MOVING IN PATTERNS

Master’s Thesis in Architecture: Mirja Bergman & Kristina Forsler, VT 2006, Department of Architecture; Theoretical and Applied Aesthetics, Lund University, LTH-A

Examiner: Prof. Abelardo Gonzalez, Department of Architecture, LTH Supervisors: Karin Hvid Rydell, architect, Finrum Arkitekter, Malmö Elisabeth Dalholm Hornyanszky, architect Critics: Morten Lund, architect, Danmarks Designskole, Kopenhagen John Cramer, architect, Tower 151, Zagreb Maria Wemme, accessibility consultant, Malmö
Moving in patterns - final proposal.
“The Link: Removing barriers to culture
Conceive an attractive link from the south bank of the Seine to the Av. du Président Wilson, north of the Palais, thereby bridging the “obstacle course” Seine River/Expressway/bluff behind the Palais de Tokyo. The Link should offer an easy stroll for people with or without disabilities, as well as view points over the Seine and the embankments. It should become the landmark of the Visitor Centre for All.

The Visitor Centre: Meeting point, services and access to the Palais de Tokyo
Create a Visitor Centre within the existing space of the Palais de Tokyo, which caters to the special needs of handicapped visitors and their fellow travellers on The Museum Walk for All. These needs range from tourist information to medical assistance, from wheelchairs for hire to children’s playground, from relaxation rooms to cafeteria.

Improve Access to the existing space in the Palais de Tokyo.

An Exhibition Concept: Creating awareness
Propose ideas for an exhibition that offers access to all forms of art (paintings, sculpture, music etc) for visitors with impaired sight, impaired hearing or intellectual challenges.”

This competition has been underlying our project.
The museum walk for all is a proposed route that links the Paris Landmarks Arc de Triomphe, Champs Elysées, Hôtel des Invalides, Tour d’Eiffel and Trocadero.

The main task has been to remove a series of barriers in the heart of the museum walk for all. Between Palais de Tokyo and quai Branly, a steep embankment, Seine River and two express ways forces people with disabilities to make a long and unattractive detour.
introduction  The starting point DESIGN FOR ALL and the conception SMART ARCHITECTURE have been leading themes to the proposal MOVING IN PATTERNS. Smart architecture, in the sense to balance out individuals’ diverse capabilities, has lead to a stimulating environment for all. The term ACCESS FOR ALL concerns everybody from disabled people to people of different ages and languages.

The human aspect has been kept in consideration throughout the whole design process ending up in an exciting architecture being sensory and aesthetic. FUNCTION IS CREATING FORM. We believe that beauty arises when harmony has been reached between function and form.
Palais de Tokyo is situated in the centre of the west area of the historical centre of Paris. The area is dominated by two tendencies:

- the upper class bourgeoisie
- the military training grounds

The most notable architectural ensembles around Palais de Tokyo are comprised of buildings dedicated to the Paris Expositions of 1889, 1900 and 1937.
 SITE bridges

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| 1 Pont d'Issy | 2 Pont du Garigliano | 3 Pont Mirabeau | 4 Pont de Grenelle | 5 Pont de Bir Hakim pedestrian bridge | 6 Pont d'Alma pedestrian bridge | 7 Passerelle Debilly pedestrian bridge | 8 Pont de l'Alma | 9 Pont des Invalides |
| 10 Pont Alexandre III | 11 Pont de la Concorde | 12 Passerelle Solférino | 13 Pont Royal | 14 Pont du Carrousel | 15 Pont des Arts pedestrian bridge | 16 Pont Neuf | 17 Pont au Change | 18 Pont Saint Michel |
| 19 Pont Notre-Dame | 20 Petit Pont | 21 Pont d'Arcole | 22 Pont au Double | 23 Pont Saint Louis | 24 Pont de l'Archevêché | 25 Pont Louis Philippe | 26 Pont Marie |
| 27 Pont de la Tournelle | 28 Pont de Sully | 29 Pont d'Austerlitz | 30 Pont Charles de Gaulle | 31 Pont de Bercy | 32 Pont de Tolbiac | 33 Pont National |
SITE northern embankment

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1 TROCADERO - 1878
Palace in Oriental style. Haussmann leveled the surrounding area. The original palace was replaced in 1897.

