

INTERCANTONAL SPACE

A new way for virtual work

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Abstract
Design : Vaud Parliament
Flow : Timeline, Schedule & App
Details

Abstract

In an ever-growing virtuality movement, we need to find a way to link long-distance discussion and architecture.

Political context

For this topic, we are interested in the Swiss confederation and its cantonal parliaments. Switzerland has a central parliament : the Federal Palace. It writes laws designed to unify the country, but each of the 26 cantons has some autonomy. While the Confederation establishes a general framework for all the cantons, each one is free to define the specificities most adapted to its territory. The independence of each canton is a strength of Switzerland, but this sometimes leads to a lot of complexity when the rules are not identical everywhere in the same country. So, what happens when a federal law requires everyone to harmonize ? Everyone must work together and coordinate to make it happen.

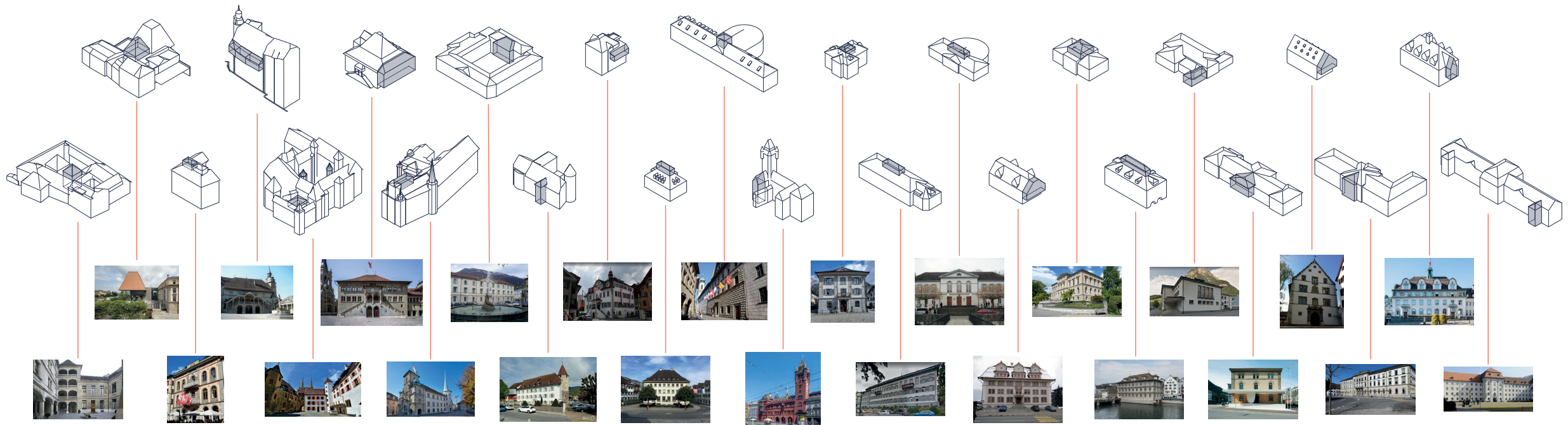
Let's take a concrete example to better illustrate : the HarmoS school system. In 2007, a new federal law was introduced. This law requires the harmonization of the school system between the cantons. The implementation of the law is going more or less quickly in the different regions of Switzerland, but the communication between the cantons is slow and complicated. In other circumstances, the different cantons can also help each other or create alliances that benefit each other. With these considerations in mind, we want to promote intercantal collaboration.

Virtual space

Digital and virtual are perhaps the key. Thanks to them, long-distance communication is becoming more and more efficient, we save a lot of time and develop new ways of working in all professions. However, these technologies can in some cases lead to a decrease in the architectural experience. Work can be done from home and social relationships between humans are weakened. So how can architecture bring something more to the remote work of parliamentarians ? How can we connect them both through space and virtuality ?

Strategy

To answer these questions, we propose a project that gives each of the 26 cantonal parliaments its own physical extension. All these extensions are interconnected through virtuality. They are grafted onto the existing buildings, either on the roof or on the façades, as a new technological layer redefining their silhouette. They are formal spaces, reserved for professionals and political discussions, whose purpose is to strengthen intercantal coordination. No interaction with the public is planned.



Map of Switzerland

Extensions

The 26 cantonal parliaments and their extensions from left to right, from top to bottom : VD (Lausanne), FR (Fribourg), BE (Bern), TI (Bellinzona), OW (Sarnen), LU (Luzern), UR (Altdorf), AG (Aarau), ZG (Zug), GL (Glarus), SH (Schaffhausen), AI (Appenzell) & AR (Herisau), GE (Genève), VS (Sion), NE (Neuchâtel), SO (Solothurn), JU (Delémont), NW (Stans), BS (Basel), BL (Liestal), SZ (Schwyz), ZH (Zürich), GR (Chur), TG (Frauenfeld), SG (St. Gallen)

