SOUND UNDER GROUND

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INTRODUCTION

Since prices on the the real estate market are getting higher and higher, and the silence regulations are stricker than ever before, both classical and popular musicians are having a hard time when it comes to organizing concerts. In the summer period it is easier to find the right place because of the numerous outdoor clubs and summer festivals that take place in the capital city. However during other parts of the year bands and musicians are often struggling with the fact that the number of indoor clubs in the city center with good acoustics has dramatically decreased. Gozsdu Manó Klub, Roham, R33 and Kuplung has closed in the past few years just to name a few. Dürer Kert is going down on the same path unfortunately. It is a noticeable trend that new locations has only chances on the outskirts of the city. Regarding good-quality acoustics, the last available places located in the city center are A38 and Akvárium Klub, but they build their profiles based on foreign bands. As a result the hungarian musical community is being supplanted from the best sounding locations.
My project would like to reflect on the problems described above, thus, that the hungarian pop-music scene has no acoustically well designed space, that is customizable and where they can sound their best.

LOCATION

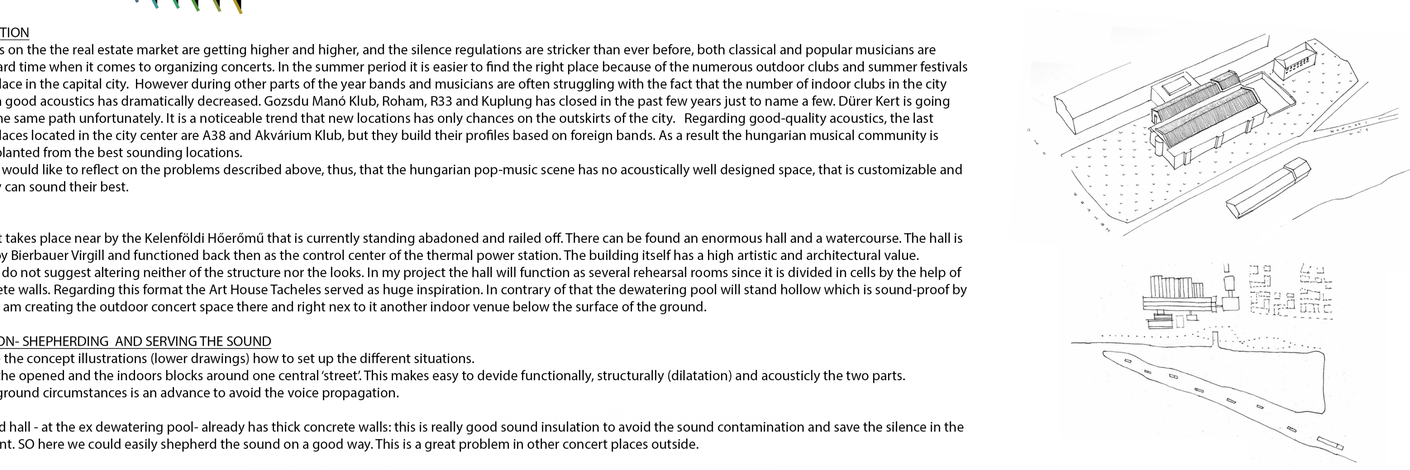
The project takes place near by the Kelenföldi Hőerőmű that is currently standing abadoned and railed off. There can be found an enormous hall and a watercourse. The hall is designed by Bierbauer Virgill and functioned back then as the control center of the thermal power station. The building itself has a high artistic and architectural value. Therefore I do not suggest altering neither of the structure nor the looks. In my project the hall will function as several rehearsal rooms since it is divided in cells by the help of ferroconcrete walls. Regarding this format the Art House Tacheles served as huge inspiration. In contrary of that the dewatering pool will stand hollow which is sound-proof by its nature. I am creating the outdoor concert space there and right nex to it another indoor venue below the surface of the ground.