2 GUIMET - 1899
Musée National des Arts Asiatiques

3 GALLIERA - 1894
Musée de la Mode

4 GRAND PALAIS - was constructed on the ruins of other older palaces, for the Universal Exposition of 1900. The buildings were dedicated to the arts by the French minister in 1964.

5 PETIT PALAIS - was constructed on the ruins of other older palaces, for the Universal Exposition of 1900. The buildings were dedicated to the arts by the French minister in 1964.
Removing barriers to culture

SITE southern embankment

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6 TOUR EIFFEL - 1889 landmark, 317 m

7 HÔTEL DES INVALIDES - 1676 Musée de l’Armée. Second largest project after Versailles.

8a MUSÉE DU QUAI BRANLY – Upping project by Jean Nouvel and landscape architect Gilles Clément, 2006. Idea is to wrap the collections’ elements.
8b Green wall - by Patrick Blanc
8c Forest - Acts as a transition between the city and the museum.
8d Palissade - Wall of serigraphed glass

9 THE PORT OF THE BOURDONNAIS - ports are used by the bateaux mouches (tourist boats), small industries or act as loading docks for construction materials.
SITE perimeters

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10a AVENUE DU PRÉSIDENT WILSON – 1858
40 m wide. Existing main entrance to Palais de Tokyo in the background.
10b Ramps leading to the restaurant of Palais de Tokyo from Av. du Président Wilson.

11 PALACE GARDEN - Garden installation along Rue de la Manutention.

12a RUE DE LA MANUTENTION - One-way street
12b Parking, blocking the pedestrians.
12c Steep stair

13a AVENUE DE NEW YORK – The Avenue, 27 m at its narrowest point, and the river bank dates from 1872.
13b No level crossing.
13c Underpass

14 THE DEBILLY PORT – ports are used for bateaux mouches (tourist boats), small industries or act as loading docks for construction materials.

15 PASSEERELLE DEBILLY - Historical monument without design restrictions. The bridge’s span is 120 m and it has a width of 8 m. Constructed for the Universal Exposition of 1900 and was supposed to be destroyed afterwards. It is made of a steel frame construction with a central arc. Was moved to its current site 1906 by the city of Paris.

16a QUIAI BRANLY - Traffic intense.
16b Stair leading up to the bridge.

17 RUE GASTON DE SAINT PAUL - Cul-de-sac
Green spots in urban areas are always appreciated, they are oases in an otherwise very hectic environment. The ongoing project by Jean Nouvel, Musée du quai Branly, on the south bank opposite to Palais du Tokyo will have a garden surrounding the building and a green wall. Apart from this the area is characterized by heavy traffic, grand buildings, stone paving and the Seine river.
SITE palais de tokyo

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Palais de Tokyo's courtyard and plazas.

Av. du Président Wilson and entrance of Palais de Tokyo.
Main entrance of Palais de Tokyo.
Entrance to the restaurant.
Door facing R. Garson de St. Paul.
Courtyard.

1938-91 National Contemporary Art
1947-77 National Museum for Modern Art
1984-93 Centre for Photography
1984-98 Museum for film, archive and library.
1999 Competition for a new museum of contemporary art in the western parts of the building.

The exterior architecture of the building adheres to the typical 1930’s style. The u-shaped complex forms two wings joined together by a colonnade. The wings frame a courtyard that goes down in three levels towards the Seine. The facade is decorated with reliefs dedicated to the glorification of the Arts and a monumental staircase contributes to the theatrical setting.

Unlike the exterior, the interior has been changed several times. The volumes and the natural light is now enhanced by a simple, raw and flexible structure. “The Palais de Tokyo – site de creation contemporaine” is situated in the main floor, at street level of Av. Président du Wilson. Apart from the museum the building also contains a restaurant, a cafeteria, a bookshop and a museum store.

Since the opening of Palais de Tokyo in 2002, there has been over a million visitors. The museum has worked with more than 300 artists and arranged over a hundred different exhibitions. Currently 8 000 m², 36% of the total square area (22 000 m²) are in use, but due to increasing amount of visitors and a high popularity among artists a future enlargement is being considered. Development is supervised by Ministre de la Culture.
SITE palais de tokyo

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ACCESS FOR ALL

Design that makes easier access for all in an urban environment.

**Design criteria:**
**Easy to orientate**
Make easier for:
People with visual-, hearing- and mental impairment and with cognitive function obstacles.

- Straight angles, few choices and few changes of directions.
- Points of orientation.
- Endpoint in sight.
- Guidelines to follow with cane.