Design : Vaud Parliament

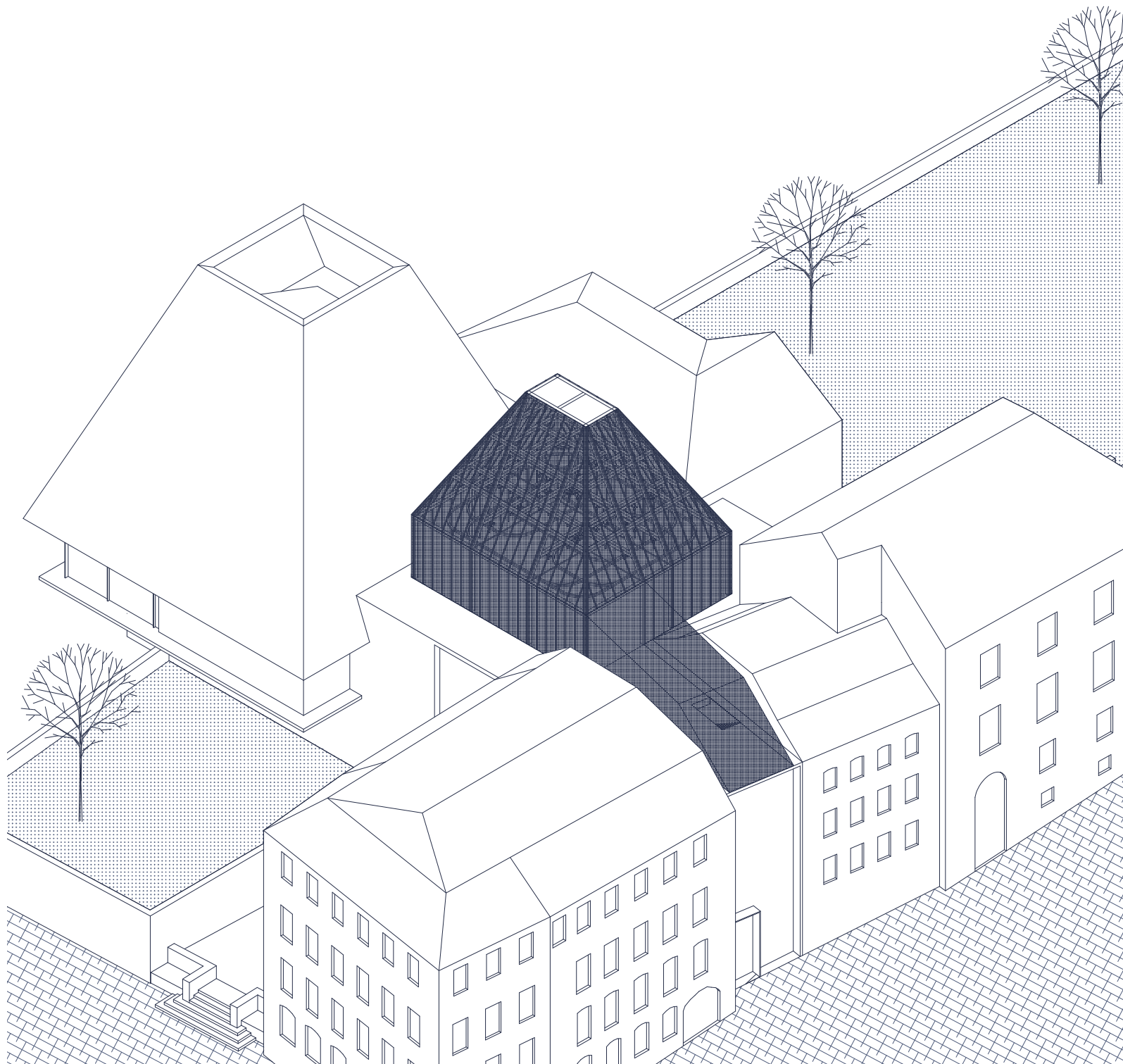


Vaud Parliament
Photomontage of the insertion
of the project in the built
context of Lausanne

