Public Platform of Future Past

2016

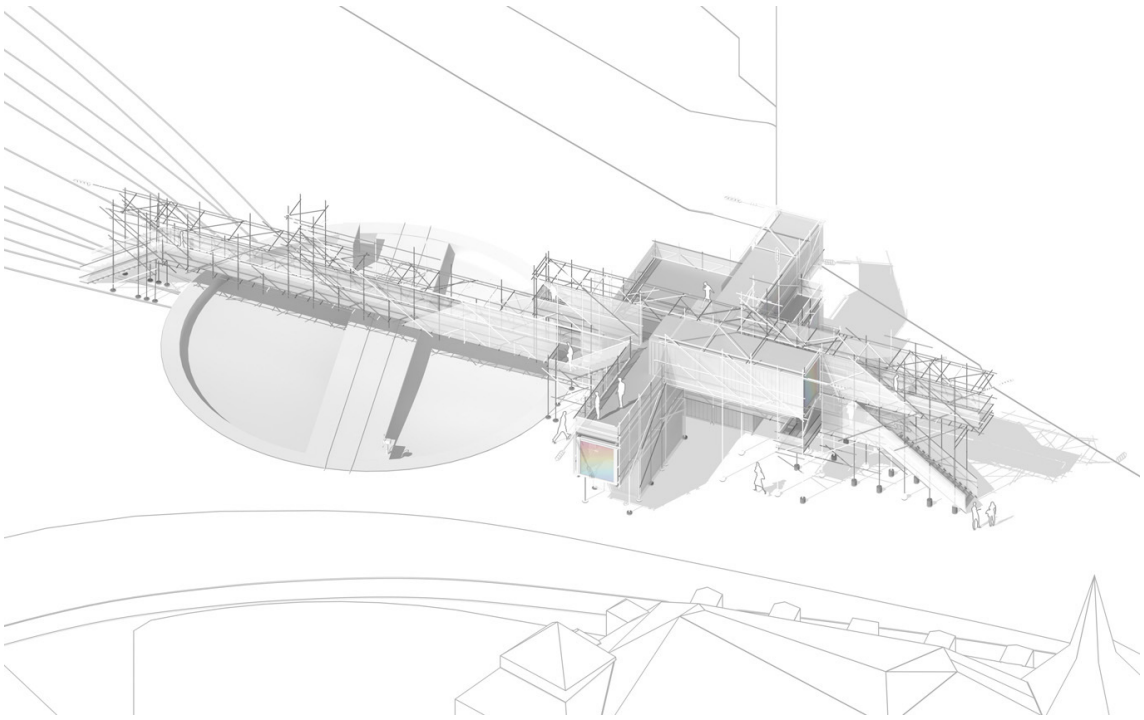
Project by fabric | ch

Client: State of Vaud (CH)

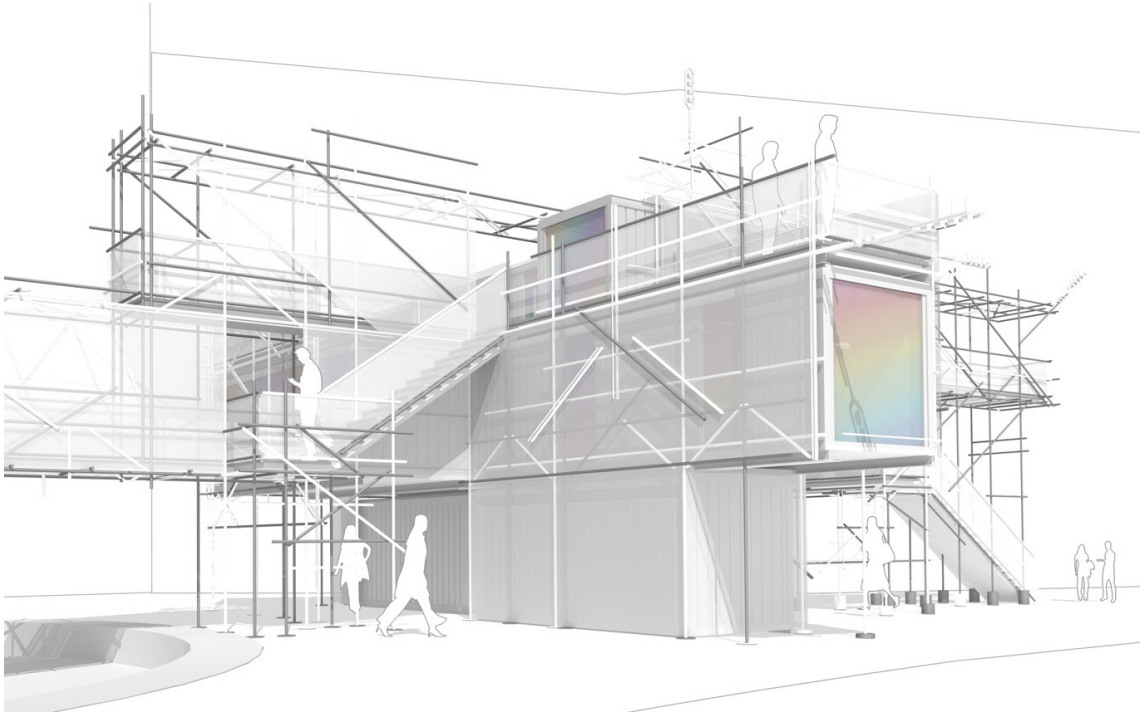
Architectural competition by invitation: information pavilion for the new Museum of Art. 1st prize

