Sliding Presence Pavilion

2008

Project by fabric | ch


Competition: The Sentient City, architecture competition and exhibition organized by The Architectural League Foundation (New York, USA)

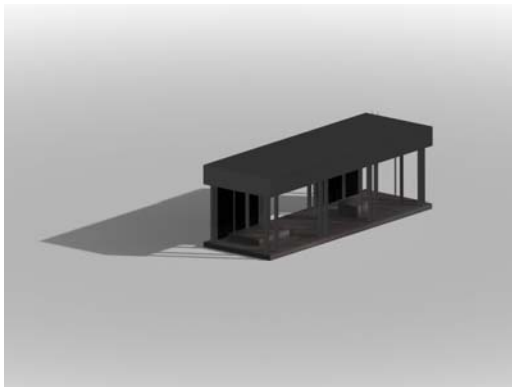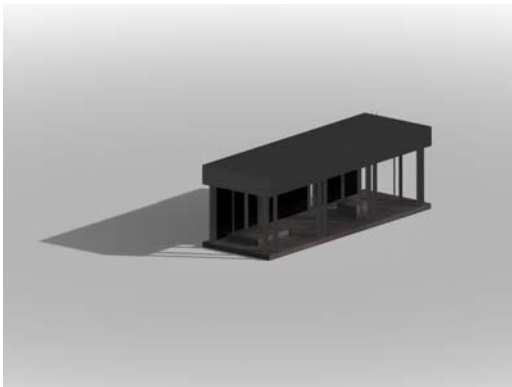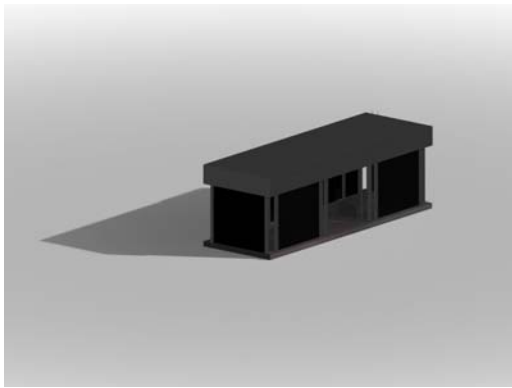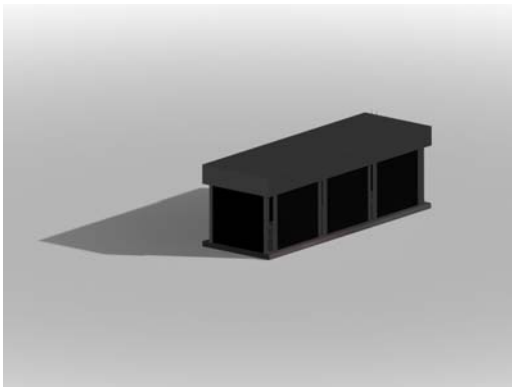--

Location: New-York City (NY, USA)