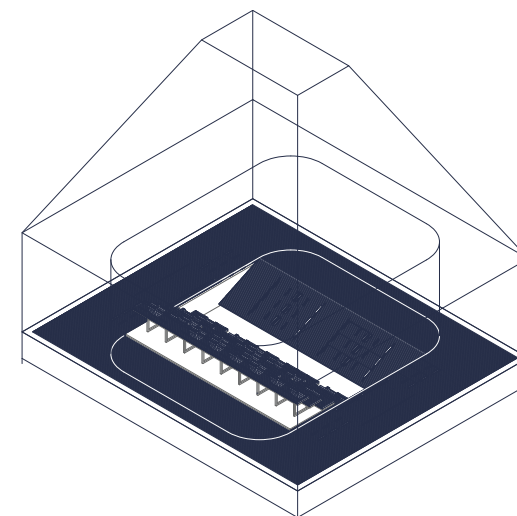
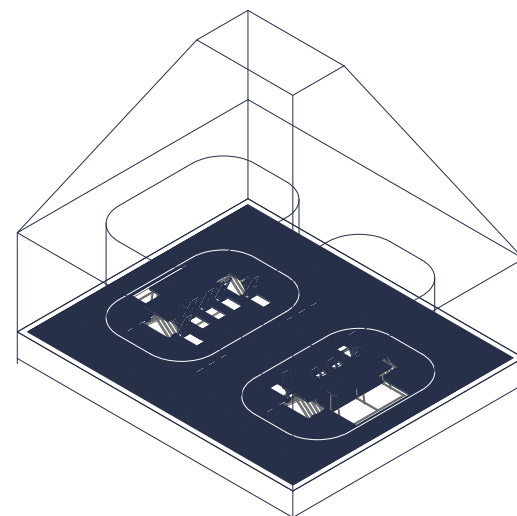
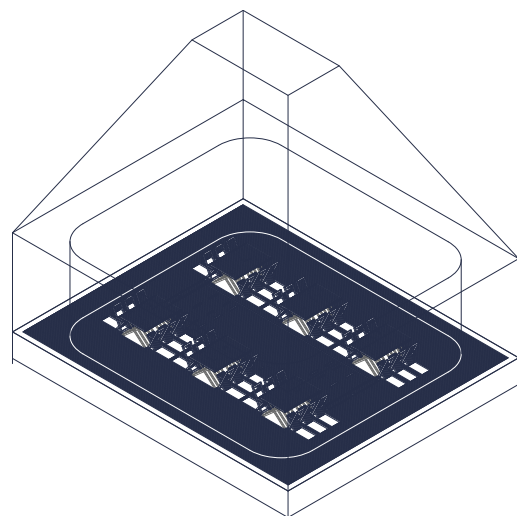
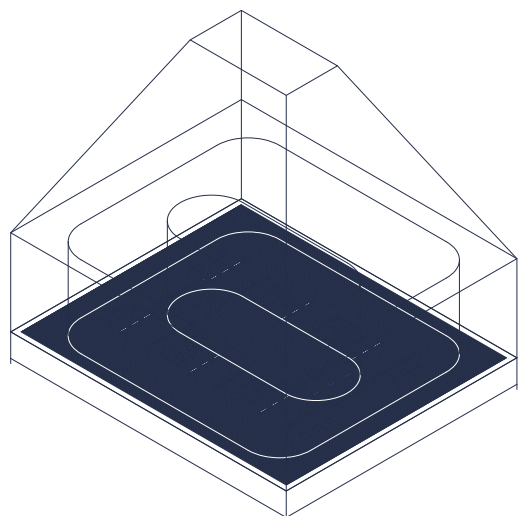
To give a more precise idea of what one of these extensions could look like, we focused on the case of the Vaud parliament in Lausanne.

Our intervention takes place at the top of the building, uniting the 5 surrounding roofs of various geometries by impregnating itself with the existing forms. Seen from the outside, the translucent façades of the pavilion filter the light and reveal the complex machinery that characterizes the project. The access is done via the prolongation of the existing staircases to the roof, then through a tunnel imitating once again the built context.

We talk about machinery because the space is modulable and requires technical solutions to function as such. The reason for this choice of modulable space comes from the observation that politicians, in their everyday life, transit through many places to have a conversation with someone. That's why our system can adapt to the demand.



Insertion
 The project takes place
 between the roofs of the Vaud
 parliament



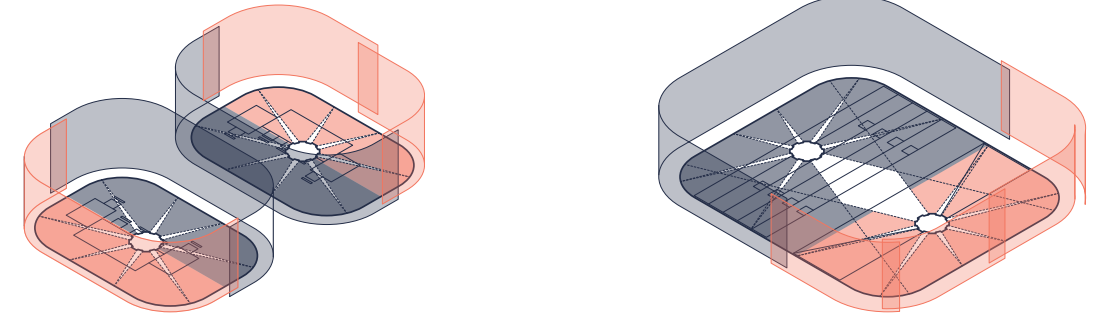
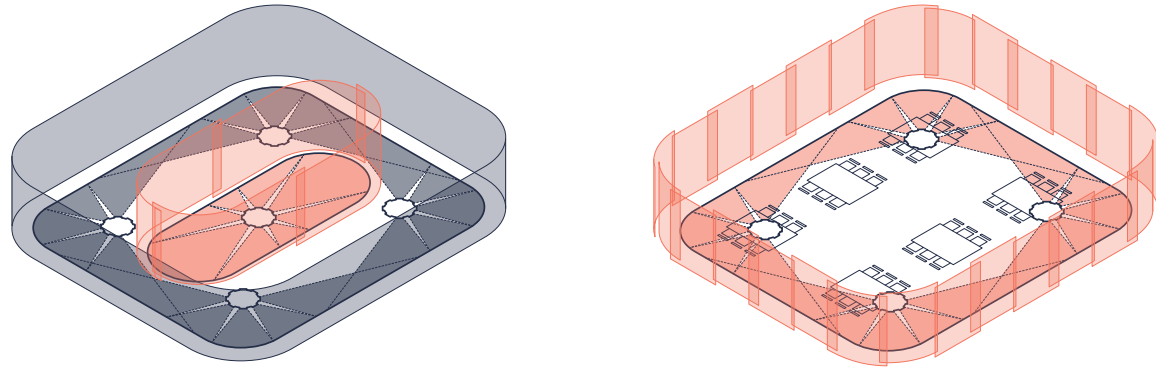
Modulability

To achieve a modifiable plan, the walls are made of silicone rod curtains moving along rails, enclosing precise spaces and generating multiple configurations while allowing people to pass through to enter the said spaces.

