Satellite Daylight Pavilion

2017

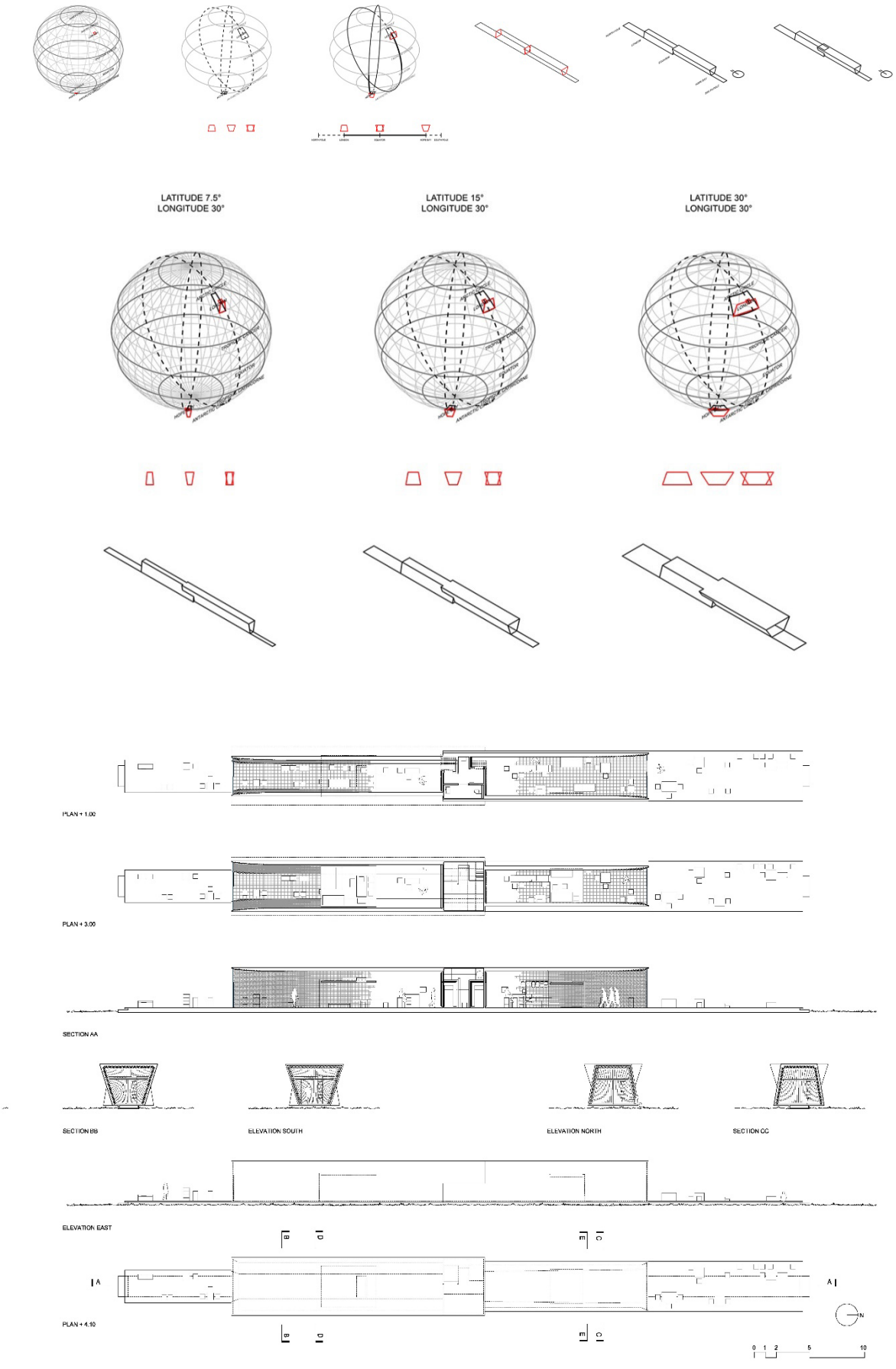
Project by fabric | ch

Collection: Haus der Elektronischen Künste (HEK, Basel) – edition nr. 2

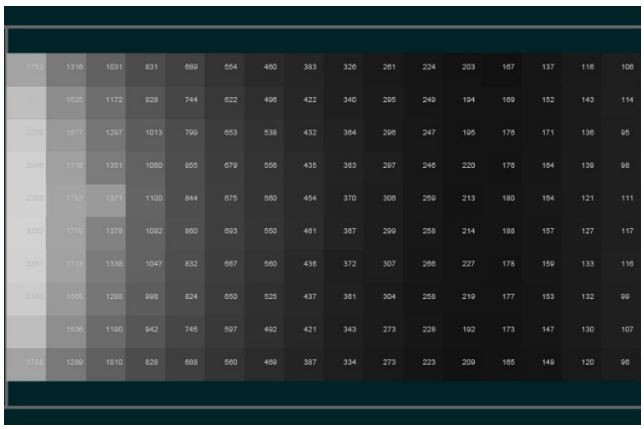
Location: London (GB) and Hope Bay (Antarctica), simultaneously