Selective candidate competition, finalist project, unrealized

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- Behavioral architecture and variable functional patterns
- Functional interferences
- Disrupted and evolutionary architecture (slow or fast)
- Retrofitted automation and lighting through the mediation of local and global spatial data mining
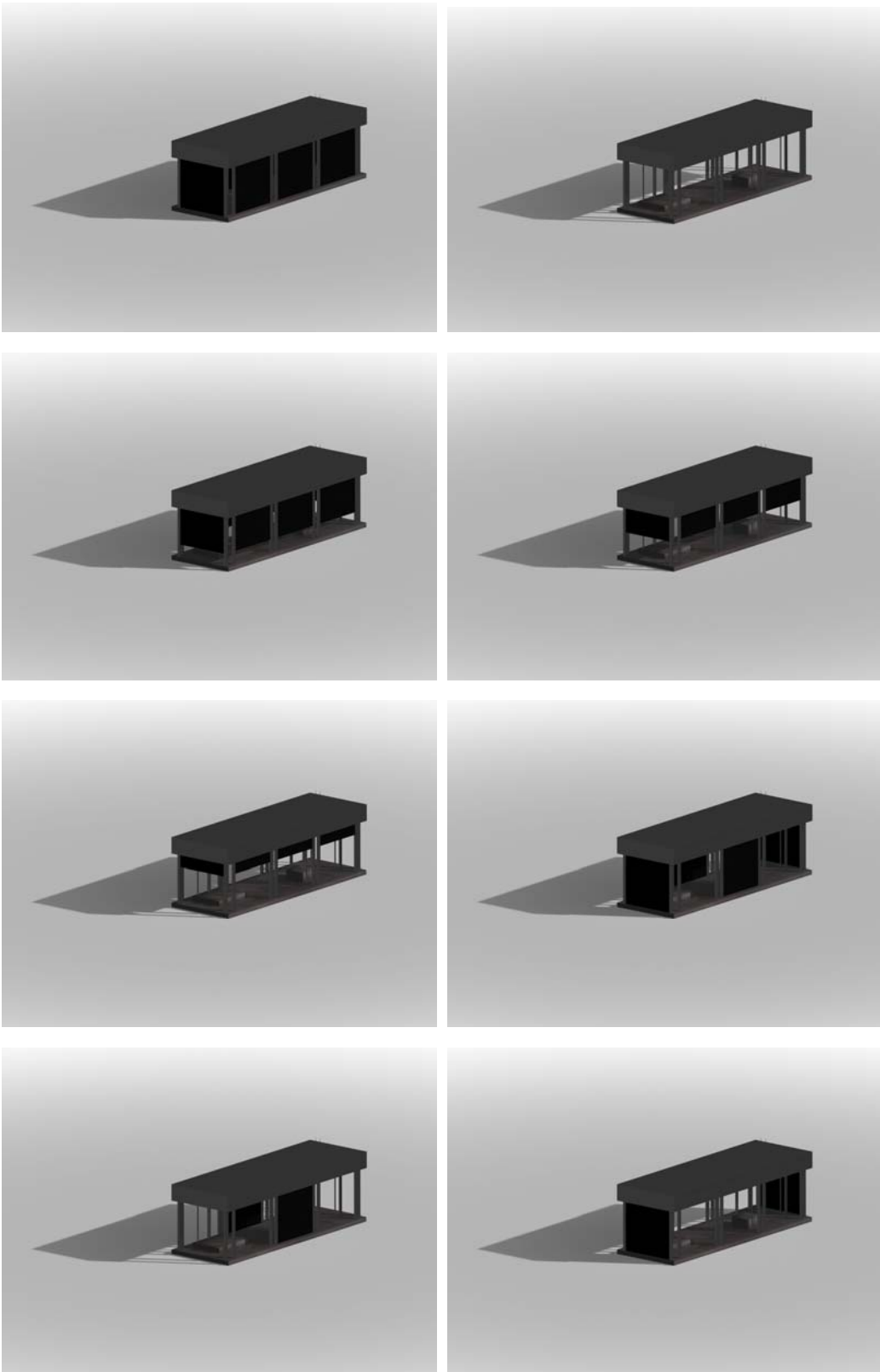
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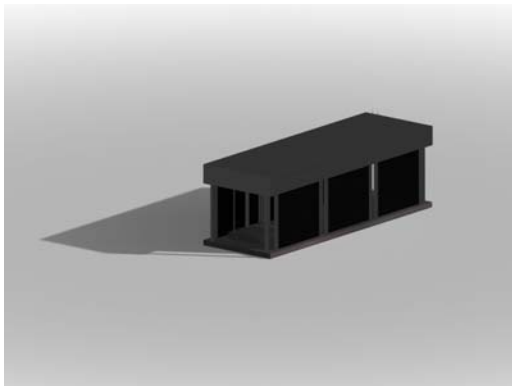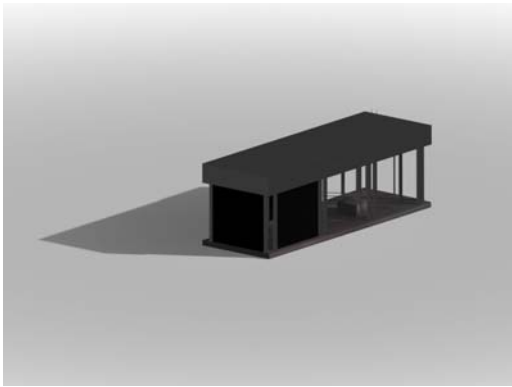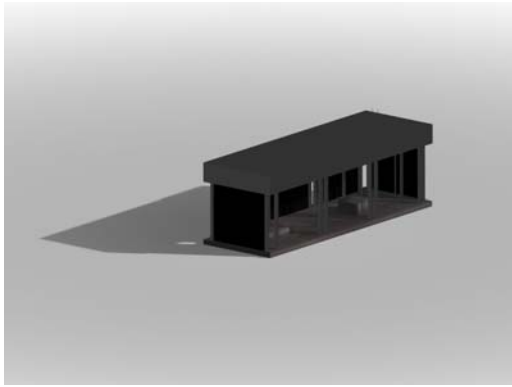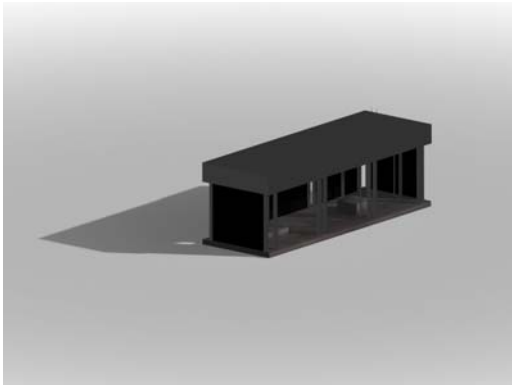