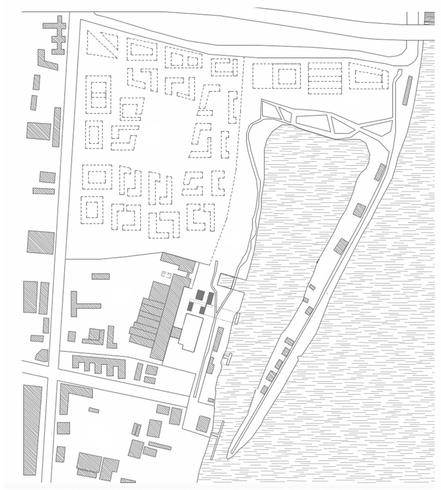
CONCEPTION- SHEPHERDING AND SERVING THE SOUND

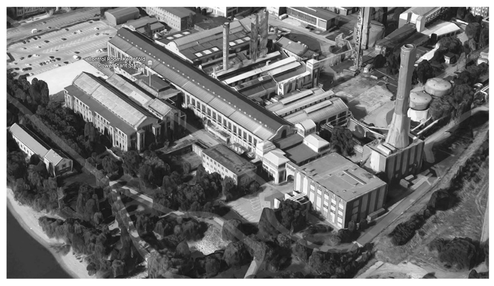
We can see the concept illustrations (lower drawings) how to set up the different situations.
I organize the opened and the indoors blocks around one central 'street'. This makes easy to devide functionally, structurally (dilatation) and acousticly the two parts.
The underground circumstances is an advance to avoid the voice propagation.

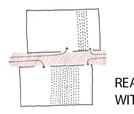
The opened hall - at the ex dewatering pool- already has thick concrete walls: this is really good sound insulation to avoid the sound contamination and save the silence in the environment. SO here we could easily shepherd the sound on a good way. This is a great problem in other concert places outside.

What about the indoors concert hall? I have allready investigated how the sound works in a concert hall with different artists and with different formations?
So my plan is a clever box with acoustic panels inside that makes perfect acoustic circumstances for all formations of musicians.
After lots of interviews with different bands i have an inspiration to make up a flexible architectural place that could serve perfect acoustic environment for all kind of

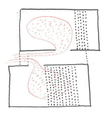




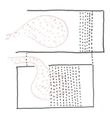




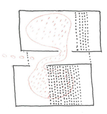
REACHING THE SCPACES
WITH THE CENTRAL STREET



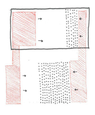
SPACES OPEN TOGETHER
AS A FESTIVAL PLACE



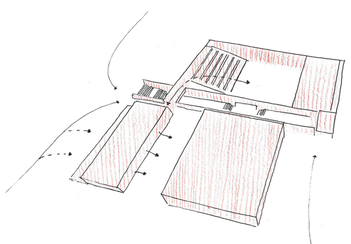
A FREE MEETING PLATFORM
OUTSIDE AND A CONCERT HALL
INSIDE

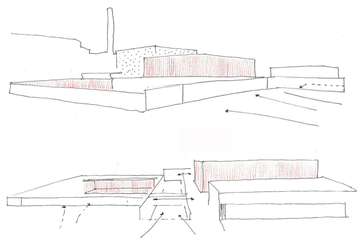


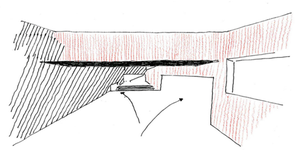
SPACES OPEN DIVEDELY
AS TWO DIFFERENT CONCERT
PLACE