**Design criteria:**
**Calm environment**
Make easier for:
People with visual- and mental impairment.

- No sloping on the path or the surrounding sides.
- Self-explaining environment.
- No large spaces.
- Calmness.

**Design criteria:**
**Safe room experience**
Make easier for:
People with visual- and hearing impairment.

- Good acoustic. Tactile experience should correspond with the visual.
- Good lighting, with contrasts and without being blinding.
- Ramps and/or elevators. Enough manoeuvre space.

**Design criteria:**
**Easy communication**
Makes easier for:
People with visual impairment.

- Logic plan. Related functions are in connection.
- Ramps and/or elevators. Enough manoeuvre space.
ACCESS FOR ALL

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Illustration of different visual defects with basis from a viewpoint at the courtyard of the Palais de Tokyo.

- Normal vision.
- Age related vision loss. Sensitive to changes in lighting and posture. Need: contrasts in colour.
- Diabetic related vision loss. Sensitive to bright light/changes in lighting.
- Partial vision loss. Difficulties with detail vision/perceiving movement/keep balance.

considered disabilities in the project:
- asthma/allergy
- hearing impairment
- vision impairment
- mental impairment
- cognitive function obstacles
- disabled

the seven definitions of UNIVERSAL DESIGN have been leading themes:
- equitable use
- flexibility in use
- simple and intuitive
- perceptible information
- tolerance for error
- low physical effort
- size and space for approach and use

"Universal Design is a holistic approach to creating environments and products that are usable by many people regardless of their abilities or age."

given parameters in an abstract room:
- wind
- sound
- natural guidelines
  - an unbroken chain of references: rails, facades, curbes, edge up/down ground/facade change in material; stone/gravel/stone/plantation

definitions of disability:

- illness/injury ➔ function obstacle ➔ handicap ➞ environment

Accessibility and design considerations:
- Normal vision.
- Age related vision loss. Sensitive to changes in lighting and posture. Need: contrasts in colour.
- Diabetic related vision loss. Sensitive to bright light/changes in lighting.
- Partial vision loss. Difficulties with detail vision/perceiving movement/keep balance.
First sketches, inspiration from movement of the water.
process In our first sketches we were inspired by the movement of the water. We started out looking at important directions and view points. In the beginning we were working with organic forms, visible in the nature. But due to functional thinking we soon straightened it up.

We thought about working with a bigger surface that allowed itself to stretch out over the Seine connecting the two sides of the river. But again, function comes first, and a large form makes orientation more complex. We let the surface split up to several, smaller fragments and tried to work in diverse directions. The idea about placing a platform in the middle of the river, like an island, was not possible due to traffic restrictions.

Early in our design process we decided to let the link pass through the courtyard of Palais de Tokyo. Activation of the inner plazas would make use of the existing grand architecture and it gave possibilities to integrate the link with the building.

After learning about different disabilities, our main functional criterias were:
- need of ramps and/or elevators
- straight angles
- no large surfaces
- orientation points; an environment easy to form an overall picture of
- guidelines
- a calm environment; few choices

These criterias led us to our final proposal.
PROCESS

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PROPOSAL plan urban structure

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the visitor centre From the courtyard the link continues into the visitor centre creating an inviting entrance area. The flooring material (glass) emphasize the connection between the inside and the outside.

The reception is placed like an island visible from the entrance. Visually impaired people can follow the walls and use this as an orientation point and guideline to find other functions placed around this area. Differences in flooring material tells you when you have reached something new.

All communication is gathered in one central place of the building that is easy to find. A round ramp, that corresponds with the interior, replaces today’s stairs and intersects the whole building. It appears round from the outside but, due to a functional thinking, there are straight angles inside which also gives us exhibition areas inside the ramp. The same material is used in the ramp (black concrete) as in the link.

The exhibition in Palais de Tokyo today and the exhibition in the new visitor centre are separated, but you can reach the present restaurant and cafeteria from both sides. The visitor centre has an additional cafeteria placed on level 3a with a terrasse that gives you a fantastic view. It is situated near the playground and the nursery. Here is also placed a more relaxing seating area with a possibility of screening of the sofas with curtains. Different materials in flooring help visually impaired people to find the way and guide them towards the ramp and the restaurant.