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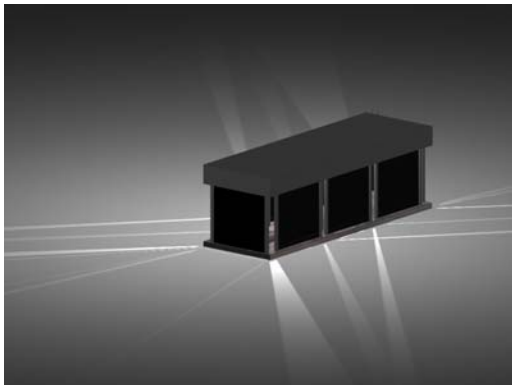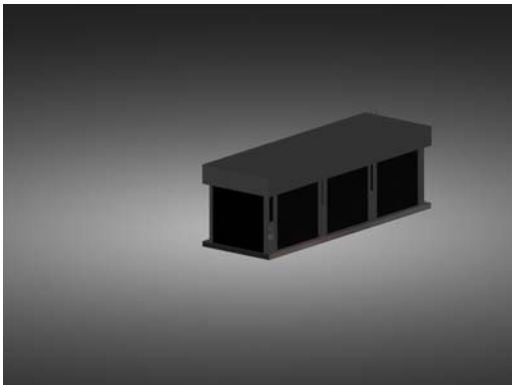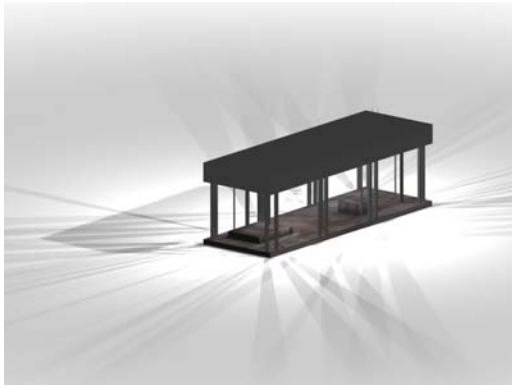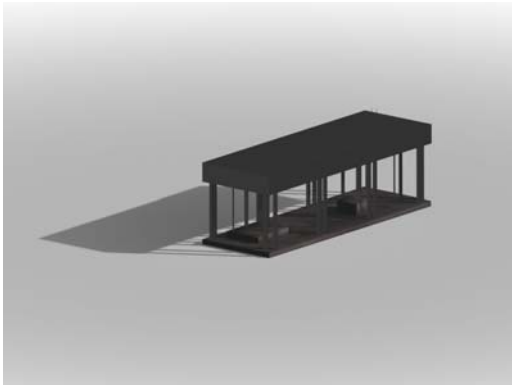
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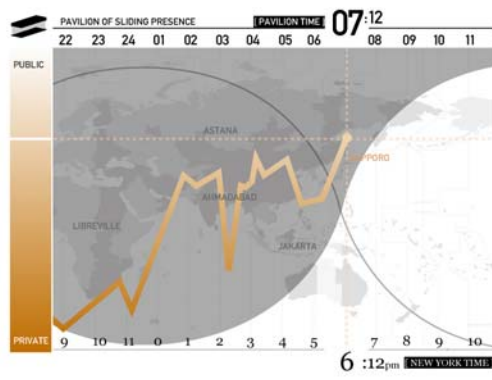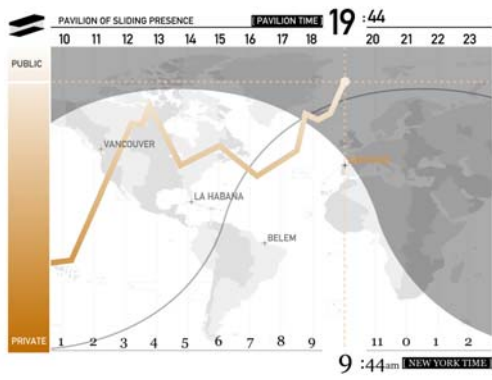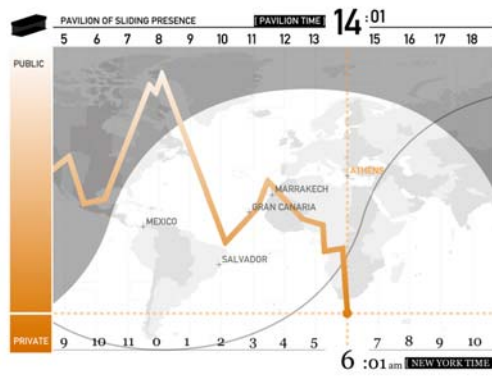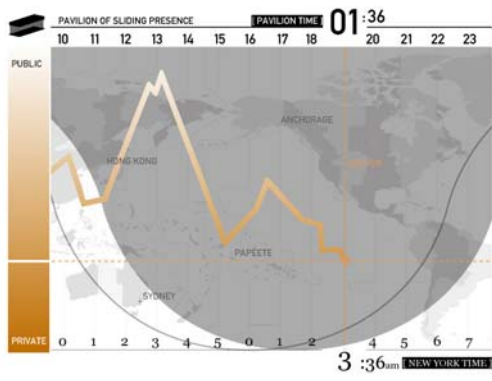
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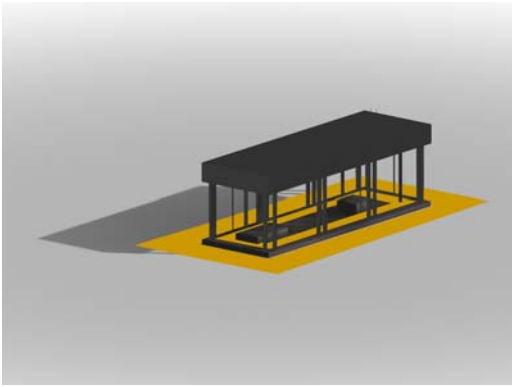