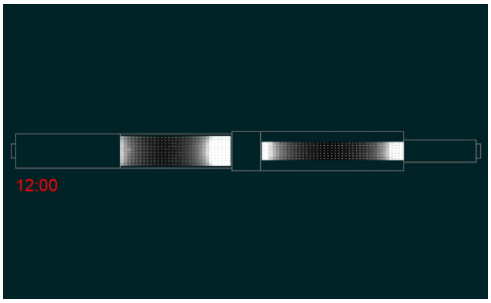
- Two Satellite Daylight installations compose one pavilion
- Local and distant light patterns and time combinations, natural and artificial
- Space of reconstructed days, phasing of times, (day)lights and seasons
- Combining the Northern and Southern hemispheres' atmospheres
- Atmosphere shifting

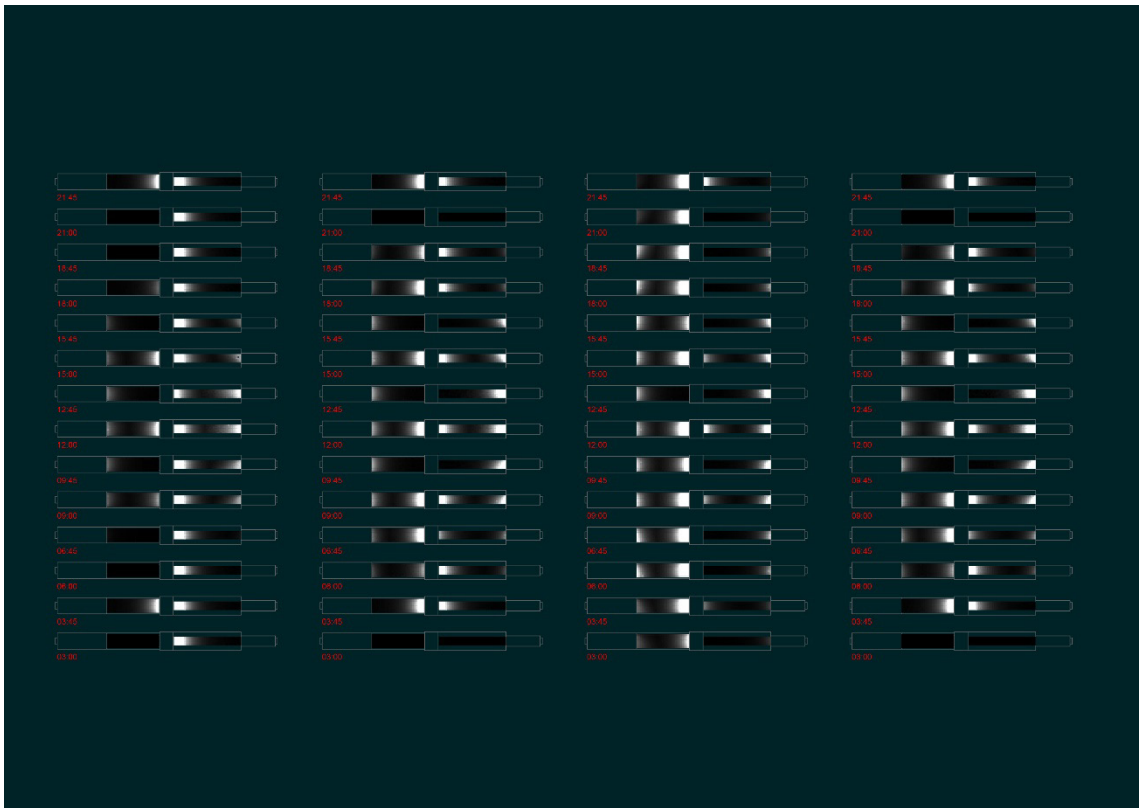
- 4 videos (2 min each) – Edition of 5

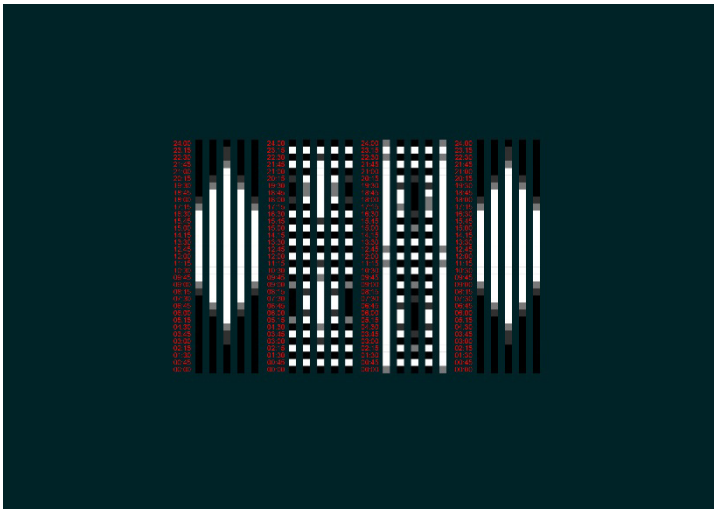

LATITUDE 7.5°
LONGITUDE 30°
LATITUDE 15°
LONGITUDE 30°
LATITUDE 30°
LONGITUDE 30°
PLAN + 1.00
PLAN + 3.00
SECTION AA
SECTION BB
ELEVATION SOUTH
ELEVATION NORTH
SECTION CC
ELEVATION EAST
PLAN + 4.10
0 1 2 5 10

[Img. 1]