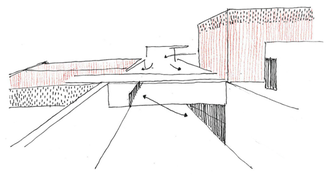


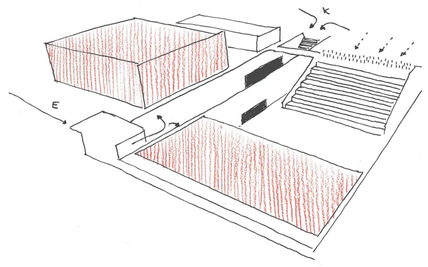
HOW TO MANAGE SEPERATELY THE
AUDIANCE SPACES AND THE ARTISTS SPACES

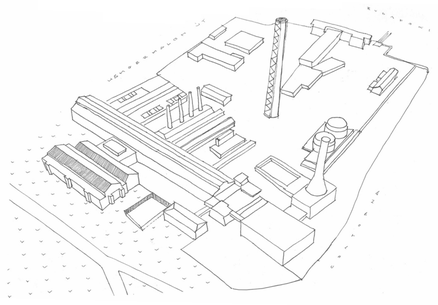




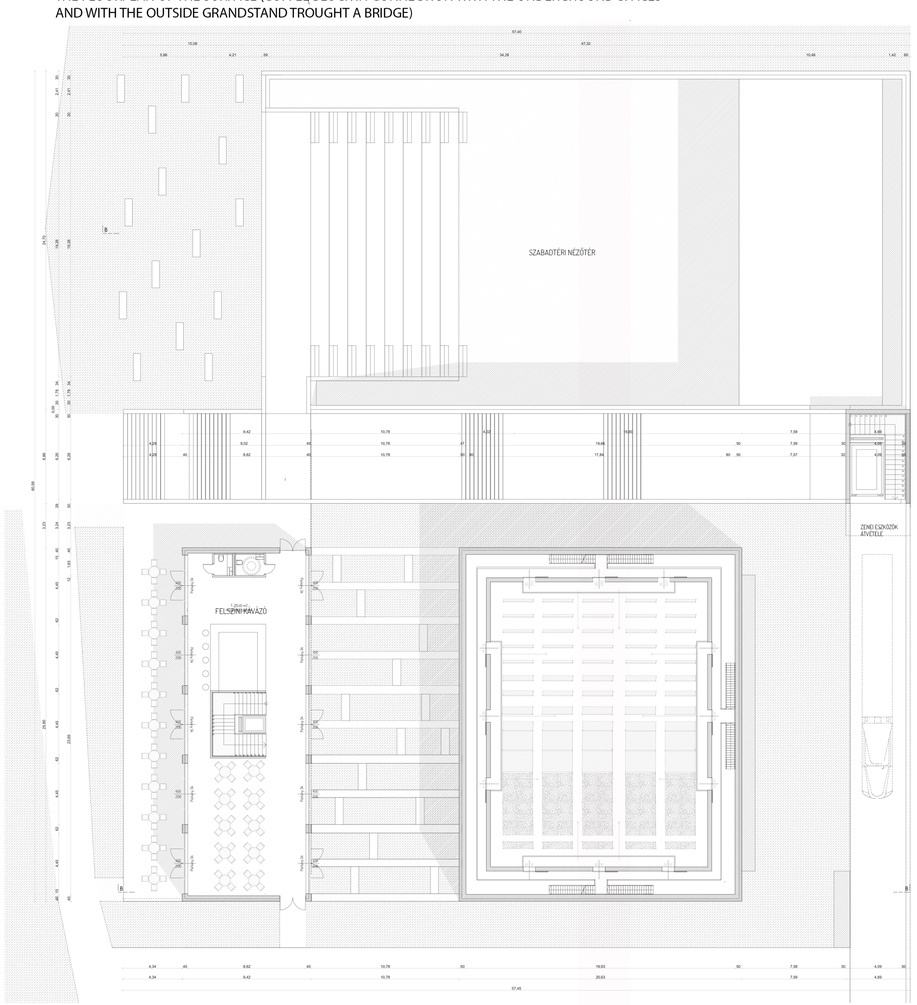




