The different usergroups within the CPA all have their own collective userspace (their ‘livingroom’) that is
This public interior, an atrium, will function as a vibrant heart within the building, activating the spaces
intersection of routes lies an opportunity to create a public interior for all the users of the NDSM wharf.
these different flows of users can come together and interact with each other and the casual visitors. On this
have been very important in the design of the building and its surroundings.

The location for the design is the NDSM Wharf in Amsterdam North. This wharf is a large industrial area that

The public programme of the CPA is organized around two cores: the Institute and the Theatre. These cores are
- generational functions (interactions between the users of the Institute and Theatre) and - generational spaces (common

The Institute is the core of the CPA and provides a variety of activities which are key to the world of the future:
particularly important is the nature of the theme and the design process, the way the theme is reflected in the shape

The Institute is also designed with reference to the spatial arrangement (high, wide, big, free) and the way all the different functions are

The Institute is designed with regard to the spatial heights. This is because the design of the CPA is based on the idea that the different functions are located in different levels in the building. The spatial heights are treated as a guideline for the design.

The Institute is also designed with regard to the nature of the theme and the design process. The theme is reflected in almost every aspect of the design.

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The concept of the current design scheme comes, among other things, out of the analysis of several independent building characteristics like; the program relations, independent research on several functions (library and institute), mass possibilities, daylight, organization, etc. The analysis of the context of the design location also plays an important role in the evolution into the current scheme. All this information, which is too much to use and incorporate into a pin-up presentation, is available in the booklet that also belongs to this presentation.

The atrium connects the public routes over the location to the functions of the building. In general terms, the atrium is a public space that is used from the early morning until the late evening by the employees and the public visitors of the building. In special occasions the atrium can also be (partly and temporary) incorporated into a specific function. For example: when the theatre has an outside performance on the terrace on the front, the atrium can become an extension of the theatre lobby. The café and restaurant can help serving the guests.

The floorplans of the parking garage (ground floor) and the second floor are not used in this presentation. These floorplans are very similar to other plans, or are of less importance to understand the building.

The starting point for the current scheme is the routing over the design location. There is a very important flow of visitors coming from the ferry (Amsterdam center) into the building. A second (future) route crosses the site from the kinetic north to the ‘blue door’ in the old NDSM welding hall. The third possible flow comes from the residential area on the north-east of the location. On the intersection of these routes lies the opportunity to create a large public space / function that connects the actual routes with the function of a building placed on that location. The functions inside the building are organized in such a way that the most public functions are connected directly to the ground floor, and with that to the context. The functions that need more privacy and are of less interest to the public are placed on top of these public functions. The connecting element between all the functions inside the building, and to the routes that run through the location, is a public atrium that allows light to enter into the lower part of the building.

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Centre for Performing Arts, Amsterdam North

Hans Roest
1311762
2008-04-11

section C - C (without elevatorshaft / staircase)
scale 1/500

The parking is positioned in an underground garage leaving a lifted public platform on top. A public street leads, between the theatre, museum and library, to the institute in the back that is oriented to a semi-public atrium.

Model A
The parking is positioned in an underground garage leaving a lifted public platform on top. A public street leads, between the theatre, museum and library, to the institute in the back that is oriented to a semi-public atrium.

section D - D (without elevatorshaft / staircase)
scale 1/500

sixth floor scheme
scale 1/500

Model B
A public street runs the entire length of the design location connecting all the functions in one long "canyon" / atrium.

seventh floor scheme
scale 1/500

Model C
The functions are stacked on the parking garage where a public atrium is placed. The institute is placed on top of the large public functions.

Model D
(Approx. current design scheme) The public functions are stacked on the parking garage. In between the functions lies a public atrium that leads up to the institute. The volumes of the large public functions penetrate the "skin"...
The circulation inside the building takes place around / inside the public atrium. The atrium connects the different functions with balconies, terraces and stairs. The circulation on the 'bottom' is free opposed to the circulation on top, where it turns into the form of walkways and corridors.

Functions

The functions in the building are placed and dimensioned in such a way that there is maximum interaction between the functions where it is 'needed', and minimal interaction where it is not 'wanted'. The large functions (parking, theatre, museum and library) are placed in the lower part of the building. The institute is placed around and on top of these functions. The depot is dimensioned as a 'tower' to connect with the museum and institute at the same time, while still holding a connection to the context on the ground floor.

