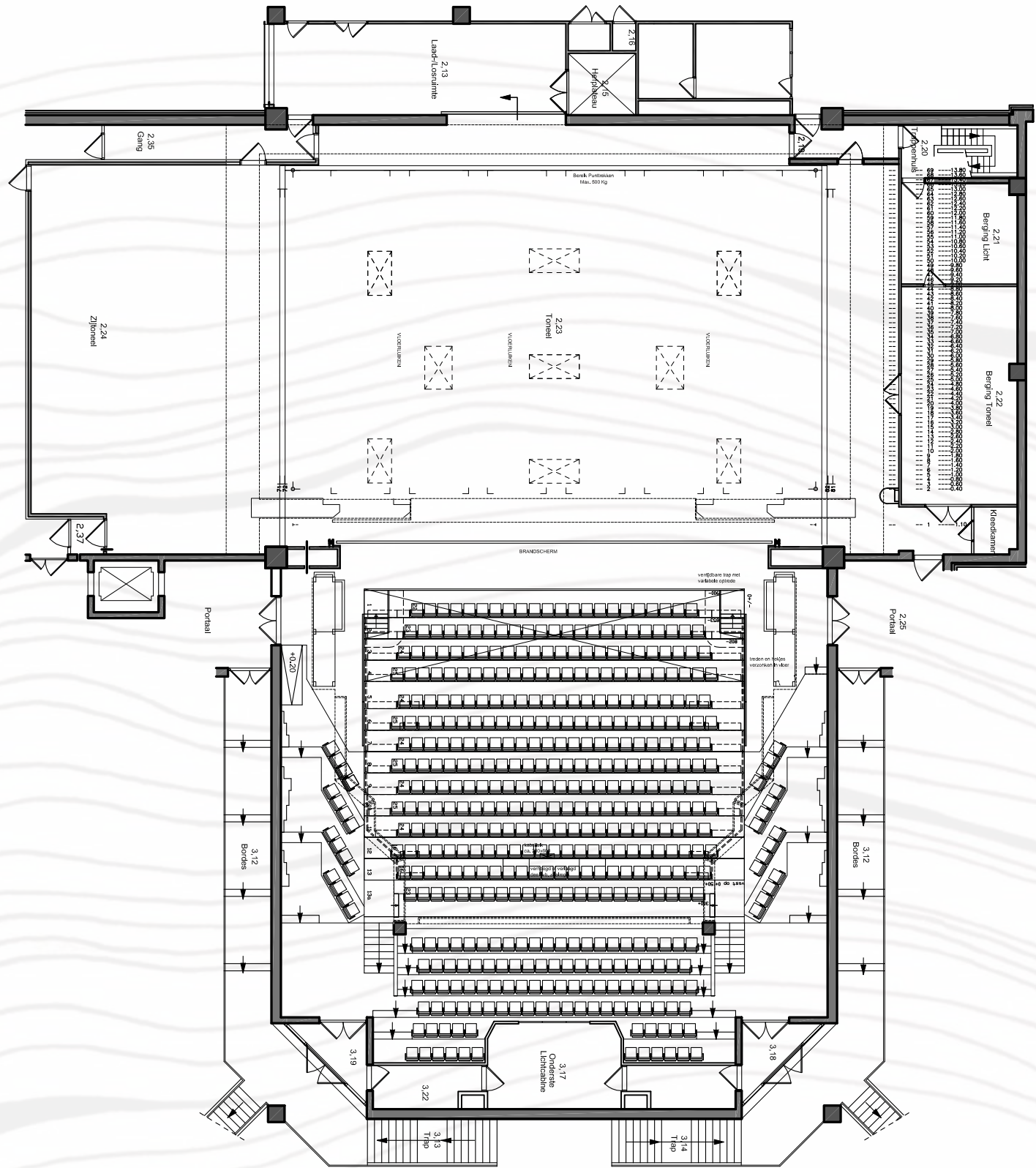
Vast glass surfaces require a qualitative shading system, proper ventilation, and acoustic solutions. This theater for acoustic and light is using automatic shades and sound blocking curtains. That is one of the best systems I can use in my project.

SCHOUWBURG THEATER ROTTERDAM



CONCLUSIONS:

This theater is greater than the proposed one. Nevertheless, it has most of the guidelines I am looking for; like stage curtains, that are also serving as fire protection, acoustic solutions, and sunken pit.

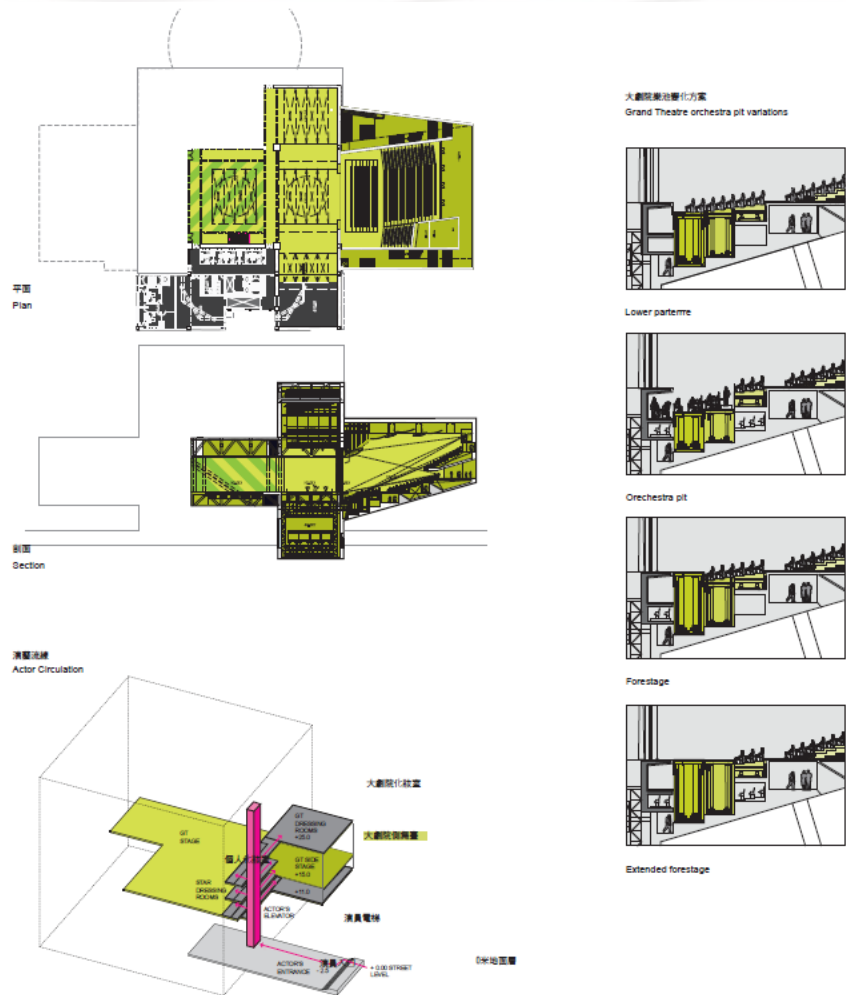


fire safety curtains

CONCLUSIONS:

Loading arrangements are difficult in this situation. I have to consider what solution I can provide for the new design. The side stages are spacious that gives more freedom to dancers and storing goods.

TAIPEI PERFORMING ARTS CENTER BY OMA



大劇院

這個大劇院是由 20 世紀末大型劇院空間演化而來的當代劇院。它的設計目標不對稱，室內的結構程度較大，所以強化觀眾參與的程度。觀眾由側面進入，空曠的觀眾台幾乎的通道；此通道為觀眾進出的主要通道，並且可以與觀眾席後側的通道成為最長的通道。這個劇院空間由觀眾台後側的通道，與主舞台後側的通道，而主舞台後側的通道又與主舞台後側的通道，因此會有良好的視線。另一個優點是，這樣的設計不需要特殊觀眾席與樓梯，就能將大劇院台與觀眾席的通道。

在觀眾席的後側還有其他進出的入口，通往劇院。主舞台後側的觀眾由側面進入，並在側面與內部直接連結。觀眾席也由側面進入，以達到私密性。

觀眾席可選擇三個不同的進出位置：舞台後側、觀眾席後側、與側面後側。典型的觀眾席有兩層大樓梯形成兩側的通道。本設計保留了第三層樓梯，因此可移動觀眾席後側的樓梯，而由側面進入觀眾席。舞台後側以三層樓梯進入，舞台後側以三層樓梯進入，這樣可避免於樓梯及樓梯系統下的空間。除了良好的觀眾席的設置之外，這樣的舞台可提供大劇院的演出空間。觀眾席只由側面進入，這樣的舞台可提供小劇院的演出。而對大劇院樓梯後側的通道而言，它也提供了台後側的樓梯空間。

舞台為典型十字型，有後舞台及側舞台以利佈景之更換。右側舞台與主舞台的樓梯連接，讓觀眾的使用更具彈性，便於觀眾的移動。舞台後側上的舞台，觀眾席也可以隨地移動。上述的設計可讓舞台空間中以後舞台的樓梯，而由主舞台後側進入，而後舞台後側的使用。

Grand Theatre

The Grand Theatre is a contemporary evolution of the larger theatre space of the late 20th century. Its shape is slightly asymmetric, and the room has a rather progressive rake facilitating a more active participation. Entry is through the sides, coming to a cross-aisle that is level with the stage. This cross-aisle provides space and access for wheelchair, but also for an open control position by repositioning seating rows in the central parterre block. This brings the open control position at a good distance from the stage without any acoustical interference from a balcony overhang, while shielding it from view for the rows behind as the rake continues upward around it. Another advantage is that bringing heavy moving consoles to this location is simple – there is no need for special apparatus or climbing stairs.

Other entry levels are at the back of the parterre where the connection is made to a large foyer. At balcony level, connections are from the back, with internal connections to the sides. The VIP positions are also to the side, for additional privacy.

The orchestra pit can be set in three positions: stage, audience and pit level. Typically this would involve two large elevators in order to create the pit. The proposed design includes a simple third elevator that would allow all seating in the lower part of the parterre to be removed. With now three elevators, it is possible to create a stage extension with three different dimensions. In its maximum use, the stage extension can reach all the way to the cross-aisle. The seats store in separate pockets below the floor and elevator systems. The possibilities in addition to the typical orchestra pit configurations provide larger plays with an extended proscenium. But the extension(s) can also be used for smaller scale events that play in front of the curtain. For large TV or rock shows it provides the additional circulation toward/around a forward stage, etc.

The stage is configured as a typical cross stage, with rear and side stages for the convenient rotation of sets. The stage-right side stage merges with a loading zone in front of the main loading elevators – this provides extra flexibility that is useful during (de)mounting of shows. The side stage can be acoustically divided if necessary. The aforementioned fourth stage can also be inserted in the rotation of sets, or be used to clear the rear stage if one scene requires a deepened main stage.

TEMPORARY STAGES ON WATER IN ROTTERDAM

The Netherlands doesn't have open-air stages or podiums. There has been in the past but in the 1960's they were not relevant and all the bands and musicians who used some sort of open aid stages or pavilions moved indoors. From that rises question. Why not bring back the open-air stages especially during pandemic times? With warm lamps for the colder season



Concert in Veerhaven



Concert in Leuvehaven

Happens during the summer in Rotterdam

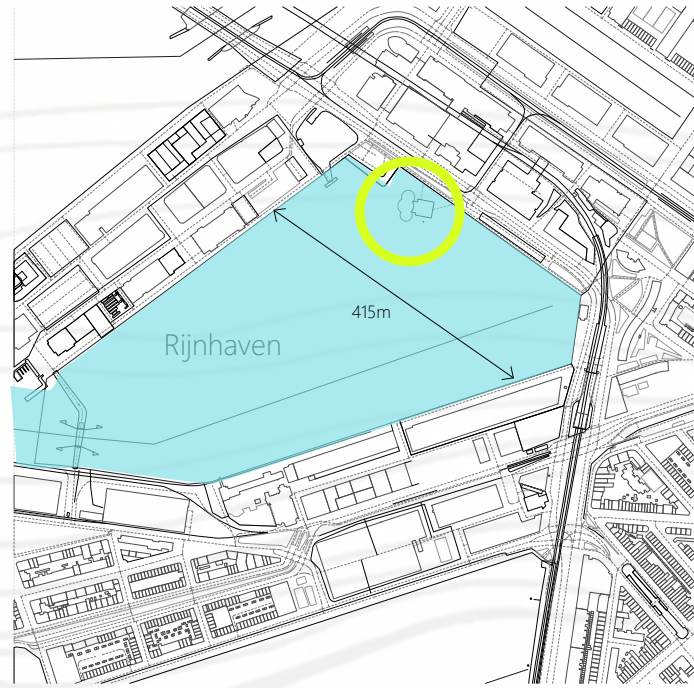
CONCLUSIONS:

Tai Pei theater has many different small stages that are placed in various layers. It gives more flexibility and freedom to create different set designs. This idea will help to realise my design.

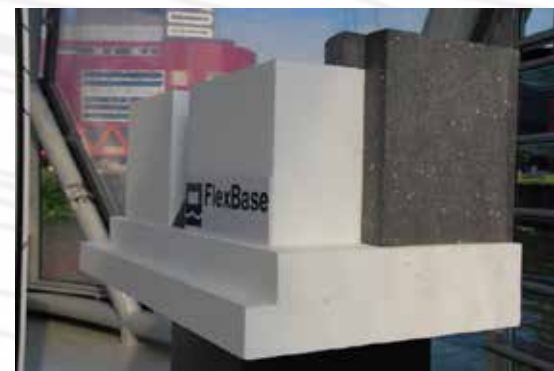
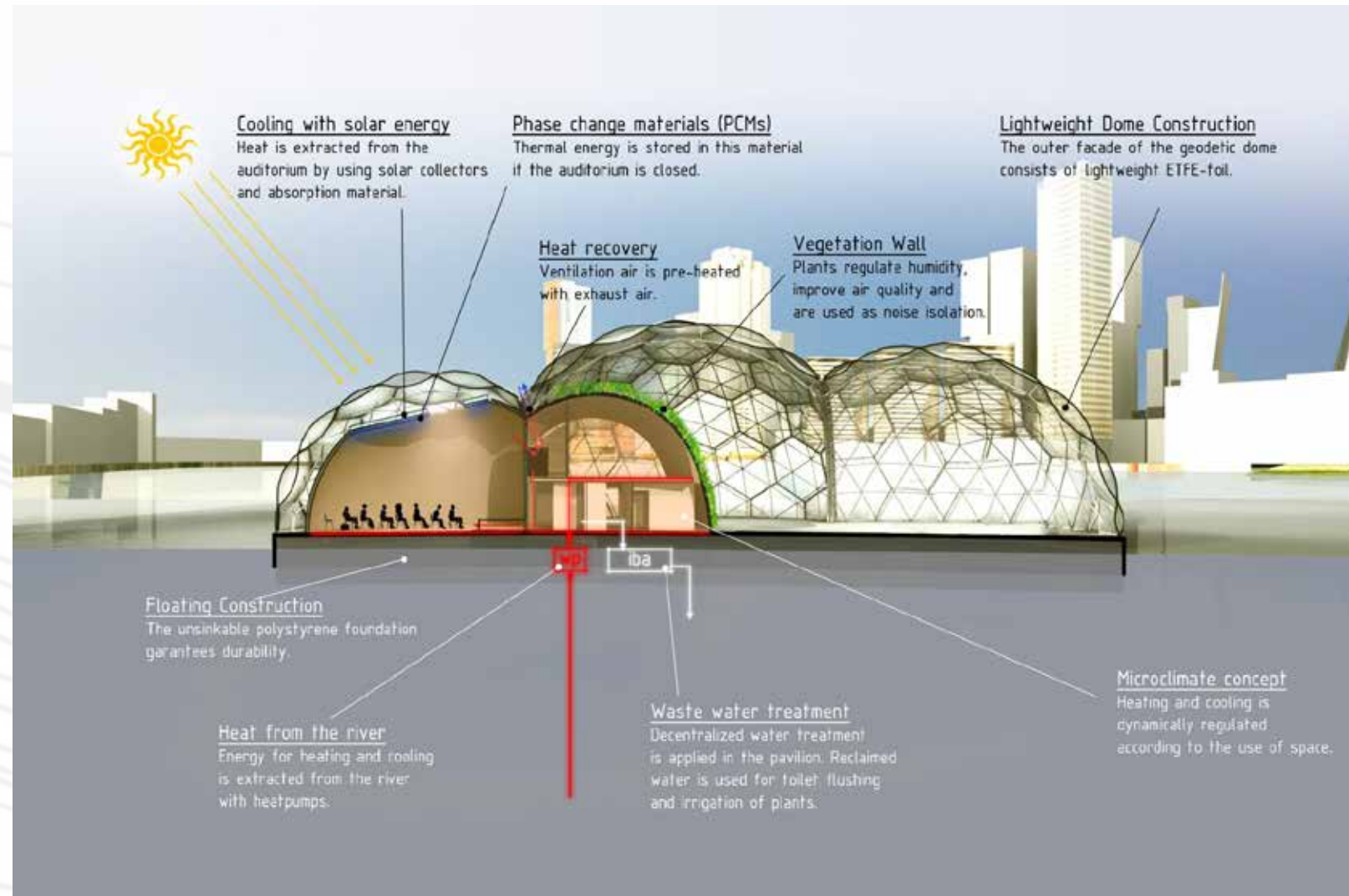
CONCLUSIONS:

There is demand and people are willing to attend events on water. Why not give them such chance and arrange these events on the water or docks. "Motion on the water" has all the potentials to achieve new horizons.

FLOATING PAVILION - ROTTERDAM



Floating pavilion in Riinhaven. The location is chosen by archi-



The Pavilion is floating on 2,5 meter of polystyrene ('piepschuim')



floating park

CONCLUSIONS:

A lightweight system needs to be part of the design to make the buildings and docks more flexible and in different shapes..

PEDESTRIAN - COPENHAGEN



wood deck

Public space - bridge and outdoor swimming pool

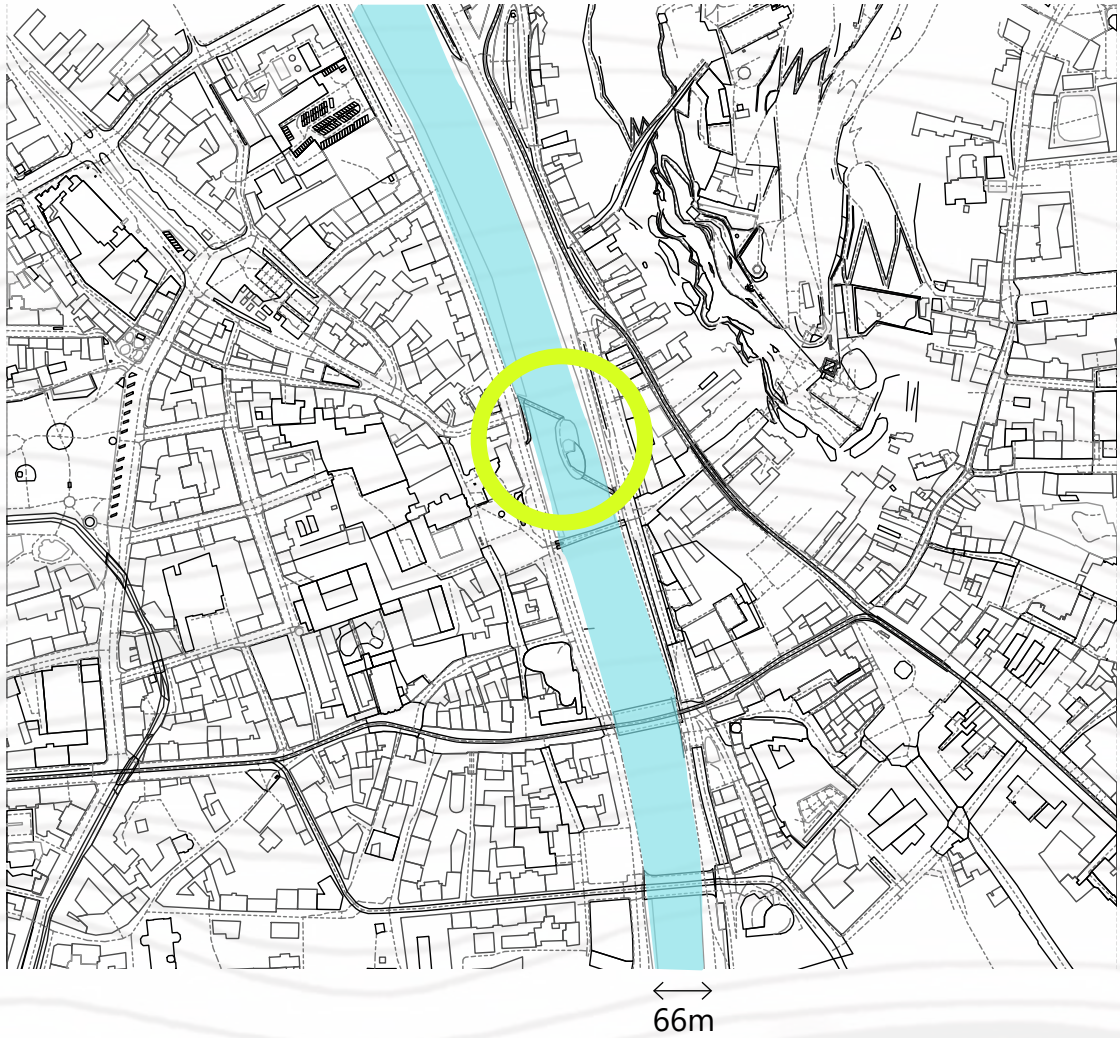
wood deck



CONCLUSIONS:

The proposal is to have clean water for outdoor swimming pools and keep hygiene at a high level. Pedestrian docks, need to be wide enough for pedestrians and cyclists.