We propose parking places for the staff under the building on level 0.
VISITOR CENTRE program

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KITCHEN & STORAGE 80 m2

RESTAURANT/CAFETERIA 80 seats

LOBBY 70 m2

CONFERENCE ROOM 50 m2

INFO POINT 30 m2

RECEPTION 50 m2

COUNTER 30 m2

OFFICE SPACE 20 m2

RENTAL SERVICE 50 m2

DOWN-SELLING 20 m2

SANITARY ROOMS 30 m2

SANITARY ROOMS 30 m2

INDOOR REST AREA 150 m2

OUTDOOR REST AREA 150 m2

INDOOR REST AREA 120 m2

CHILDREN’S PLAYGROUND INDOOR 100 m2

CHILDREN’S PLAYGROUND OUTDOOR 150 m2

DAY NURSERY 50 m2

CINEMA 120 seats

EXHIBITION SPACE 1000 m2

PREPARATION 200 m2

STORAGE 200 m2

TECHNICAL INSTALLATIONS (SUB STATION ONLY) 130 m2

ARCHIVES 20 m2

BACK OFFICE 80 m2

MEETING ROOM 30 m2

RESTROOM / SHOWER 20 m2
removing barriers to culture removing barriers to culture removing barriers to culture removing barriers to culture
VISITOR CENTRE plan 1b

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VISITOR CENTRE  plan 3b

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public
private
addition
existing
removed

SCALE 1:500

50 cozy room/relax
46 outdoor playground
47 indoor playground
48 wc
49 counter
VISITOR CENTRE sections

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VISITOR CENTRE facades

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FACADE NORTH

FACADE EAST

SCALE 1:500

addition
existing
VISITOR CENTRE

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Interior view from the lobby inside the Palais de Tokyo towards the new ramp.
conceptual exhibition – thrilling ideas. We feel that it is important to make use of the big interior volumes and the beautiful natural light inside the building. We want to make a space that is flexible, where you can experiment with the rooms and their qualities. The building should not limit the creative ambitions of the artists, but open up to all kinds of art; exhibitions, installations and performances.

It should be a living, social place favourable for dialogue, discussion and reflection. The exhibition room grows and the limits become vague. When you move inside the building as well as outside on the link you are surrounded by art and a part of the exhibition. We have a performance stage in the seating area and room for exhibitions inside the round ramp and out on the link.

We believe that the communication between the artist and the visitor is developing. The visitor is becoming more active, contributing to the outcome of the finished idea. Art is an attempt to communicate with the individual person and to create a place for that persons' feelings and imagination. By letting the observer participate and interact, the comprehension intensifies and you get a meaningful experience. The information should be adjusted for the individual person, to give the visitor choices and let him/her absorb the impressions in his/her own pace.
VISITOR CENTRE exhibition

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Suggested presentation techniques;

- Guided tours with headphones.
- Hand computer that guides you through the exhibition and tells you about the objects.
- Virtual Reality; freedom of movement is boundless. It gives you the possibility to adjust the reality you see to your own needs.
- Tactile information boards, a voice is automatically giving you information when you touch them.
- Pictogram, pictures are an universal language.
- Range leading sounds to guide you.
- Touch tours; the more senses you use the stronger the experience. When it comes to fragile objects you can make reconstructions of them or get samples of the material that people are allowed to touch.
Removing barriers to culture
concept/idea  Nature is very strongly associated with our senses. You can scent the ocean, hear the waves and feel the sand underneath your bare feet. With your hands, you feel the form and the smooth surface of a stone that is still warm from the sun. When you are walking in the forest the birds are singing and you can hear the wind blowing in the trees. You can scent the flowers on the meadows and feel the grass tickle your legs and your feet. Nature gives us peace and quiet, strength and energy.

The green that unfolds and stretches out like a patchwork quilt over the Seine river creates a link, connecting the two sides. It offers experiences beyond what you normally find in an urban landscape. It creates sequences of varied character. Different natural and artificial components activate all of your senses and make the environment exciting, an experience to be in and walk through.

The decision on the link being drawn through the courtyard offers activation of the inner plazas and are making them accessible for all. This position also saved 3.10 m in height difference compared to if the link was drawn on Rue de la Manutention. The garden installation, Palace Garden, on this street is appreciated and kept as it is today.