These configurations make the use flexible by allowing to vary the geometry of the space, the number of participants (from 1 to 26) and the form that the discussion takes.

Configurations

The different spaces from left to right : meeting gallery, multi-cantonal meeting, meeting rooms, auditorium



Screens

The curtains not only serve as physical dividers, they also function as screens to project live video from the connected cantons. Each cantonal extension has its own modifiable space and connects virtually to the others thanks to this device.

The projections are of two types: canton (orange) and background (blue). The screen is divided into several parts, each displaying a canton (in front of the person) or a background (behind the person) showing the building from which the person is connecting so that the region of the interlocutor can be easily identified.

Projections

The different spaces from left to right : meeting gallery, multi-cantonal meeting, meeting rooms, auditorium

All these projections are smoothly blended together through digital processes and give birth to an immersive space extending beyond the screen into a panoramic landscape of Switzerland and its cultural diversity.



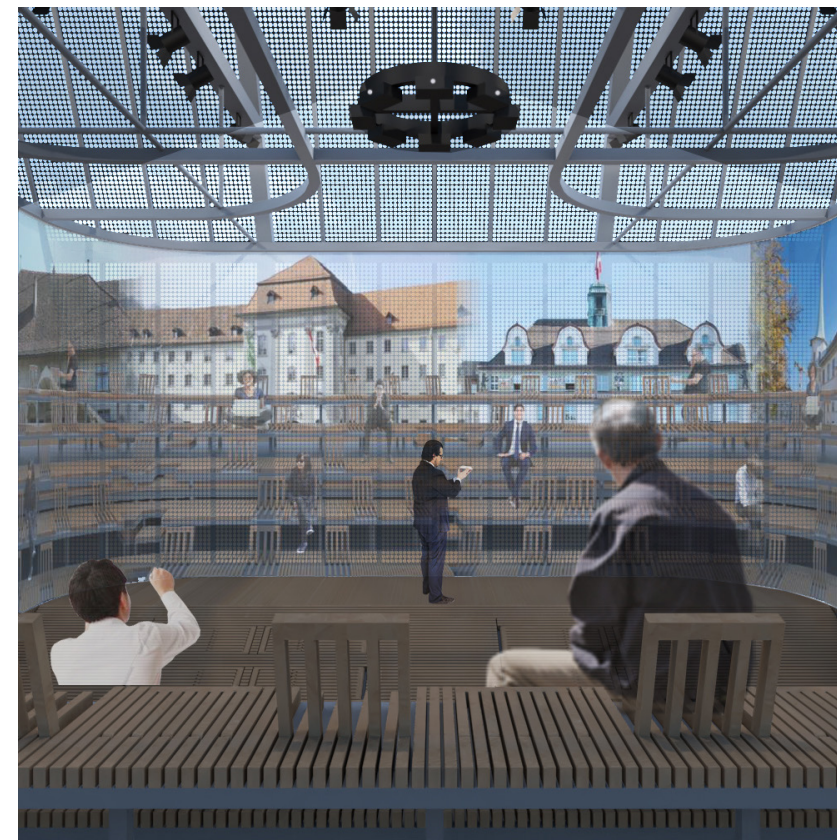
Meeting Gallery



Multi-Cantonal Meeting

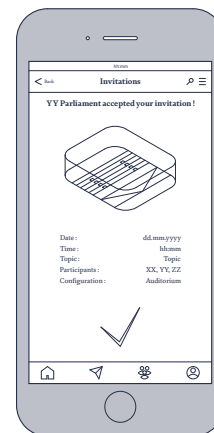
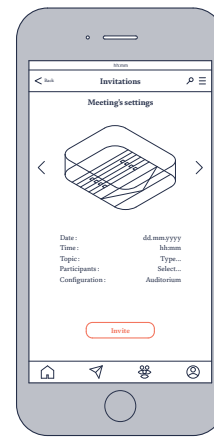
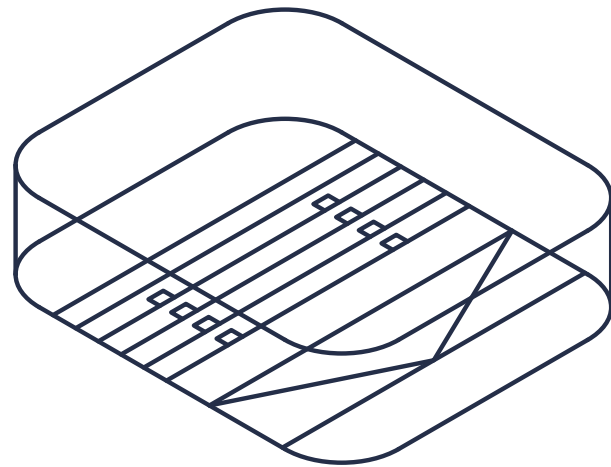