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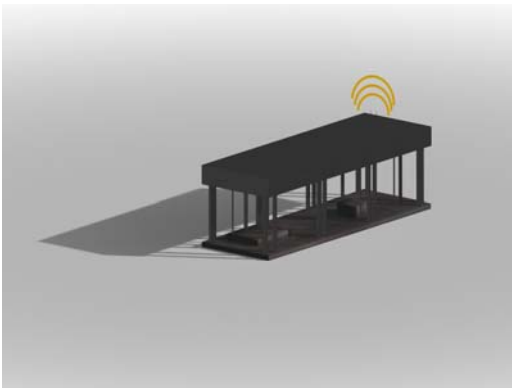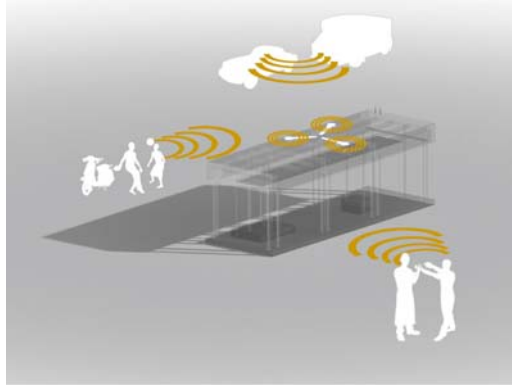
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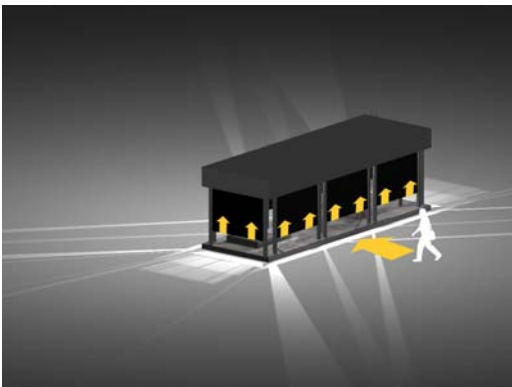
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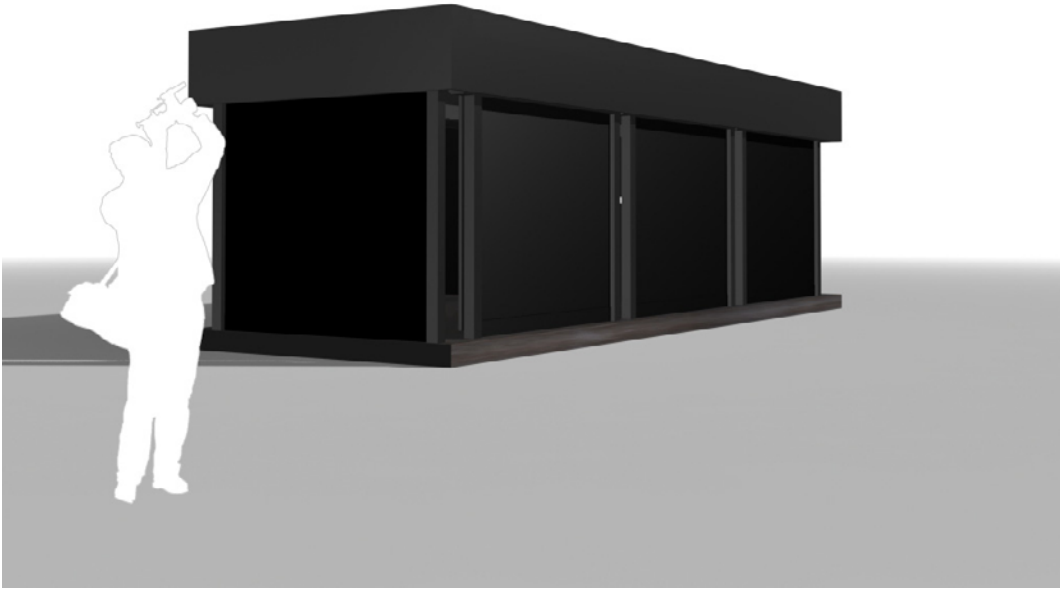
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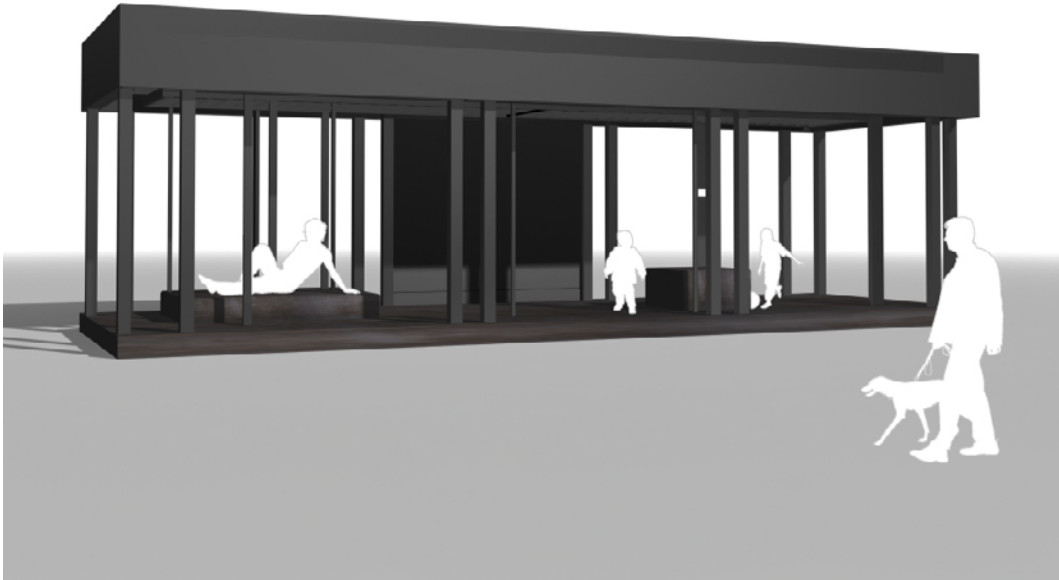
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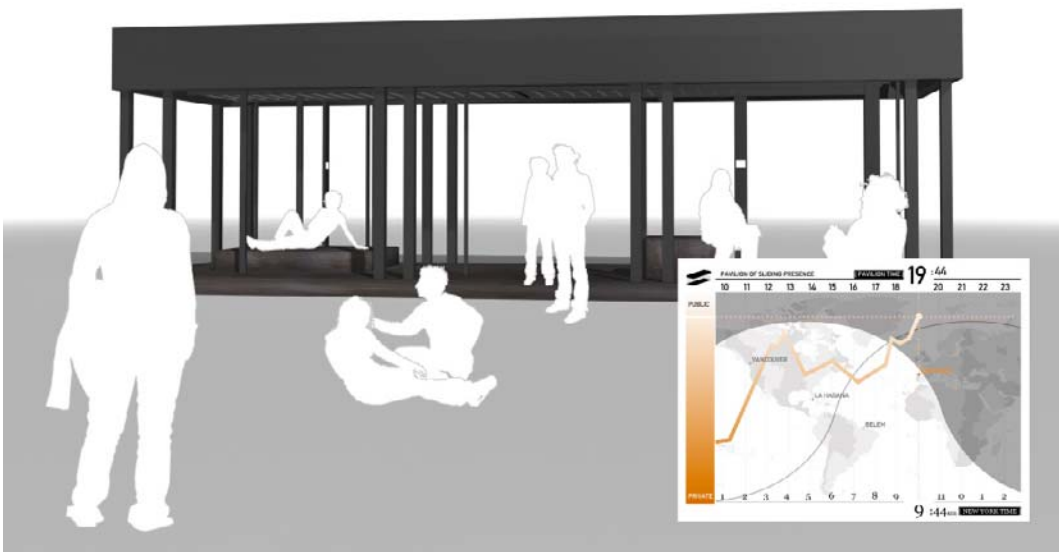
[Img. 12]