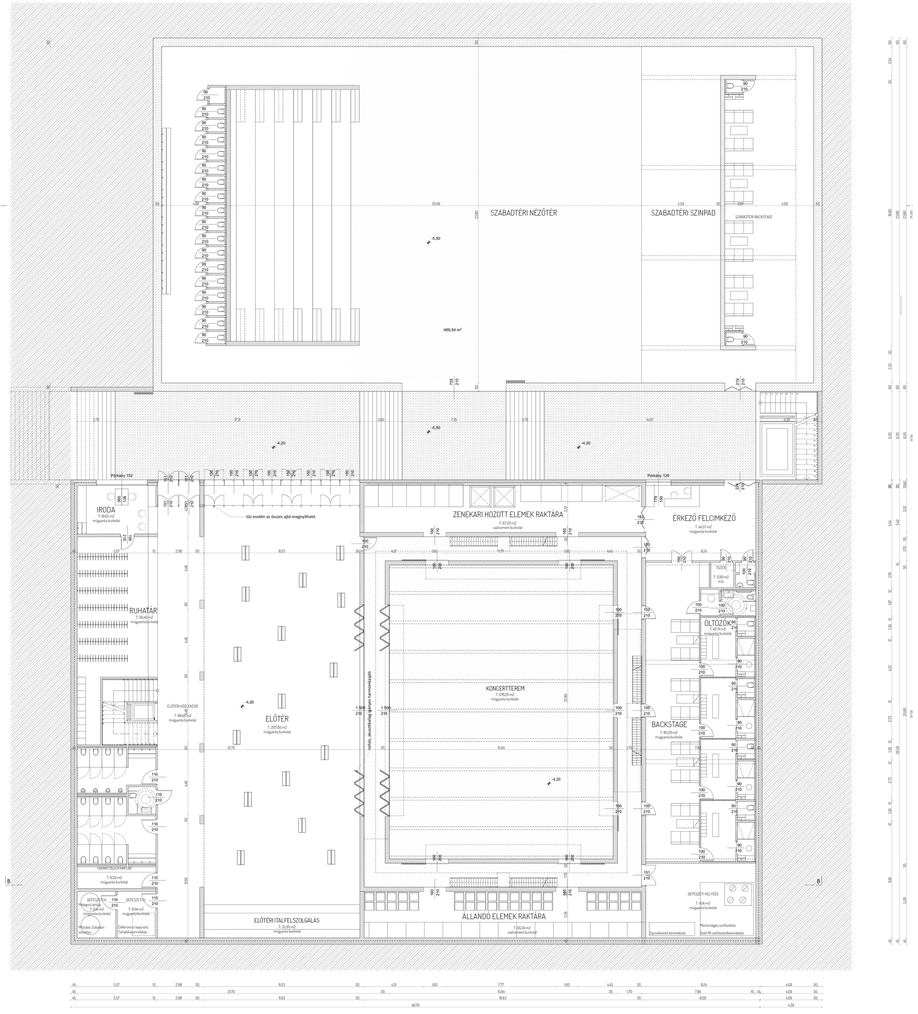


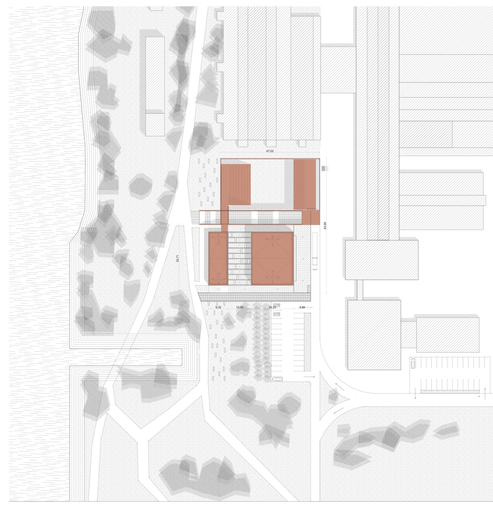


THE FLOORPLAN OF THE SURFACE (COFFEE BLOCK IN CONNECTION WITH THE UNDERGROUND SPACES AND WITH THE OUTSIDE GRANDSTAND TROUGHT A BRIDGE)