CONNECTING LINK - GRAZ



Artificial island in the Mur with theater and coffee place



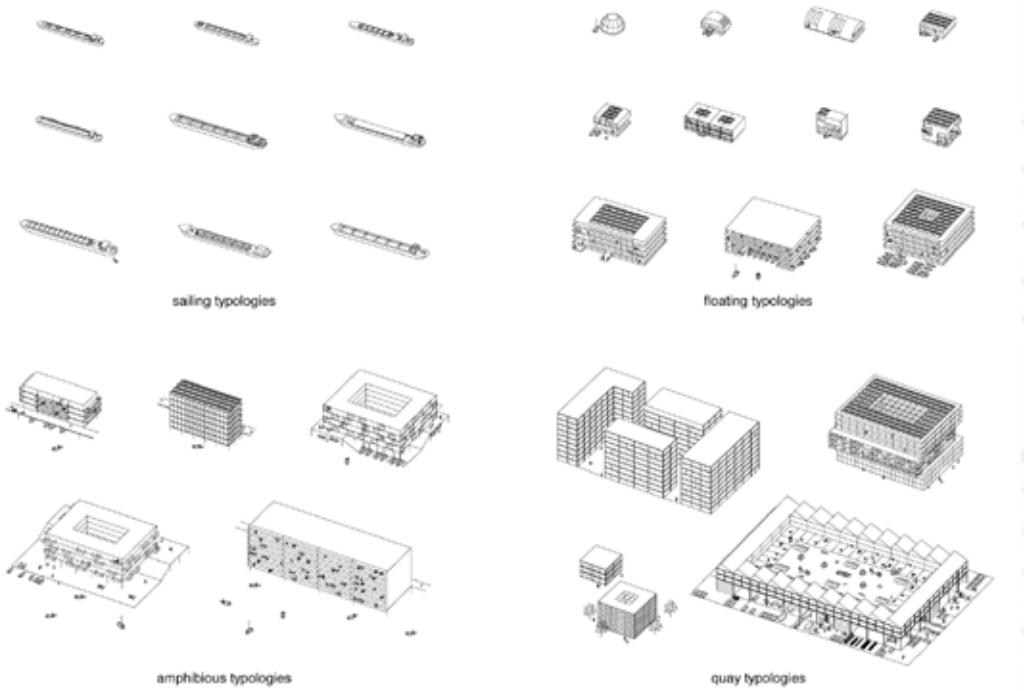
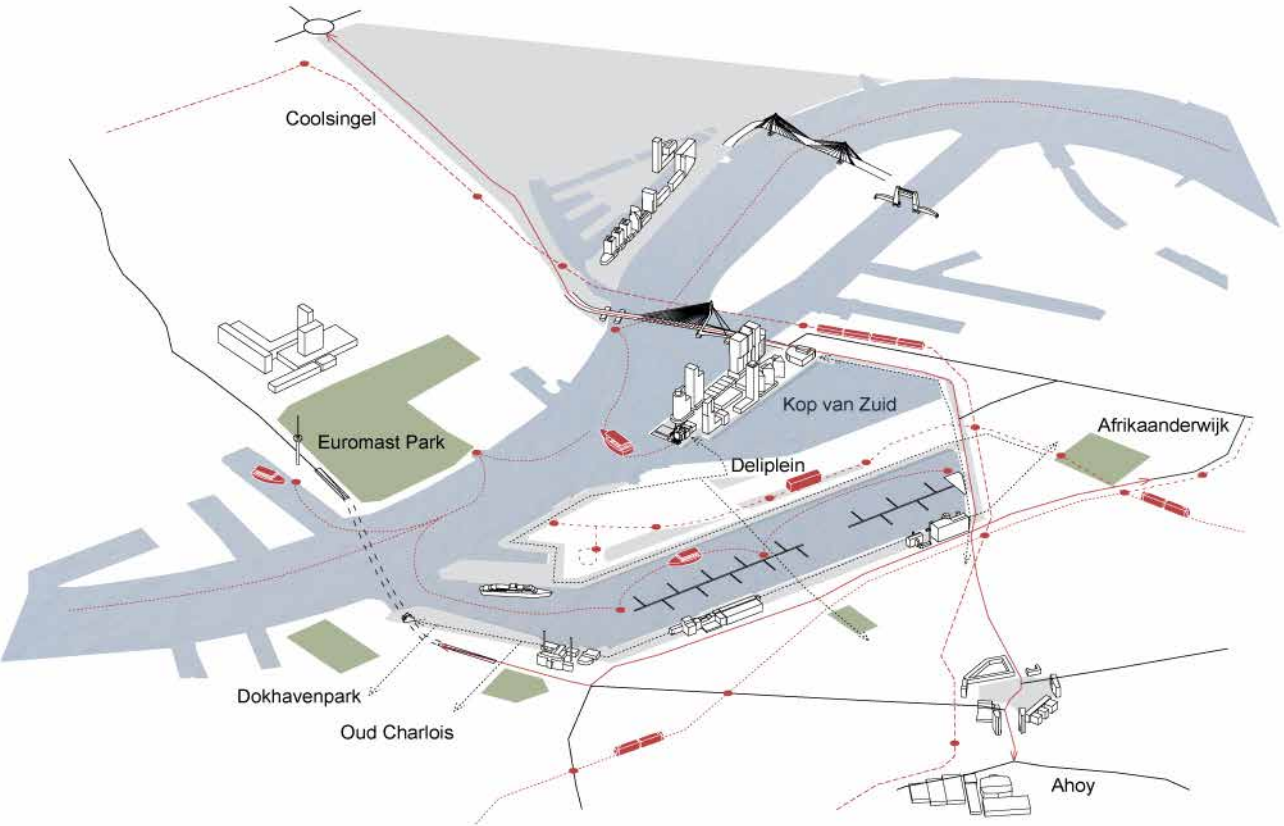
Gem in the river



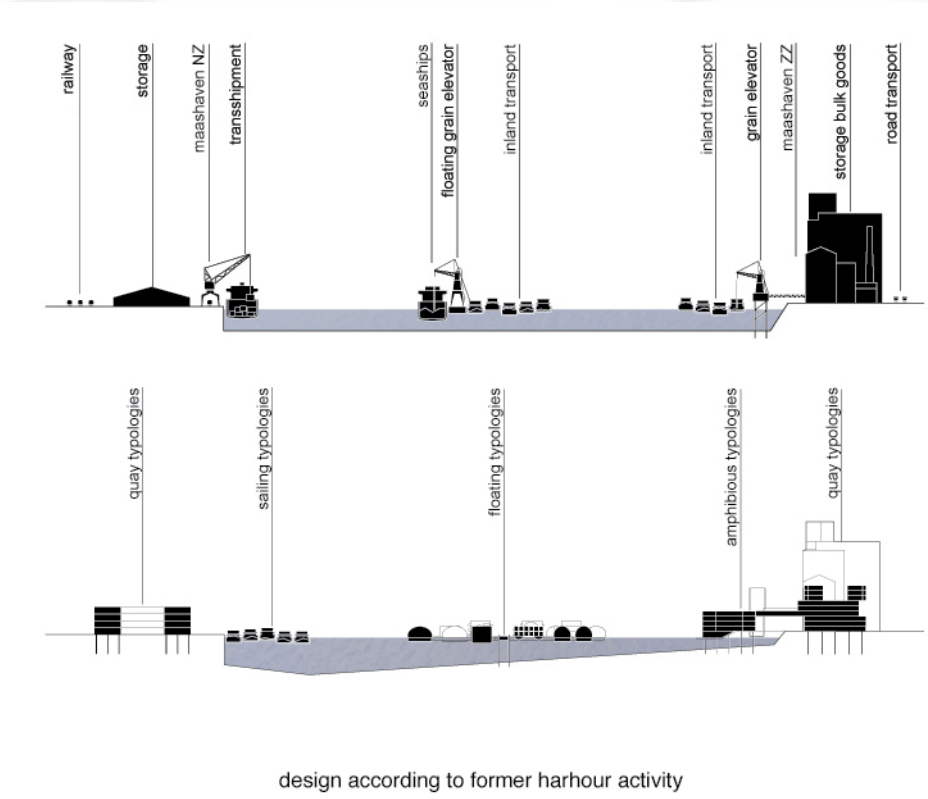
CONCLUSIONS:

The link needs to have a different type of experience and atmosphere. play with shapes and light. Eye catcher during the night.

PROPOSAL FOR MAASHAVEN



Goldsmith proposal for Maashaven



CONCLUSIONS:

The proposal is to make a neighborhood on the water. I do not think that is the best solution. People need outdoor spaces and different activities. Water is for everyone.

3 CONCEPTS

WHY?

- empty harbor
- poorly designed waterfront
- lack of good public space
- lacking connection with other cultural venues

HOW?

- by connecting two waterfronts
- by creating harmony in urban setting
- by improving public space
- by adding extra layer of public activities
- by bring cultural events on water

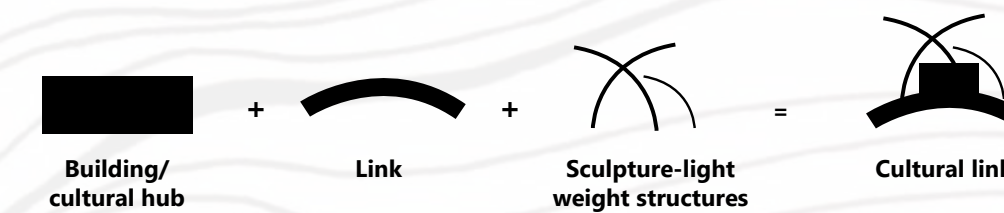
WHAT?

- cultural hub with various events and activities
- qualitative indoor and outdoor public space
- adjustable space according to event and/or weather conditions

3 CONCEPTS

1

CULTURAL LINK
connect two sides



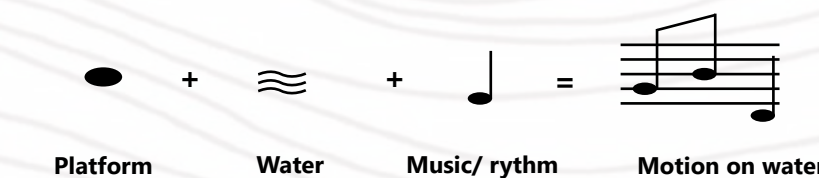
stage is in the building



audience is **IN** the building

2

COVER THE SURFACE
floating elements



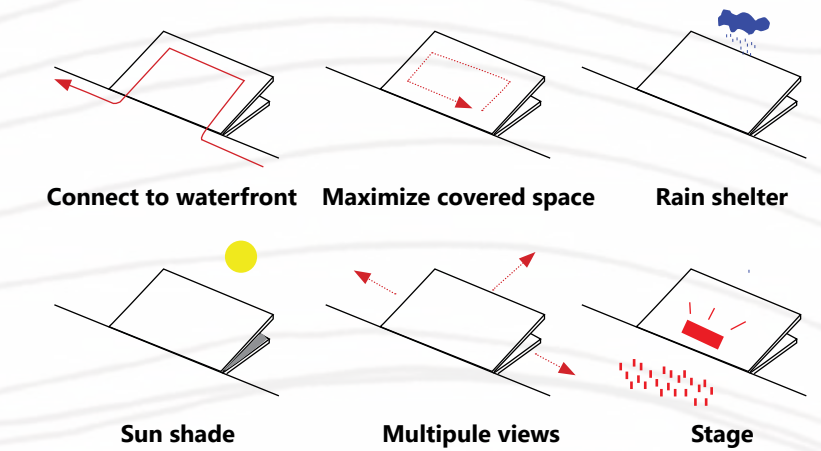
stage is in the water



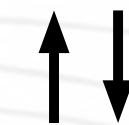
audience is **AT** the waterfront

3

WATERFRONTS
expand water edge



stage is in at the waterfront

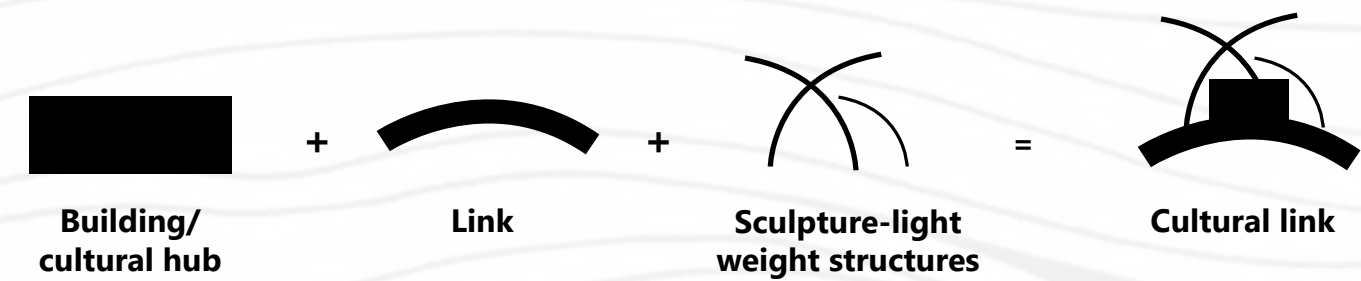


audience is **ON** the water

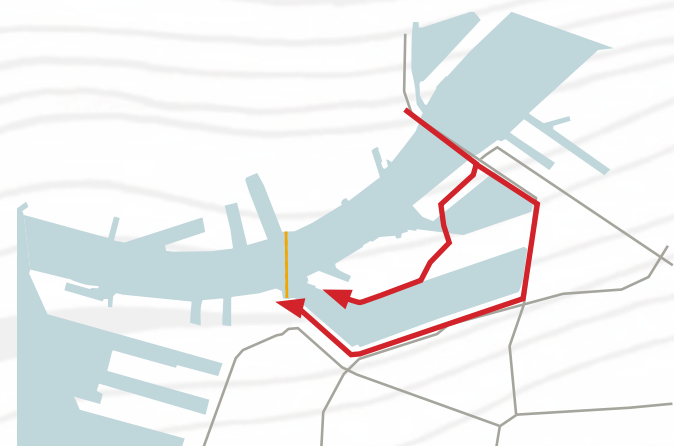
CONCLUSIONS:

New ideas and concepts help to lead to the final outcome. Step by step. 3 opposite concepts lead to the final hybrid concept that contains all three. They balance out each other and make stronger the final idea.

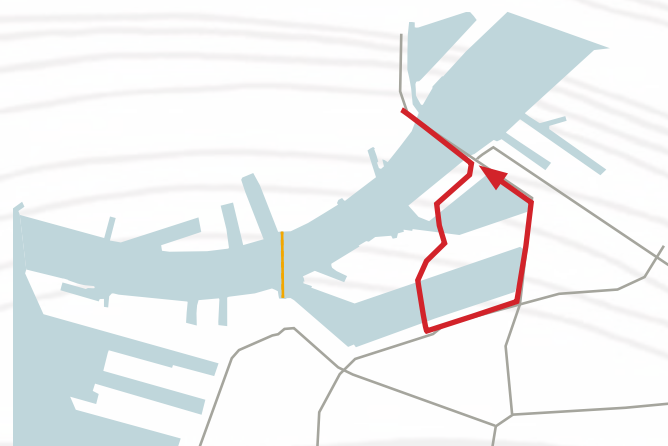
CULTURAL LINK



Loop of cultural venues



Maashaven is natural divider between Katendrecht and Tarvewijk, creating circualtion issues.



A new bridge will tie together the cultural area by connecting landscape and cultural venues in a natural continuous loop.



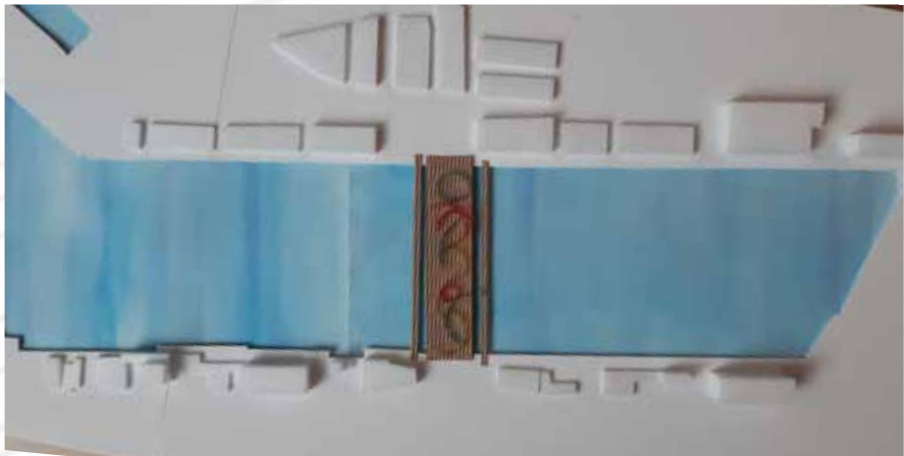
Jevnaker, Kistefos museum (BIG)



Graz, The Island in the Mur, theater

ALTERNATIVE 1

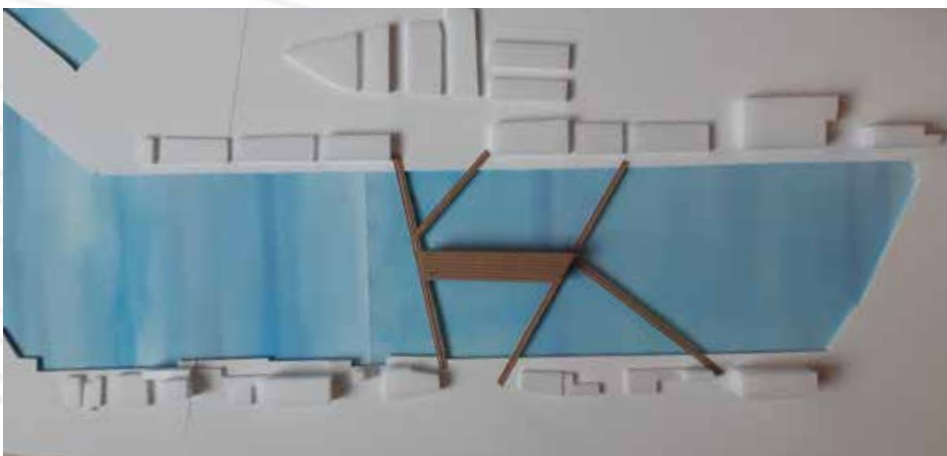
- one bridge
- building lenght the same as bridge



audience in the building and bridges

ALTERNATIVE 2

- many bridges
- building in the middle



audience in the building and bridges

ALTERNATIVE 3

- many bridges
- buildings on intersections



audience in the building and bridges

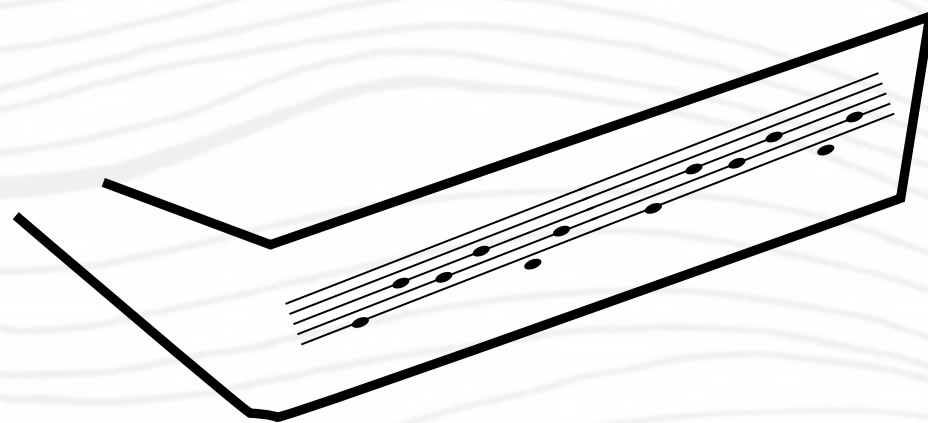
QUALITIES

- connect waterfronts
- compact link with various functions
- public space in-between
- colorful
- landmark, central object
- separate bicycle lane
- free waterfronts
- level differences above water level
- easier builing approach

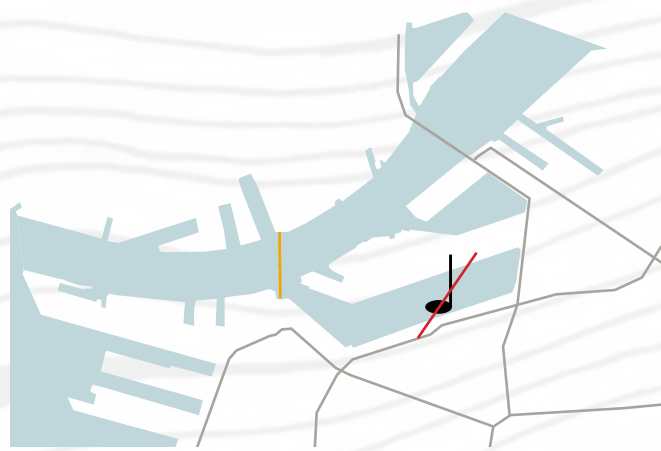
CONCLUSIONS:

This concept is a too simple and straightforward solution. Not using the water surface as much as could.

MOTION ON WATER

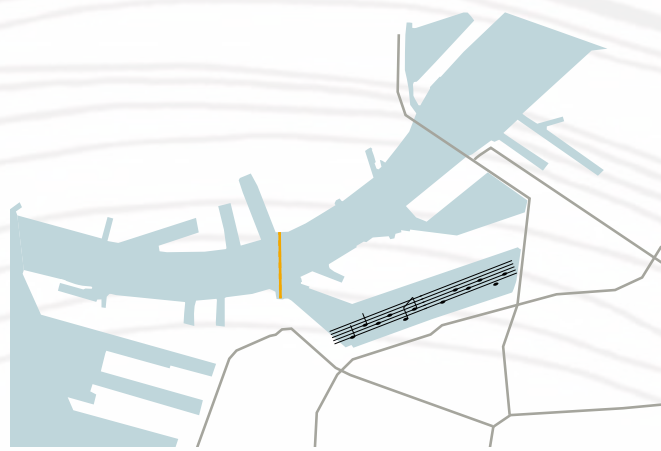


Harbor covered by music



Empty / silent harbor

Silent harbor. Wind and motor-boats are making rare sounds.



Harbor filled with music

Music by Artist from Rotterdam South. Fills the harbor with music, motion and dancers on floating platforms. Music connects and invites people.