Location: Lausanne (CH)

— Public measuring & observation device as architecture
— Artificial Intelligence as environmental mediator, temporary function generator, and public information tool
— "Architectural Intelligence / Ar.I."
— Public related data & code



[Img. 1]



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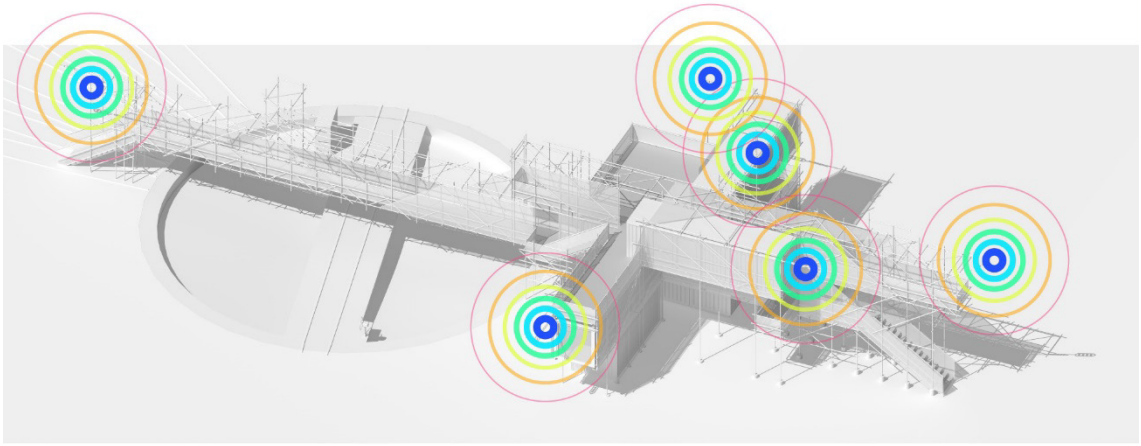

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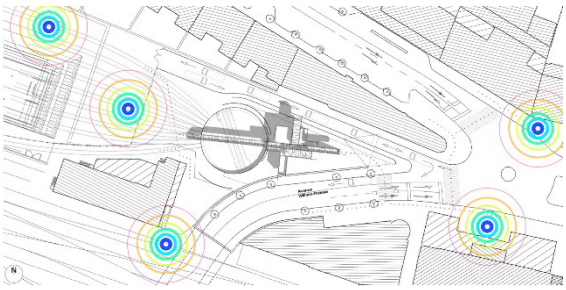

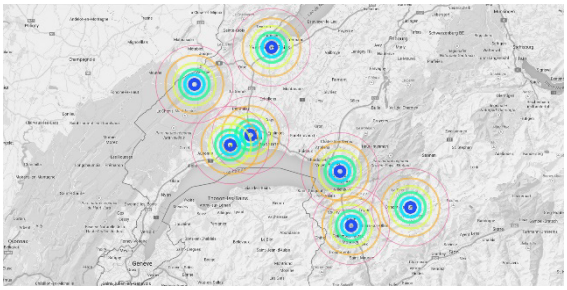

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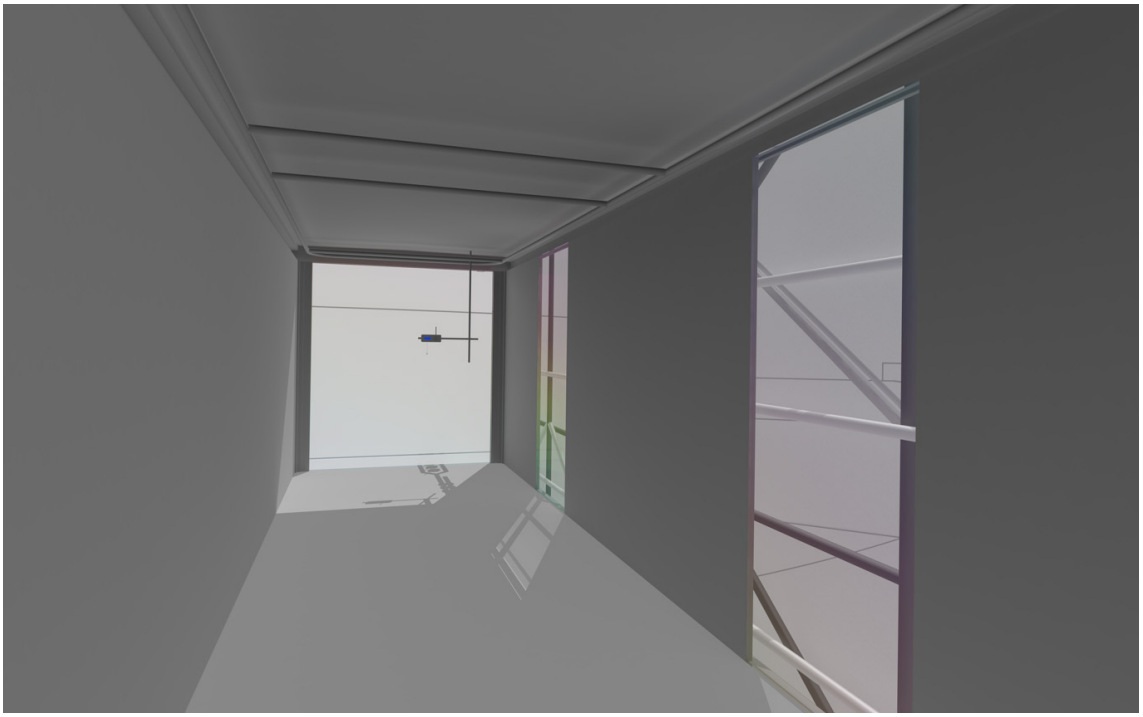