Meeting Rooms



Auditorium

Flow : Timeline, Schedule & App

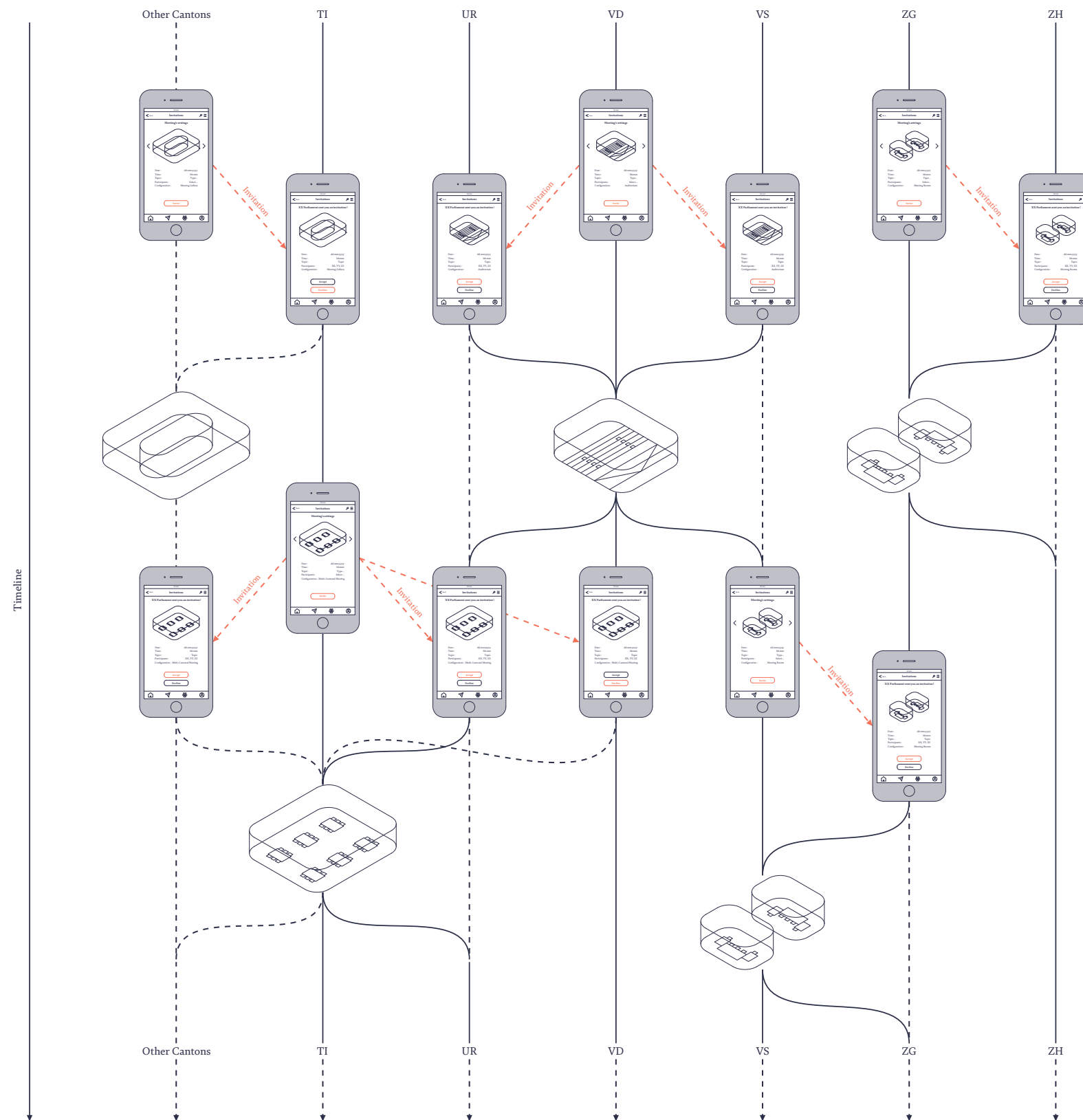


Our extension system works in conjunction with a mobile phone application allowing meetings to be scheduled. The user chooses the configuration that the pavilion will adopt, parameters the date and time of the appointment, specifies the subject of the debate and sends a notification to one or more cantonal parliaments to invite them to join a virtual discussion.

Once the invitation is delivered to the recipient, it can be accepted or declined depending on how busy the agenda is and how many meetings are already planned.

If the invitation is accepted, the participants reach their respective buildings at the indicated time and engage in a conversation through the projections displayed on the curtains.