[Img. 13]

[Img. 14]

[Img. 15]

[Img. 16]

[Img. 17]

[Img. 18]

[Img. 19]

[Img. 20]

Image captions:

[Img. 1]   The pavilion is a simple black volume based on its automated industrial roller doors grid. It is composed of a thick roof made of coated metal that contains the artificial light display and most of the sensors, as well the communication technologies and a concrete base. An irregular metallic pillar pattern occupies the main space. This space also provide two concrete "seatings": one is closer in dimension to a regular seat while the other looks more like a bed.
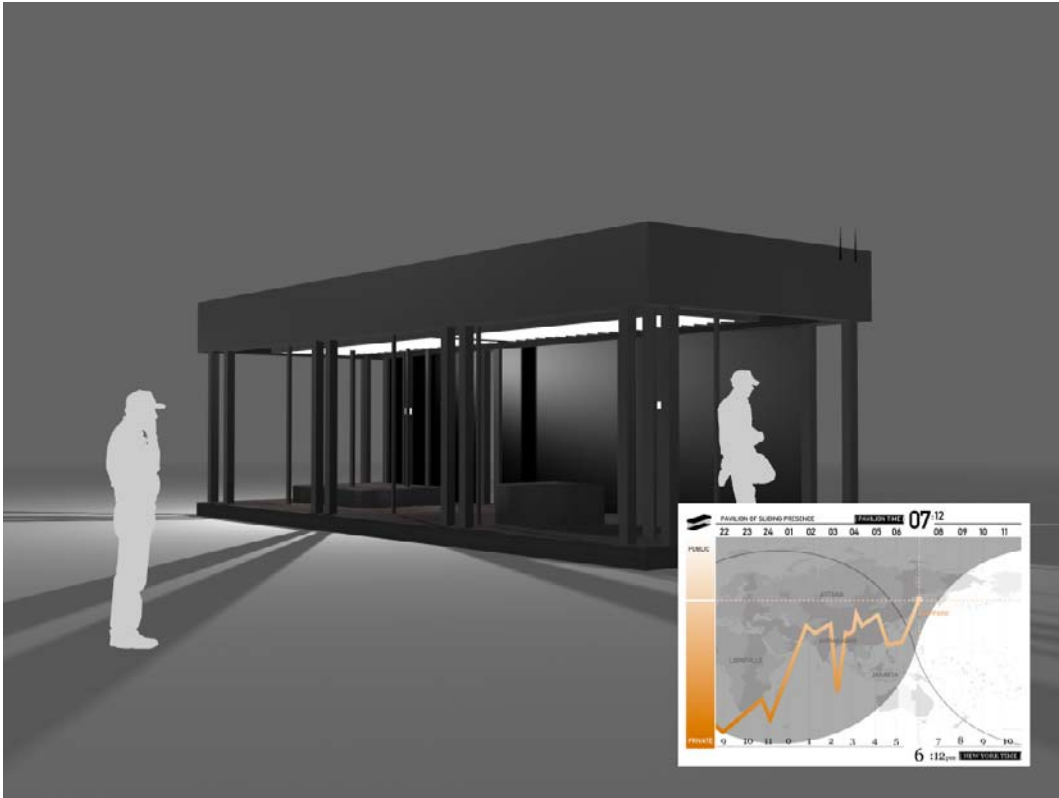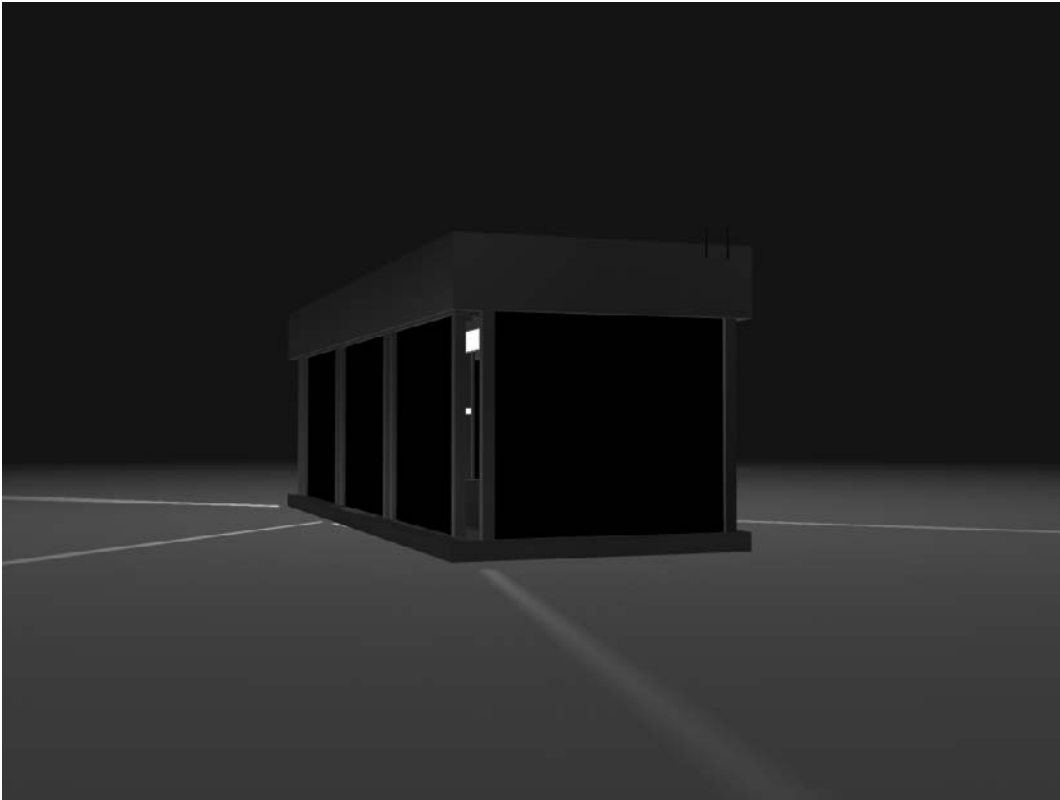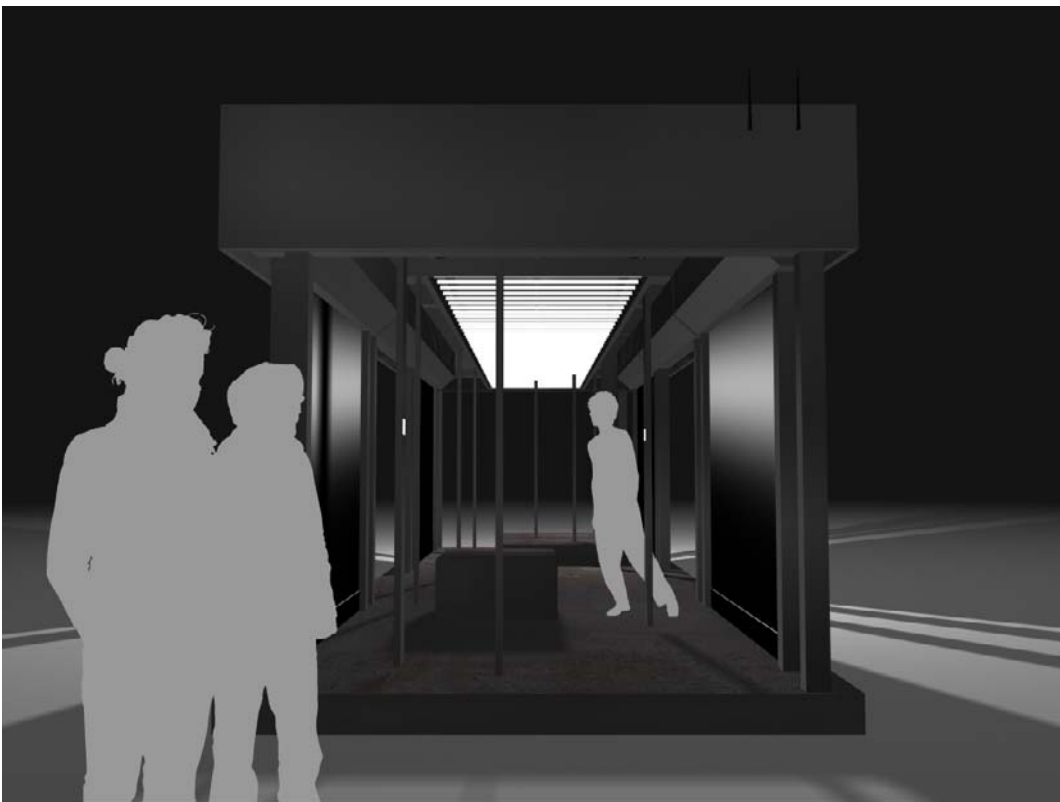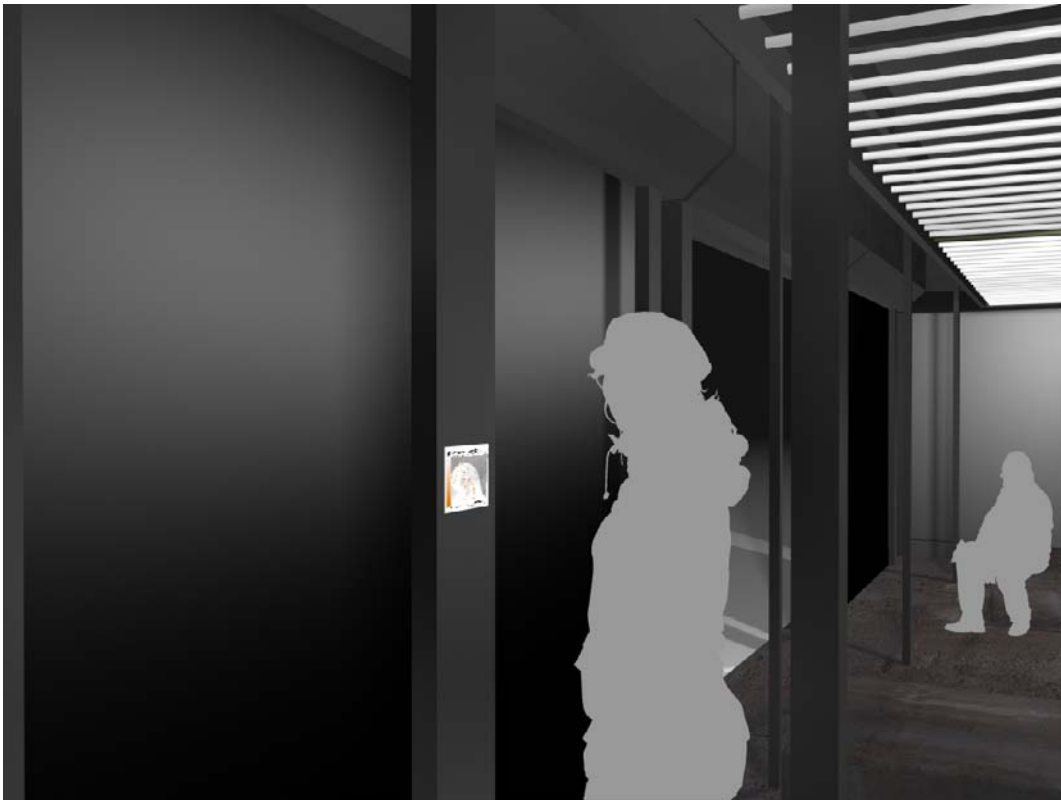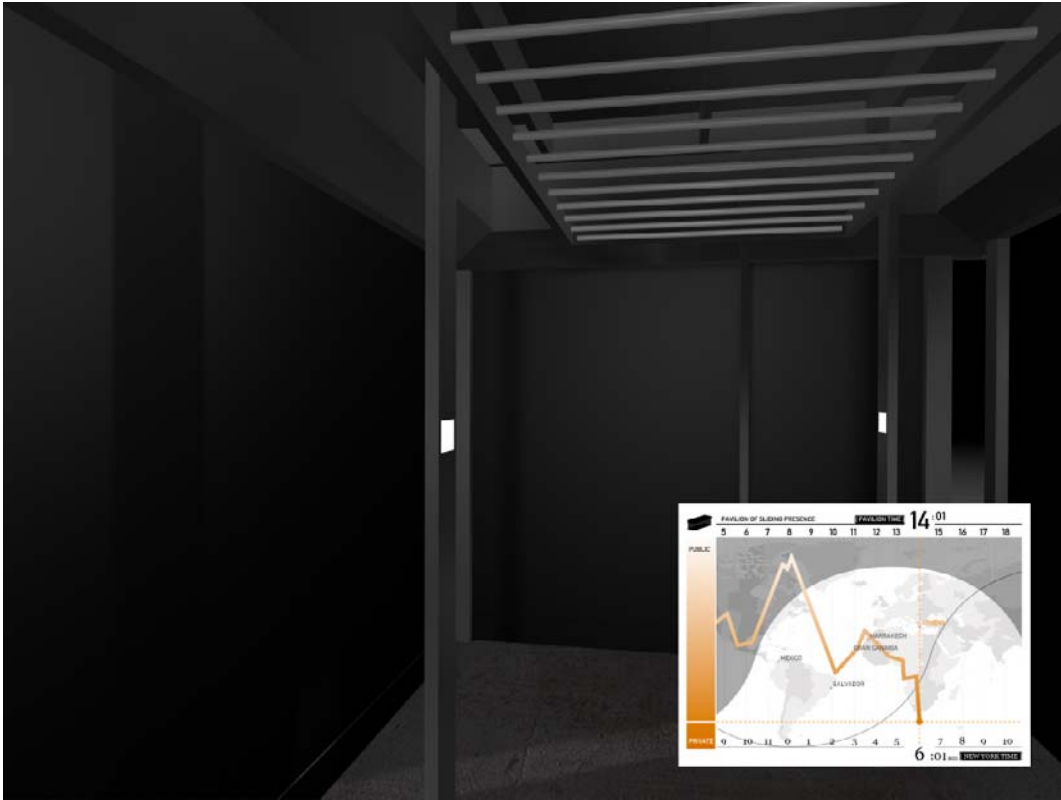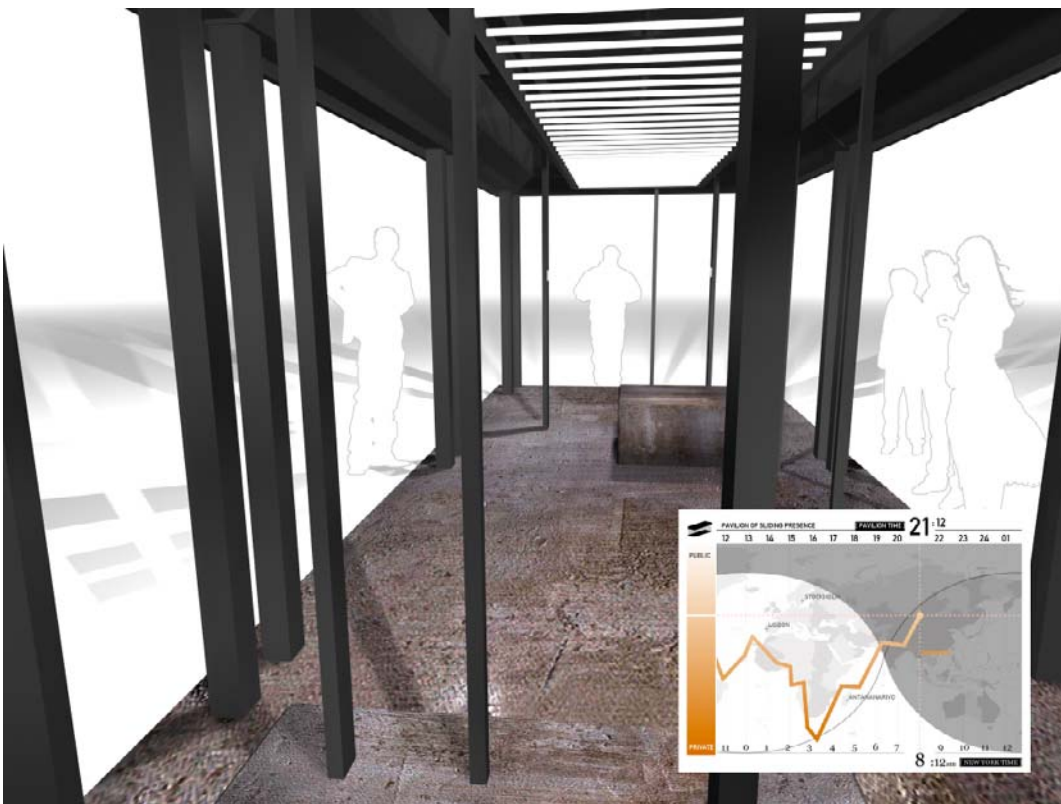The industrial roller door can provide endless variations to the spatial, functional but also visual pattern and configuration of the pavilion (including 1/4-, semi-, 3/4- or fully open).