Public / Private

The functions are organized in such a way that the most public functions (theatre, library and museum) are easily accessible for the visiting public. The top of the building houses the most 'private' sections of the institute.

Routing

The (possible) routes (from / to the neigbourhood, and through kinetic north) are the starting point for the design organisation. On the intersection of the routes a public space emerges to connect the routes and the functions of the building program.

Concept (plan)

The functions of the building program are placed around and above the public atrium connecting all the functions.

Concept (section)

The parking forms a lifted surface from where there is a good overview over the context. The public space is placed on top of the parking garage to maximize the contact and interaction with the context and to make the building easily accessible.
This presentation outlines the current design of the Centre for Performing Arts at the NDSM Wharf in Amsterdam North. These five panels only show the products that were required for this presentation. The research products, as well as the exercise and design process, can be found in the A3 format booklet that also belongs to this presentation.

Location
The location for the design is the NDSM Wharf in Amsterdam North. This wharf is a large industrial area that lies between the north part of the dwelling area of North and the river and the city centre. A ferry connects the wharf to Amsterdam CS by a 10 minute boat trip. The unique industrial and large scale character of the site have been very important in the design of the building.

The design of the building, the routes that run over the location and through the buildings have been an important guiding factor. The shape and programmatic arrangement provides an interaction where different flows of users can come together and interact with each other and the casual visitors. The design of the location and the surroundings of the building have been inspired by the 'open' and industrial character of the NDSM Wharf. In the existing situation, there are no roads and no parking spaces on the ‘inside’ area of the wharf. To preserve this character I only inserted one clear routing that runs from the ferry landing, through the building, to the dwelling area. The rest of the wharf is cleared and open space that allows the buildings to communicate their rich history. These open spaces can function as urban squares or stages for outside performances.

CPA
The Centre for Performing Arts is going to be an important actor on the NDSM Wharf. The ‘Kinetic North’ (‘Kunststad’) and the MTV building are already known very well at that location, and together with CPA they are going to complete the new character of the NDSM Wharf by turning it into an artistic area. The building will ‘breathe’ performance all over the place and act as a connecting element between the different buildings because of the public functions that are not represented in the other buildings.

As opposed to the Kinetic North and the MTV building, the CPA has very much relation with the context. The terrain of the context is gradually lifted and literally runs through the building together with the existing and historic routings through the buildings. The public functions are housed in their separate expressive shapes and really ‘take over’ the space in front of the building, in fact also drawing that area together with the building itself. The terraces on the front and backside can function as squares where the visitors of the CPA enjoy the view and where the users of the CPA can relax.

The expression of the building is also going to be connected to the context, preserving its historic values. Industrial architecture, like the Welding hall on the left, and Kinetic North on the right is also going to be incorporated into the expression of the CPA, completing the site.
The construction plays an important role in the expression of the building. The construction of the theatre and the museum is visible from the outside not only because of the large dimensions. The large frames make a reference to the industrial architecture on the NDSM Wharf and tries to take elements of these constructions. The construction is placed at regular intervals so that the rhythm guides the visitors to the inside of the building.

The facades of the different functions are also different in materialisation. The institute has a double skin facade with a very smooth outer glass facade. Inside this facade there can be installations, sunscreens, operable elements, etc. giving each part (and even individual rooms) the possibility to change the amount of daylight and sight to the context. For the outside of the building this means that a volume of the institute will always remain intact, but the elements behind / inside the volume are constantly changing.

The materialisation of the theatre and museum facades will be completely closed or at least opaque to form a distinction between the glass institute volume.

'Performing' is the main theme in the building and is reflected in every part of it. The building has several 'informal communication spaces' that can be turned into performance spaces and the theatre is able to open up to the front of the location creating an open-air theatre. This topic is described in more depth on the next panels with the rest of the program.
The floor levels of the different functions are adapted to the specific needs of the user groups using these functions. In this way all the different functions are placed on the level that provides maximum efficiency with regards to the spatial heights. Split-level floors are created at the points where different functions meet on the same level. These split-levels are created to enhance the spatial experience and possibilities in the building.