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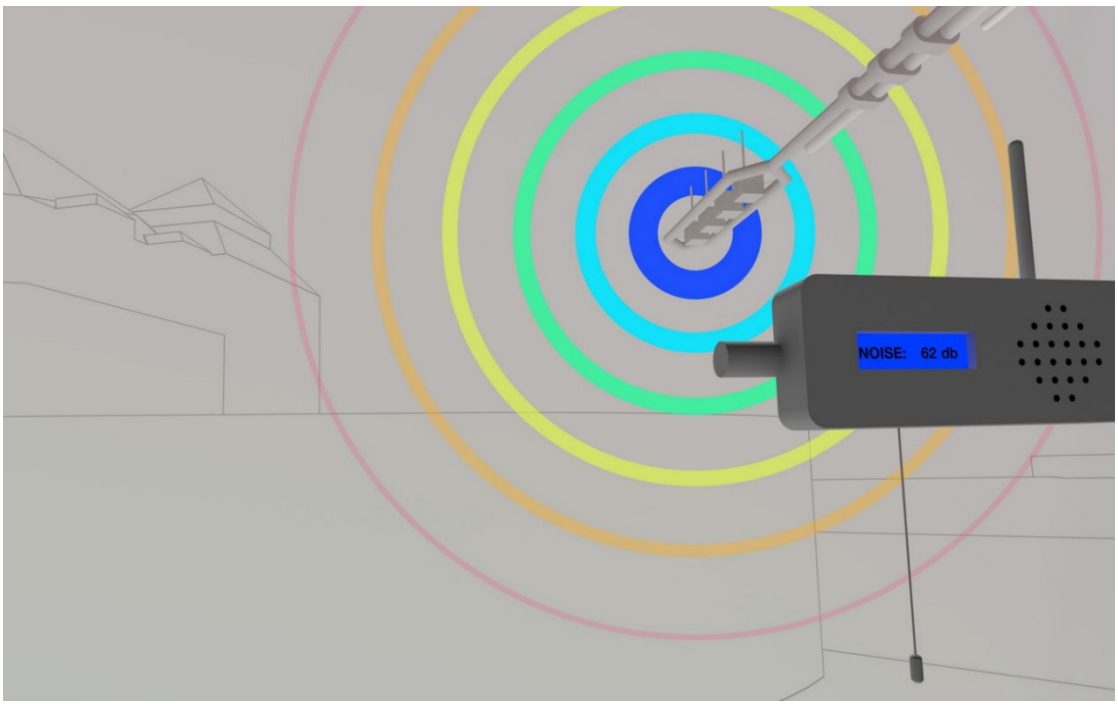

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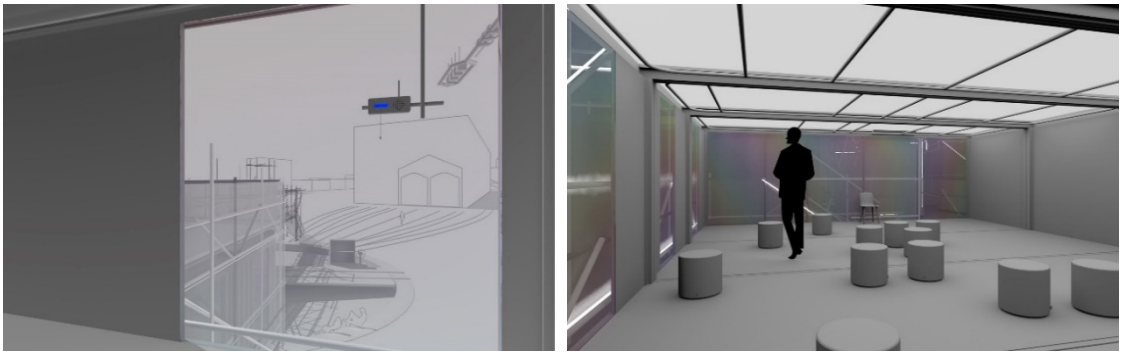

