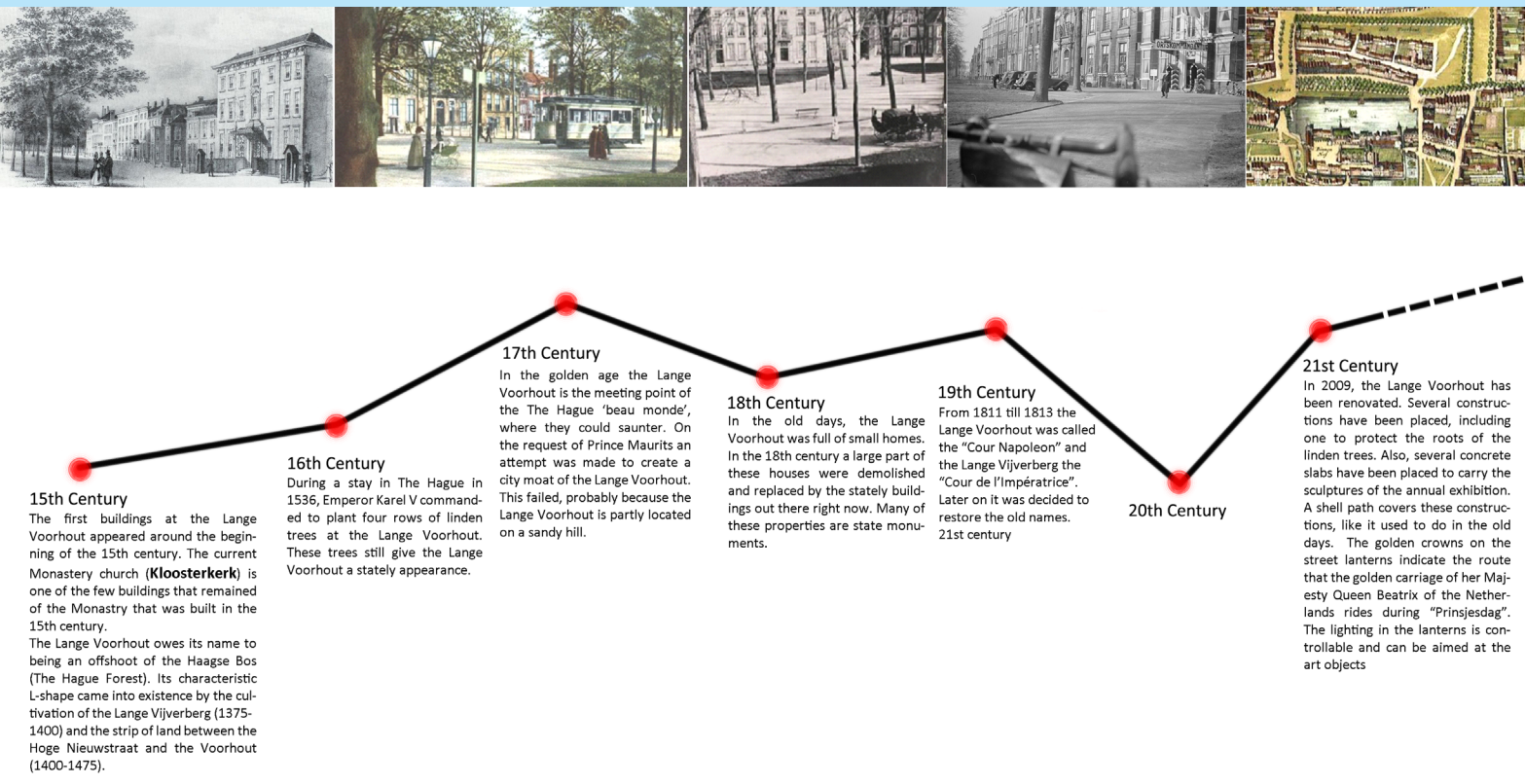


Site Analysis



History of Lange Voorhout



Colors of Lange Voorhout



Events of Lange Voorhout



My approach

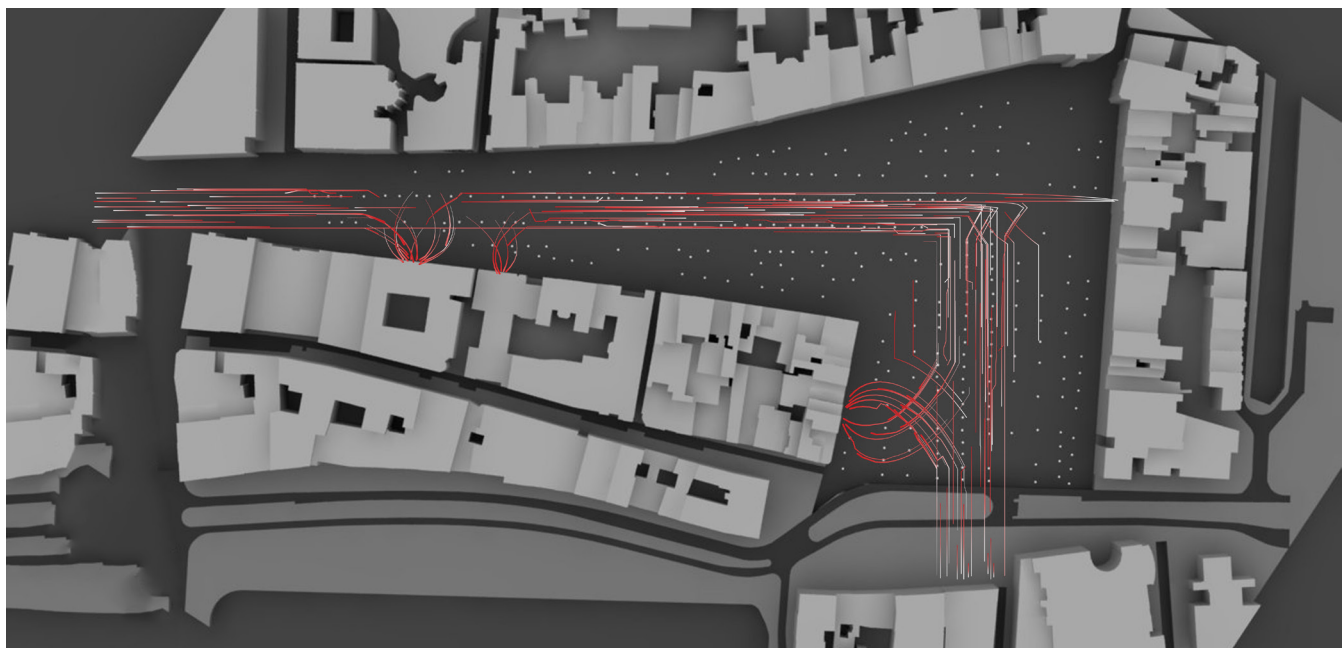
Lange Voorhout gives the feeling to the visitors that they are in an important place. Any addition to the site is not only a great opportunity, but also great risk to disturb the nature and the quality of the site. The most significant characteristic elements of the site are trees that create the natural beauty, important historical and cultural buildings, materialization of the area and occasional and periodic events.

It is obvious that the old trees on the site have a great influence on visitors. These linden trees determine the main characteristics of the site and while designing new elements for this area my intention was not to interfere it. In the pursuit of achieving that, branches, trunks and the roots of the trees should have been considered.