The volumes of the design are organized in such a way that the public functions (museum, theatre and library) penetrate the volume of the institute. The materialisation of these volumes is also different to enhance the expression. The parking is placed underneath a lift platform providing maximum overview over the NDSM Wharf and the city centre of Amsterdam.

The three elevator shafts provide the basis for the stability of the building. The elevator shafts (also the main staircases) run from the ground floor to the roof and connect all the functions in the building. The main construction of the museum is disconnected from the volume itself. This way the volume seems to ‘float’ above the heavy industrial construction. As a reference to this principle I used the ‘Kraanspoor’ at the NDSM Wharf.

The construction of the theatre is also very big because of the large span of 30 meters. By making the construction work as a rhythm in the building, together with the construction of the museum and much like the AEG Turbine Factory in Berlin, the visitors are guided to the heart of the building: the atrium.

The construction of the institute is the most traditional, being made of prefab concrete columns, beams and floors.

The facades of the public functions, penetrating the transparent volume of the institute, are (almost) completely closed. The museum stores delicate collections of theatre articles that can’t be in (direct) sunlight and need artificial lighting to be at their best. The theatre also needs this lighting for the plays, instead of natural daylight.

The closed facades, especially that of the depot at the backside of the building, also help with constructing the stability of the whole building.

**CFA program**

The program of the CPA is a very diverse program that has not yet been realised before. It connects a wide range of different programs within one building. All these different programs and user groups have specific needs to the amount of space, the spatial arrangement (high, wide, big, small, etc.) and the placement compared to other functions and the outside of the building. Much of the research on the program is displayed in the A3 booklet that belongs to this presentation.

However, the most important theme of the program is ‘performing (of arts)’ and this theme is reflected in almost every aspect of the design. Throughout the building the ateliers of the different disciplines are openable to the circulation spaces in order to make spontaneous performances possible. There are also some informal communication spaces in the institute that can work as a temporary stage whenever this is wanted.

The front facade of the theatre is completely operable to allow performances to take place oriented to the outside in the summer months.
functions
The functions in the building are organized in such a way that there is maximum interaction between different user groups when that is preferred, and less interaction where it is not needed.

The vibrant heart of the building is the atrium that runs the entire height of the building starting from the first floor. The atrium is used as a meeting place where the different user groups can take place. The atrium also allows for visual interactions between virtually every function in the building to take place.

public and private
The most public functions (theaters, library, café / restaurant and the museum) are placed in the lower part of the building to make the best connection with the context. The functions that need more privacy (some ateliers, the offices and the depot) are placed on top of these public functions to provide more shade and to create a calm working space for the people who have to be there every day.

circulation
The circulation through the building is organized in such a way that the atrium, the centre and heart of the building, is the most important circulation space and provides the most interaction between the different user groups. The first floor, where the entrances come into the atrium is the circulation hotspot of the building making it a very lively and vibrant space. From here, the different users of the institute use the same staircases and elevators but are permitted to go 'higher' in the building reach the more private functions. The casual visitors can't reach these floors directly, but have to go to the institute reception first. (no. 31, third floor)

The internal circulation within the different functions is separated from the main circulation throughout the building. For instance, the circulation of the museum which is connected to the atrium by escalators, stairs and elevators, but is also organized in such a way to provide the visitor with a routing that displays the different collections can be seen, or skipped, at the users pace.
What is a Centre for Performing Arts to me?

Centre for Performing Arts - Context - Concept - Building

**Public Realm**
A CPA should be an extension of the public realm into the interior of the building.

**Response to new developments**
The building should be capable to adapt to new developments in the field of performing and the world of arts.

**Interaction**
People of different backgrounds and disciplines should be able to interact and learn from each other. See and be seen.

**Environment**
The environment and creative attitude should play an important role in the interior of the building. The theatre and the museum are dominant functions.