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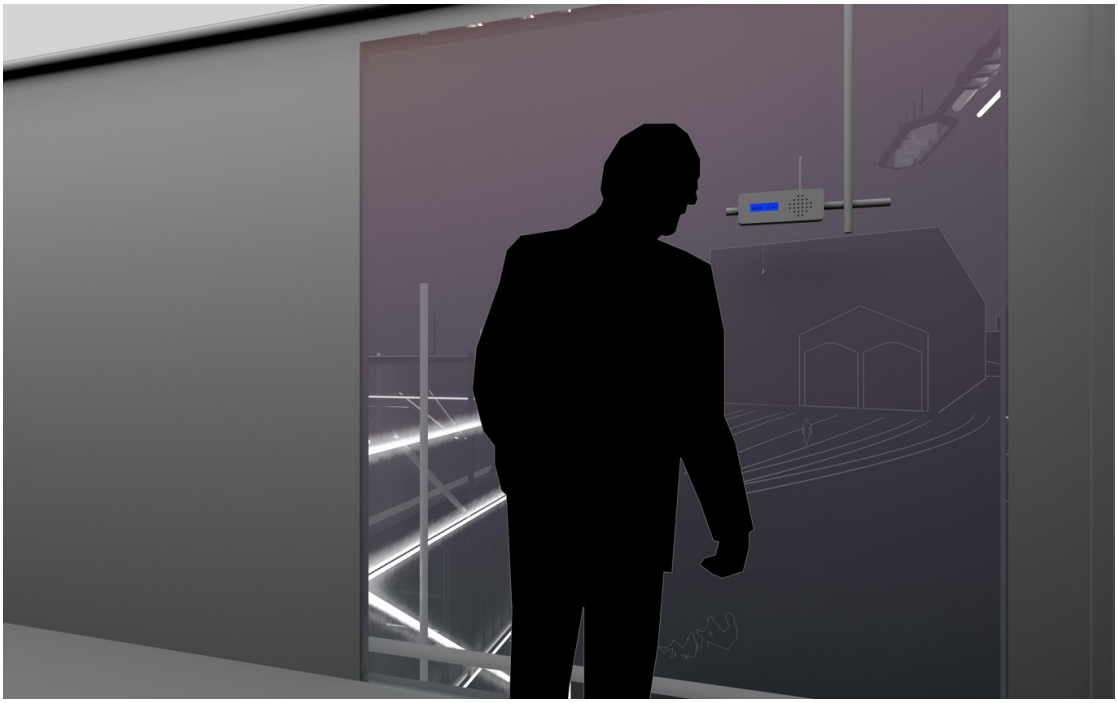

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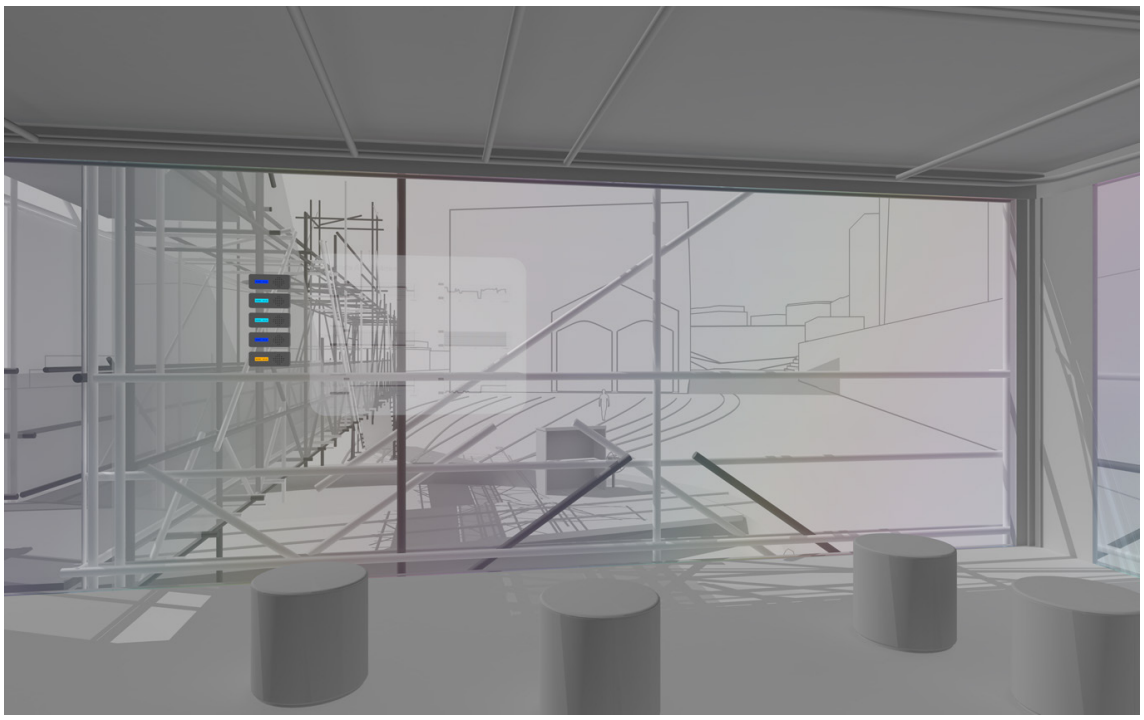