Movement Analysis/Simulation and Project Development

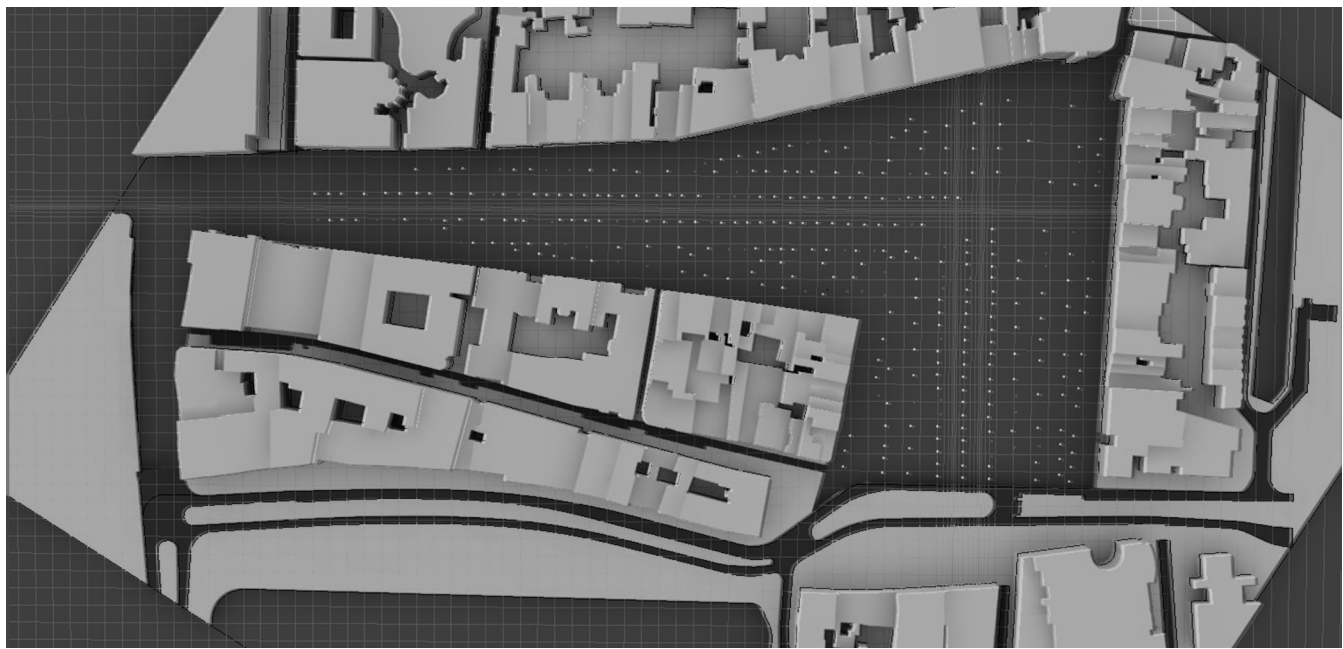
In order to come up with an interactive design, movement of the visitors has been analyzed and reproduced by using the features of Swarm Behavior. This method is applied with those steps:

1. Random number of people is populated on the main axis of the site.
2. As a regular movement vector, main axis directions have been used
3. Attractor points has been defined (Buildings that taking attraction: theatre, studio, restaurant and museum)
4. Obstacles are defined (this case these are trees on the site)
5. Movement vectors are redefined according to attraction zones, and exact locations.
6. By having number of iterations (this case it is 20), the movement of the people are observed and the system produce the movement paths
7. Movement paths have defined the locations of lighting, pavilion and shelter.



After this point there are various kinds of way to use that information. However when we consider the alterability of the site to change the event locations, number of events and their characteristics, regular 8x8 grid has been considered more appropriate to start with.

Even so, when the beautiful one point perspective of the main axis is considered, instead of square cells, linear cells are designed to emphasize the linearity and the light quality of the view. While deciding on the sizes of cells, the book market has been considered as a reference (seller, customer and counters).



8. The paths, which have been obtained from visitor movement diagram, have determined the division of grid by using quad tree method. Because when a cell becomes smaller it has a tendency to turn into part of shelter or pavilion.

9. In order to have flying slabs, horizontal wall-like components are used. Locations and sizes of the walls are decided considering the site qualities such that;