**Experience towards the public visitor**
A CPA should have a open and accessible attitude towards the public and the visitors of the building.
- no reference

- complex set of very different **functions**

- serveral **usergroups** within the building at the same time

- there is no function in the program that is able to **connect** all the different parts
- introduce a function / space that is able to connect all the functions and users in the building
- the ‘heart’ of the building

**what is a CPA?**

- a place to meet and interact with similar and different people and disciplines
- a place to perform or go to a performance
performing, to me, means to work in a specific field of expertise, in a place where it can be seen by others

being seen / heard
Performing, to me, means to work in a specific field of expertise, in a place where it can be seen by others

being seen / heard
a place where people practice their expertise (functional)

a place where products or objects can be exposed to others (exposing)

The definition of a ‘Stage’
Centre for Performing Arts - Context - Concept - Building
interaction space, a public space that connects different functions and usergroups

performance space, open to the public

transparency towards the visitor
NDSM Wharf
Centre for Performing Arts - Context - Concept - Building
scale of the context is inhuman
the public space is undefined
historic and heavy industrial character is present everywhere
transition between industrial and dwelling areas
connection between Amsterdam Centre and Amsterdam North
a lot of public space, but no shared public interior (autonomous buildings)
NDSM Wharf
Centre for Performing Arts - Context - Concept - Building
accommodate the routings
the routes that cross the design location are very important and play an important role in the development of a building volume

adapt to the volumes
the buildings in the direct context have a very large scale, the design should fit within this scale

use the industrial character
the industrial character of the context is very important and the new building should fit within this character:
- use of form
- use of materials
- building typology

extension of public space
the building should function as a public heart to the location, freely accessible to visitors and performers
the very first conceptual image made for this design

- **parking** on the ground floor creating a lifted platform (stage)

- functions are placed in **clusters** which have their own **volumes**

- all the functions are connected by a public **route** which crosses **collective spaces** in the building

- spaces are clustered per function, creating **functiongroups**
**Public Realm**
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**Interaction**
People of different backgrounds and disciplines should be able to interact and learn from each other.
See and be seen.

**Environment**
The environment and creative attitude should play an important role in the interior of the building. The theatre and the museum are dominant functions.

**Experience towards the public visitor**
A CPA should have a open and accessible attitude towards the public and the visitors of the building.
the construction on the lower part of the building is used to guide the routings over the location
- rhythm in one direction
- orientation of the portal frames in the other direction
Translation of influences into form and space

Centre for Performing Arts - Concept - Building

public functions are housed in separate volumes that guide the routings over the location

- theatre facade is treated as a skin **extravert**
- museum facade is treated as a volume **introvert**

**Construction = basis**

**Extravert vs. introvert**

**Skin vs. volume**
The institute is situated in a transparent volume that connects the public functions:
- ateliers orientated towards the context (performing)
- large atrium providing vertical circulation and the collective space that connects the function groups.

Translation of influences into form and space
Centre for Performing Arts - Context - Concept - Building
Concept of the public heart

Centre for Performing Arts - Context - Concept - Building
Placement of functions - Parking

Centre for Performing Arts - Context - Concept - Building

- covered parking (inside)
- outside parking
Placement of functions - Entrance

Centre for Performing Arts - Context - Concept - Building

- entrance in the heart of the building volume and location
  - access from the inside parking
  - access from the outside
Placement of functions - Theatre

Centre for Performing Arts - Context - Concept - Building

main entrance from the atrium on the first floor of the building
Placement of functions - Depot

Centre for Performing Arts - Context - Concept - Building

loading area at the back of the building on the ground floor (trucks etc.)

depot (storage and working spaces) vertically stacked in the building
Placement of functions - Mediatheque

Library is placed in the same volume as the theatre, orientated to the back of the location (water) and access from the atrium on the first floor.
Placement of functions - Public institute functions

Most public institute functions (lecture rooms and terrace) are placed on the lowest floors of the institute.
Placement of functions - Ateliers, Laboratories and Offices

Centre for Performing Arts - Context - Concept - Building

ateliers, laboratories and offices are all orientated towards the outside / context except the atelier spaces in the 'end' of the atrium
Placement of functions - Collective userspaces

Centre for Performing Arts - Context - Concept - Building

collective userspace per usergroup placed into the atrium space connected by the main staircase
Placement of functions - Service space, Installation spaces