Amsterdam, light festival



Piccolo teatro



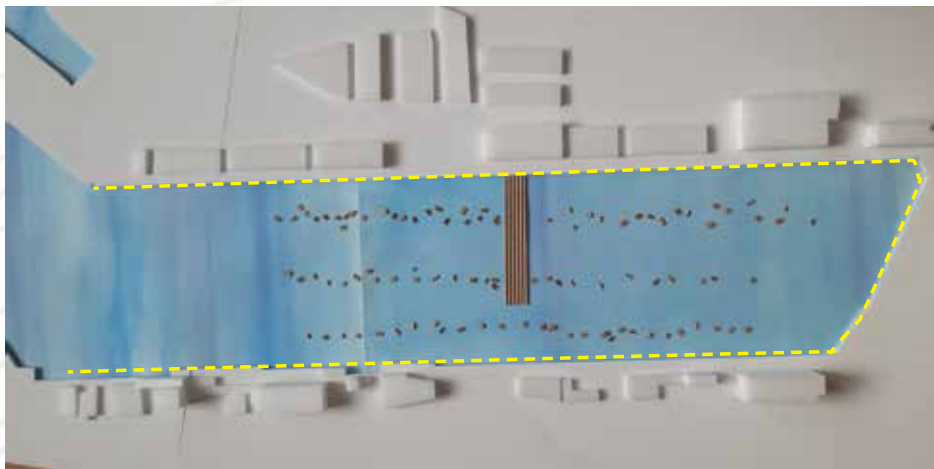
Scenic design set



Interactive cultural water-edge

ALTERNATIVE 1

-floating stages are placed according to a song



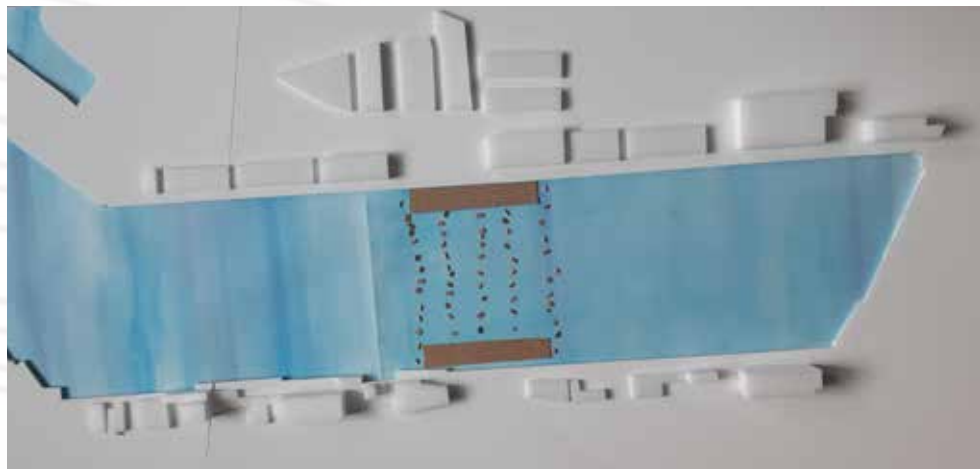
- audience at the waterfront
- change of song changes disposition of floating stages
- central building - drydock

QUALITIES

- water is stage
- floating elements cover entire harbor
- floating elements are collocated in various combinations
- audience can be inbetween floating elements and dancers
- water is playfield

ALTERNATIVE 2

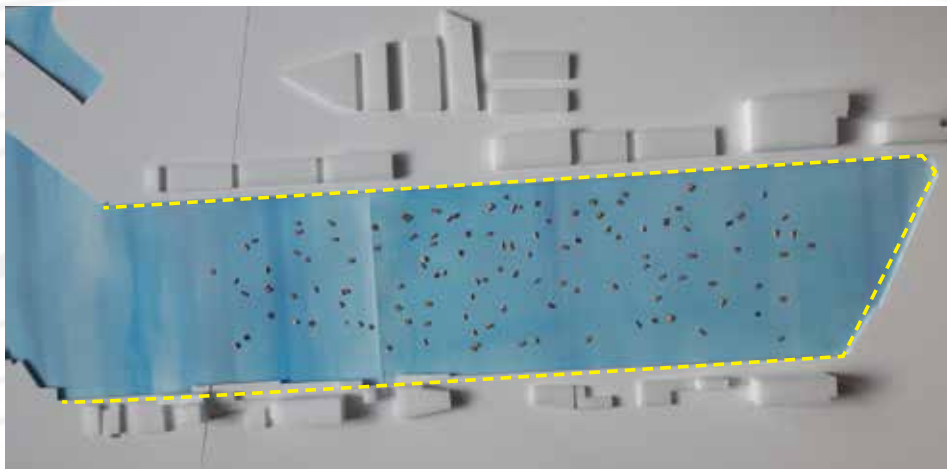
-floating stages are moving in shortes dirrection



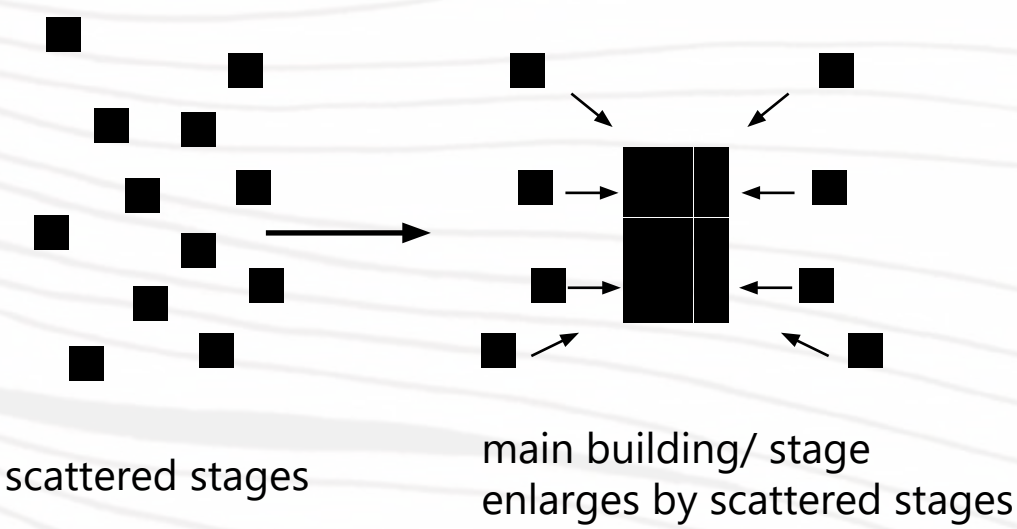
- audience at the waterfront and plato
- platforms are moving on cable system

ALTERNATIVE 3

- water is covered with small floating stages



- audience at the waterfront
- floating stages are creating one main stage



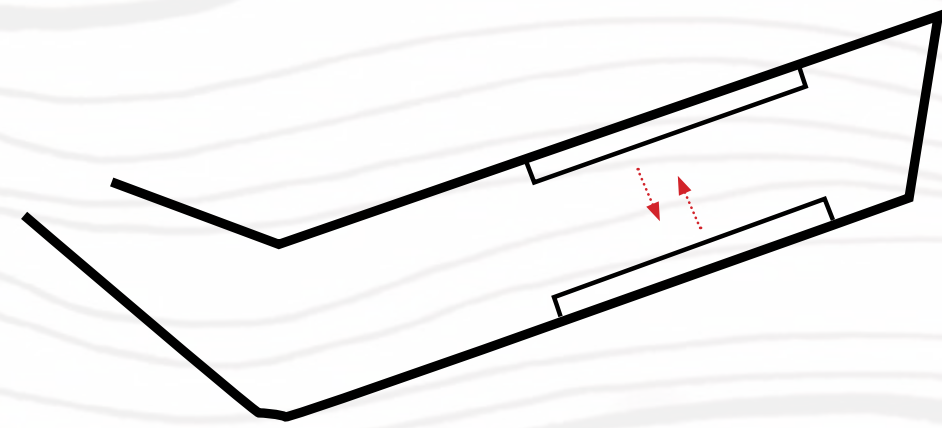
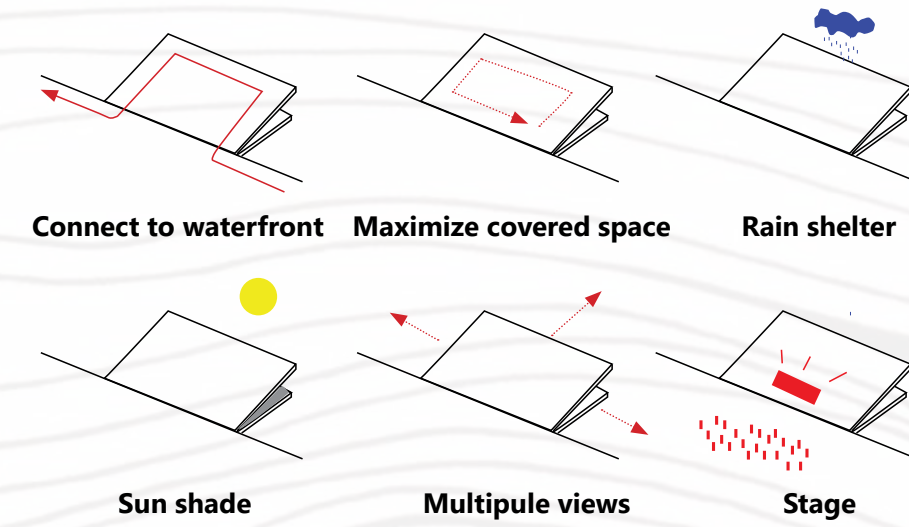
scattered stages

main building/ stage enlarges by scattered stages

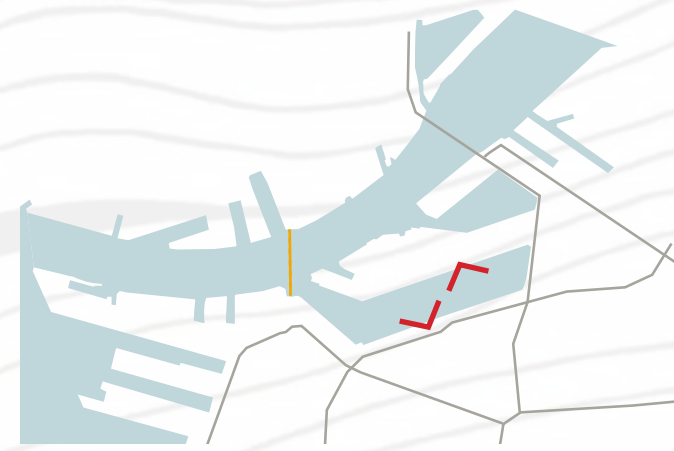
CONCLUSIONS:

The small stages can make too much chaos and the stages are very small. This concept is lacking a public space.

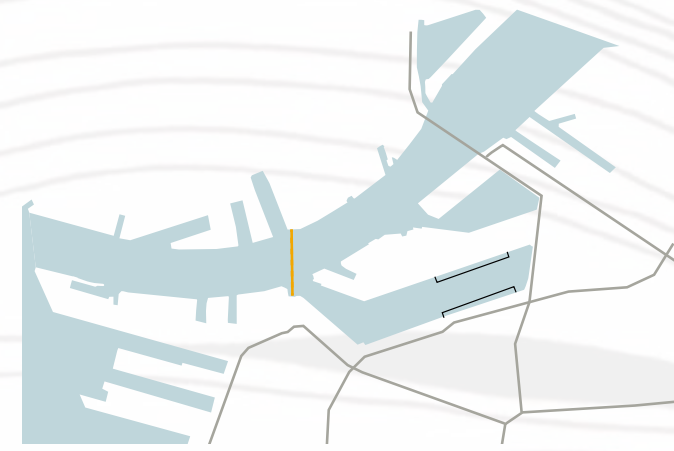
ALONG THE WATERFRONT



Along the waterfront



Even, identical view



Alive view with activity



Aarhus, public swimming pool



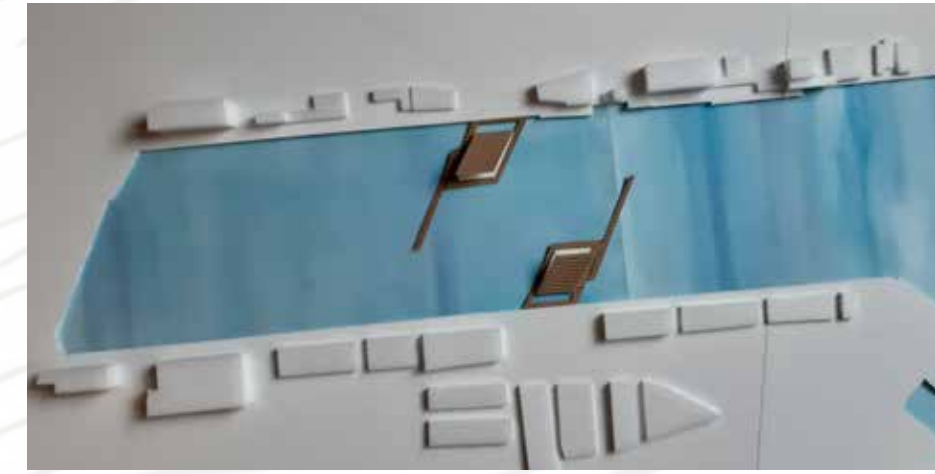
Copenhagen, public swimming pool



NYC, viewing platform

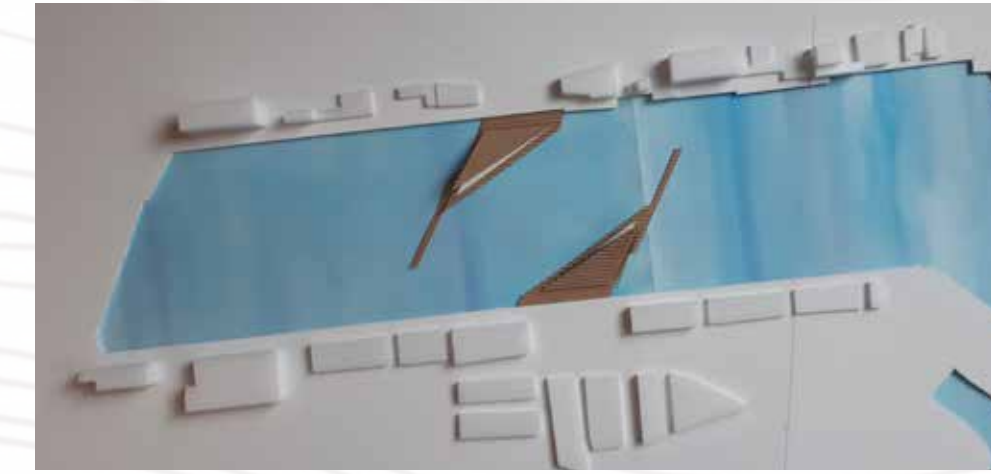
ALTERNATIVE 1

-floating modular buildings along the waterfront



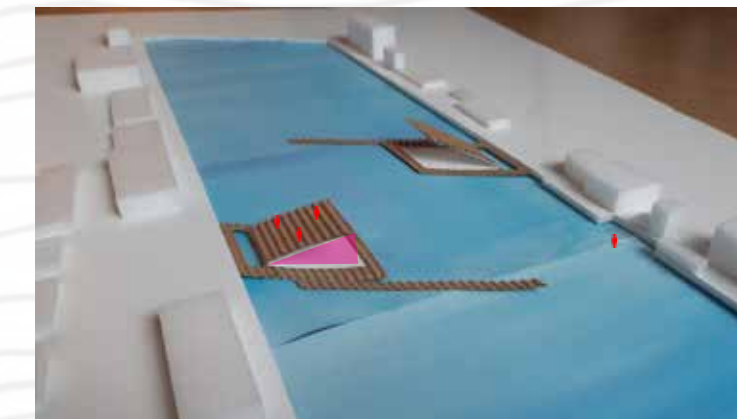
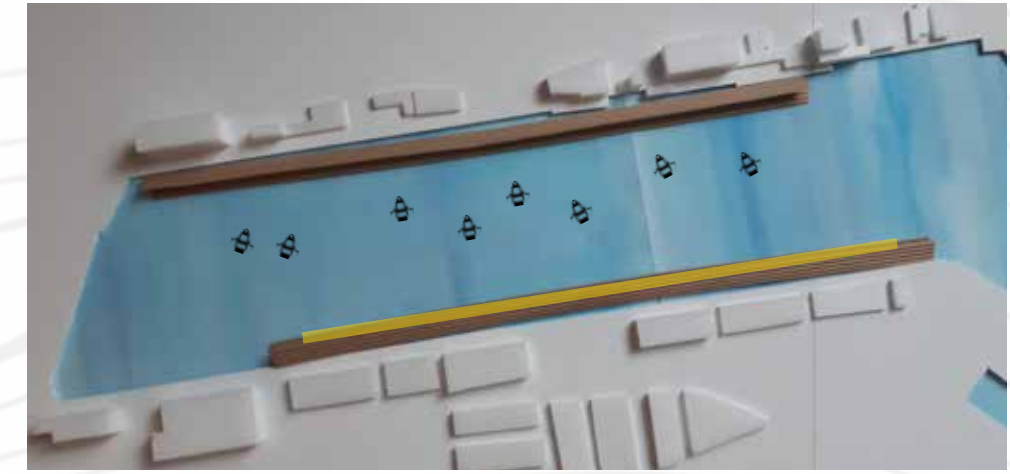
ALTERNATIVE 2

- differently shaped floating modular buildings along the waterfront. Weather studies

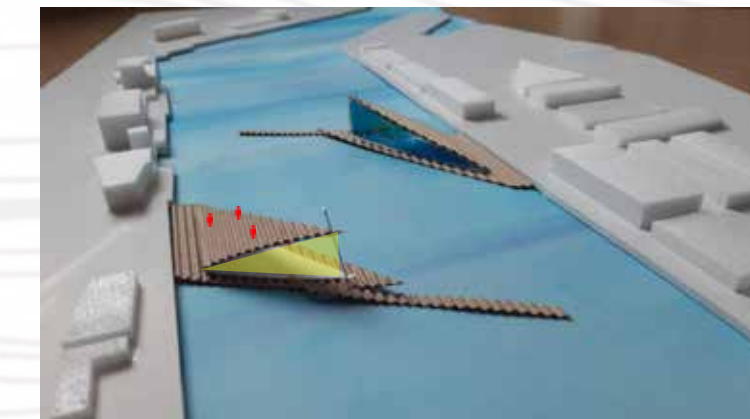


ALTERNATIVE 3

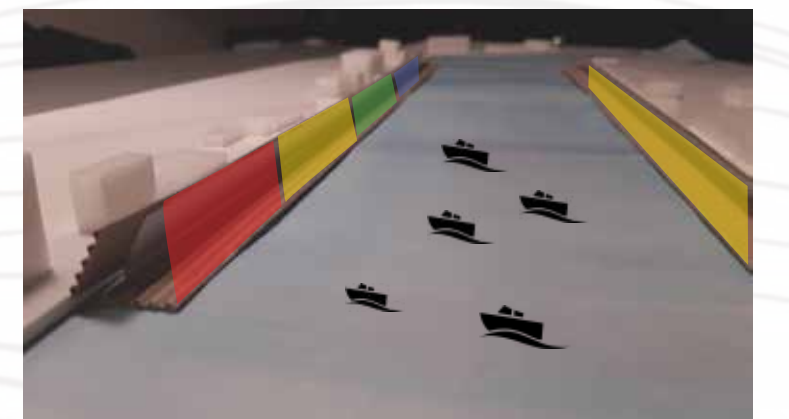
- water is covered with small floating stages



audience is in the building



audience is on the building



audience in the water

QUALITIES

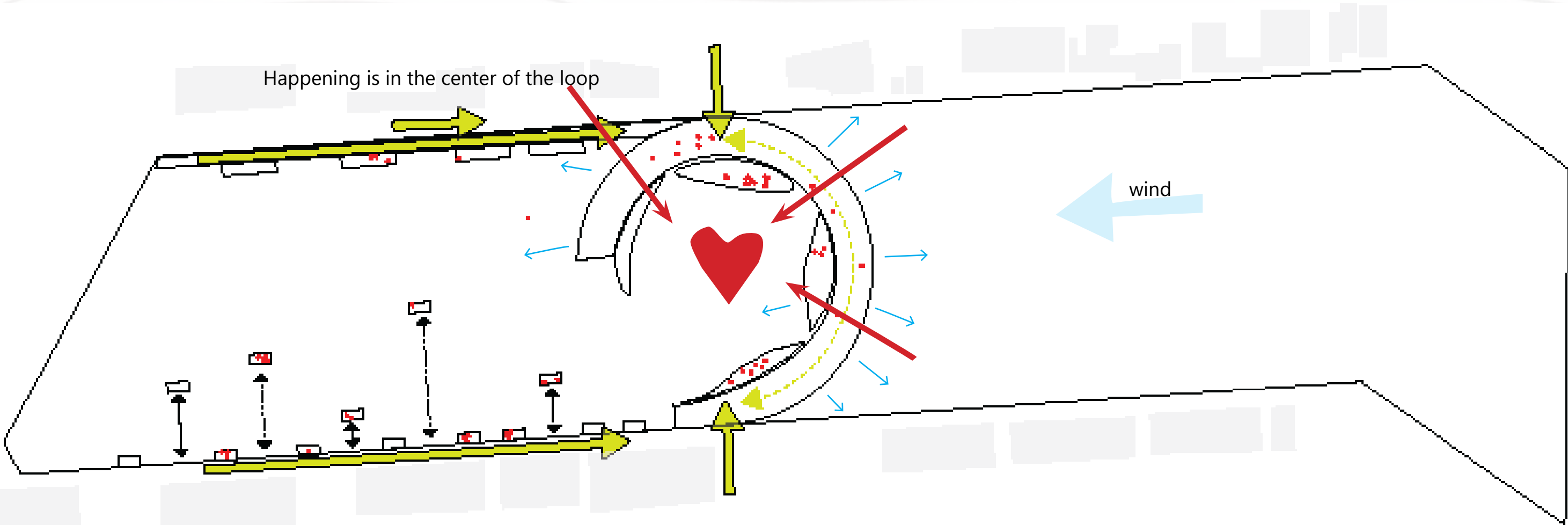
- creates inner water stage
- modular objects
- tribune
- outdoor pool
- audience can be also on the water
- free floating object
- various viewing points

CONCLUSIONS:

This concept has an inner "courtyard" but is not connecting both sides which is a disadvantage.

HYBRID

In the final concept, I am trying to combine some of the qualities from the previous concept ideas with circular shapes



CONCLUIONS:
First hybrid design when 3 concepts are combined in one design. A good starting point to explore this option. The circle gives infinity's feeling and a great 360-degeree panoramic view.