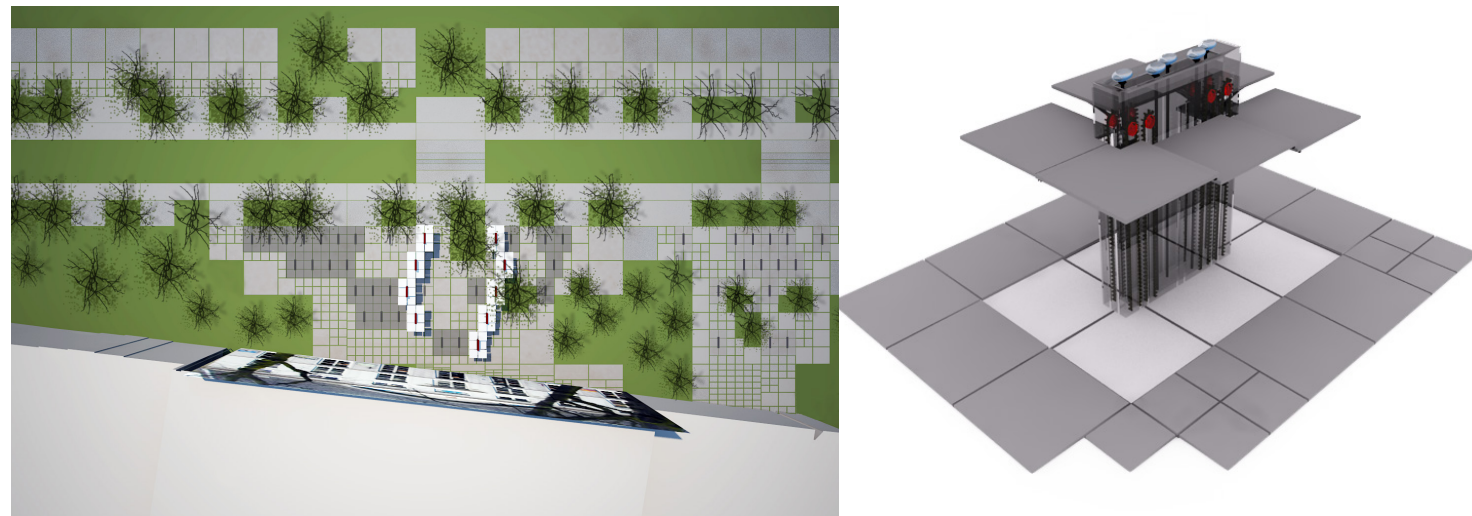


9. In order to have flying slabs, horizontal wall-like components are used. Locations and sizes of the walls are decided considering the site qualities such that;