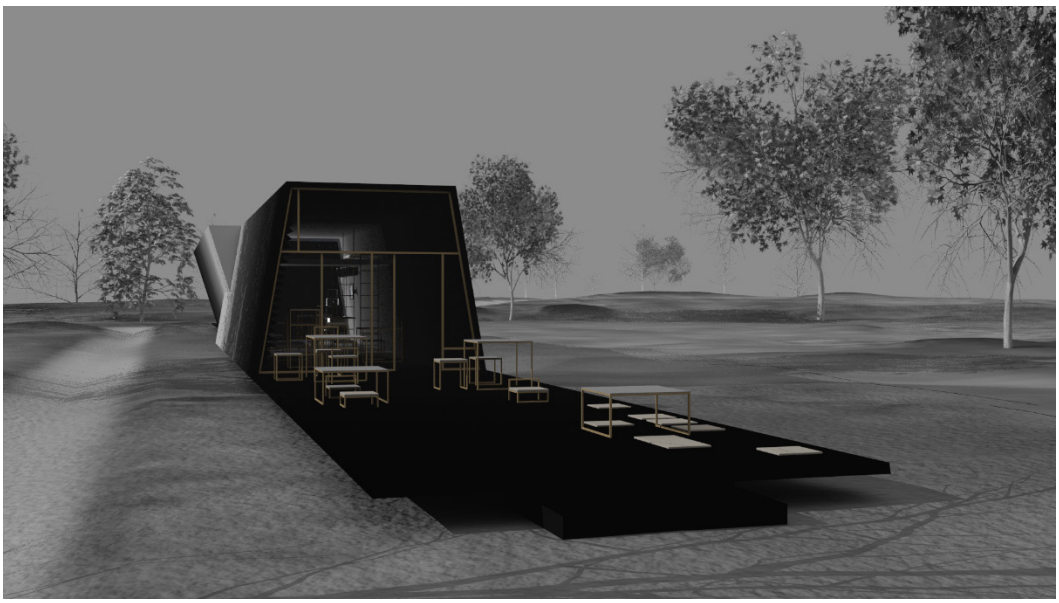


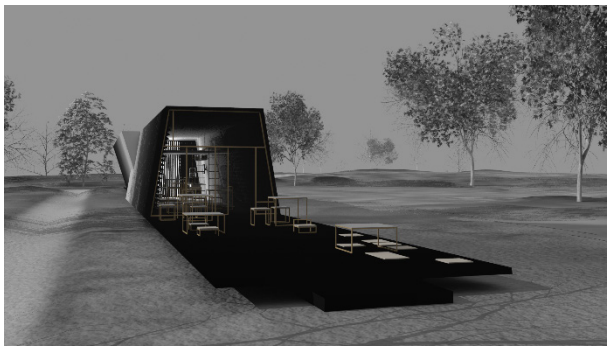


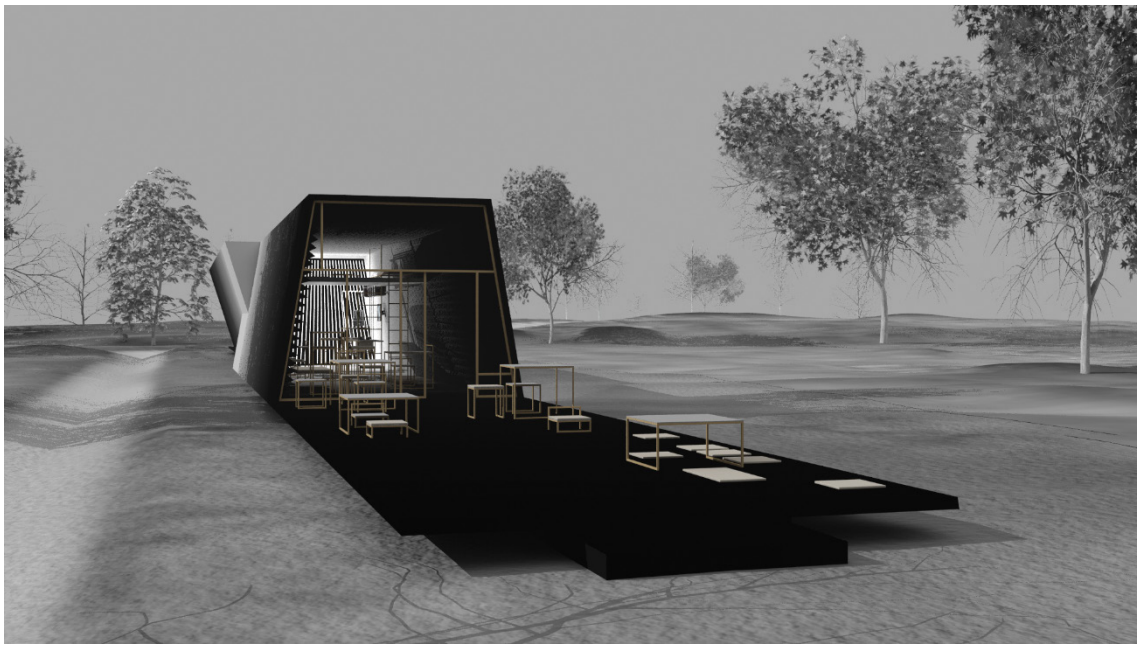


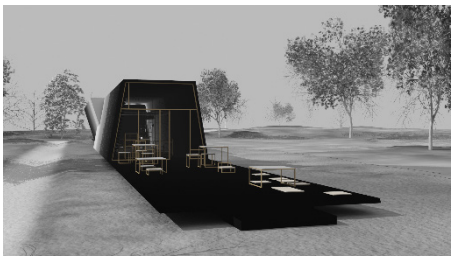


[Img. 2]