Snøhetta, Hotel



Belgarde, Beton Hala waterfront centre



Kastrup, public swimming pool

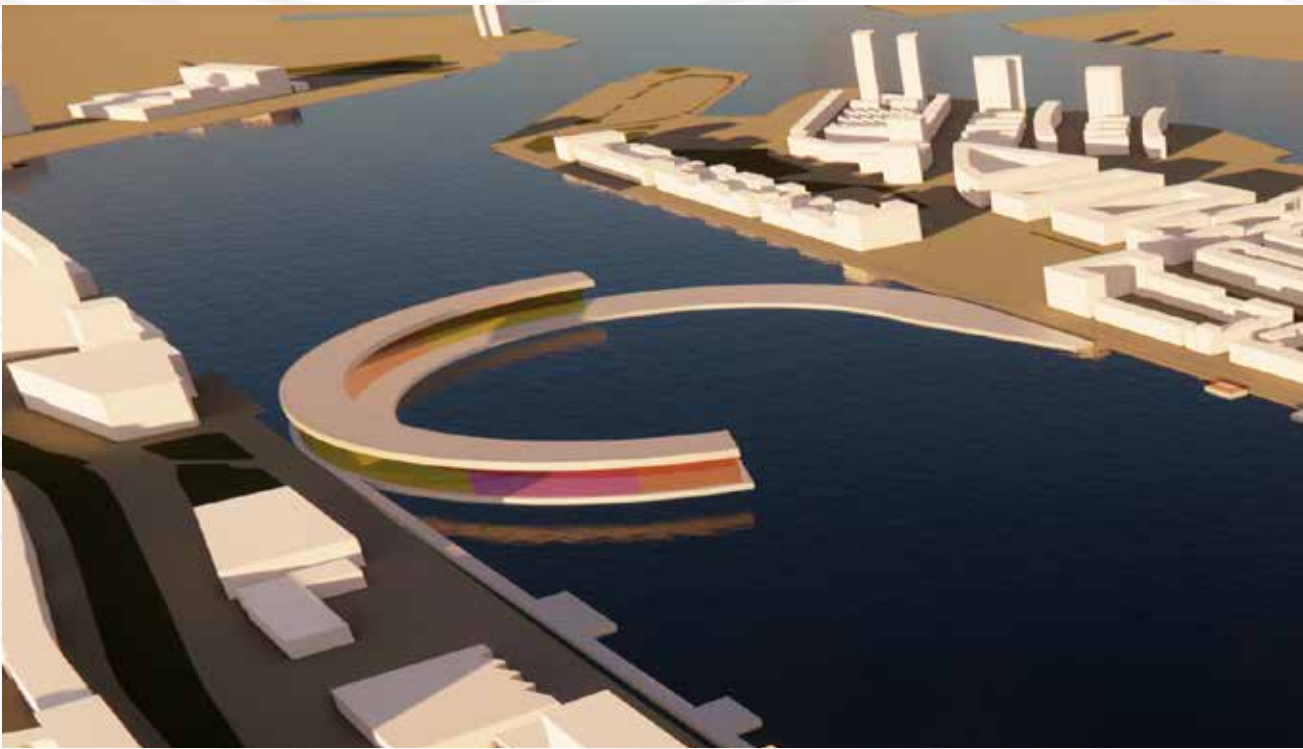
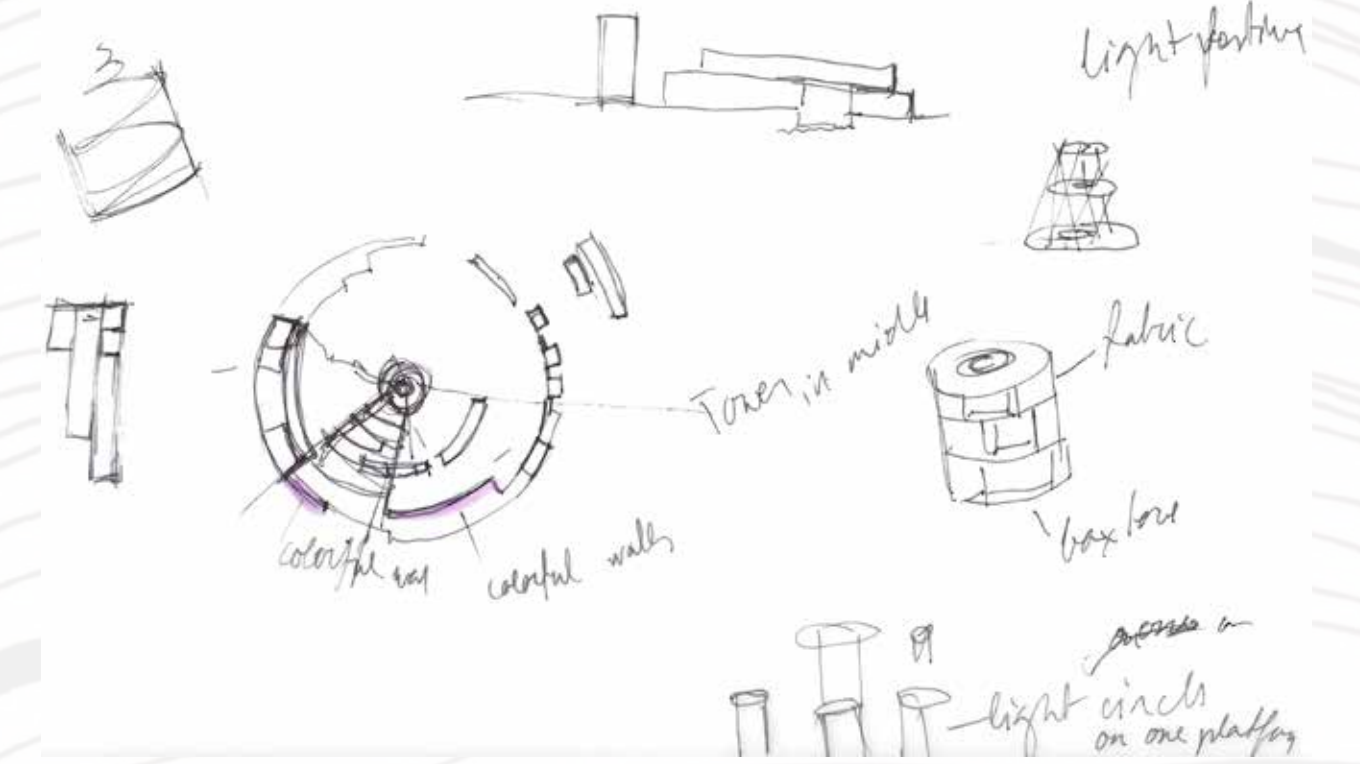
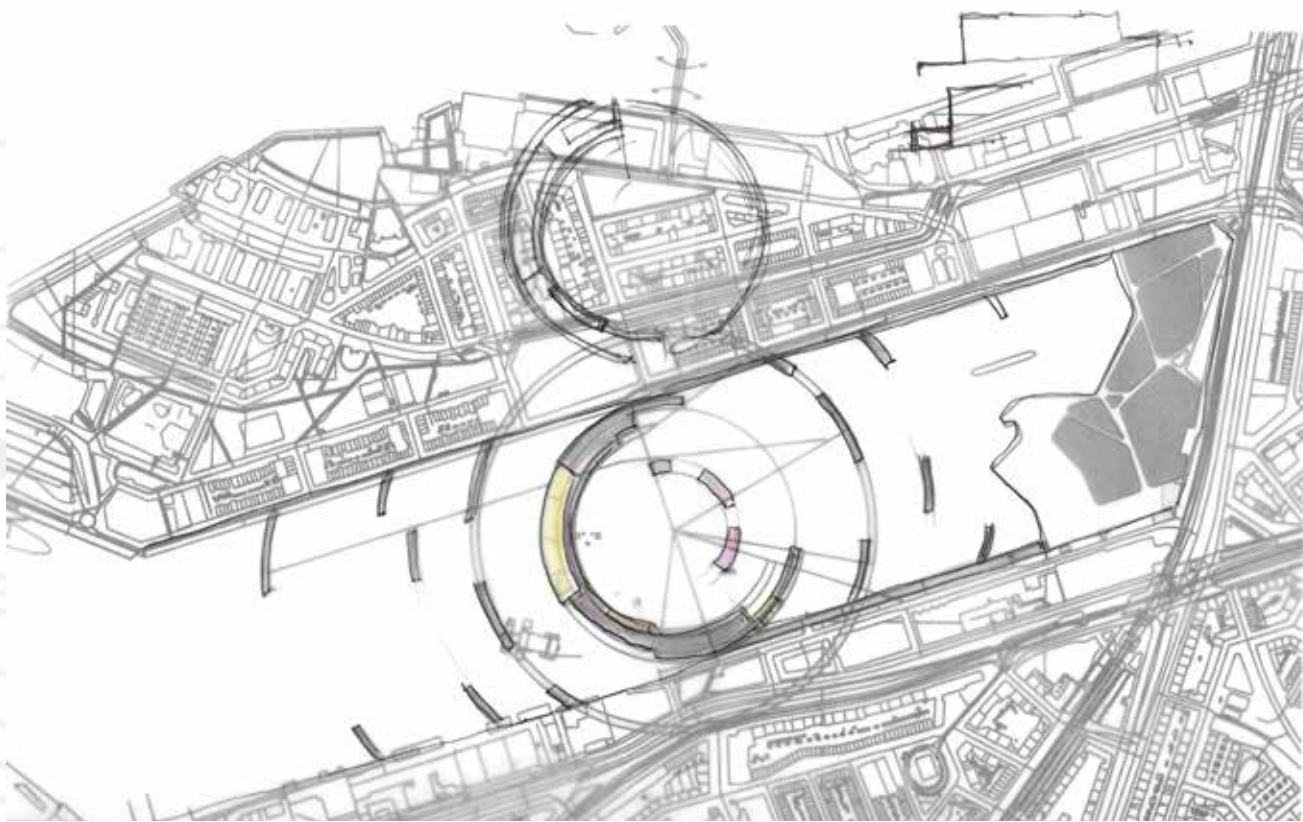
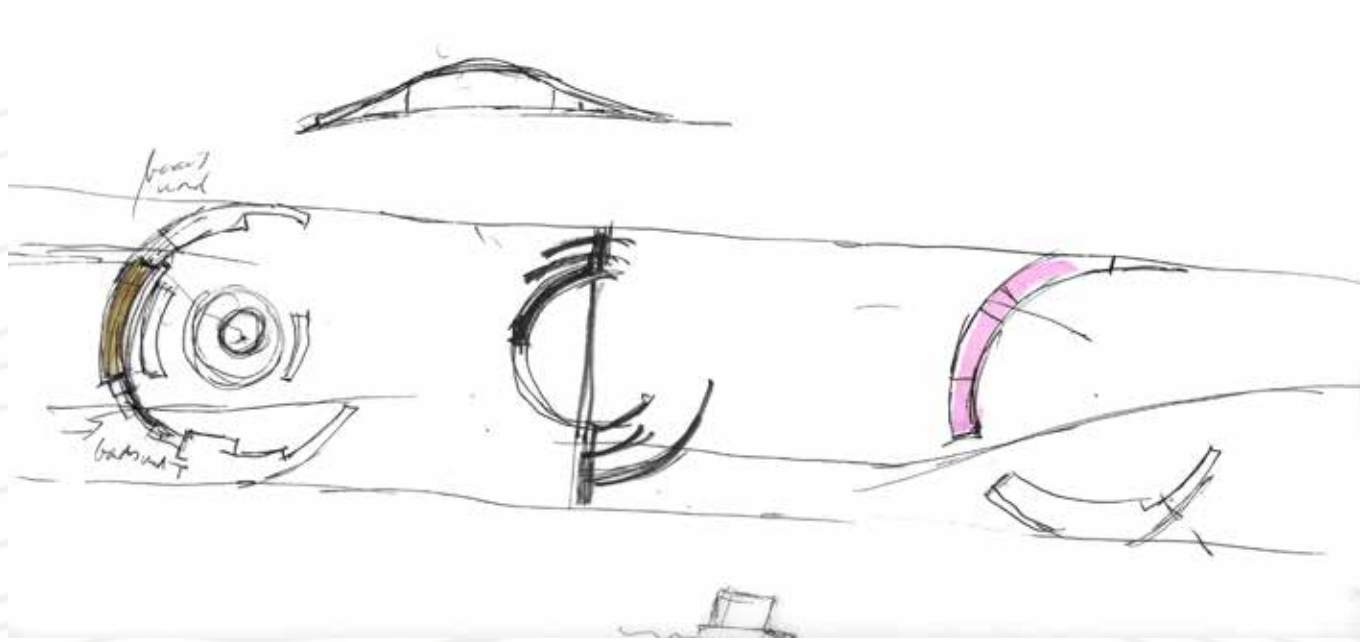


Kastrup, public swimming pool



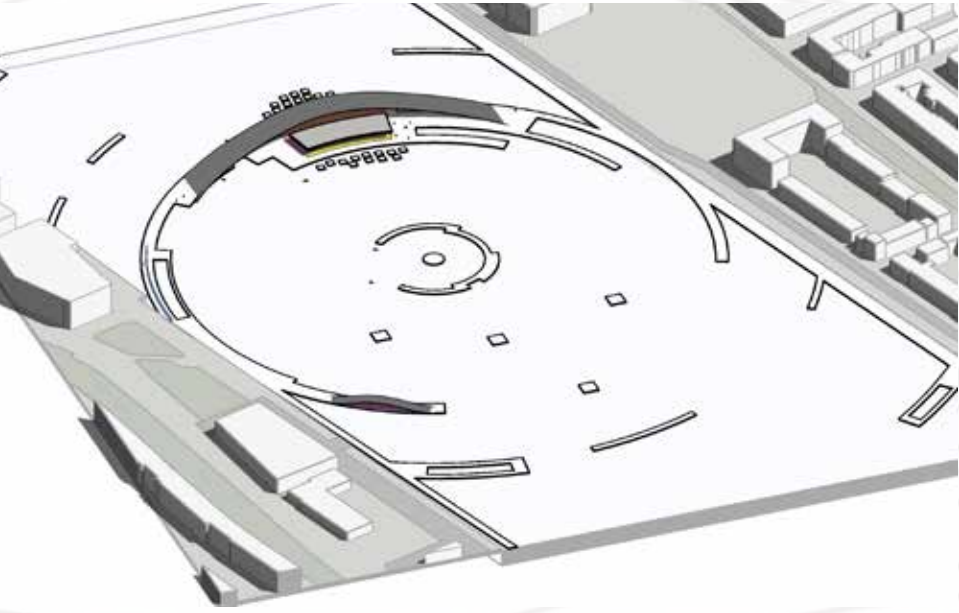
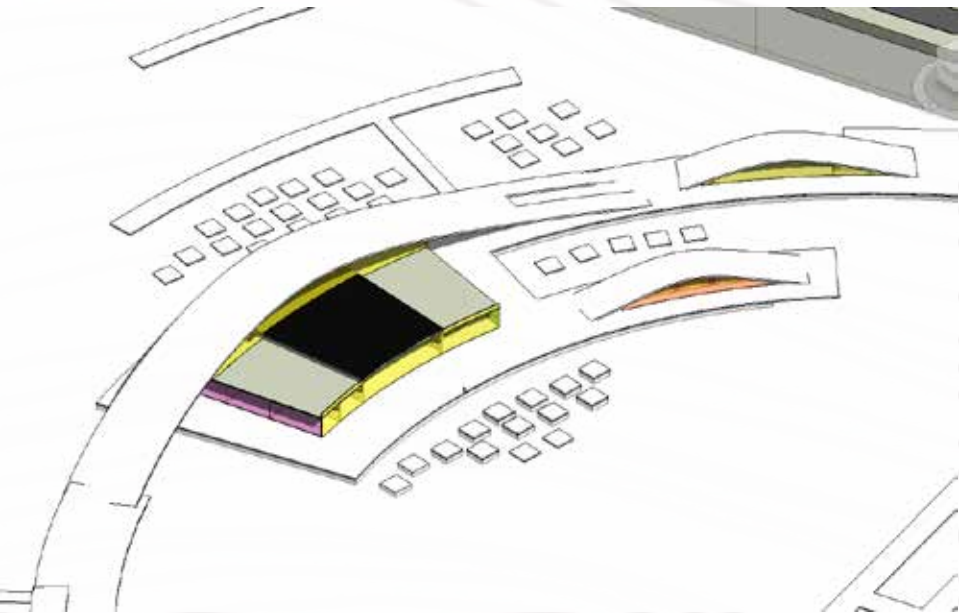
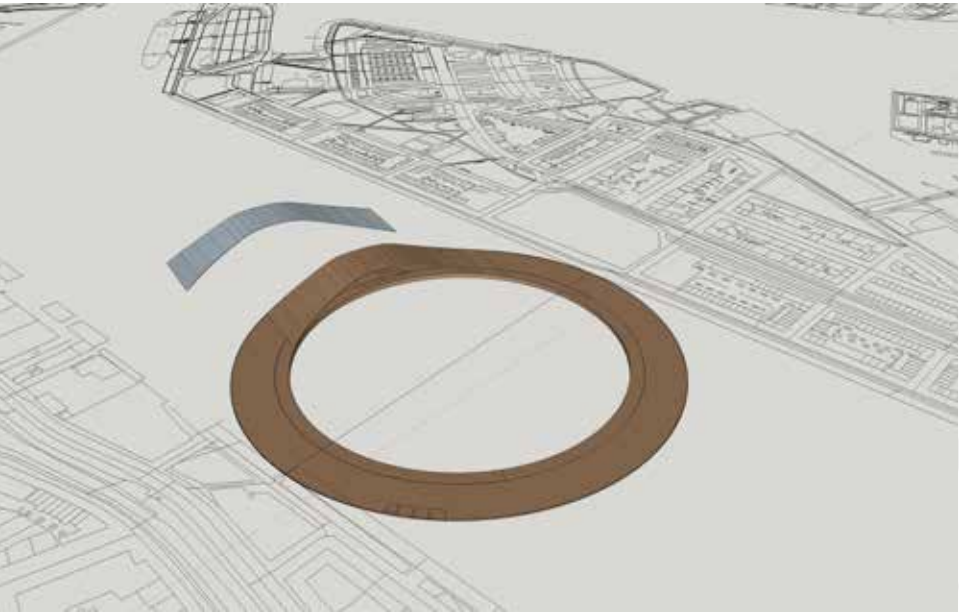
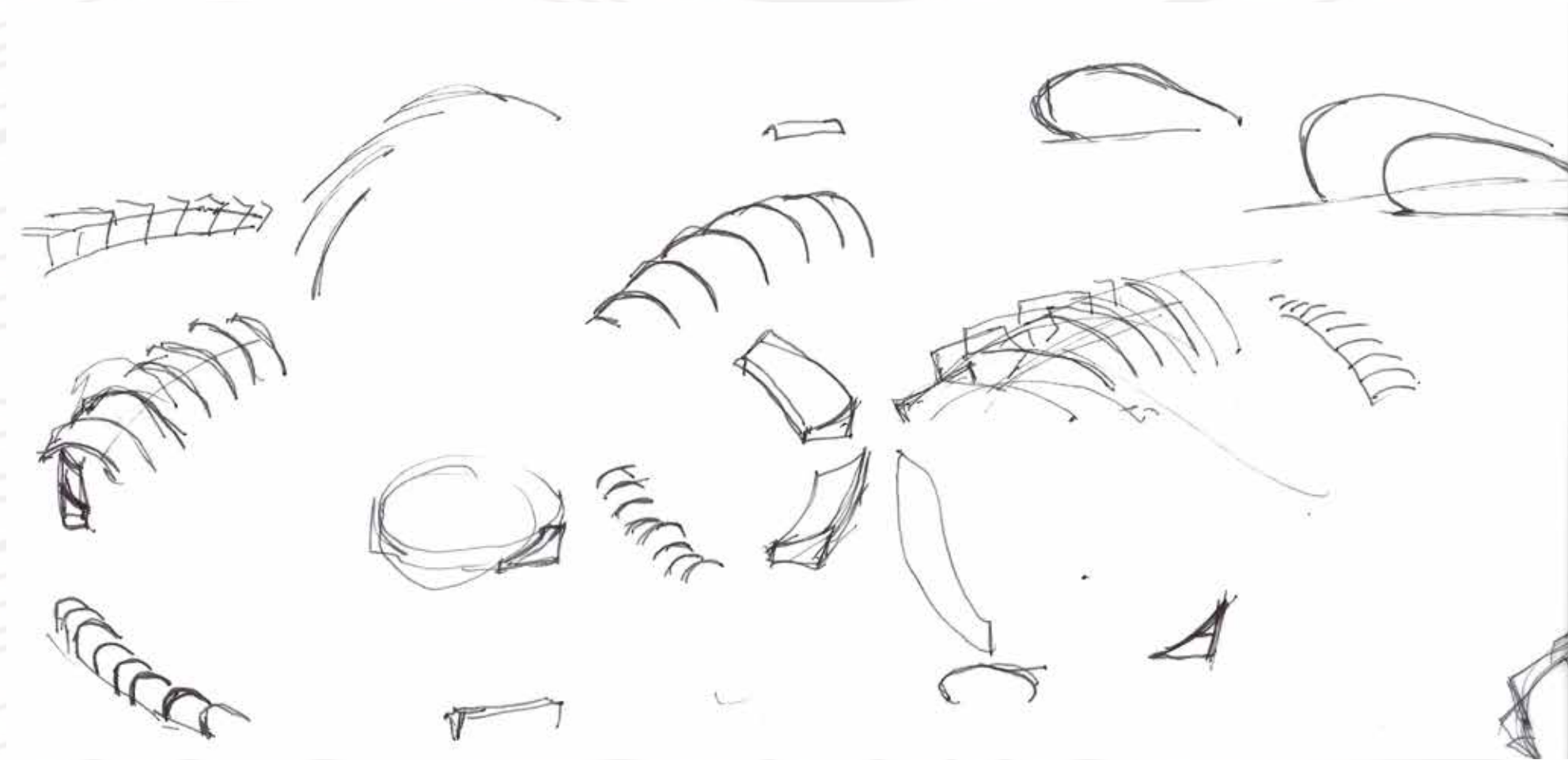
Aarhus, Infinity bridge

HYBRID STUDIES



CONCLUSIONS:
Vast glass surfaces require a qualitative shading system, proper ventilation, and acoustic solutions. This theater for acoustic and light is using automatic shades and sound blocking curtains. That is one of the best systems.