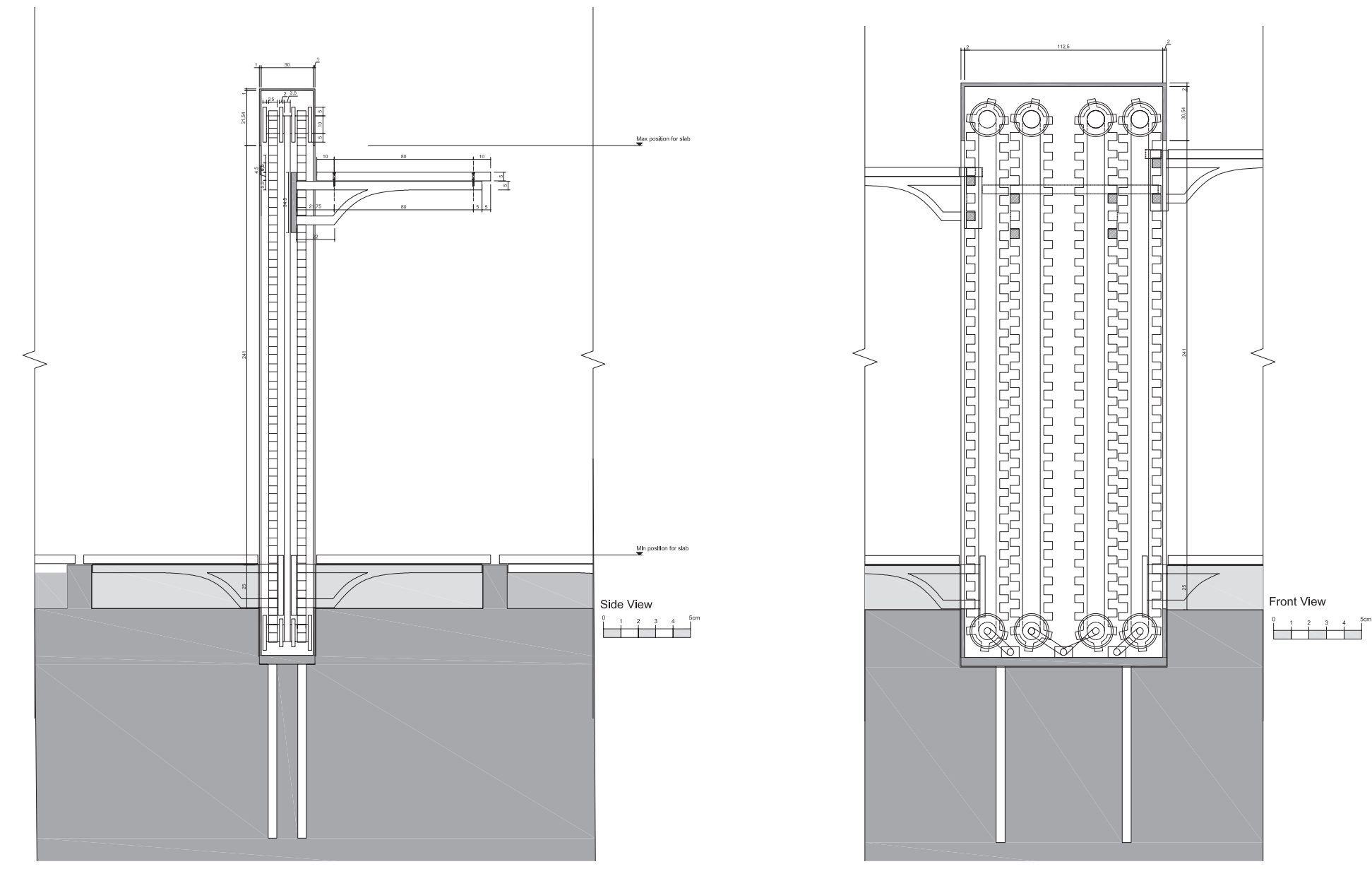
Walls should

- be located perpendicular to the main axis
- have a proper distance (5m) to the historical site buildings
- have the optimum location to support as much slabs as they can

By using these constraints possible wall locations are determined and nests for the walls, and the slabs around them should be constructed on the site.



Shop Drawings



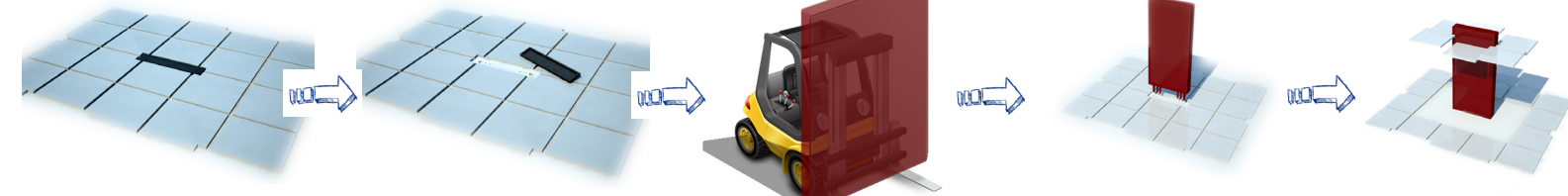
Site has various events during year such as, Queens Day, Golden Couch, exhibitions, book market and parties. Lange Voorhout has important buildings, which require extension to, like Dilligentia (theatre), Pulchri Studio, Escher Museum (former palace).

Hence, Lange Voorhout is a living environment itself, despite of weak solutions for temporary needs. The main problems of the site can be listed as static lighting elements which cannot adapt themselves to changing situations of their environment, and shelters and pavilions (tents) that are constructed during festivals and exhibitions as they.