Application
Example of an invitation
process for the auditorium
configuration

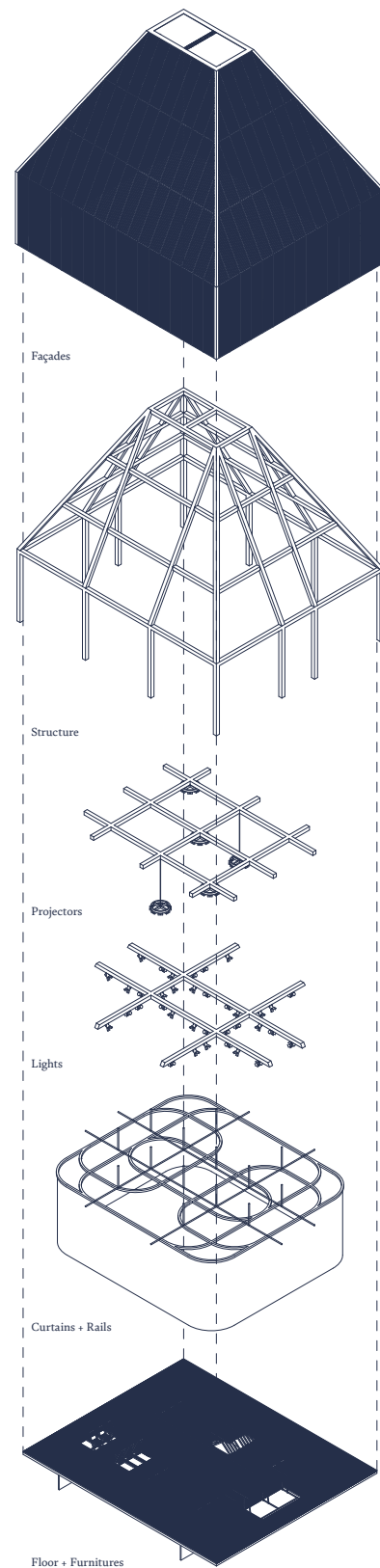


By applying this mechanism to all 26 Swiss cantons, we obtain an interaction diagram of this type. The horizontal axis represents the cantons while the vertical axis represents the temporality. For practical reasons, only 6 cantons are represented here. The system is scalable in one direction as well as in the other.

When a meeting takes place, the concerned cantons gather virtually to have a discussion. Once the meeting is over, everyone goes their own way and follows their own schedule.