WAVE STUDIES

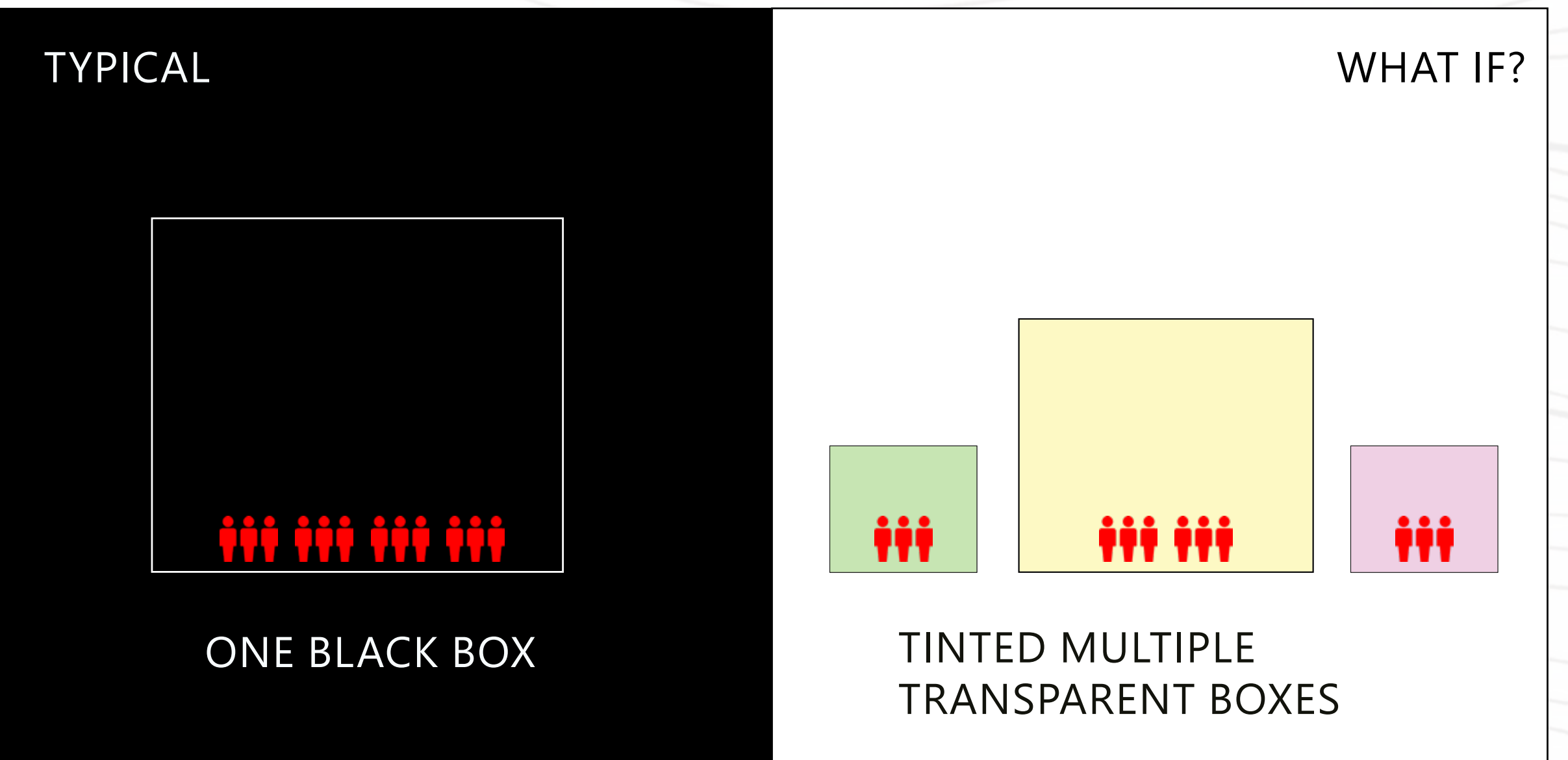


CONCLUSIONS:
I tried different types of waves and directions to be sure which is the best option to clearly present my idea. And it leads to the conclusion that one big wave and few smaller waves are representing the notion of a ripple effect.

DESIGN MANUAL



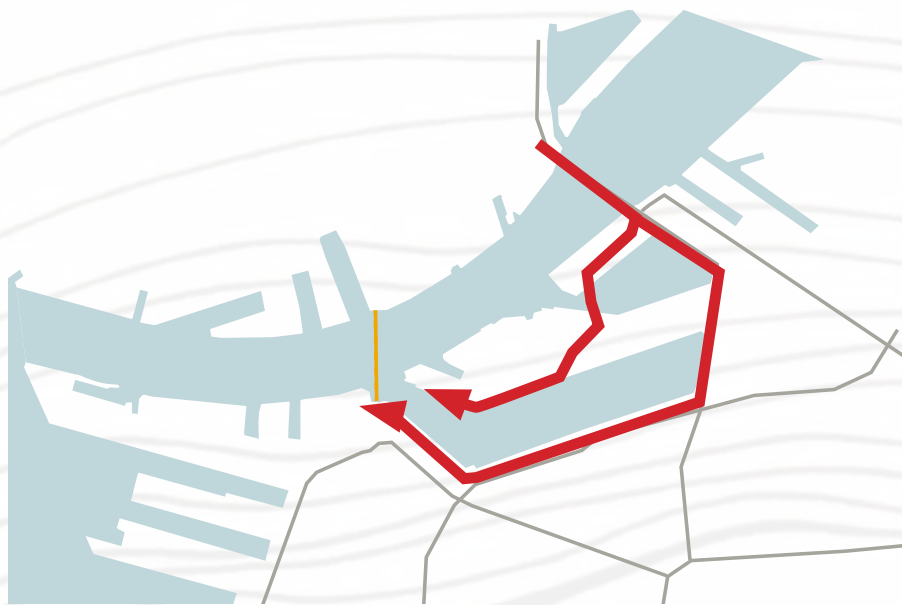
TRANSPARENCY



CONCLUSIONS:

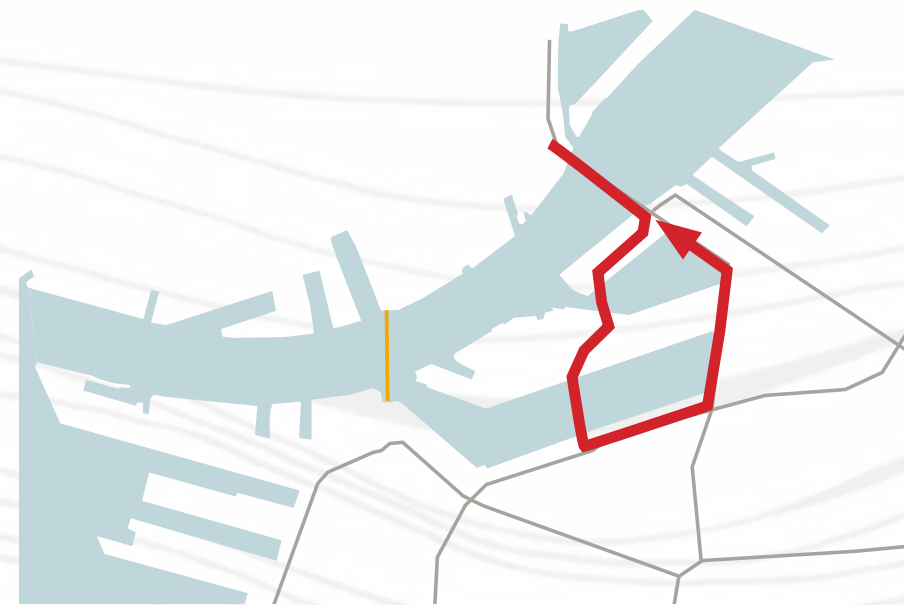
Transparency allows us to see what is happening behind the walls. It is inviting. It brings excitement and intrigue. In the darkest hours of the day, transparency is inviting, it makes the place alive and active.

CULTURAL LOOP



Dead end circulation

Maashaven is natural divider between Katendrecht and Tarvewijk, creating circulation issues.



One circulation loop

A new bridge will tie together the cultural area by connecting landscape and cultural venues in a natural continuous loop.

WHY?

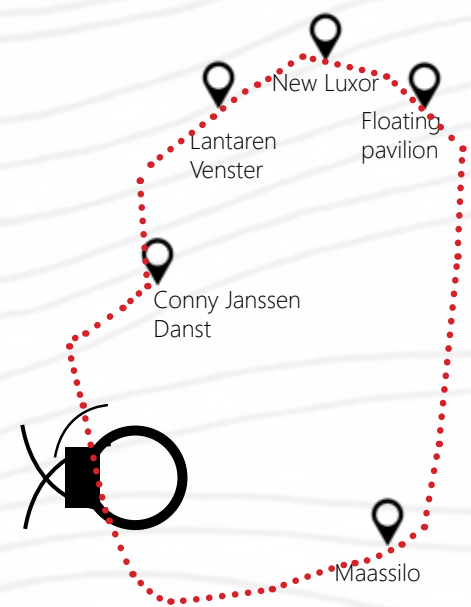
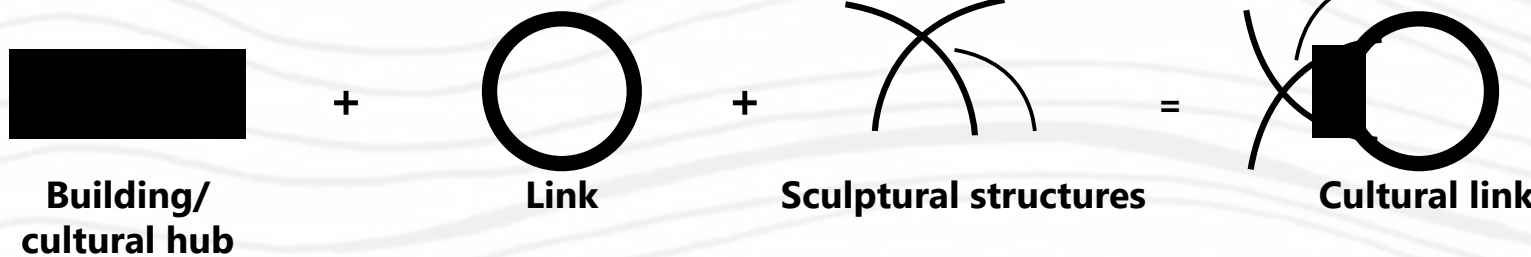
- empty harbor
- poorly designed waterfront
- lack of good public space
- lacking connection with other cultural venues

HOW?

- by connecting two waterfronts
- by creating harmony in urban setting
- by improving public space
- by adding extra layer of public activities
- by bringing cultural events on water

WHAT?

- cultural hub with various events and activities
- qualitative indoor and outdoor public space
- adjustable space according to event and/or weather conditions

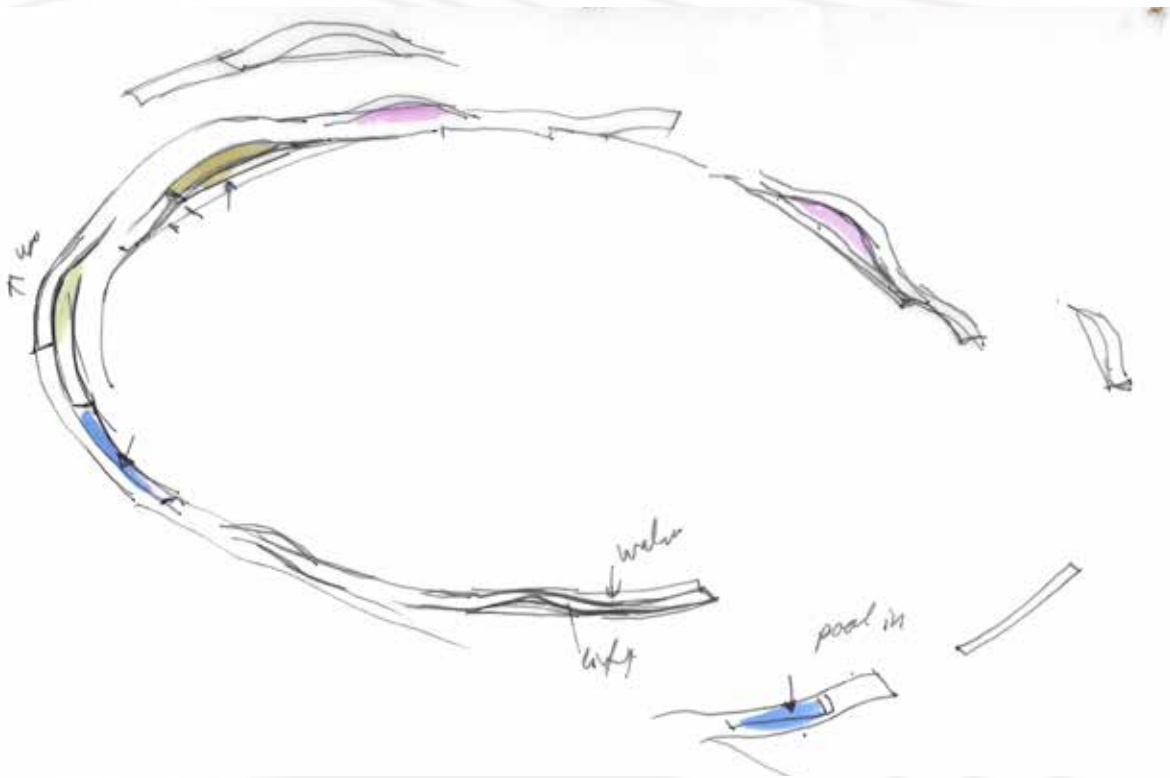


Loop of cultural venues

CONCLUSIONS:

Loop is the same as a bridge, as a connector as a link. It is connecting two waterfronts. It is the main design function. This loop will create a closed circle.

FUNCTION BY ATMOSPHERE



CONCLUSIONS:

Transparency gives the possibility to look at what is happening inside. Transparency and wavy environment create the atmosphere that one is on the motion - seeing dancers moving inside and himself moving through the constructed environment.

STRATEGY

STARTING PRINCIPLES



CONDITONS

size weather location capacity lightweight accesable

TECHNOLOGIES

build - up stability mooring envelope shape

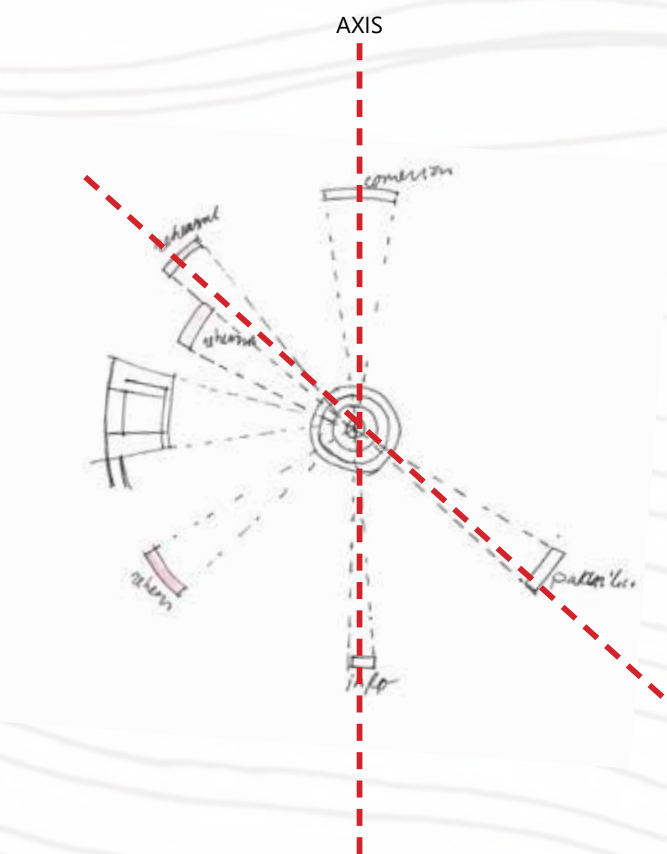
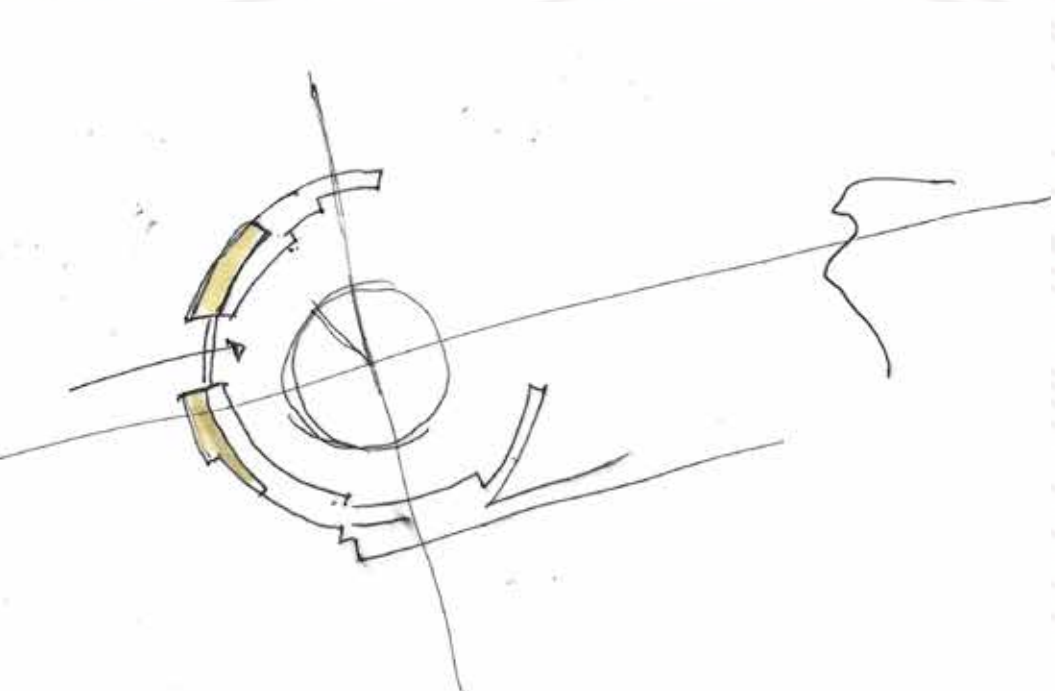
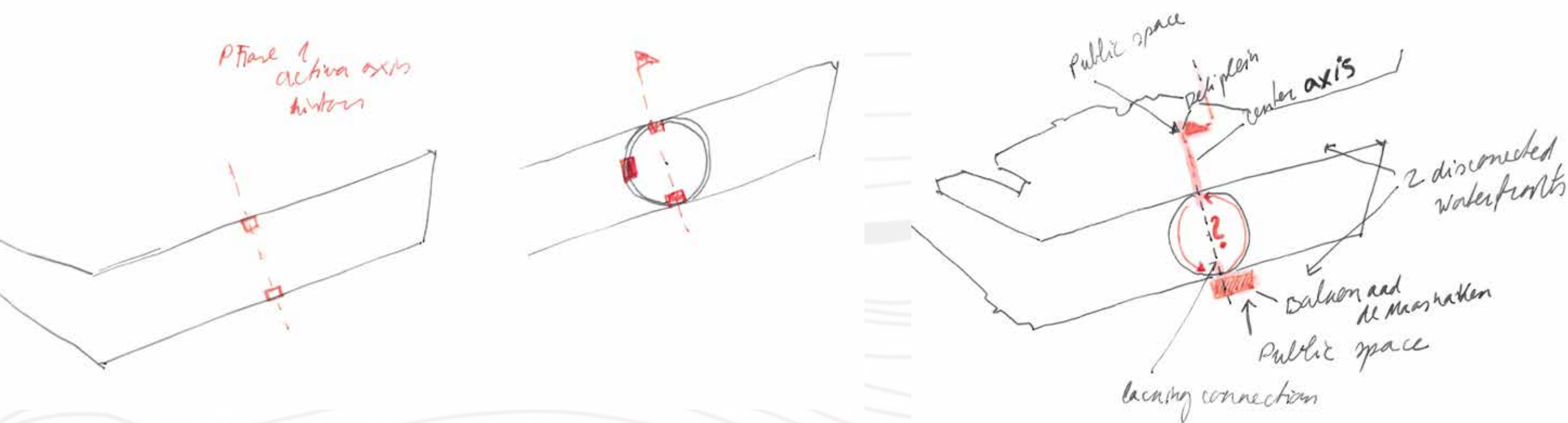
DESIGN PRINCIPLES

view to water connection to water view towards "object" reflective new experience
experimenting transparent sits well in landscape connecting walls = roof great public space

CONCLUSIONS:

Strategy is the guideline to achieve the best design. It guided me through the entire design process.

AXIS



CONCLUSIONS:

The circular shape is based on the axis which is connecting The Kattendrecht and The Tarwewijk. The axis is the main thread and creates a simetry.

PROGRAM

The initial program for Arts and performance center

| | |
|-------------------|-----|
| ROOM NAME | M2 |
| PUBLIC AREAS | |
| LOBBY | 200 |
| COFFEE BAR | 20 |
| CLOAKROOM | 60 |
| TOILETS | 60 |
| BOX OFFICE | 20 |
| | |
| THEATER | |
| AUDITORIUM | 500 |
| STAGE | 170 |
| | |
| | |
| | |
| TECHNICAL SUPPORT | |
| EQUIPMENT ROOMS | 120 |
| CONTROL ROOM | 15 |
| | |
| | |
| PERFORMER SUPPORT | |
| DRESSING ROOMS | 100 |
| GREEN ROOM | 20 |
| DANCE STUDIO | 225 |
| MUSICIANS | 30 |
| PERFORMERS SPACE | 100 |
| RECORDING STUDIO | 80 |
| WORKSPACES | |
| OFFICE | 35 |
| | |
| | |
| CIRCULATION | |
| | 200 |

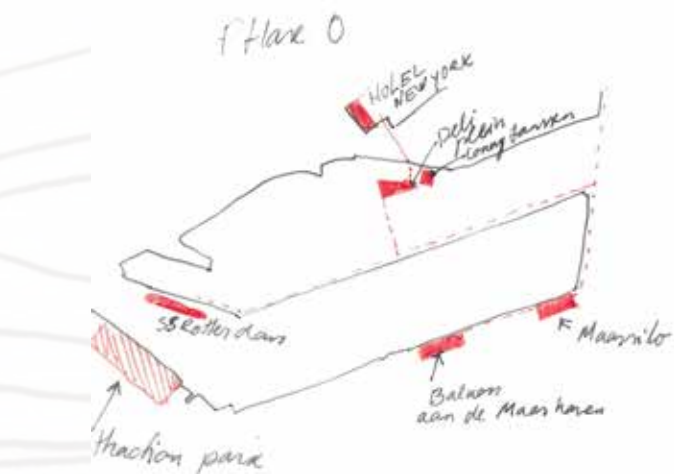


“Motion on the water” is a **factory** of dance. The entire circle is the stage. Buildings on it are designed to house the technical equipment and used as rehearsal spaces.

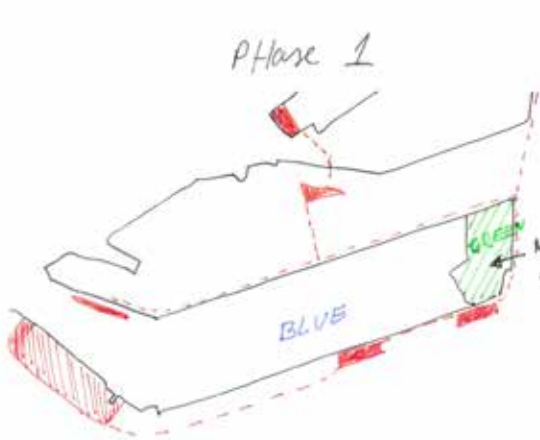
CONCLUSIONS:

The initial program needs to be adjusted and reorganized there is not enough space for all necessary equipment and activities. I need to pay attention to the program for the other smaller buildings that can have a supportive role.