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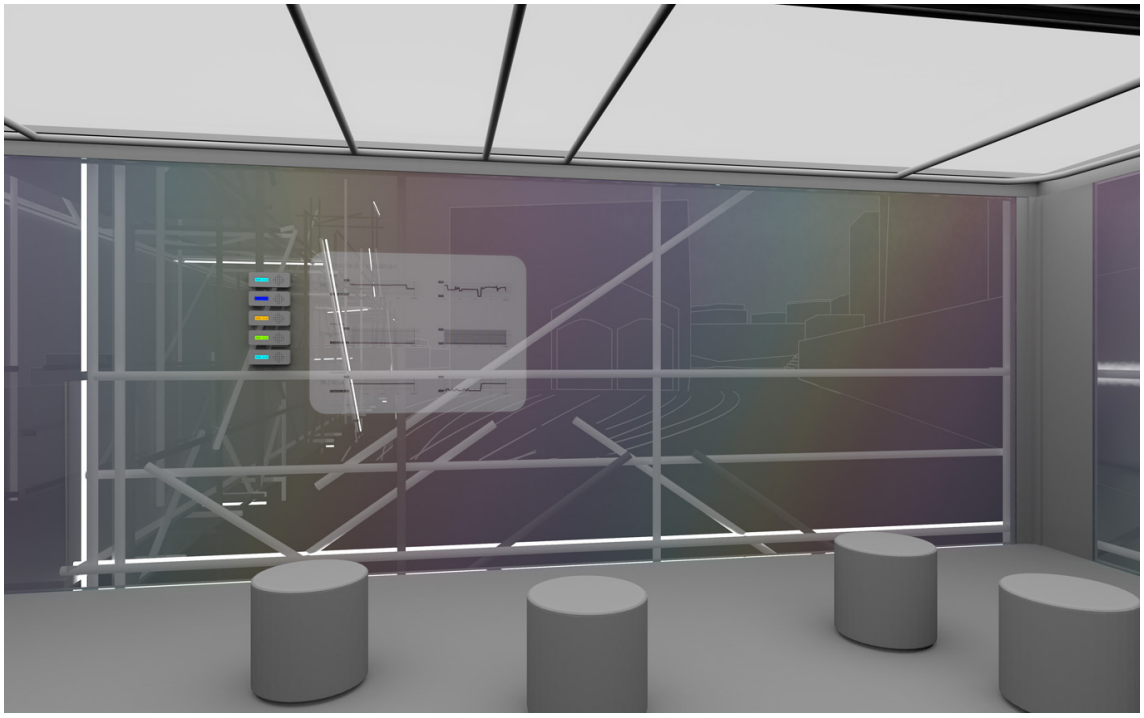

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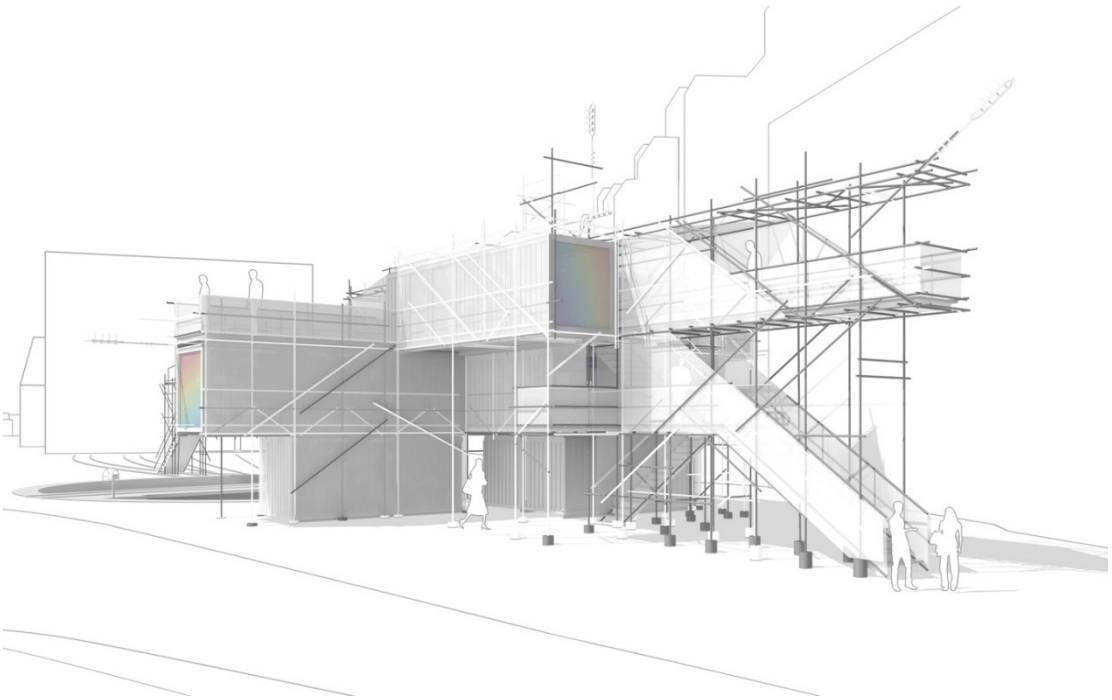

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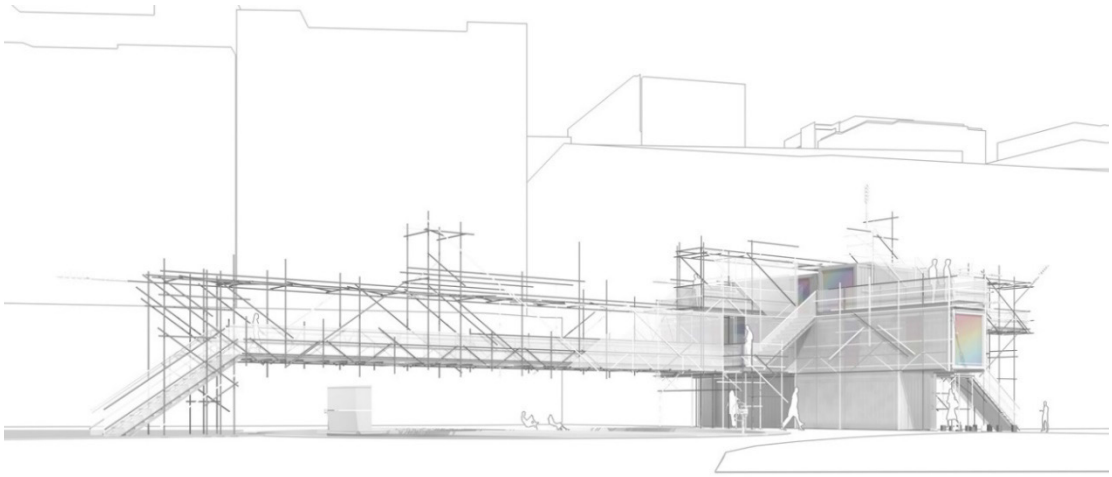