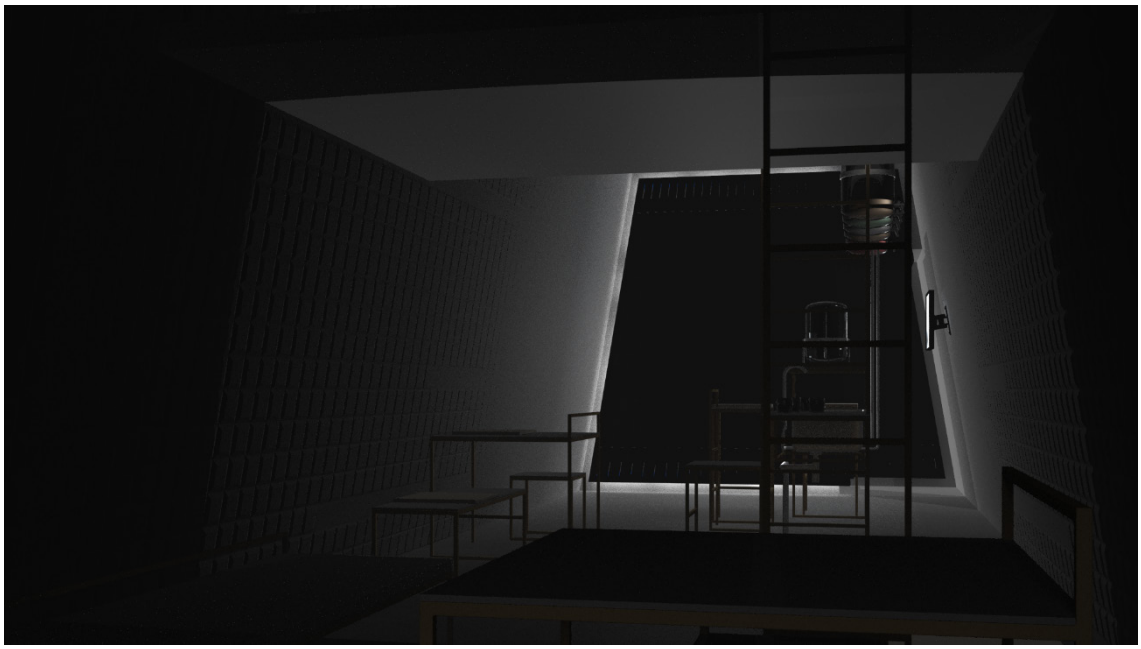


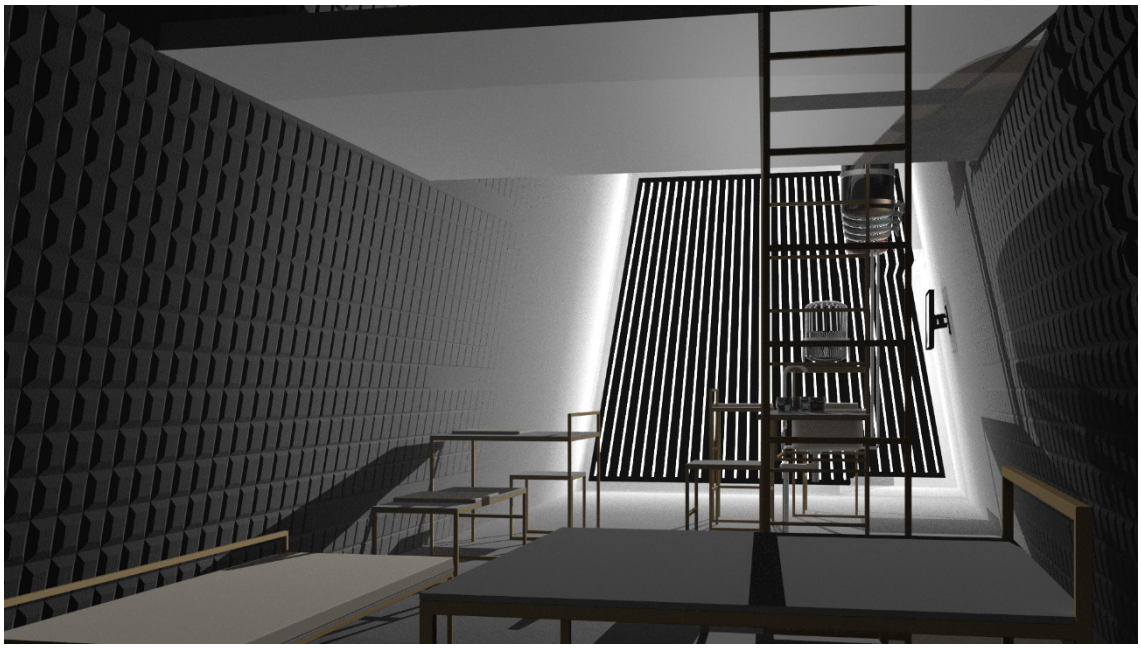