Service spaces (toilets and showers) are grouped per floor.
Installation spaces are grouped per function.
museum function punctures the entire building volume
the public atrium fills up the space between the different functions and connects them vertically
the form of the atrium gets smaller towards the top of the building where it is 'punctured' by the collective userspaces. The open ground floor is clearly visible.
the entire vertical construction of the building is made of (prefabricated) concrete

stability is provided by concrete walls and the elevator cores
the semi-prefabricated floors span 10m. between the columns, and cantilever 2.5m. on both sides (facade and balcony)
the second skin facade is attached to the floor by a steelconstruction
Section of the Atrium
Centre for Performing Arts - Context - Concept - Building
Section + functions
Centre for Performing Arts - Context - Concept - Building
Section + routing
Centre for Performing Arts - Context - Concept - Building
Sequence of entering

Centre for Performing Arts - Context - Concept - Building
Sequence of entering

Centre for Performing Arts - Context - Concept - Building
Sequence of entering - Public platform

Centre for Performing Arts - Context - Concept - Building
wall between the atelier and atrium space punctured with openings

atelier spaces
concrete construction is placed in front of the wall
- providing the structuring visibility of the grid
- express the adaptive character of the building
- sustainable building
- allow the userspaces behind the wall to be as functional as possible
prefabricated concrete balconies with installations
- extension of the atelier spaces
- informal communication space in / around the atrium
- horizontal circulation over each floor
- like the Bauhaus staircases and spaces in front of the elevators
collective spaces extended into the atrium space

- only flooredges to enhance the relation between different floors (vertical)

- separated by color from the floors and balconies (white)
main staircase / performance routing through the atrium
- main connection for all the functions around the atrium
- public vertical routing
- connecting all the collective balconies in the atrium

staircase as an extension of the collective floor
- smooth sides and underside
- self supporting

see and be seen
Atrium space
Centre for Performing Arts - Context - Concept - Building
Atrium space
Centre for Performing Arts - Context - Concept - Building
Section of the atrium

Centre for Performing Arts - Context - Concept - Building
Section fragment of atelier space
Centre for Performing Arts - Context - Concept - Building
Section fragment of atelier space
Section fragment of atelier space + routing
Atelier space at the end of the atrium
Atelier space at the end of the atrium

Centre for Performing Arts - Context - Concept - Building
Atelier space at the end of the atrium

Centre for Performing Arts - Context - Concept - Building
prefabricated concrete portal frames as main construction
- elements inspired by the context
- industrial and heavy
floors are placed ‘between’ the portal frames

vertical circulation and installation space between the portals

theatre floor is vertically adjustable
- creation of different theatre ‘landscapes’
- relation between inside and outside, up and down
- connection with the backstage that is underneath the theatre floor
fixed / closed functions are placed in small pavilions
- keep the space between the portals intact
- adjustable functionspace between the pavilions
- organize and define the spaces around them
Theatre facade is treated like a skin over the portal frames
- special openings at the front and back ends by the horizontal orientation of the facade elements
- openings on the side to create relations between the outside and the backstage / show the portal frames
- main entrance in the middle connects to the ground floor of the atrium
Theatre (and mediatheque)
Theatre (and mediatheque)

Centre for Performing Arts - Context - Concept - Building
Theatre (and mediatheque)
Theatre (and mediatheque)
Section + ateliers
Centre for Performing Arts - Context - Concept - Building
Climate design of the institute

Centre for Performing Arts - Context - Concept - Building
Facade section of the institute

Centre for Performing Arts - Context - Concept - Building
Balcony section of the institute

Centre for Performing Arts - Context - Concept - Building

lighting on the ceiling / bottom of the balconies

prefabricated balcony slab
glass atelier / office doors
concrete structure placed in front of the wall
lighting and heating integrated behind a steel grid

concrete core heating / cooling installations above the ceiling
steel-grid ceiling

storage in the atelier walls
wooden finishing in the atelier
semi-prefabricated concrete floor

STUDIO CPA | MSc 4 Interior | Final Presentation 2009-01-23
Hans Roest | 1313762 | mail@roest.com
prefabricated concrete portal frames as main construction
- elements inspired by the context
- industrial and heavy
provide a platform on which the museum volume is placed
concrete construction grid to allow a maximum of open and adjustable space
- hanging / moving wall-elements
museum facade is treated like a volume placed on the portals
- punctures at special places to expose the collection behind (showroom)
- smooth stucco surface and deep openings enhance the feeling of volume
Exterior (front)
Centre for Performing Arts - Context - Concept - Building
Interior
Centre for Performing Arts - Context - Concept - Building
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