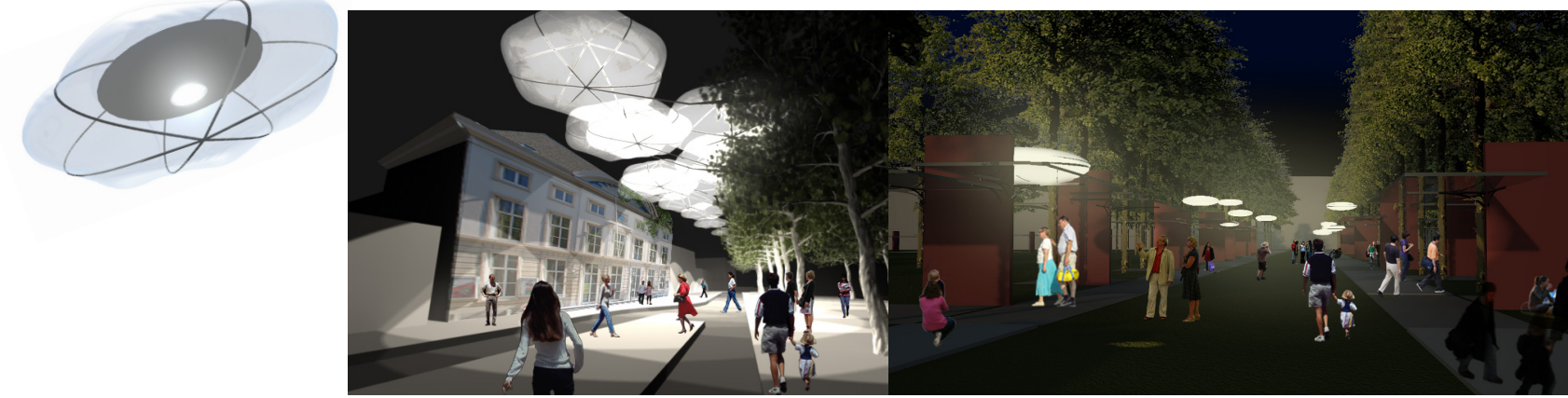
Not to affect influence of the site, less complex forms have been used as lighting elements and simple horizontal and vertical elements are considered to create spaces for events. Thus, they have been designed as they can disappear as much as they can.

Working system of the design:

- Additional wall will be carried with a forklift to its location
- Wall will be attached to its nest
- Because it has its own mechanism and power source, wall will just use the ground as a structural foundation.
- With a remote control, slabs will start to rise on the wall with the support of the engine and gear system (conveyor belt system) of walls.
- Depending on the requirements expected during event, system can provide sun shading, protection from precipitation or fully closed exhibition place.



11. When there is a need of light, balloon swarms are flying all over the site and locate themselves on the event area. With the help of helium, gps and engine they can suspend on the air without any additional support. So they don't interrupt any event occurring on the site.



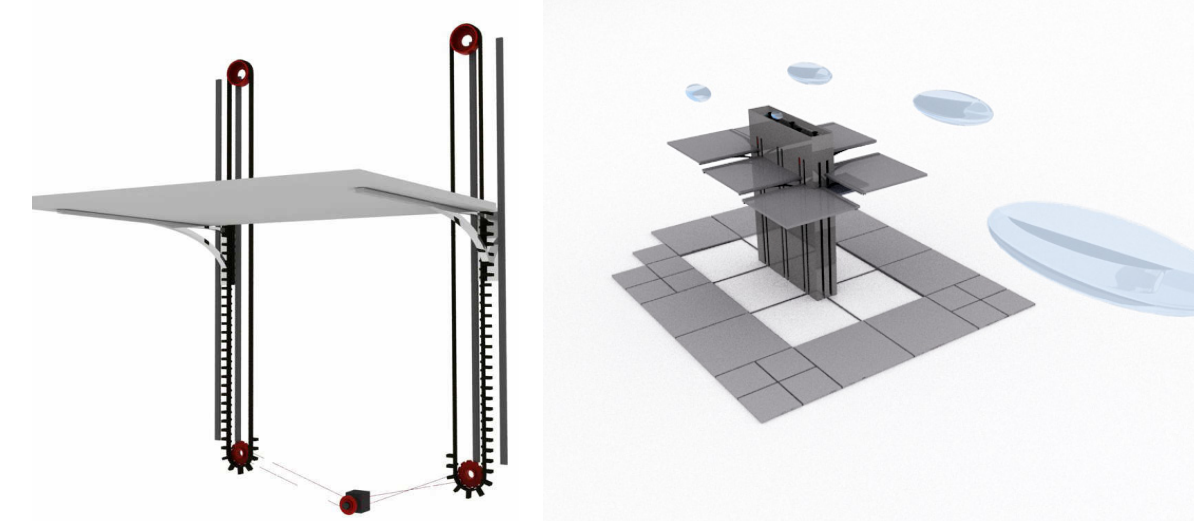
While designing the system; several parameters have been considered as below:

- Adaptable: Living Environment System designed as it can be adapted either to linear or to central space organizations. Also system is designed as a generic mechanism that can respond to the changes on events.
- Respectful: It has ability to shape itself according to the site elements (in this case, trees)
- Deployable: System gives possibility to be removed not to disturb visual connection during royal ceremonies on the site.
- Dynamic : one element has the capacity to be interactive to the event going on