UNDERGROUND FLOOR PLAN

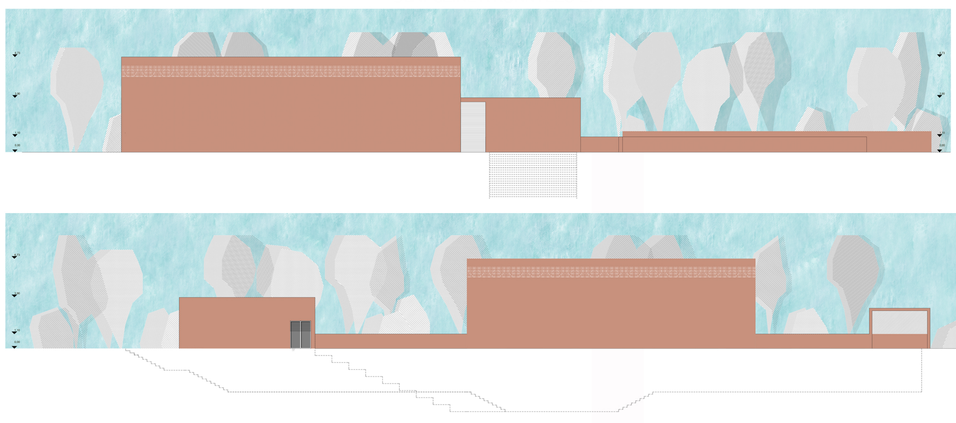


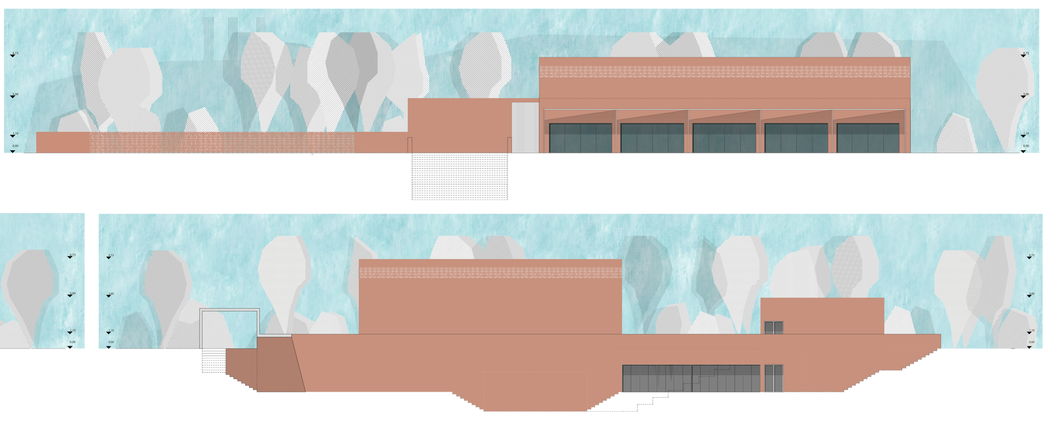


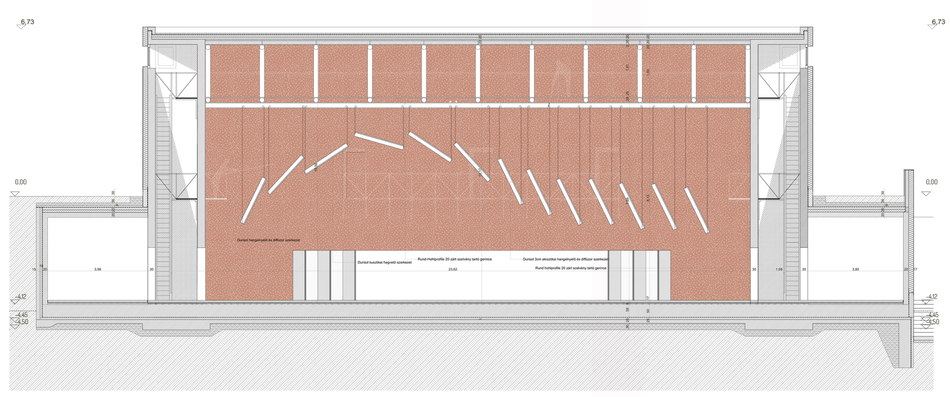
ORGANIZING SPACES

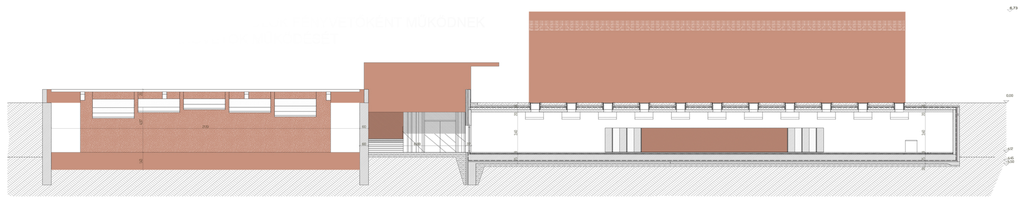
The building is on the verge upon a park full of trees and an industrial area. I exploited the contrasts such as open and closed, negative and positive spaces by the help of an uncovered road – so to say an inside path. This very path unfolds the inside spaces and functions which is organised on a scale: from the intimate to the public purposes. The public spaces can be found on the left while the dressing- and rehearsal rooms are located on the right next to the thermal power station. The publicity scale is present inside the building. On the left side of the layout one can see the cloakroom, toilets and the reception which are meant to be the more intimate part of the building. These are overlooking the social spaces which are the foreground for the audience. From that point one can get into the biggest social area which is the concert hall. The same logic is visible when it comes to organizing spaces in the backstage. As the most intimate speaces, toilets, makeup rooms and dressing-rooms are located on the right whereas the social rooms for the artists can be found on the left. Box-in-the-box principle. The concert hall is being encompassed by an aisle: first of all it is functioning as a service passage to the storage rooms. Secondly it is favourable because of its sound-proofing qualities. Lastly it is composing a transition between the forefront and the concert hall.