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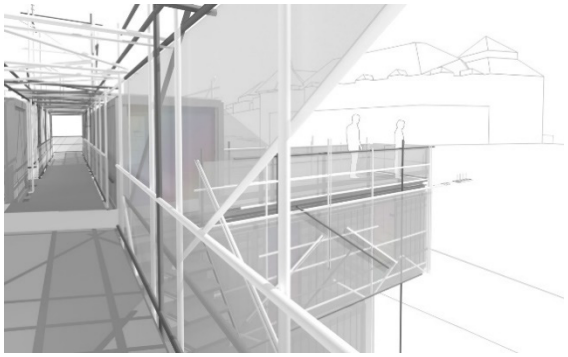

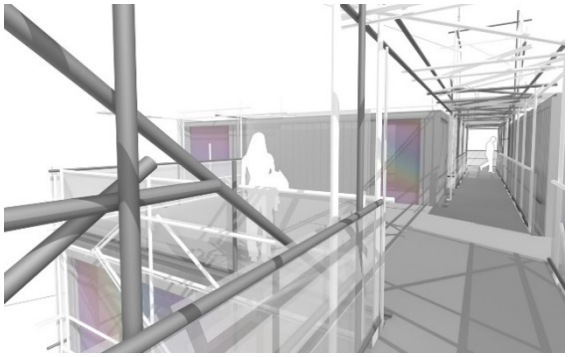

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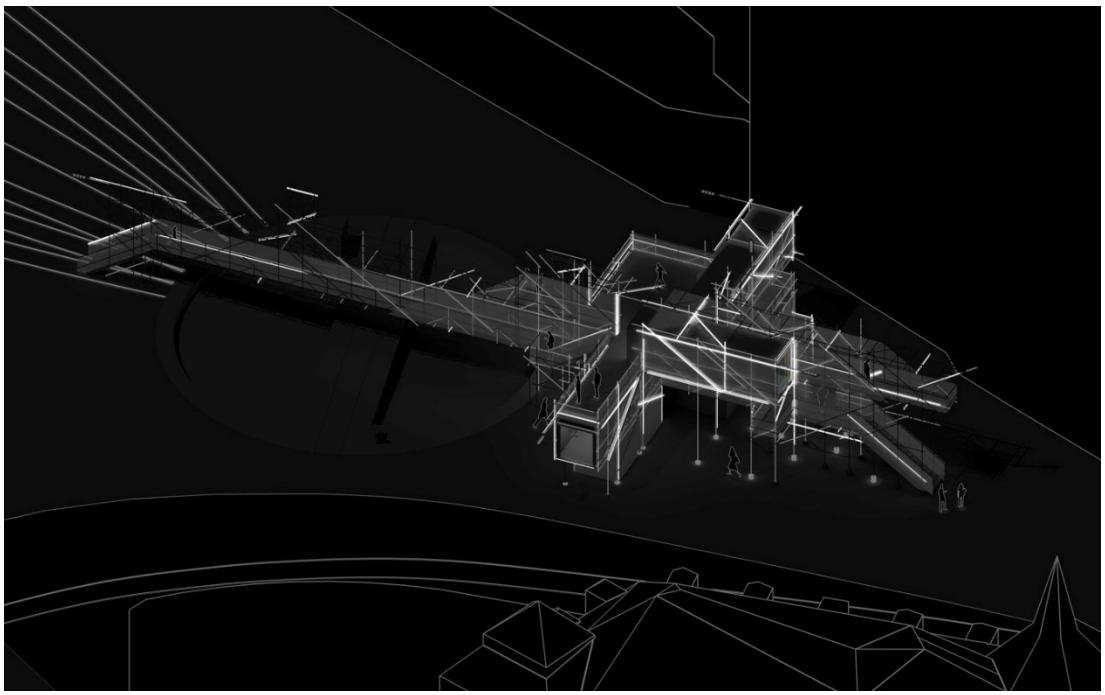

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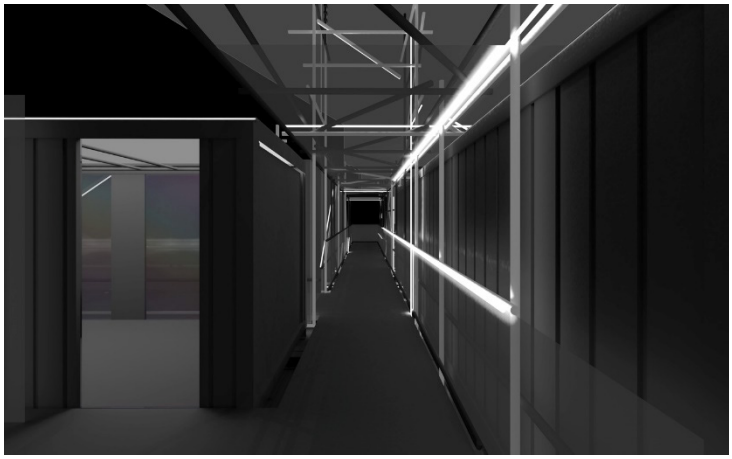