[Img. 2]   Some illustrations of the potential variations that show either very closed and monolithic configurations, mono and frontally orientated ones, side ones, etc.

[Img. 3]   The lighting configurations work on the same way: variations from very functional behaviors (open and lit at night) to absurd ones (lit and totally closed during day time) and all the in-between possibilities.

[Img. 4]   A piece of software drives the behaviors of the pavilion and an interface shows its "disrupted" (or not) state: the Functional Interferences Software & Interface. Based on the monitoring and mining of the environment –both local and global–, it will define in which kind of state the Pavilion stands (public or private, in between, both), in what type of spatial behavior (openness or closure / hosting or fierce, hesitating), both defining functional or a-functional answers to inputs.
So to say, the pavilion can be at the same time in a conflict condition of night <u>and</u> day, in an interferential open <u>and</u> closed one, thinking it is located in in two different locations, etc.

[Img. 5]   Basic greenhouse gases (different ones than H_2O) and pollution particulates concentration scheme during a regular day in San Jose: it is assumed that the air is less polluted in the morning and that the particulates, being heavier than air will concentrate more densely on the lower levels of the Tower of Atmospheric Relations.

[Img. 6]   The Sliding Presence Pavilion is equipped with several types of sensors: motion detection and presence tracking that comes with industrial roller doors, "gunshot tracking" (sound tracking, triangulation and localization).

[Img. 7]   It is naturally equipped with a network connection to get updates from the global tracking system and send updates of its current state.

[Img. 8]   In a general way, the behavior of the roller door(s) can be functional (it opens when somebody approaches or when an approaching sound is heard) or a-functional (it closes). For different reasons, it can also close itself as a functional pattern (it's late at night, too much noise, screams and "dangerous" movements around?) or open as an a-functional one, etc. All doors can act together, a group of them or only one. Finally, in response to different inputs, it can also happen that nothing happens at all (!), due to the state of the pavilion.