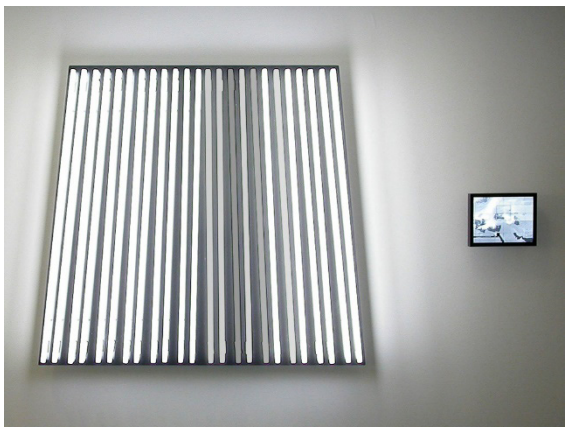


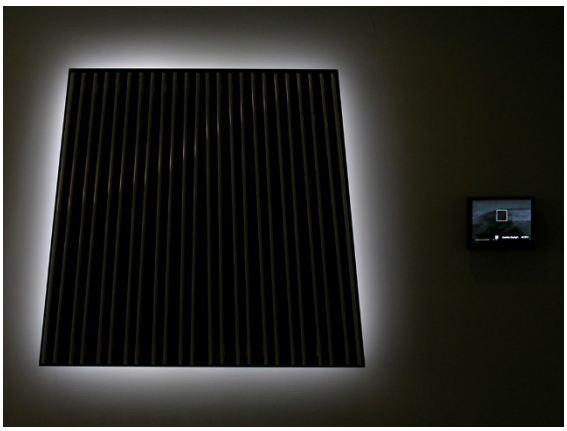