THE COLOUR OF THE BULIDING IS THE MEAN COLOUR OF THE FACTORY BUILDINGS ON THE ENVIRONMENT



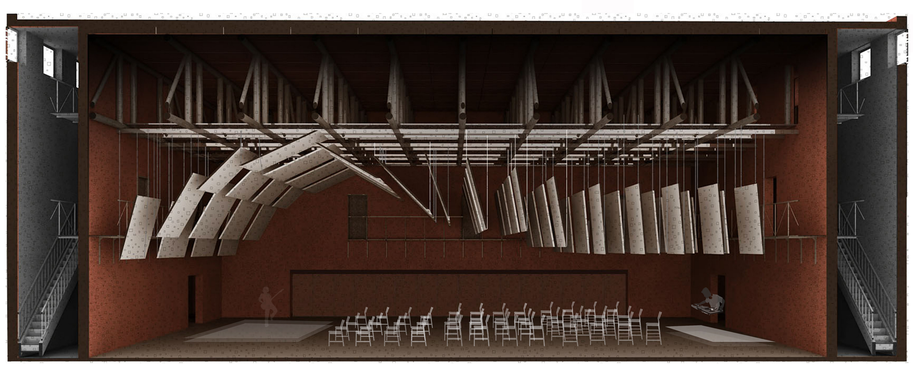






HOW TO SET THE ACOUSTIC PANELS

The acoustic panels set from the cieling: a vierrendeel-cross hibrid structure that has the ability to moove around easily to set the acoustic panels.

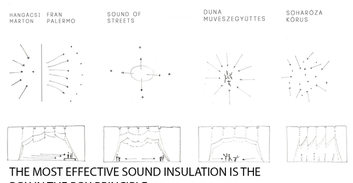


ACOUISCIC SYSTEM

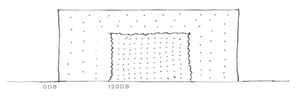
The Hungarian practice – sadly - often doesn't take into consideration customizable acoustical features when designing musical scenes, probably because of the high-cost equipment. Classical musical venues seem to represent the only exception. I was working with acoustical engineers and could create a system that is both cost effective and adaptive to the needs of the pop-music sphere.
The acoustical panels hanging from the ceiling are mobile: one side of them is intensifying sounds while the other is swallowing them. These panels can be easily turned around so that always the right side is in action. They can be variously arranged on the ceiling meeting the expectations of various band formats. The unique effect of these panels hanging from the ceiling is that it is appointing the place of the performer. The panels are moving in synch with the artists - as can be seen on the illustration. That way an organic relation forms between architecture and technology.

(acoustic adviser: Beáta Mesterházy acoustic specialist)

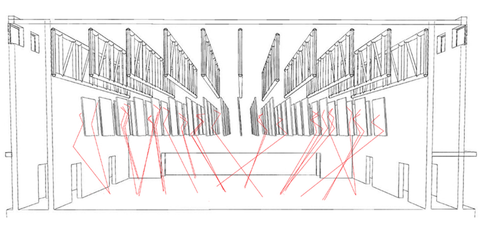
THE BANDS FORMATS WITH THE ACCOUSTIC CONSEQUENCE



THE MOST EFFECTIVE SOUND INSULATION IS THE
BOX IN THE BOX PRINCIPLE



THE ACOUSTIC SETTING WHEN BANDS STANDS
SPORADICALLY



THE ACOUSTIC SETTING WHEN BANDS STANDS
ON A SPECIFIC SPOT