[Img. 9]   The pavilion totally closed on one morning.

[Img. 10]   A bit later, quite open, mono-oriented with a passageway in the center ...

[Img. 11]   An open and quite transparent configuration, but with two sides.

[Img. 12]   The pavilion in a fully open and transparent configuration. While in broad daylight and despite that, the artificial lights start to activate due to the instructions sent by the behavioral software (and interface) that indicates "night" (19h44 while it is 9:44am in New York).

[Img. 13]   Double night and quite normal condition in the beginning of the evening. The space of the pavilion is oriented into one main direction.

[Img. 14]   Later at night, starting to activate a more intimate configuration. Closing.

[Img. 15]   Totally closed and inaccessible, but lit from the inside.

[Img. 16]   Wide open again, in the middle of the night.

[Img. 17]   Two small LCD screens on the metallic pillars, but unfortunately nobody to watch them.

[Img. 18]   Someone checking the state of the Sliding Presence Pavilion on its interface.

[Img. 19]   It is apparently again day time on the outside (6:01am in New York and 14:01 Pavilion time), but the pavilion, being in a totally private mode for whatever reason, remains dormant and entirely closed.

[Img. 20]   Is the sudden change of configuration of the Sliding Presence Pavilion the results of the presence of people around it? Or is it just its normal functional behavior or is it because of a global change? Anyway, the pavilion is open and lit again, etc.

Txt

Sliding Presence Pavilion
functional interferences

Our contemporary relation to space is both conditioned by our physical movements and modes of perception in a localized environment, as well as by the mediated links we maintain to it (these mediated relations concern travel or physical mobility of course, artificial lighting and heating but also more recent technologies like information and communication, networks –which includes the older technologies that were radio, television–, etc.). The space spectrum we're now living in is becoming wider (and sometimes "immaterial", "invisible", "hybrid"), thanks to all sort of "spatial devices". What happens now with space could be compared to what happened once (and still do) with the electromagnetic waves spectrum: we could only see the visible colors with our naked eyes at first (as a parallel to the space of the physical body), but then, thanks to new tools, technologies and devices, we could start to see things that our eyes couldn't (as a parallel to mediated spaces), broadening the field of activity and vision.
It is therefore still one space, but the spectrum is much larger, more complex and variable.

Through these mediations, some kind of new spatial situations occur. We can call them "spatial interferences": the distant into the local, the private into the public, the mixing of time zones, etc. (i.e. we all have experienced such situations as a private phone call that interrupts us in a completely public situation, or to live temporally a-synchronized due to a meditated event, to travel, to international working habits or artificial lighting, to listen to a conference podcast in a metro, etc.). These interferences induce a sort of instability in our relation to the environment and in the environment itself, bring on new space usages. It switches, hesitates and is more relative; it suddenly or slowly slides from one state into another, it confronts types of presence (from public to private). But this remains mostly invisible yet: architecture and urbanism of the city still remain the ones of the 20th century.

Our project, the *Sliding Presence Pavilion (functional interferences)*, is a proposition to transform this situation, which means that the architecture itself will become more hesitating, disrupted in its functional patterns, oscillating between different states, configurations and behaviors. This sort of "multitasking" space and open landscape experience we do live in will become materialized into a variable pavilion. A structure that will slide, oscillate between public and private states, between openness and closure, between hosting and fierce.

Public and private spaces have usually specific qualities that can be described in terms of spatial configurations and/or social uses (i.e. openness, movement, circulation, some noise, groups of people, variations, lit, exposed, etc. vs. closed or en-

closed, exclusive, partly lit, mostly quiet, individuals or small group of people, protective, etc.). The space is in general built, its function set and people use it (or not).

The *Sliding Presence Pavilion (functional interferences)* will on the contrary suggest variable functional patterns (public, private, both, in between) to be inhabited (or not) and/or observed by the audience. Despite the small size of the pavilion, it is close to a landscape that everybody can inhabit in its own way.
These "patterns" will be produced according to a set of rules: the software negotiation between local monitoring (not fully defined at this stage, but this could be localized movements and presences, localized sounds), some local and usual functional rules for public and private spaces (opening hours, etc.) and a global network data mining for particular information (not defined at this stage as well, but this could be the recurrences of private or public interests in the world news or networks, their global importance and locations).

These rules will produce interferences in the pavilion's behavior and its own "perception" of location and time. It will therefore sometimes react in functional ways (i.e. door/s opening or staying open when somebody approaches) or a-functional way (i.e. door/s closing or staying closed when somebody approaches) and will have a whole range of in-between configurations (from open to closed, from hosting to fierce). As an example, the assembly of speaking people can trigger the pavilion to enter a public and openness mode (which is a predicable behavior) while a sudden ringing phone in its surroundings can make it get very closed, or a distant information can take the lead and turn it into private mode. The pavilion changes will be sudden or gradual; it will be "quiet" or "nervous".

So to say, the interactions with the pavilion are more of the "environment" or "contextual" (local & global) type. The public, the users, will most of the time not have obvious interactions with the *Sliding Presence Pavilion*, even if what they are doing is in fact taken into account. And even, too, if from time to time and depending on pavilion's state (displayed as an interface on three small lcd screens embedded into some of its pillars as well as accessible on mobile phones), people will have direct interactions with it.

Sliding Presence Pavilion (functional interferences) is not so much about form than it is about spatial configurations and "landscape", functional openness and architectural behaviors. Based on a typical industrial material (industrial roller door), the pavilion and its automated doors will modify its usual basic functional behaviors (usually: doors open when someone or a vehicle approaches) and recode it so to suggest spatial functional patterns to be inhabited or not. The Pavilion will oscillate according to a set of rules and will be driven by custom software. This *Functional Interferences Software & Interface*, based on the monitoring and mining of the environment –both local and global– will define in which kind of state the Pavilion is (public or private, in between, both), in what type of spatial behavior (openness or closure / hosting or fierce, hesitating), both defining functional or a-functional answers.

fabric | ch, September 2008

Contact

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