[Img. 3]



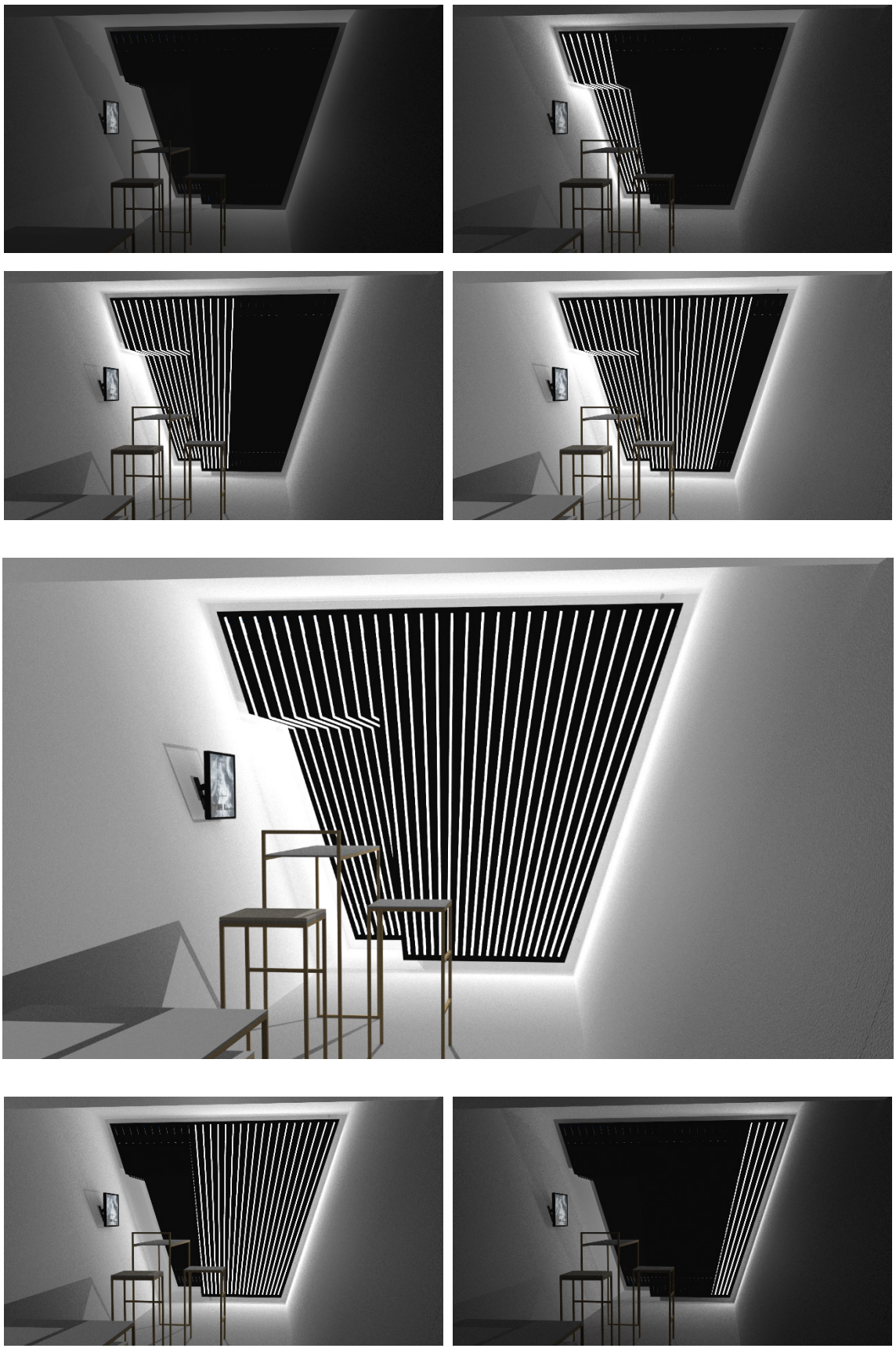


[Img. 4, 5]