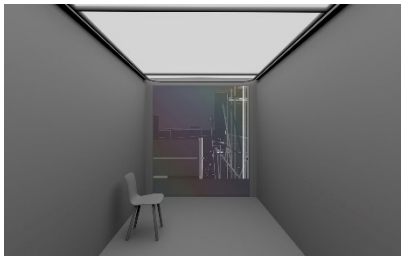

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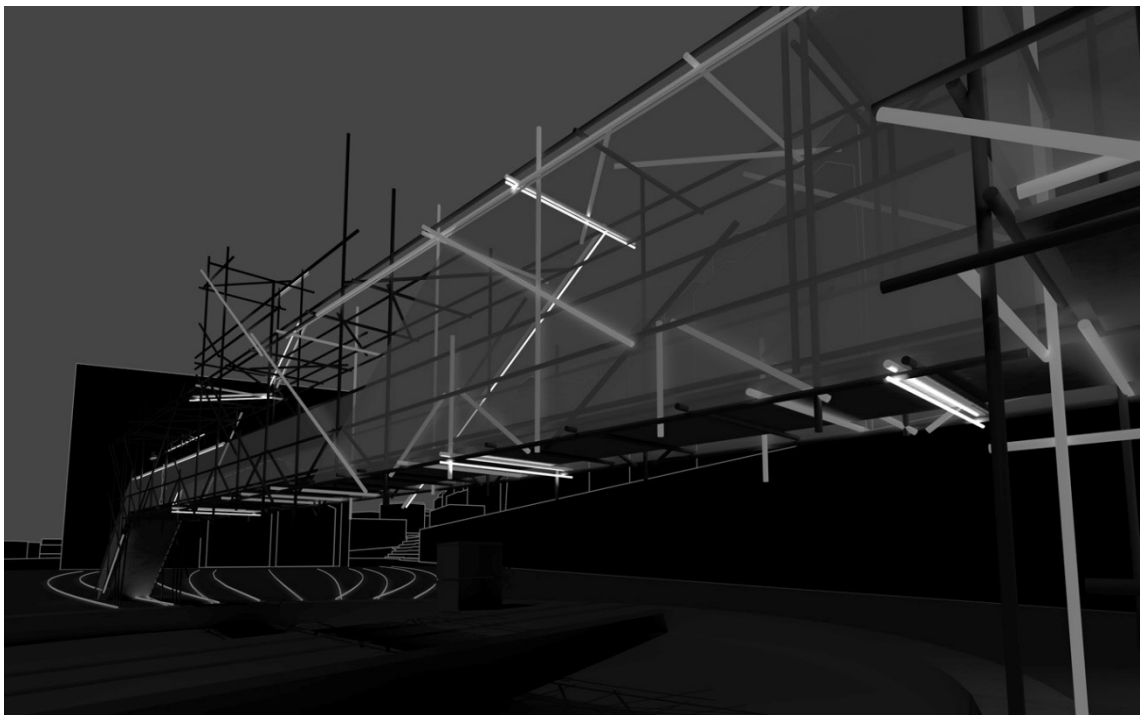

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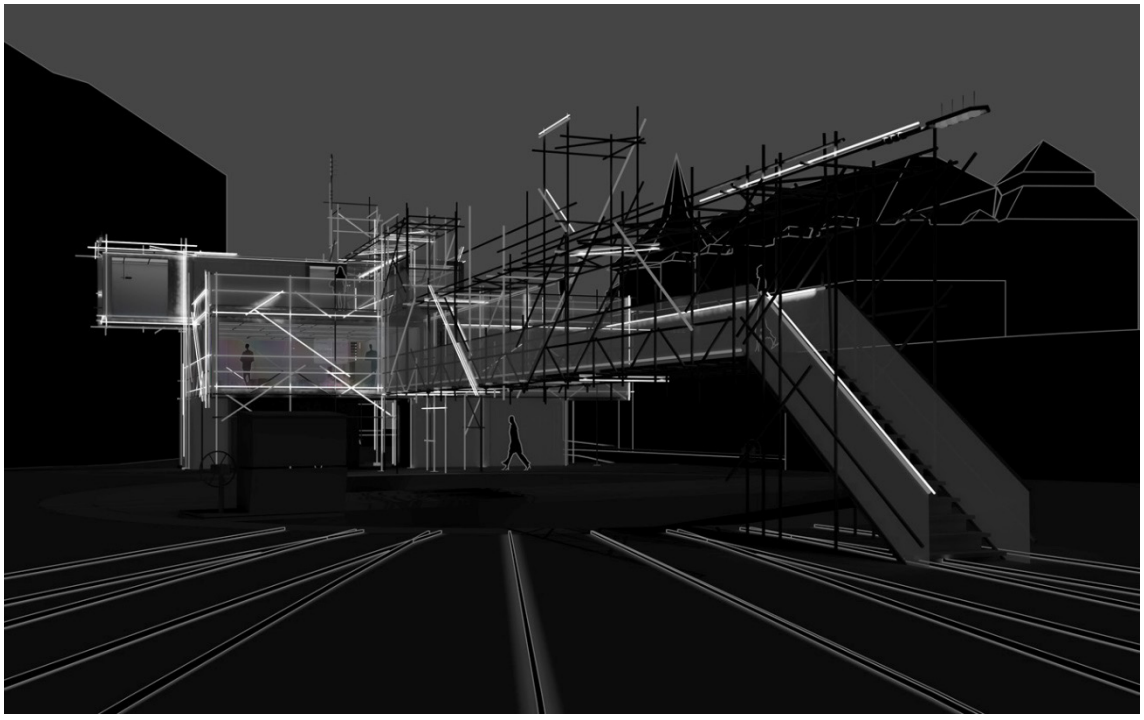

[Img. 20]

Image captions:

[Img. 1] Axonometric view of Public Platform of Future Past, an architectural structure and information pavilion overlooking a construction site in constant modification. The architecture acts as an observation desk over an "archeological" site.