Paris is known for its closeness to the water that runs through the city. Part of the proposal Moving in Patterns is to make the river more accessible and create an opportunity for coming down to the waterline and sit.

design  The strict design and straight angles are derived from function. It allows all movement to happen as easy as possible for all. The geometrical forms work well and are in harmony with the existing grand building. The idea of a green patchwork arose from a wish to work with nature and to create a room in variation that attracts all of your senses. The scents from all the flowers and herbs changing over time, as well as the sounds, reach people far away and give them a premonition of this place.

The link will be a landmark, a beautiful coloured pattern visible from the sky as well as from the ground. During the night it will look like the path is floating on light.

communication  In this proposal the environment is self-explaining and easy to read for all. The angles of inclination are almost flat and there are no big squares. For those who do not want to or can not take the longer paths, you have a choice to go straight through. The meaning is not to be relying on elevators. They exist if you want to use them but you should not be depending on them. One exception is the platform elevator in the high plaza that gives people in wheelchairs the same movement and thereby the same grand view and experience as the walking. The different types of rooms help visually impaired people and mentally impaired people to orientate. The varying rooms work as guidelines so that when you pass by you start recognizing a certain place by smelling a specific scent, hearing a sound or getting tactile information. These experiences will guide you and help you to find the way.
LINK proposal

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removing barriers to culture removing barriers to culture removing barriers to culture removing barriers to culture
LINK plans

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LINK construction

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construction Reinforced concrete elements and the foundations are mounted on site. Spans up to a maximum of 40 metres separate the loads. The perforation of the foundation is determined by the geotechnical conditions. The glass is screwed to parts of the concrete elements that are elevated.

materials The different materials and its qualities are also important guidelines for visually impaired people. Walking paths should be in contrast colour and easily recognized. We chose to work with black polished concrete that is contrasting with the light building. The shining surface will reflect the water underneath and as you come by boat you will feel like the water is surrounding you. The upper side of the link is covered with reflective plates of glass. These will reflect and bring down the heaven and you get the same experience here, heaven and sea are switching places. The glass is electrically conducted to prevent ice from forming on the ground during the winter, and it is protective against slipperiness by small rubber dots let into the surface.

The sea level platform has no glass surface and is not polished because of the slip and fall risk. Here the heaven is photoengraved into the concrete surface out of prevention causes but also in order to correspond with the upper level. The railing and the roofs are also in glass to enhance the horizontal feeling. The railing has a rubber top that is easy to grab hold of.
LINK construction

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Detail of construction, tree

middle level

Detail of construction, planting
upper level

SCALE 1:10

SCALE 1:50
LINK conceptual diagram

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Different types of rooms activate all of your senses and help you to orientate.

For visually impaired people
- Braille/information in railing
- Edges to follow with cane
- Guidelines

Braille/information in railing
Edges to follow with cane
Guidelines
LINK - benches and roofs along the link offer sheltered seats.
room SCENT - view showing room with herbs and in the background the resting area.
SEA LEVEL - platforms enable access to the river Seine.
MIDDLE LEVEL - a meeting place at the middle level facing quai de New York.
room SOUND - sound experience in an open box of glass.
room FLOW - a ramp leads from the pavement of Av. de New York up to the link.
room FG - view from the entrance area of the Visitor Centre.
room VIEW - the new path is linked with the High Plaza through a new opening in the existing platform.
Improvements to attain an obstacle free environment.

**palais de tokyo** Tactile orientation maps in relief with Braille available. Use of pictograms instead of written signs, pictures is a common language for all. Contrast in colour on all the pillars. Different material in flooring to mark important places.

**entrance**
Operation device for door opening, > 1 000 mm from door, 800 mm height. Tactile model of the building to look/feel at, gives you an overall understanding of the space before you enter.

**reception**
Counters board, in contrasting colour, with a lower part being suitable for wheelchair users and children.

**doors**
Door frames in contrasting darker colour. Door handles in contrasting lighter colour. Threshold free doors.

**windows**
Rail in front of window functioning as a warning mark.

**hwc**
180 degree turning radius for wheelchairs
Sickbed available.

**elevator**
Glass marked with pattern. Operation device, 770 mm height, with Braille.

**stairs/ramps**
Contrast in colour points out first/last step. Railing continues 300 mm at both ends. Low walls on both sides, 40 mm, to follow with cane.

**link**

**the path**
Metallic tactile tiles, contrast of visual lightness in colours, 90x25x4 mm, distance in between < 10 mm
Braille information in railing.

**pavement**
Pavement side in contrast with light stone.
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