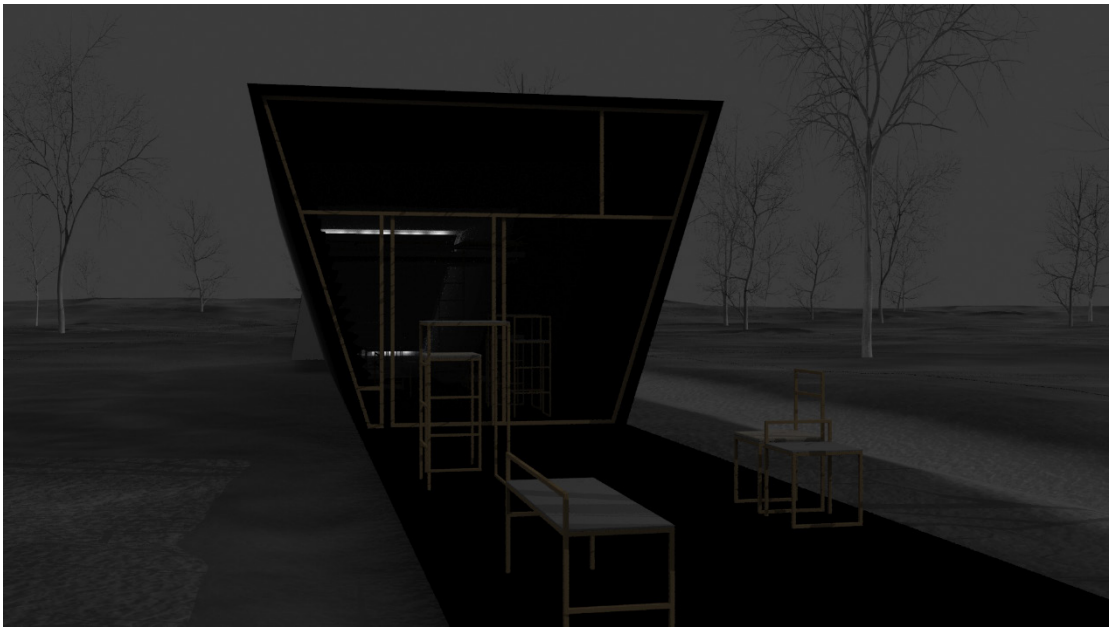


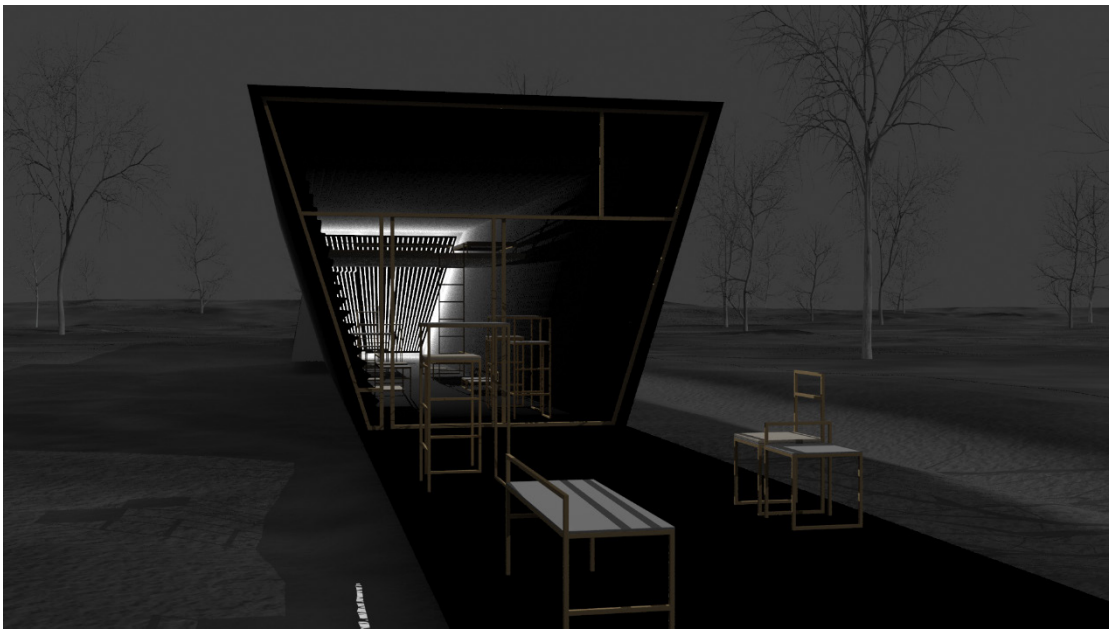
[Img. 6]