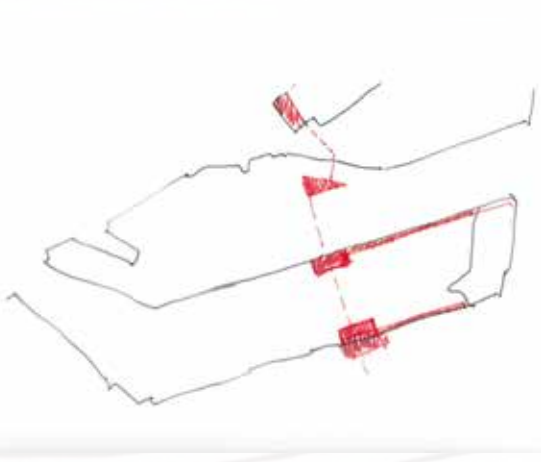
DEVELOPMENT - PHASES



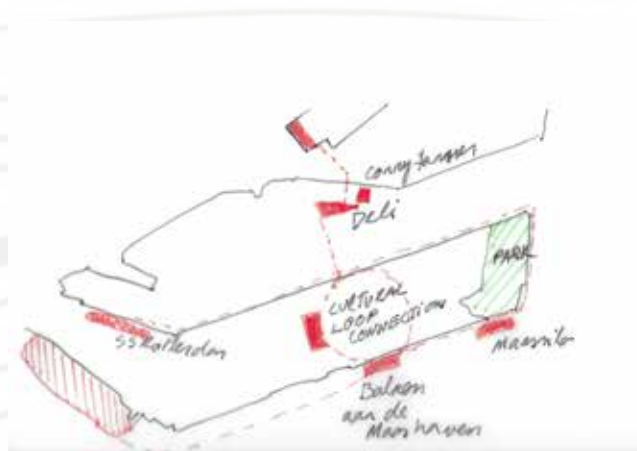
EXISTING SITUATION WITH VENUES



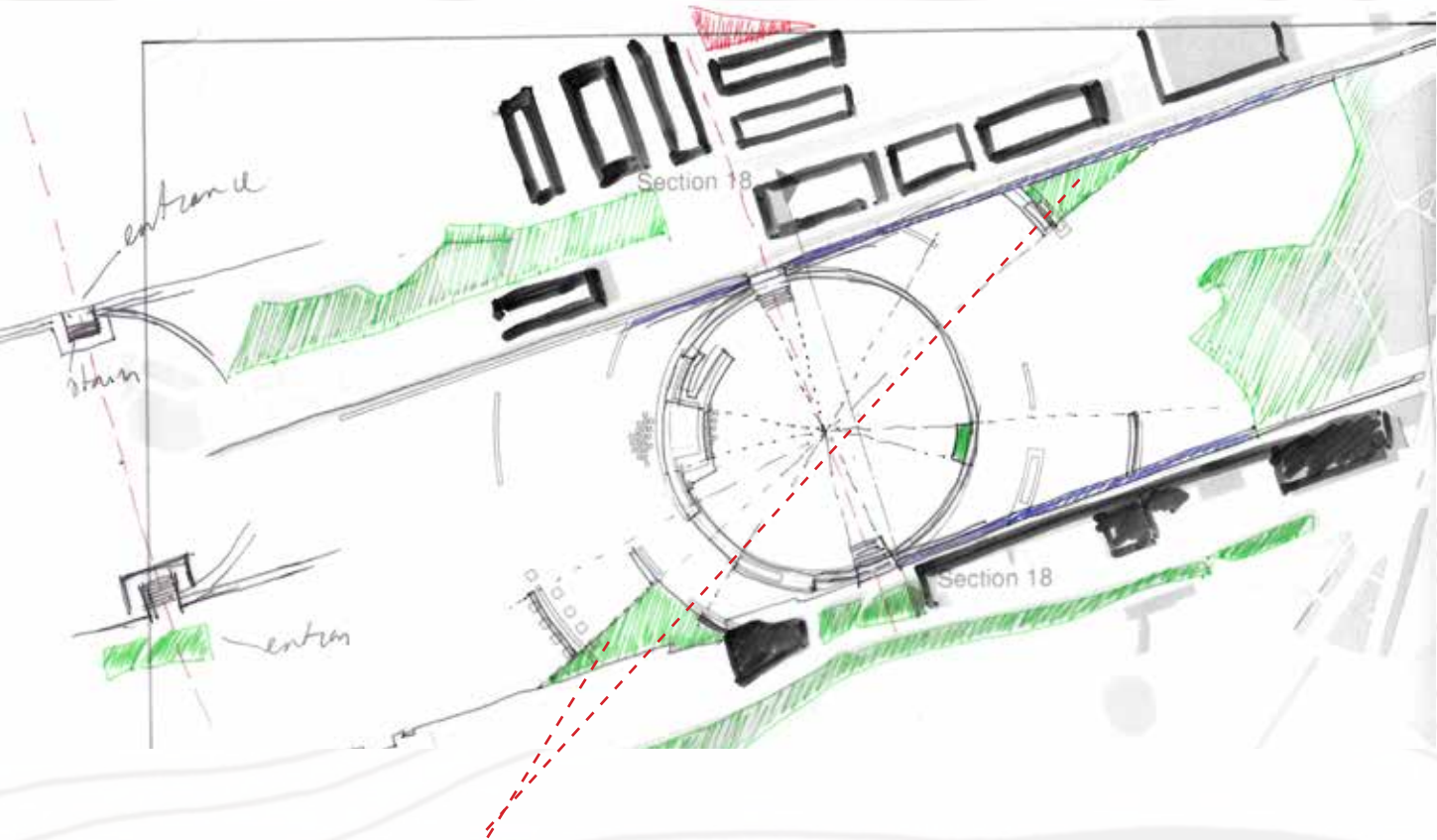
NEW PARK



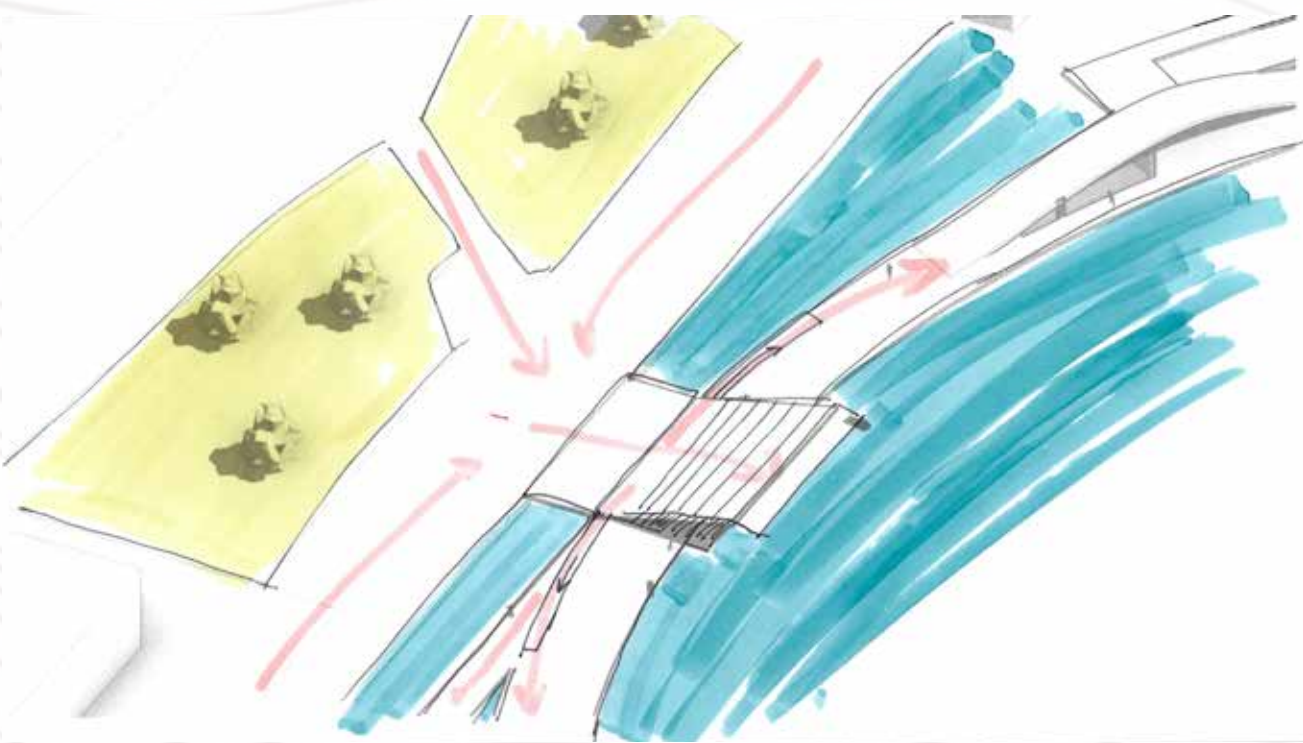
CREAT AXIS WITH MOORING ELEMENTS



CREAT LOOP CONNECTION



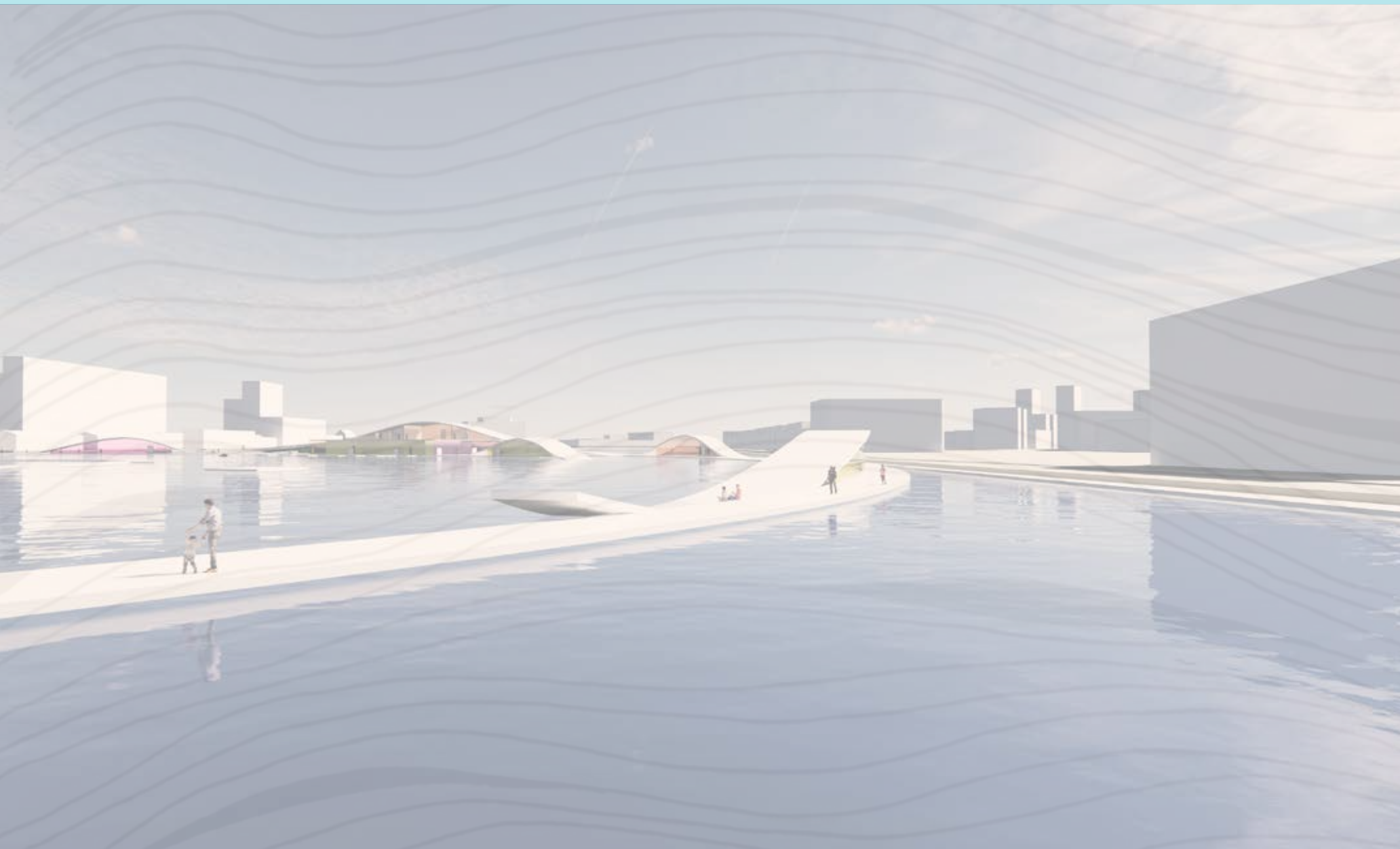
FLOATING PARKS



CONCLUSIONS:

“Motion on the water” is a growing organism. It can develop and change its shape. It starts with the mooring element and from there on it grows. Harbor is big enough for further development. It can take its shape according to urban needs. The waterfronts are untouched and have space for new floating house developments.

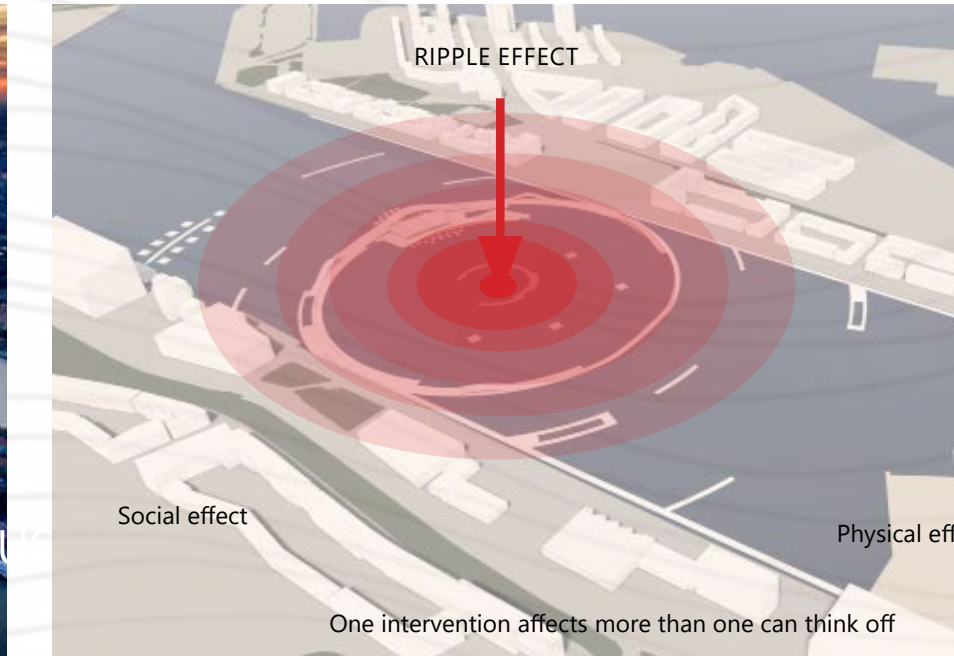
PRELIMINARY DESIGN



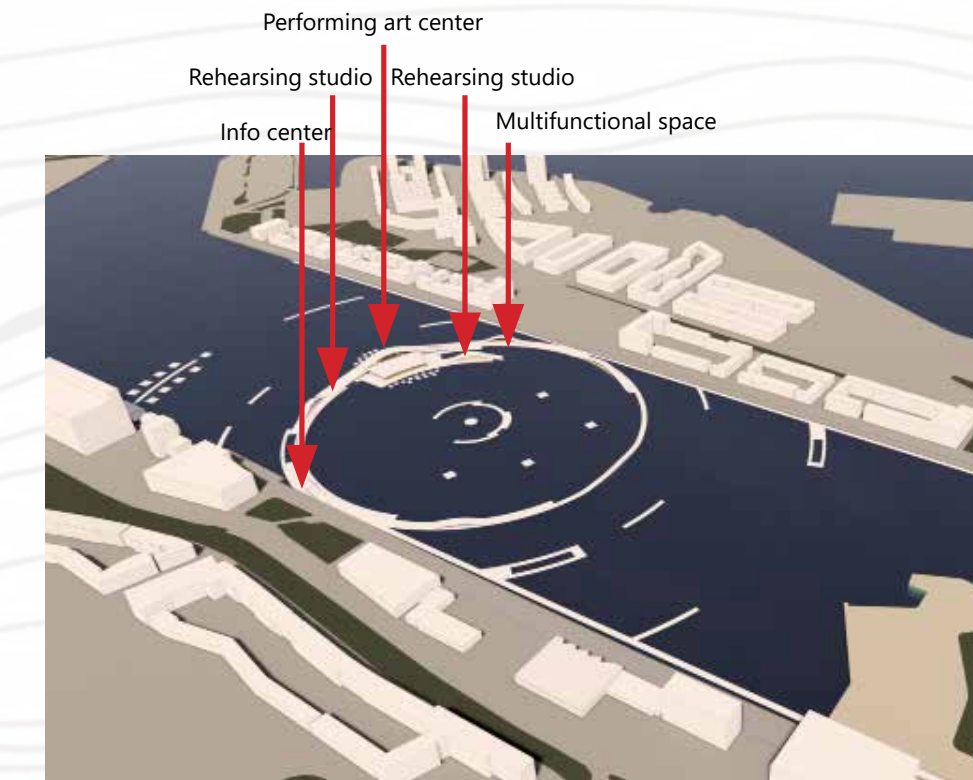
URBAN ACUPUNCTURE



Maashaven is an excellent urban acupuncture starting point. These major changes can bring back life on the water and connect the residence of the north and the south both socially and physically.



Cultural link is urban acupuncture that changes the urban environment and connects the north and the southern districts of Rotterdam. It acts as a multifunctional park – square on the water which is serving as a physical connecting element between Tarvewijk and Katendrecht. It consists of inhabitant movement, dancers moves, waves, playfulness, and various activities. It is a merging and connecting element on the water. It will bring back the vibrant historical vibes that Rotterdam is known for but in a different and new exciting way. The urban acupuncture intervention's ripple effect will excite and invite more people and connect the hearts.

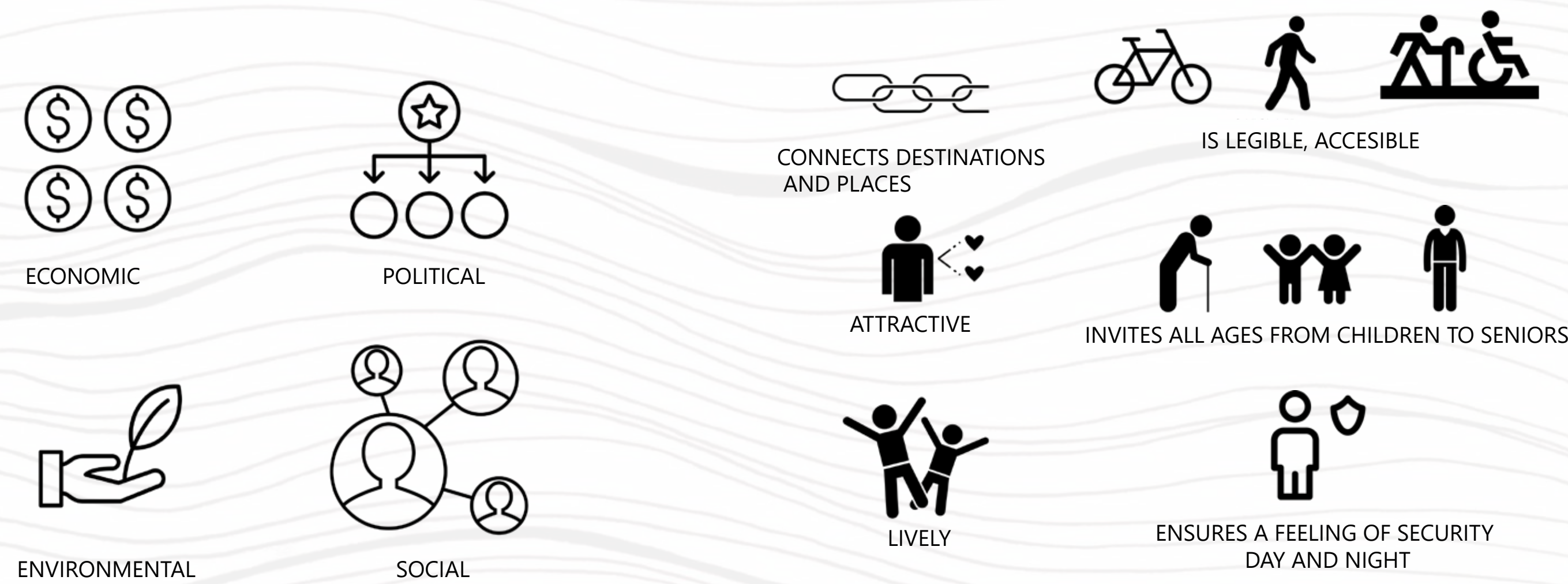


Cultural link “Motion on the water” main function is a center for cultural performing arts with 500 indoor seats. Which includes vast public outdoor spaces for various activities. The link serves as a pedestrian and bicycle bridge for the city residents.

CONCLUSIONS:

Urban acupuncture is a good starting point for this area. It will affect nearest districts. Inhabitants will have stronger connection to the city and its cultural life.