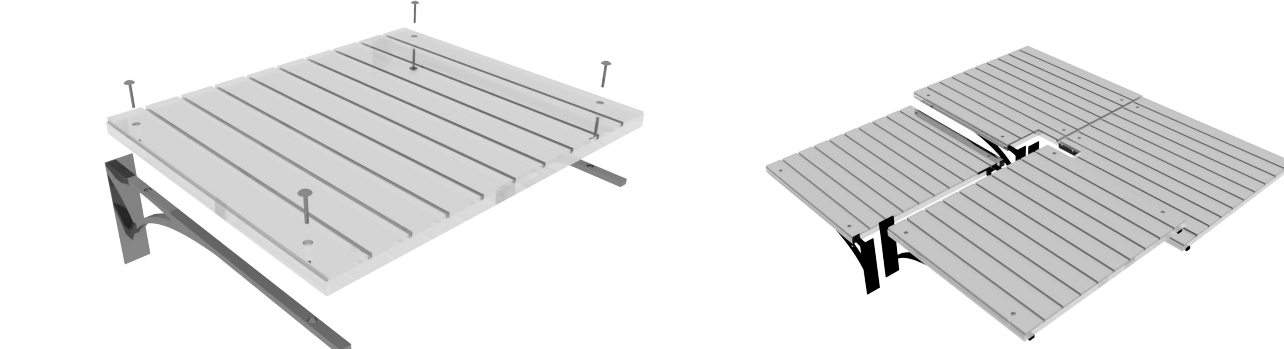
It is breathing, and living with its environment.

System Elements

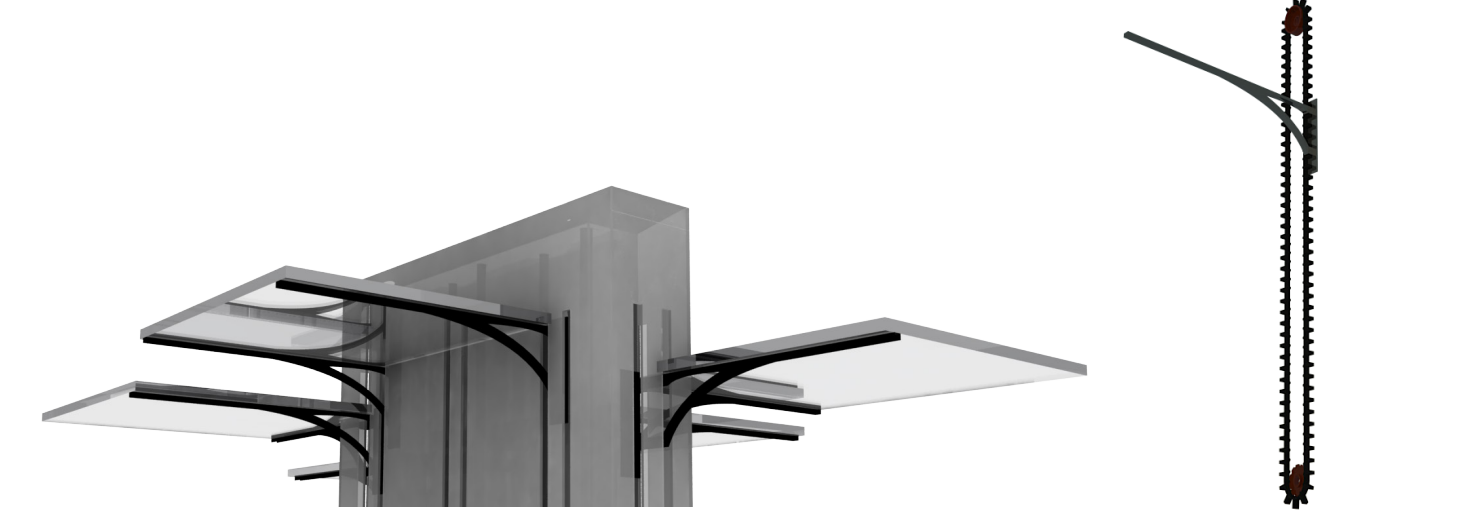
• **Walls**
are the mechanic elements and backbone of the structural system of the design. While they are strong vertical elements to define space with the slabs, they also provide conveyor belt for slabs to rise on, and at the same time work as a nest to the lighting elements (helium balloons).