Flow Diagram
Timeline and interactions
between cantons

Details

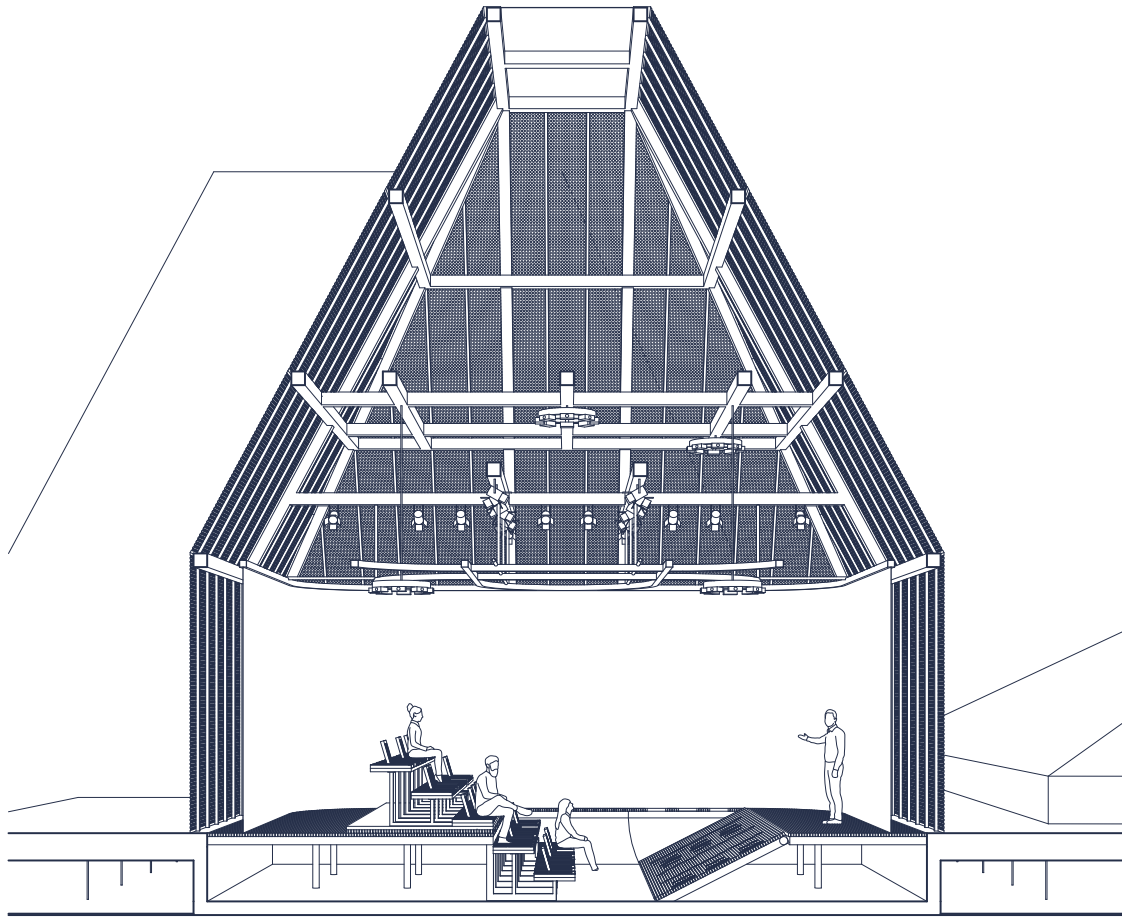


Constructive Layers

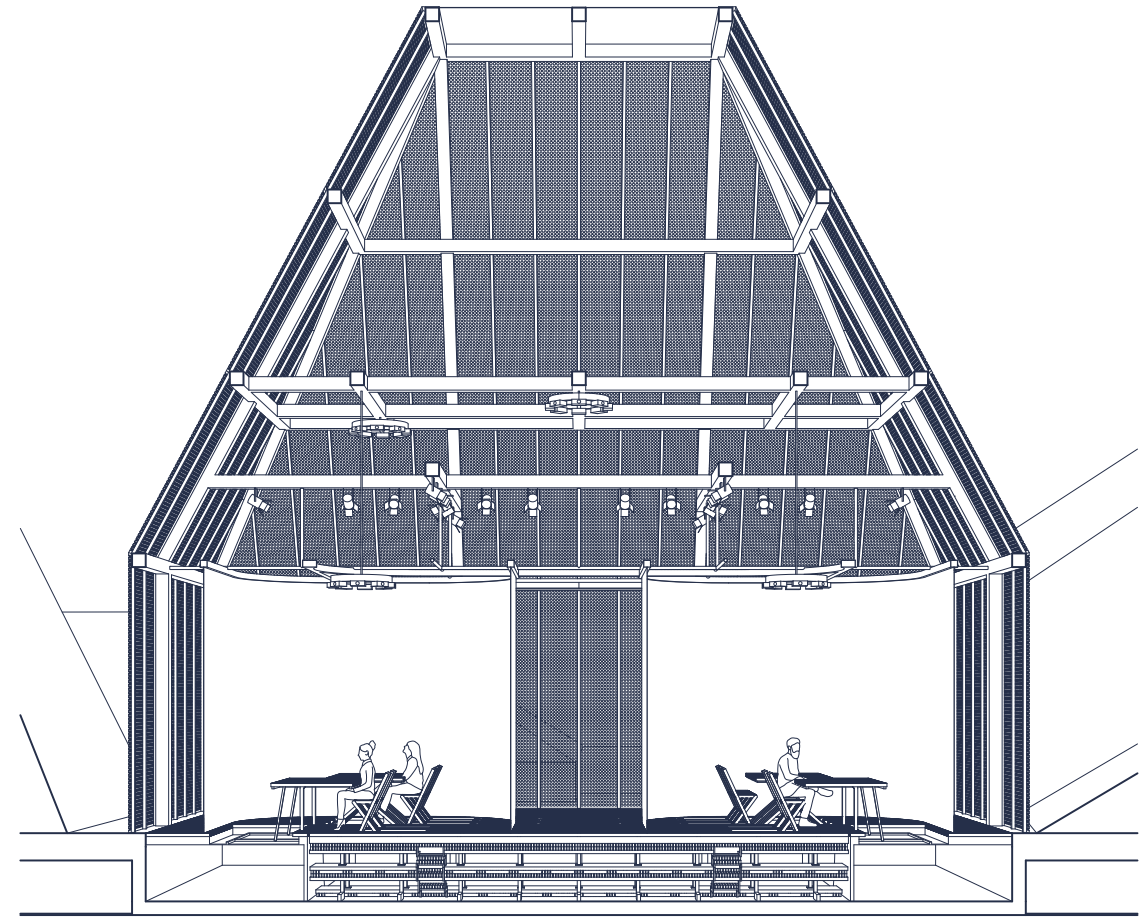
The walls are not the only adaptable elements of the project. The pavilion is equipped with a whole series of installations necessary to stage the meetings.

Kinetic furniture such as chairs, tables or bleachers can be deployed from the wooden floor according to the needs.

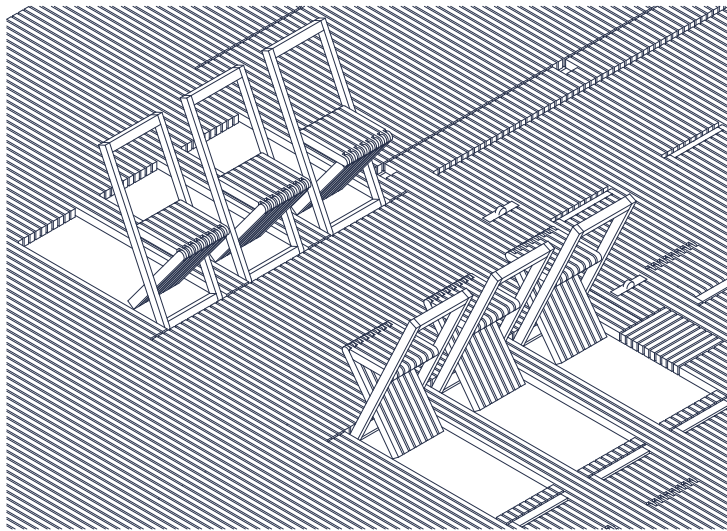
In addition, the imposing volume of the roof houses 2 technical layers materialized in the form of grids. The lower and upper layers respectively host the lighting and the projectors. The spotlights can be oriented in the desired direction while the beamers can be moved along their grid and lowered once the right position is reached.