BENEFITS



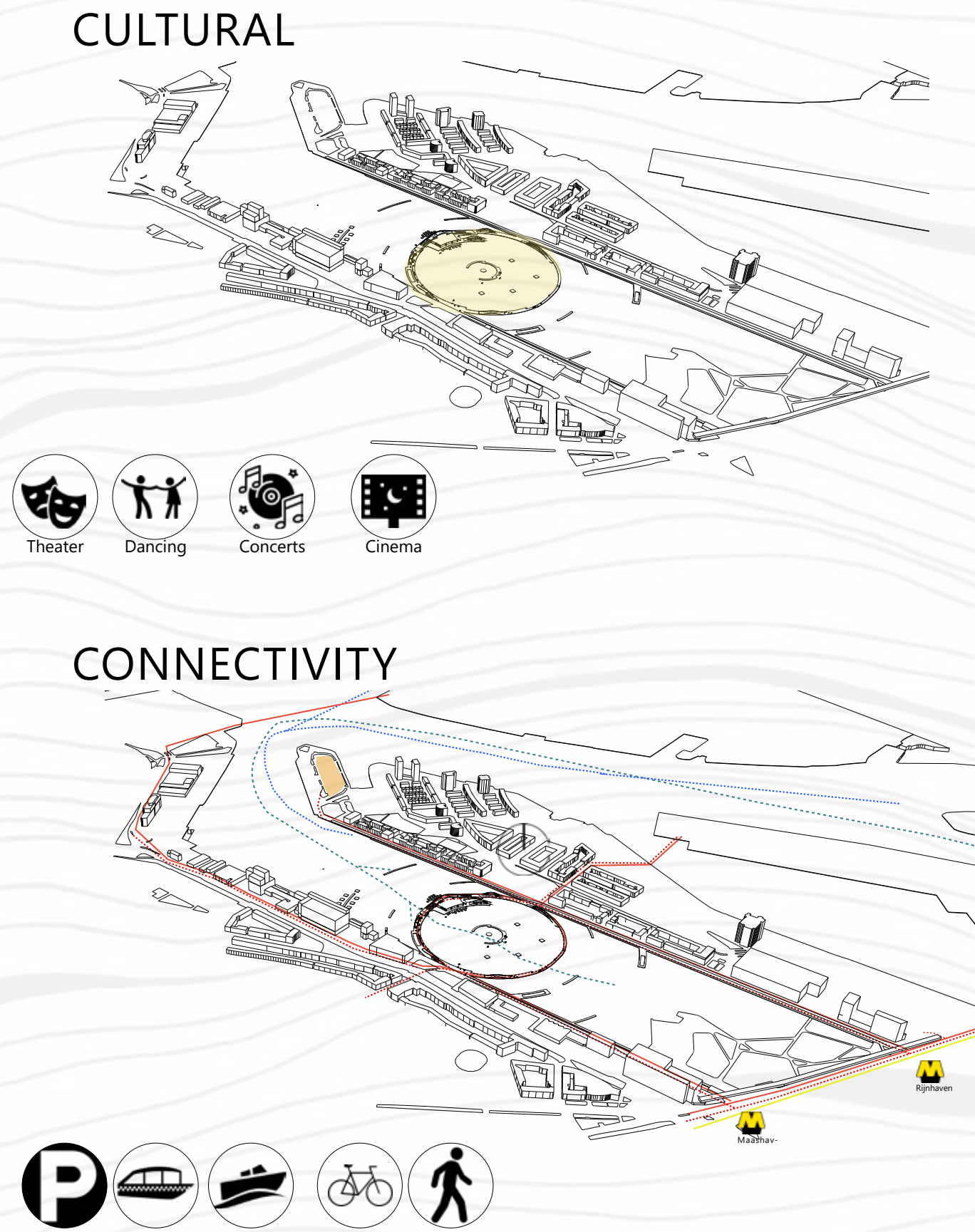
By having such a project City of Rotterdam would gain benefits in many systems and directions. And improve the social connection between various cultures and ages. Last but not least is the environmental benefit is that this intervention can be built from recycled material.

Quality is one of the most important criteria. By creating such a water square park public space needs to be available and friendly for all visitors because as collective, free, heterogeneous, multifunctional, and integrative spaces, squares and parks still play the main role for encounter and interaction in people's everyday life. As a great advantage, this square serves as a connecting bridge and is improving the cycling infrastructure, and adds up qualitative attributes

CONCLUSIONS:

Rotterdam and its people will have benefits in many fields. Especially by making the harbor area safer and visually more appealing.

LAYERS



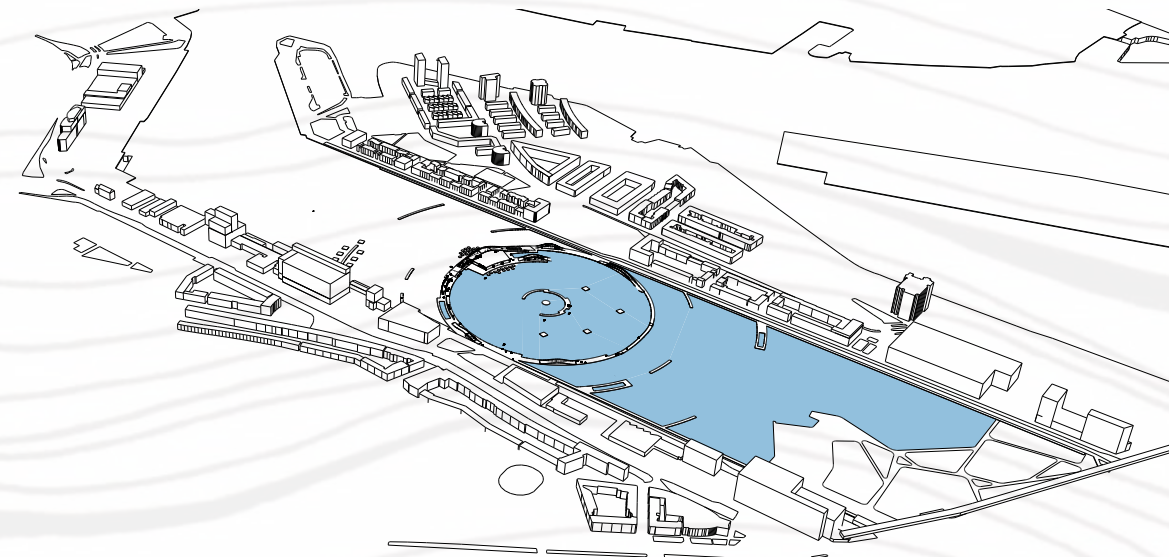
The cultural link's - main function is to invite the spectators to different types of indoor and outdoor performances. On the standard stage or outside on floating stages, that can be grouped and combined in the random and most inventive solutions. The enormous public space gives an extra opportunity to have various outdoor concerts and even outdoor cinema evenings above the water. As a cultural and artistic element, it has an innovative and attractive night landscape. Such an approach will also help to keep the place safer and more pleasant. In specific areas will be located solar panels.

To make it successful design "Motion on water" has many integrated layers that serve the citizens in many different ways.

Connectivity – added quality is that the link is connecting two districts Kattendrecht and Tarwevijk. Bicycles and pedestrians are crossing the link at various levels. The water connections are extended with extra water buses and water taxi stops. By doing Northern inhabitants can easier access this water park. Extra small decks in the water are serving as stopping elements for private boats and yachts. The inner part of the intervention is accessible via integrated bridges.

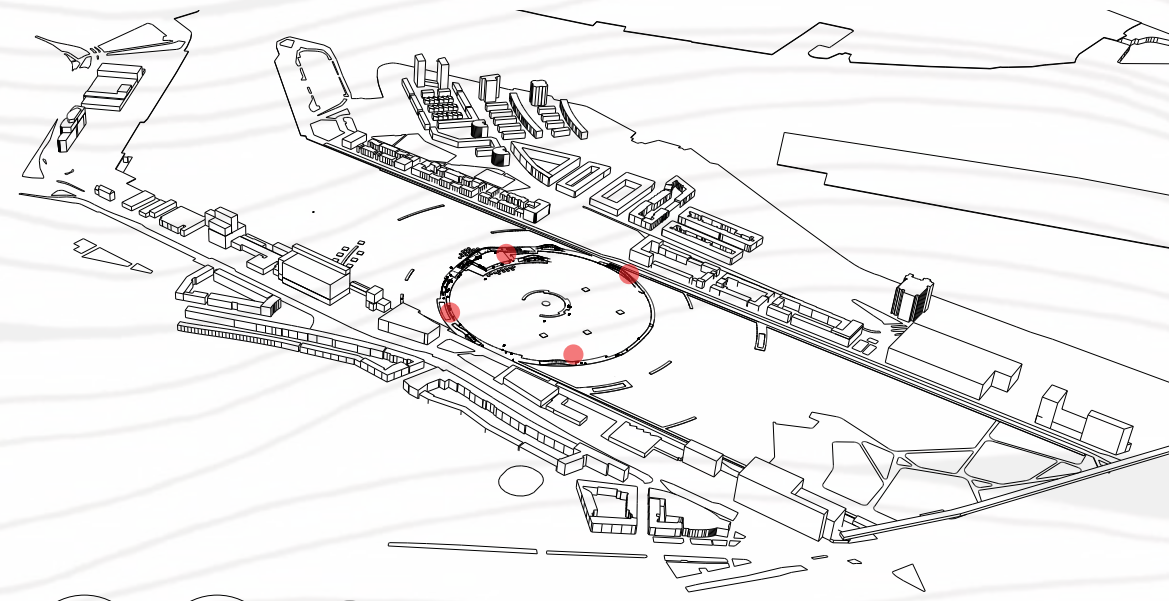


RECREATION - IN SUMMER



Water activities - in summer include various activities. Starting from floating swimming pools for kids and adults with clean water to water skis, wakeboard, and jetski. During the summer this part of the water square becomes the main activity during the day.

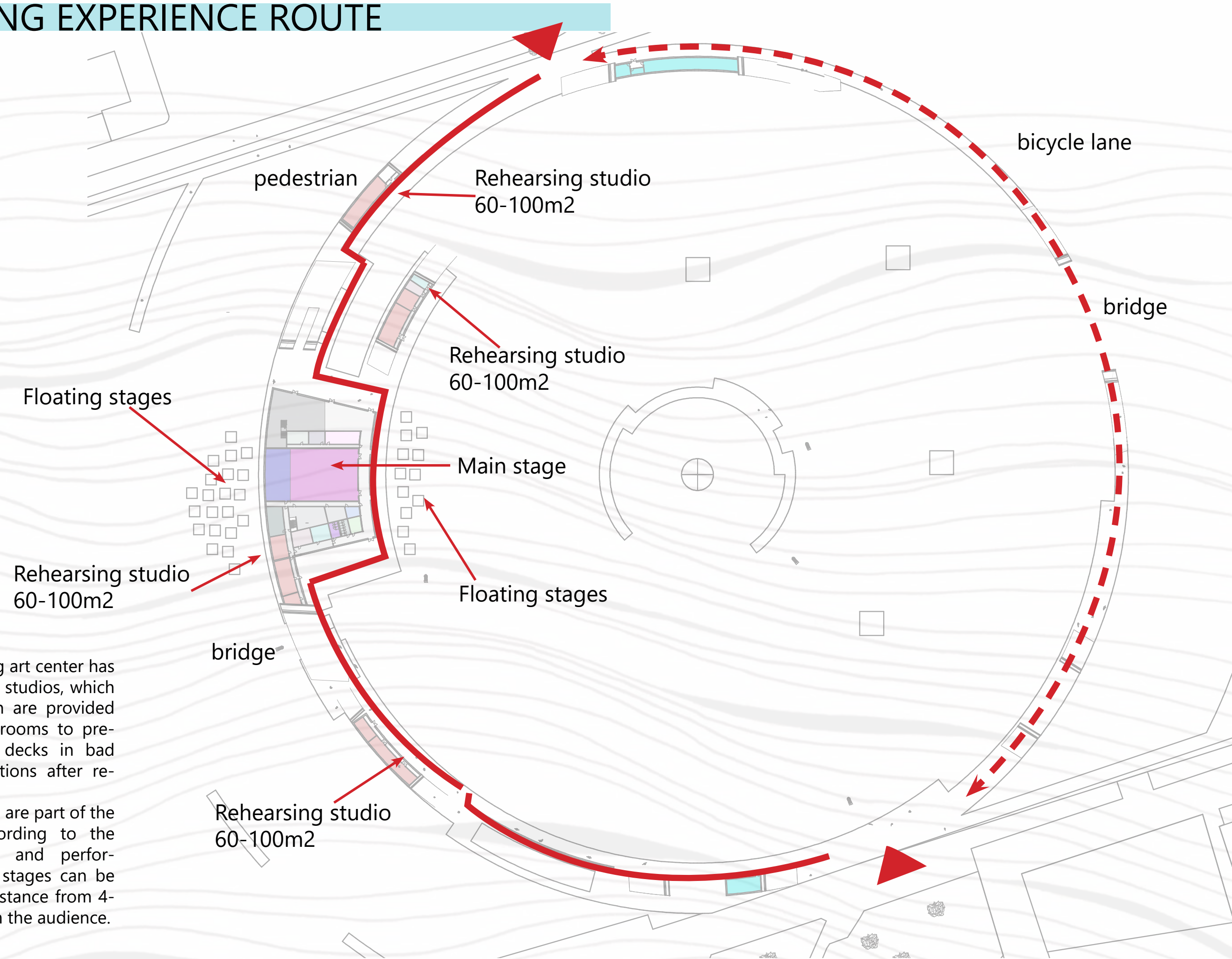
COMERCIAL



Comercial - In designated places are located commercial areas with a small shop, coffee places, restaurants, and rentable spaces for various events.



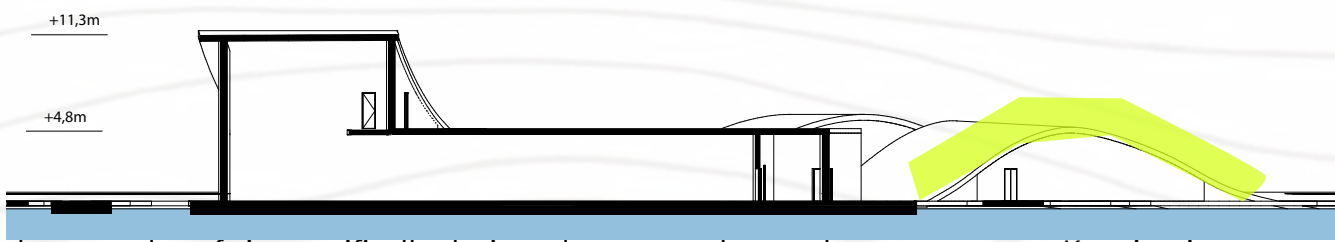
WALKING EXPERIENCE ROUTE



The performing art center has few rehearsing studios, which are nearby. An are provided with dressing rooms to prevent crossing decks in bad weather conditions after rehearsal. Floating stages are part of the program. According to the choreographer and performance needs, stages can be located at a distance from 4-20 meters from the audience.

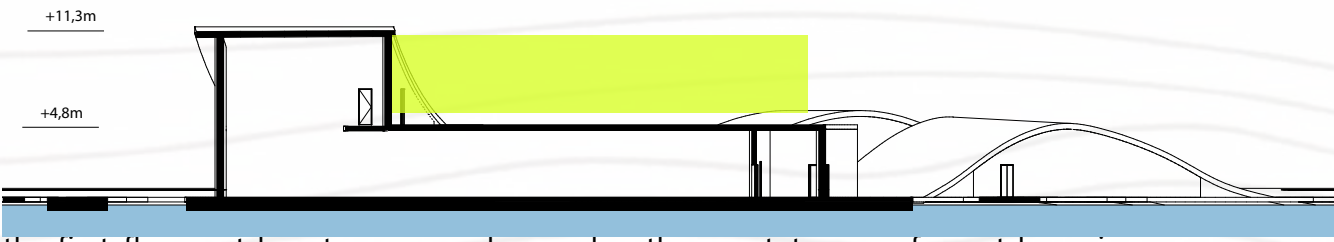
PERFORMING OPTIONS

On roof



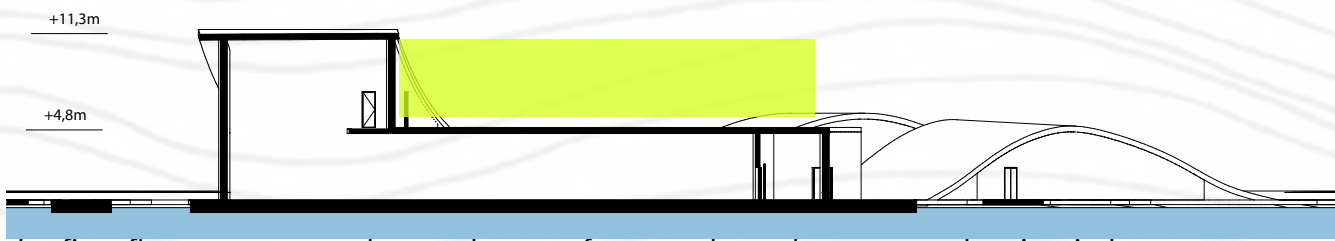
the curved roofs in specifically designed areas can be used as extra stages. Keeping in mind the proper dancing surface. The spectators can be on the decks and platforms or their boats.

Outdoor Cinema



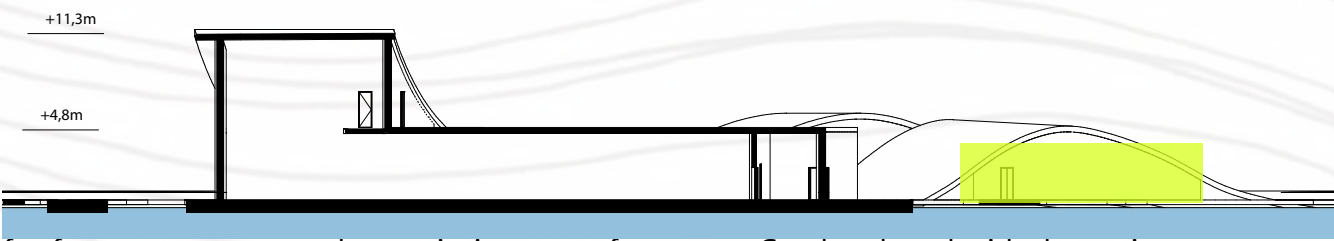
the first-floor outdoor terrace can be used as the spectator area for outdoor cinema purposes, intensifying the lively connections to the surrounding area. Especially during the night.

Cafe performance



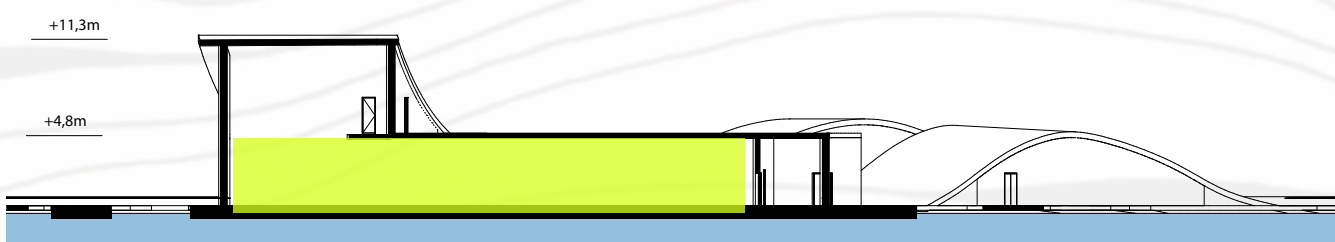
the first-floor terrace can be used as a cafe area where dancers are dancing in between the coffee tables. Make in integrated and sensational experience.

Small performance space



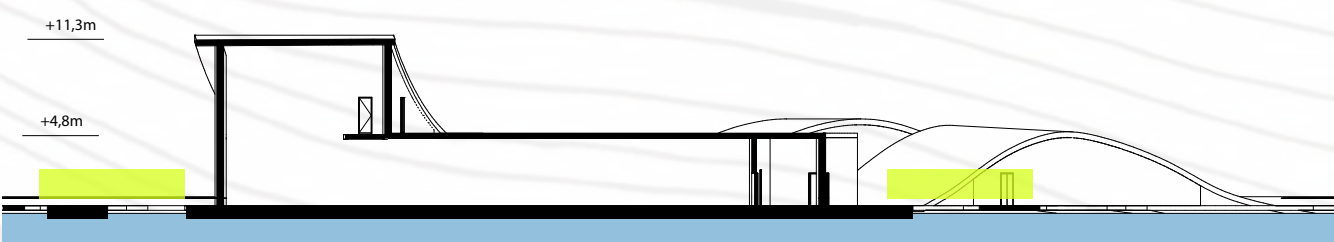
for fewer spectators and more intimate performance. Can be closed with the main curtain.

Indoor performance



can be used in various performance configurations with an open or closed-off main curtain. The main stage has a glass back wall which gives an unforgettable feeling and excitement, especially in late evening performances.

Floating performance

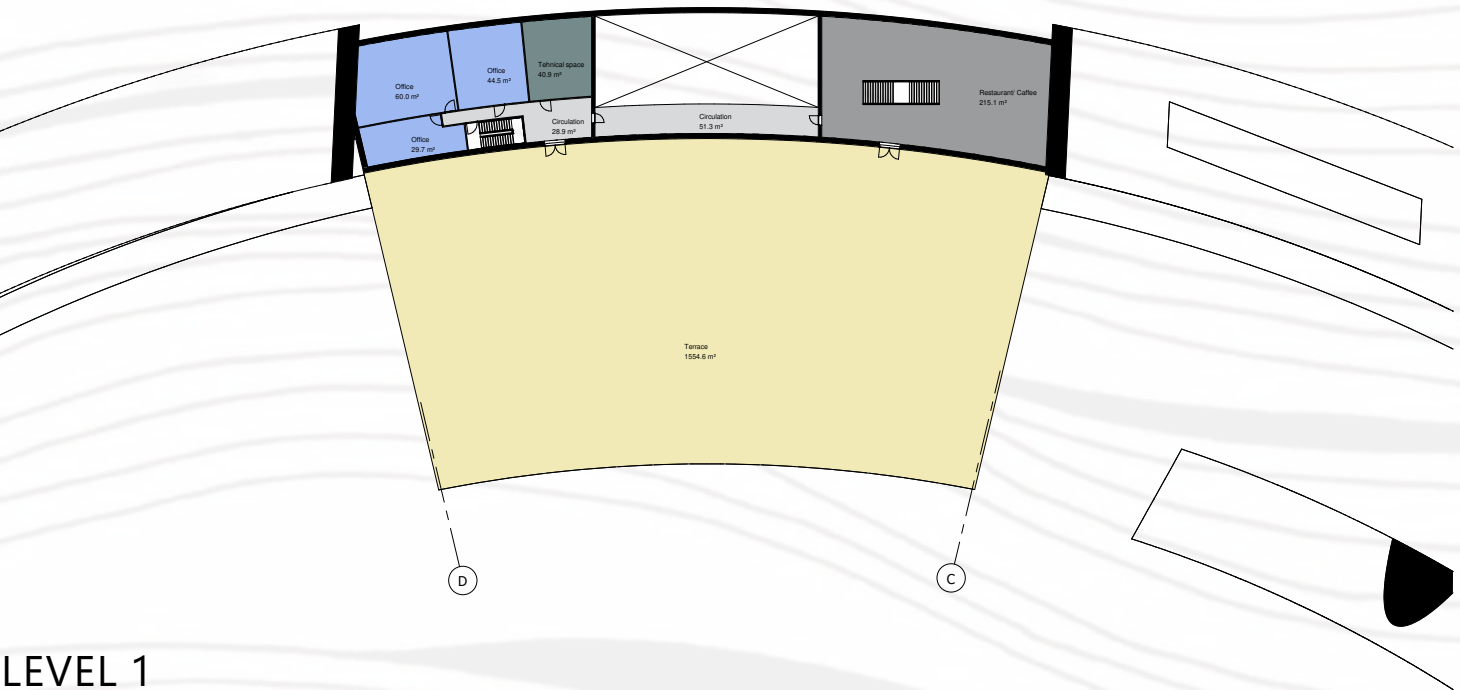


most intriguing and exciting. Floating stages can be grouped in specific configurations. Spectators can be on the decks, on the first-floor terrace, or the boats. Choreographers dictate the location.