• **Slabs**
are the horizontal elements lying on the ground during a normal day (with no events occur on the site). When there is a need of a shelter, closed or semi closed space for an event, they can rise on the mechanical walls that can be either permanent or temporary walls. They have the details on them to hold on the construction, they will be just waiting for the walls to activate them.



Structural Elements: "Bracings"



Roll Up Closure Elements

Between Slabs

Between Slabs and the floor



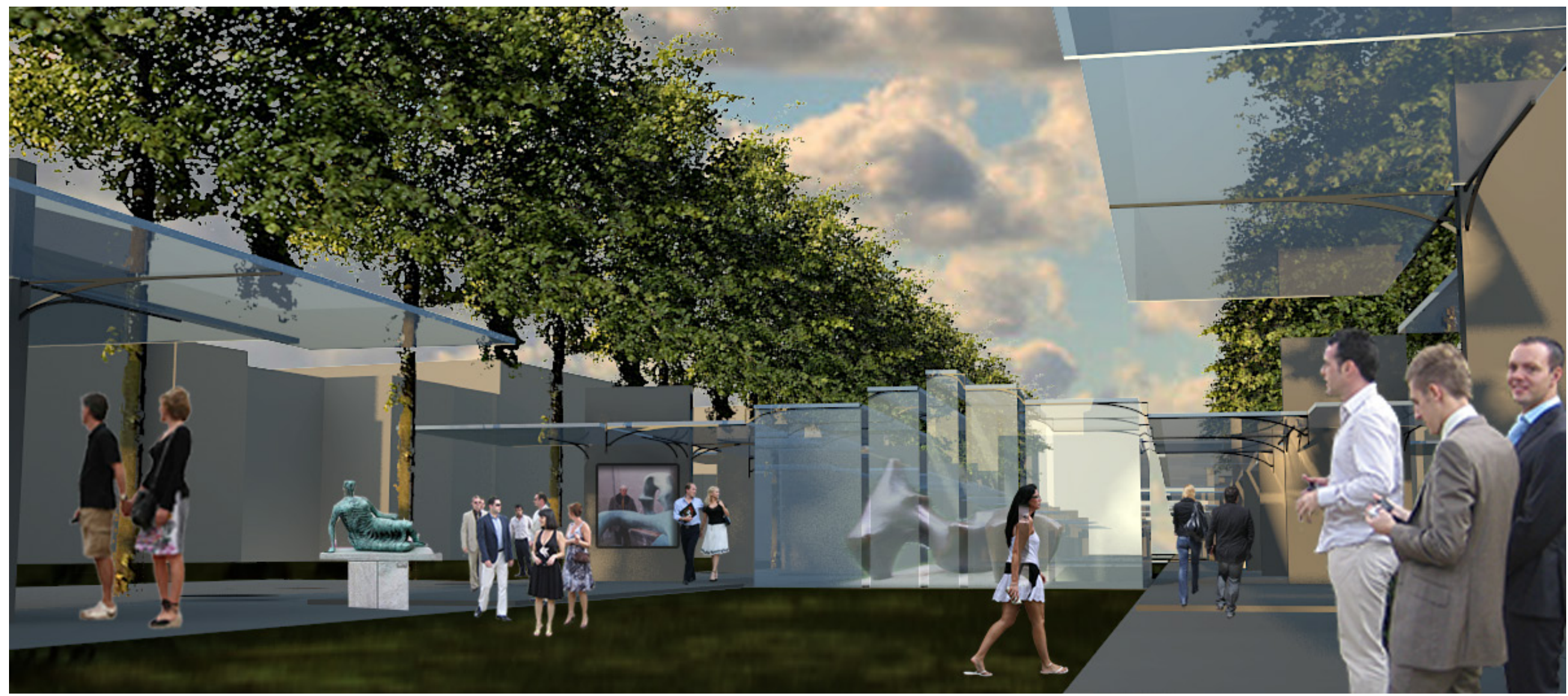
Scenes from the System



Bookstore



Antique Market



Open Air Exhibition



Open Air Foyer for Dilligentia

Lange Voorhout : at Past, Now, in the Future