[Img. 3-12] The pavilion is equipped with sensor device inputs and displays outputs of different sorts. The localized and distributed sensors help gather information and knowledge about the transforming environment. These data feed a system (bot) that gives advice in vocal and textual feedback forms to visitors about the way to experience the space. Architectural displays channel the physical presence of the pavilion into different distant locations.

[Img. 13-20] Different day and night views from the pavilion platform to the site, as well as from the site to the Public Platform of Future Past.

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Public Platform of Future Past

The Public Platform of Future Past (PPoFT) is a structure (an information and sightseeing pavilion), a Platform which overlooks an existing public site while basically taking it as it is, in a manner like how an archeological platform overlooks an excavation site.

The asphalt ground floor remains virtually untouched, with traces of former uses kept as they are, some quite old (a train platform linked to an early 20th-century locomotives hall), some less so (painted parking spaces). The surrounding environment will move and change considerably over the years while new construction goes on. The pavilion will monitor and document these changes; therefore, the last part of its name: "Future Past."

By nonetheless touching the site at a few points, the pavilion reorganizes the area slightly and triggers spaces for a small, new outdoor cafe and a bike parking area. This enhanced ground floor program can work in isolation, separated from the upper floors.
Several areas are linked to monitoring activities (input devices) and/or displays (which concern interest points and views from the platform or elsewhere). These areas consist of localized devices on the platform itself (five locations) and satellite areas implanted directly into three active construction sites or even in distant cities concerned with new construction (three museums, two new public squares, a new railway station and a new metro). Inspired by a similar prior installation in a public park during a festival -- Heterochrony --, these raw data can be of different natures: visual, audio, integers from sensors (%, °C, ppm, db, lm, mb, and so on), and so forth.

Input and output devices remain low-cost and simple in their expression: several *input devices* and sensors are placed outside of the pavilion in the structural elements and point toward areas of interest (construction sites or more specific parts of them). Directly in relation to these sensors and the sightseeing spots, but on the inside, are placed *output devices* with their recognizable blue screens. These are mainly voice interfaces: text to speech outputs driven by one bot, according to architectural "scores" or algorithmic rules. Once the rules are designed, the "architectural system" runs on its own. That's why we've also entitled the system which is based on automated bots "Ar.I." It could stand for "Architectural Intelligence," as it is entirely part of the architectural project.

The coding of the "Ar.I." and use of data have the potential to easily become something more experimental, transformative, and performative along the life path of PPoFT.
Observers (users) and their natural "curiosity" play a central role: preliminary observations and monitoring are indeed the ones produced in an analogous way by observ-

ers (eyes and ears) at each of the five interesting points and throughout their wanderings. A simple cord in front of each "output device" acts as an extension of this natural curiosity: users can pull on it, which will then trigger a set of new measures by all the related sensors on the outside. This sets new data enter the database and become readable by the "Ar.I."

The whole part of the project devoted to interaction and data treatments has been subject to a dedicated short study. The main design implications of the study are that the "Ar.I." takes part in the process of "filtering" what happens between the "outside" and the "inside" by participating in the creation of a variable, but specific, "inside atmosphere." By doing so, the "Ar.I." bot takes its own part fully in the architectural main program: triggering the perception of an inside, proposing patterns of occupations.
"Ar.I." computes spatial elements and mixes time. It can organize configurations for the pavilion (data, displays, recorded sounds, lighting, and clocks). It can set it to a past, a present, but also to a future estimated disposition. "Ar.I." is mainly a set of open rules and a vocal interface, except for the main common access and conference space equipped with visual displays. "Ar.I." simply says data at some times, while at others, more intriguingly, it starts giving instructions and "spatial advice" about the environmental data configuration, and how to interpret them.

In parallel to the PPoFT and in the frame of various research or experimental projects, scientists and designers at fabric | ch have been working to set up their own platform for declaring and retrieving data (**Datadroppers** project). A simple platform, but one that is adequate for our needs, on which we can develop as desired and where we know what is happening to the data. To further guarantee the nature of the project, a "data commune" has been created, and we plan to release the code on Github.

In this context, we are turning our own office into a test tube for various monitoring systems to assess the reliability and handling of these different systems. This, then, is an occasion to further "hack" some basic domestic equipment and turn them into sensors and try new functions with the help of our 3D printer. Again, this experimental activity has been turned into a side project, **Studio Station**, while keeping the general background goal of "concept-proofing" the different elements of the main project.

A common room (conference room) in the pavilion hosts and displays the various data. Five small-screen devices, five voice interfaces controlled for the five areas of interest and a semi-transparent data screen. Inspired again by what was experimented on and realized back in 2012 during the exhibition project Heterochrony.

fabric | ch, July 2016

Contact

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