DRAWINGS



LEVEL 0



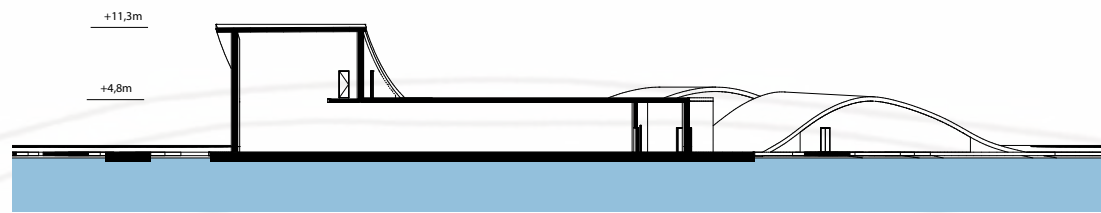
LEVEL 1

The 0 level has the stage and auditorium space. The stage can be connected to the restaurant area and be used for specific venus. The stage is oriented towards the West direction, which adds extra sensation due to unforgettable sunsets and weather conditions.

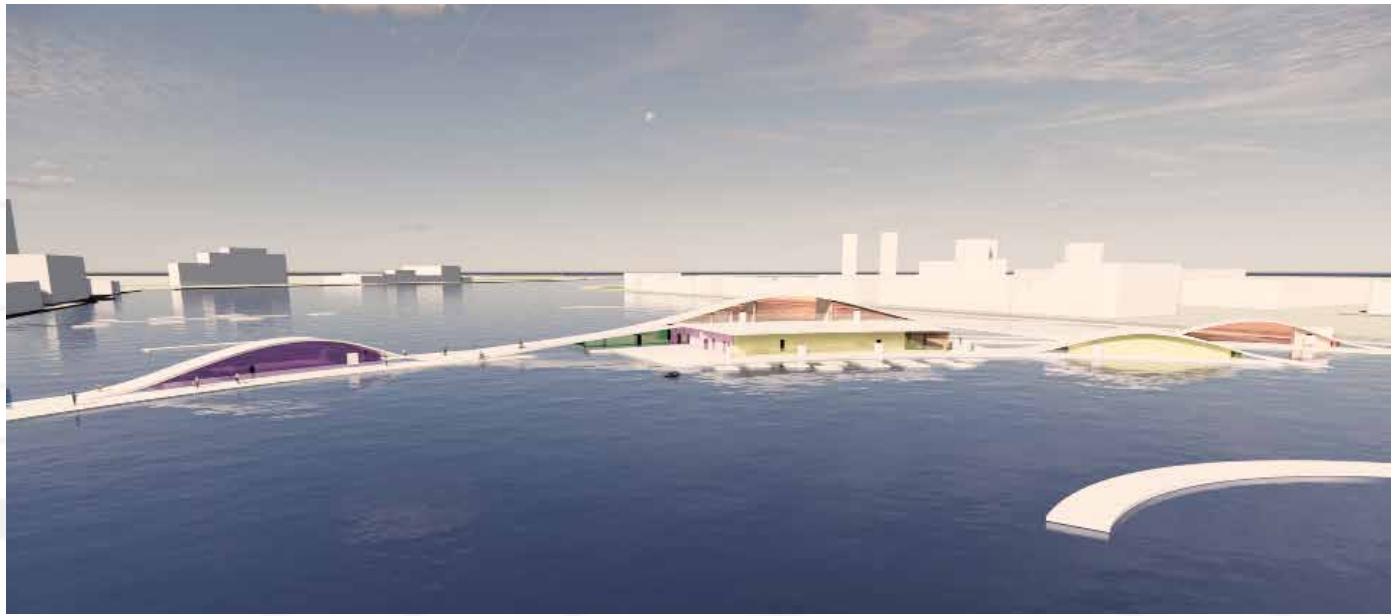
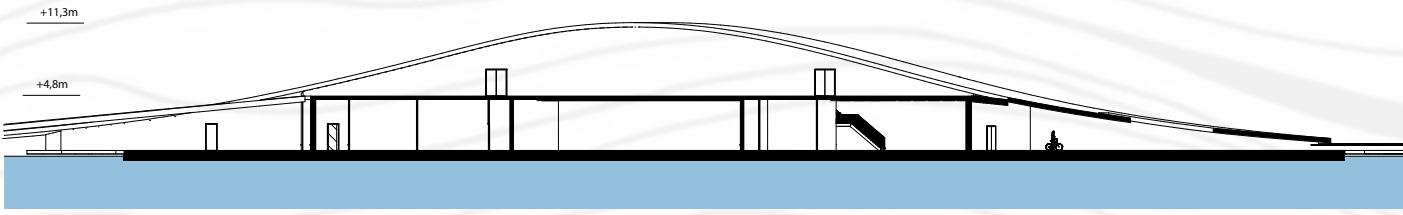
CONCLUSIONS:

Change the shape of the auditorium in a way it is following the external walls. Adjust the program for all the rooms. The middle part of the terrace has to be higher. The roof terrace needs external stairs to have direct access from the street level.

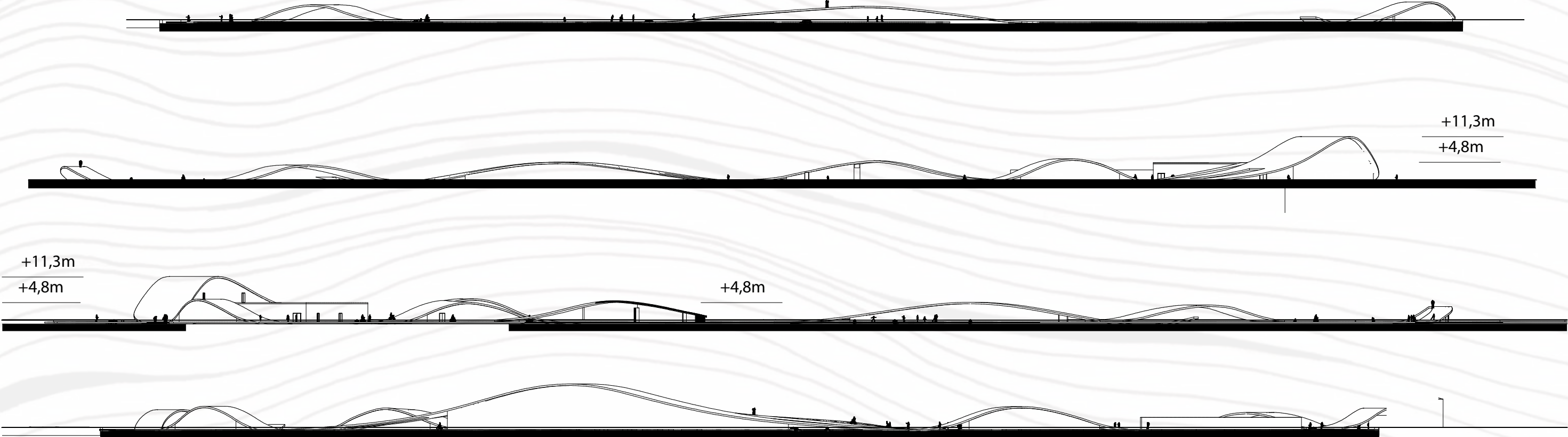
SECTION A-A



SECTION B-B



ELEVATIONS

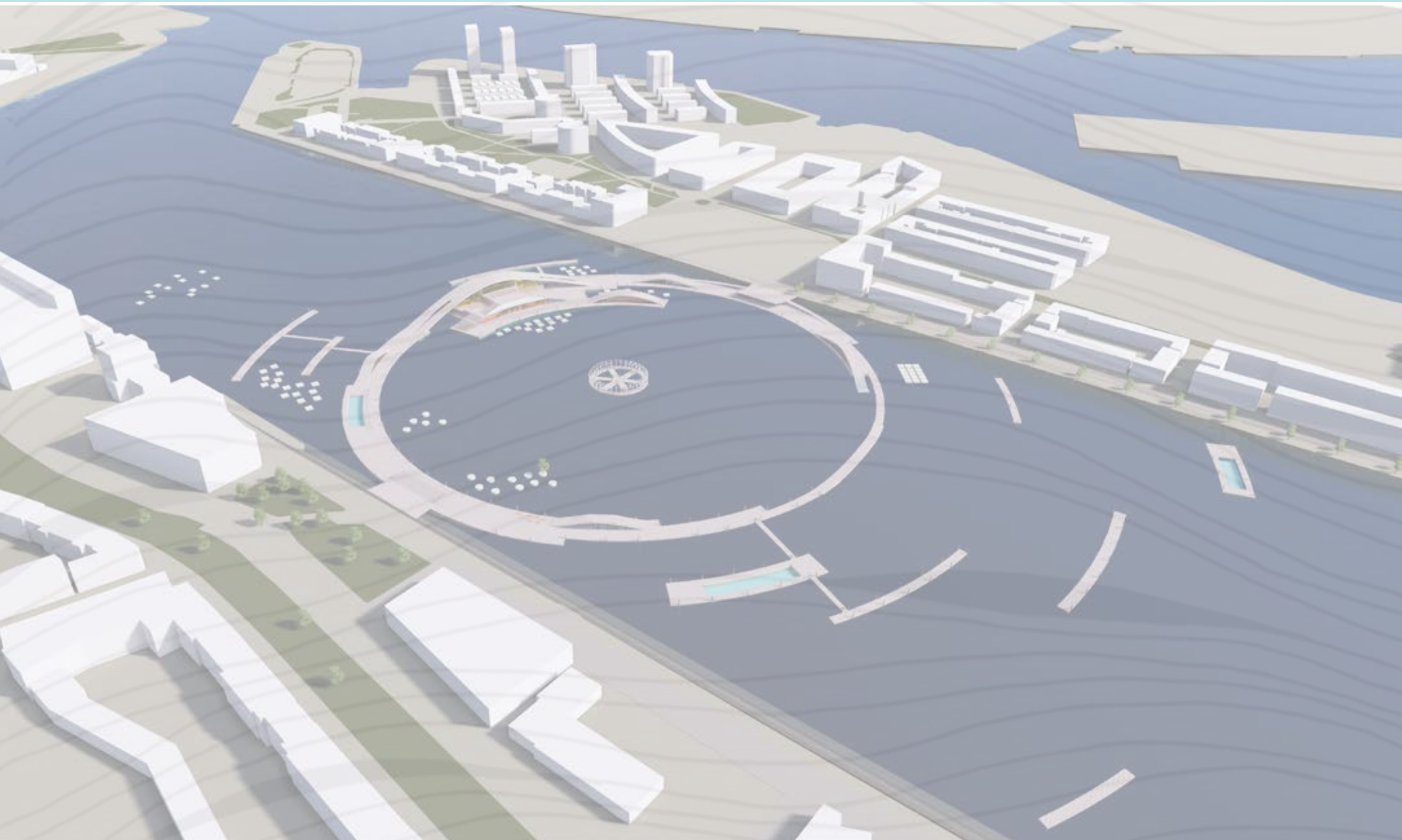


CONCLUSIONS:

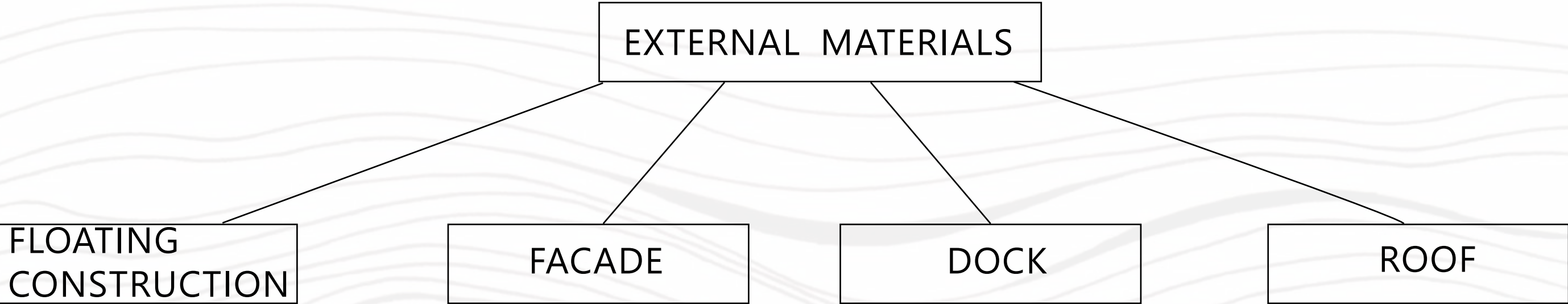
The hights in the big auditorium need adjustments due to the light and ventilation system. Walking bridges are taking place above the seating area and stage.



DEFINITIVE DESIGN



MATERIALIZATION RESEARCH



- PRE-FABRICATED CON-
CRETE HULL
- RECYCLED DOCK FLOAT
- FLEX BASE

The floating structure depends on the size, purpose, and function. The concrete hull is under the building floating deck is under jetty, docks, and small stages flex base is under vast surfaces.

- TINTED GLASS
- TRADITIONAL GLASS

- COMPOSIT DECK
- RECYCLED PET

- COMPOSIT DECK
- GREEN ROOF

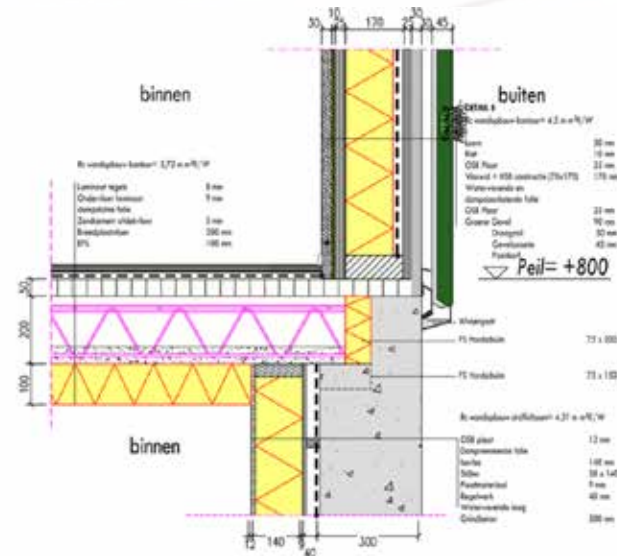
CONCLUSIONS:

This project has a combination of very sustainable materials to very specific and unusual solutions. It has contemporary and experimen-
tal materials.

PRE-FABRICTED CONCRETE HULL



The standard heights of our concrete containers are 1.22, 1.72, 1.86, 2.32, 2.42, 2.52, 2.82, 3.02 and 3.32 meters. The highest concrete box that we have made to date was even 4.00 meters high. The width of a concrete box is optional, the widest concrete box manufactured by us was 16.00 m wide.



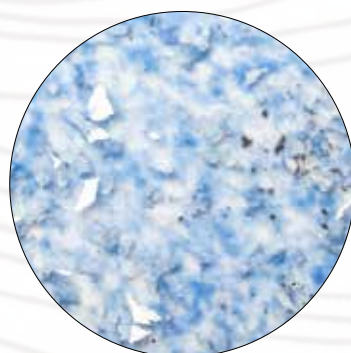
CONCLUSIONS:

Prefabricated concrete hull will be a custom-made solution with specific dimensions that are bigger than standard. This solution needs pre calculations and precise drawings

RECYCLED DOCK FLOATS



recycled dock float



colorful surface - recycled pet



Composit deck, beams



Pet bottles are collected in the Rotterdam area, and afterwards recycled into the floating docks. In such a way this project is part of sustainable design initiatives.

CONCLUSIONS:

Make this project a part of clear rivers projects and make it sustainable. Recycle the pet products into colorful surface materials, floating docks, or composite beams. One of the collection points can be in the Maashaven.

TINTED GLASS



WHY TINTED GLASS?
It changes the perception of the space and other colors. In the Yellow room, all the other colors are losing their tone and everything becomes black and white.

WHAT IS THE EFFECT?
The color gives a filter to the entire scene and even to a spectator. Color plays with senses and creates different reality

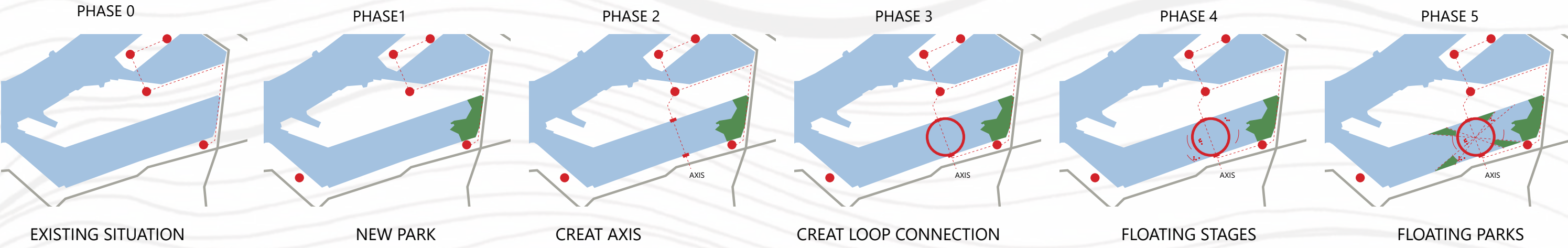
Your Rainbow Panorama, on top of ARoS Aarhus Kunstmuseum, Denmark by Olafur Eliasson.



CONCLUSIONS:

Play with filters and tinted glass to address different experiences and simulate the weather conditions.

DEVELOPMENT - PHASES



EXISTING SITUATION
Boundless harbor without public activities.

NEW PARK
The new park is an initiative from the government to improve public space in this neighborhood.

CREAT AXIS WITH MOORING ELEMENTS
Creat axis that is connecting 2 districts and is the starting point for the cultural loop.

CREAT LOOP CONNECTION
The panoramic view allows one to experience the site from a different viewing point.

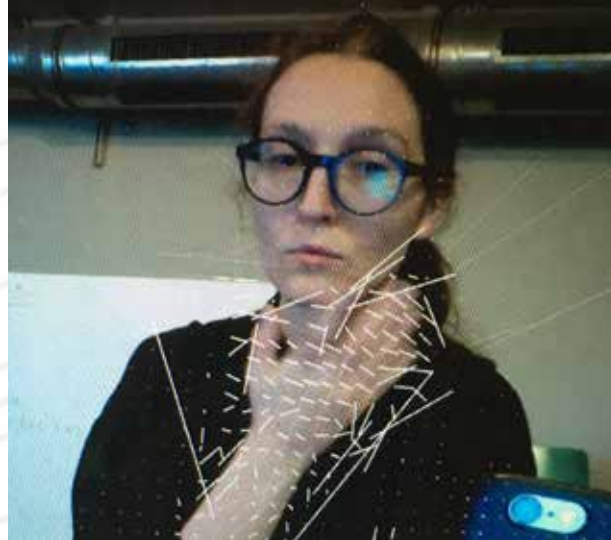
FLOATING STAGES
By adding floating stages, the intervention becomes more flexible and playful in its program.

FLOATING PARKS
New floating parks are extensions of the newly developed park. The intervention is organically growing bigger.

CONCLUSIONS:

The location of intervention allows to expend and to add extra programs and buildings. It is flexible in it is shape and purpose. It can grow in all directions.

MOTION TRACKING



Kinetic experience



Interactive art



Chordata motion

CONCLUSIONS:

Motion tracking is a digital tool that provides different types of performances. These performances allow dancers to experiment with new dimensions and for the audience, it is new insight into how technologies go hand in hand with dance.

NIGHT LIFE - LIGHT FESTIVAL



“Ghost ship” in Amsterdam by Albert P. Termote
Images projected onto perpendicular curtains of water that can be viewed from multiple angles.



De Magic Lake show in Zell am See
Water, Light, Music and laser show

CONCLUSIONS:

Reference projects show the vast possibilities that can happen on the water. Be creative and play with water, lasers, lights, and music. There are no limits. The Maashaven is also an exhibition platform for artists and experiments. Moto - Use the space.

CONSULTANTS



Renee Trijselaar
Consultant in cultural sector

Renee is a professional in the cultural sector. She gave a lot of useful tips about the cultural field and how things are happening here in Rotterdam and which parties and people are important to get in touch with. She is the person who confirmed the fact that a lot of events are happening behind closed doors. My intuition for such a building is a good start to open up the cultural sector.



Ellen Passage
Stage manager at Conny Janssen Danst

Eleen is a stage manager and person with hands-on everything. She gave a good insight into the process of how the specific sites need to be prepared and what is important if the dance group is touring. She finds the “Motion on the water” as a very interesting and challenging project. Conny Janssen Danst has the first hand to do the opening event.



Anja Reinhardt
Choreographer and performer

Anja is one of the first dancers, choreographers who gave an insight into how creative the dancers can be. She suggested watching a lot of videos to understand how dancers think and move. How far they can go and what are their limits and borderlines. In conclusion, almost no limits, they are always open to try something new and challenge themselves. Also, open to trying more performances where water is part of the story.



Jana Bitterová
Choreographer and performer

Jana has a lot of experience in different types of performance. As a professional, she pointed out what is important for a dancer, what are the distances between a dancer and spectator, and how to get the best connection and relationship between these 2 parties. She has also participated in a networked choreography between 3 countries. That is a new kind of performance and requires extra knowledge in technologies. I am willing to looking into that.



Irina Spicaka
Digital media artist Berlin

Irina has more than 10 years of experience in digital art. Her creative environment is in Berlin where she is based for the last 10 years. She is always seeking new projects and new collaborators. We discussed what would be the option to have a kinetic project on the water.



Sefton Geubbels

Stage manager at Theater Rotterdam Schouwburg

Sefton has many years of experience as a stage manager. He gave me a tour around the theater and told me a lot about technical issues, challenges, and needs. He also pointed out what is important for technical people and their working flow. The conclusion is that it is very important to talk to all the professionals about their workflow and try to combine these needs in a good design.



David Cok

Music production, stage technician

David has experience as a sound technician in various performance buildings. He shared his knowledge about light and sound. In big auditoriums, it is important to have enough space for all the light equipment and installations. The greater the scene is the more equipment and more space is needed.



Aris Gitzias

Architect at OMA

Aris is an architect in OMA for many years. He shared his knowledge about theater design and how complicated it can be. It requires a lot of research and programming because each theater has its specifics and involved parties and participants. Sometimes it is easier to design a bigger auditorium where there is enough space than small heaters.



Peter Batenburg

Architectural engineer

Peter has wide experience in detailing different types of buildings. Detailing is his passion. He will help to try solutions for any unusual situation.

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