[Img. 7]

[Img. 8]





[Img. 9]

Image captions:

[Img. 1] Shape studies triggered by geographic notations. Plans of the teahouse located in Kensington Gardens.

[Img. 2] Accompanying light studies. Due to the behavior of the two artificial light displays (or "windows"), combined with their natural counterparts, a study needed to be done to better understand the light patterns of the pavilion along the hours of the day and seasons. Based on the results of this study, functions (rest, active) were located on two sides of the pavilion.

[Img. 3] Video 1 (HD, 2min). 21st of March, 8am to 9:30am. View from the north.

[Img. 4, 5] Two stills from Video 2 (HD, 2 min). 21st of June, 12pm to 1:30pm. Views from inside the north part of the pavilion. Teahouse bar and pieces of furniture in the front.

[Img. 6] Satellite Daylight as an installation in Nestlé's headquarters in Vevey (CH). Satellite Daylight 46°28'N (2007), Nestlé's art collection.

[Img. 7] Video 3 (HD, 2min). 21st of September, 4pm to 5:30pm. Inside the south part of the Satellite Daylight Pavilion, facing the artificial window.

[Img. 8] Still from Video 3, (HD, 2min). Satellite Daylight has entered the half of the Earth plunged into night. The sun and daytime are on the opposite side of the planet, which results in a backlit configuration for the artificial light display.

[Img. 9] Video 4 (HD, 2min). 21st of December, 12am to 1:30am. Outside view from the south terrace.

Txt

Satellite Daylight Pavilion

Satellite Daylight Pavilion is a teahouse and environment to be physically located in Kensington Garden, London. It is composed of two large, variable light displays and two long volumes extruded from their shapes. The pavilion is to be oriented precisely along the north-south axis. A middle zone separates the space of the pavilion into two: the north and south parts, each with its own shape (extrusion).

The shape of the overall pavilion follows design rules based on geographic elements (equator, north-south orientation, Arctic and Antarctic circles, times zones, seasons, and the obliquity of the Earth). On each side of the middle zone, oriented toward the south and north, stands a large (~4m x ~4m), strong, dynamic LED-based light display. These are the only artificial lights in both parts of the pavilion. The walls of each side are plastered with a gradient (white to black), a volume pattern whose purpose is to reduce increasingly natural light reflection.

The two light devices act like artificial "windows," opened onto the present or distant luminous conditions of two locations: London and Hope Bay (scientific station, Antarctica). Each "window," 15° in latitude wide (1 hour of time), moves virtually along the latitude of its location (51°30'N for London and 63°23'S for Hope Bay). It takes each one approximately 92 minutes to achieve a 360° rotation around the axis of the Earth, independently of its latitude. Informed by weather stations and satellite images, they therefore vary constantly, meaning that their lighting intensity change along with the months, seasons, time of the day, and cloud cover.

Both "windows" trigger light and visual patterns, and oscillations of night and daytime and seasons. They act like geo-engineered artefacts of channeled natural daylight. Each of the windows is a Satellite Daylight (London and Antarctica).

(See documentation on the Satellite Daylight, 46°28'N, in the documentation area of the fabric | ch website, or at http://vimeo.com/18700263).

In the north and south sides of the Satellite Daylight Pavilion, dedicated furniture pieces seem to hesitate between a dormitory and a café, as both situations alternate frequently in the space of the teahouse. Inside the middle zone that separates the two sides, the space is grey, fresh and "wooly" (albedo 35%, temperature 16° -- average albedo and temperature of the Earth--).

All the space in the pavilion oscillates at the global rhythms of the natural light brought in from different locations, determined by the rotation of Earth around the Sun and the inclination of its axis. The space and patterns inside the space are both abstract and naturalistic, reconstructing an artificial climate.

It is about geo-engineering, it is about urban and pole territories, it is about seasons and locations and the light patterns they trigger, it is about the inhabitable zones (or not) of our planet.

fabric | ch, November 2017

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