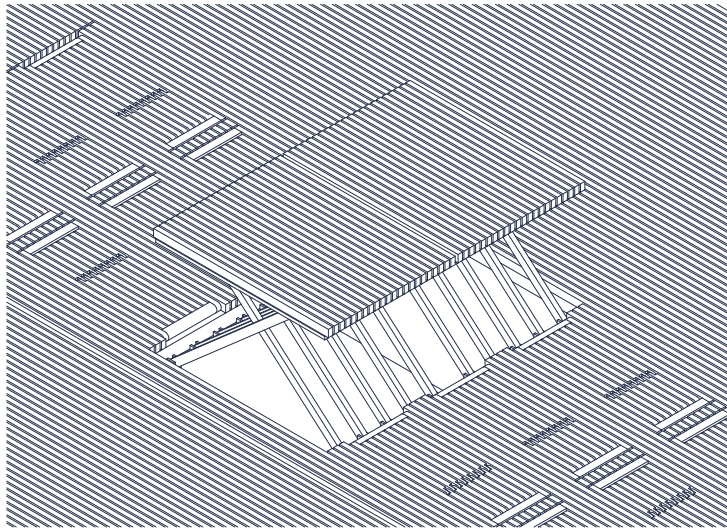
Auditorium



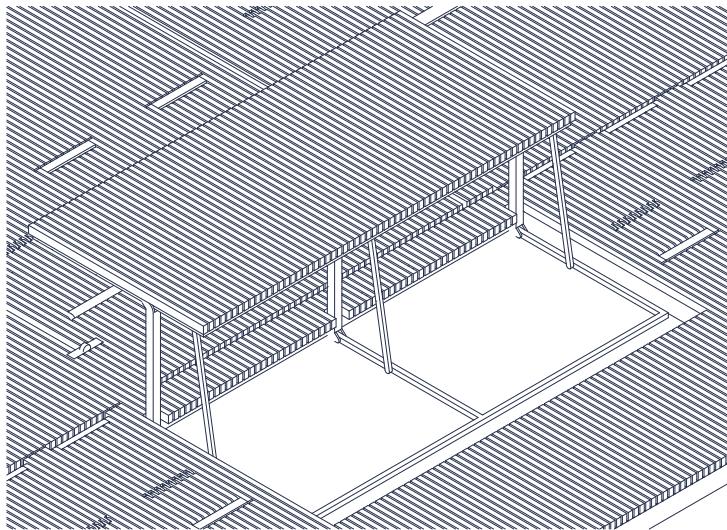
Meeting Rooms



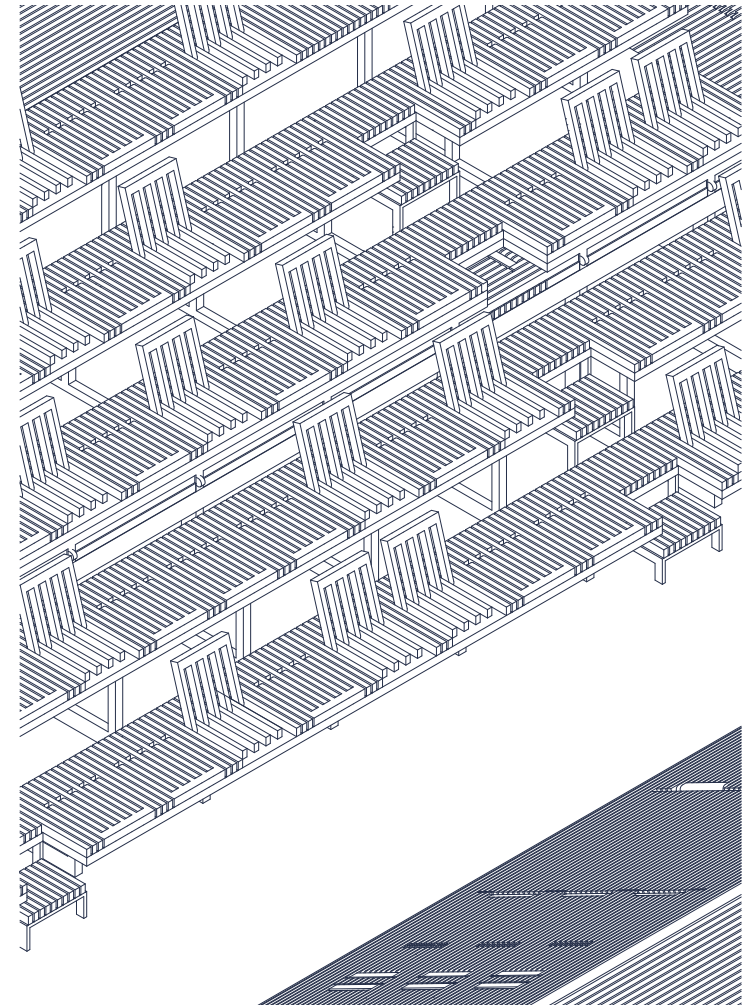
Chairs
Multi-Cantonal Meeting
Meeting Rooms



Tables
Multi-Cantonal Meeting
Meeting Rooms



Conference Table
Meeting Rooms



Bleachers
Auditorium