STICHTING BOOGIEWOOGIE

WINTERSWIJK



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Fig. 1.1

PREFACE

General purpose

This book was made for the graduation studio 'Revitalising Heritage' from Heritage & Architecture (HA) of the TU Delft, as a start for the design process.

I studied the Stichting Boogie Woogie in Winnterswijk in three aspects:

- 1) Precedent research
- 2) Building analysis
- 3) Value analysis

The analysis has been done by Seongchul Yu with Lars Barneveld, Marloes Bier, Dinand Kruize, Lisa Noorman, and Tryfon Stogiannis.

Observation-based research and analysis

The analysis of Stichting Boogie Woogie is including the architecture analysis, cultural value analysis, and technical analysis. For more in-depth analysis, I tried to integrate each analysis rather than divide them separately.

At first, I start my analysis by answering observation questions when I had a look at this building several times. These questions are also influenced by the book 'Designing from Heritage' (Kuipers, M. & De Jonge, W., 2017). These questions hold a general framework for my analysis.

In the course of the process, I have adopted the well-known framework formulated by Steward Brand to structure our analysis of the tangible layers of the St. Elisabeth complex (Brand, 1994).

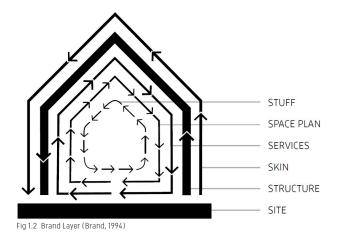
Brand's framework makes the observer aware of the integral physical coherence of

a building, as well as the different rates of change pre-defined layers go through. Brand distinguishes six general-purpose layers for a building:

Site, Structure, Skin, Services, Space Plan, and Stuff.

However, I have added three more subjects: Surroundings, Surfaces, and Spirit of place, to draw sufficient attention to them during the processes of observation and valuation. I have dealt with Site with Surroundings as one category, and Skin with Surfaces as well because these topics have strong correlations.

(Clarke, N., & Kuipers, M., 2017)



HERITAGE ANAMNESIS QUESTION EXAMPLES			
Question	Aim/Supportive action		
What building/structure/heritage site are we looking at?	Collecting administrative and quantitative data.		
What is its aspect and has this changed in the course of time?	Collecting visual and usage data and measures.		
What is it made of and with what building techniques?	Collecting construction and material data.		
What are its characteristics?	Collecting data on the current appearance of exterior and interior.		
Does it show traces of damage? Where and what?	Collecting data on current technical performance.		

Fig 1.3 Observation question example from 'Designing from Heritage (Kuipers, M. & De Jonge, W., 2017)

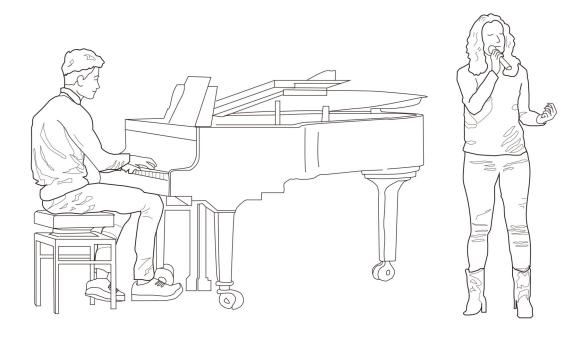


Fig 1.4

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Fig 1.5

01

INTRODUCTION



The Boogie Woogie music school is nominated for demolition.

The municipality of Winterswijk wants to build a new music school in 2020 according to the wishes of our time especially with the techniques of today so that an energy-neutral building can be constructed. The current building built in 1972 absorbs a substantial amount of energy costs each month, which is a heavy burden on Boogie Woogie's budget. The new music school to be built is part of a larger plan in Winterswijk: the Cultuurkwartier with a library, a cinema, restaurants, and a public park. Also, to be more energy-efficient, the new music school will be more modern and functional.

(Tanja Kits 09-01-19, 13:08 Source: De Gelderlander)

I. INTRODUCTION

1.1 BACKGROUND

DEMOLISION? PRESERVATION? DISCOURSES OVER THE NEW PLAN

Stichting Boogie Woogie

The architects were Ir. A. Schwenke and Ir. B.G. Bosch (both building engineers) and the building was built in 1972 on a small hill. For its time it was a technical masterpiece and it was built in the style of Structuralism.

However, nowadays the building is old fashioned and not very practical anymore. The building is so big that all the classrooms are used only on Wednesday afternoon, and except for that time, many spaces in this building are empty. Besides, all the stairs make accessibility so bad. They would like to improve it but there is no money. The building does have an important social function for the region. The teachers also give music lessons in Groenlo, Lichtenvoorde, and Aalten. Also, the concert hall is used a lot, for like primary school musicals. As the concert hall has 285 seats and is quite cheap to rent (€80 per hour for a concert or show), it is accessible for various users. Also, repetition rooms are used guite a lot, they are also guite cheap for rent with €15 per hour for a band room and €7 per hour for a small repetition room. The main positive points of the building are the concert hall and the ballet room with very good acoustics, and the very good insulation of the repetition rooms.

(info told by Johan, the janitor of Boogie Woogie during the tour on 18-09-2019)

Subsidies for things like music schools go down in the Netherlands and the music school is dependent on subsidies. On top of that, there are fewer students than before, and the students pay less money than the classes cost because otherwise, they would be too expensive. Also, the building uses a lot of energy and the air condition systems and electricity systems need to be renewed or renovated. For these reasons the music school costs more money than it generates. Renting out the repetition rooms and income from the restaurant space doesn't make enough money to cost-effective. The school had a negative result in 2016, 2017 and 2018 and they asked to raise the subsidies. (Tanja Kits 09-01-19, 13:08 Source: De Gelderlander)

For the high costs and impracticalities of the building, there are plans for demolishing it and making a new cultural center. Opinions differ about this, some people like the building and are in favor of keeping it whereas others see many opportunities in a new cultural center building.

(info told by Johan, the janitor of Boogie Woogie during the tour)

Some opinions of Winterswijkers

Johan, a janitor of the music school, thinks that the building is nice, especially the concert hall, but that the function of the music school is more important. The building nowadays costs a lot of money and they have to come by on subsidies. So for him, a more efficient and cheaper building would be nice because they then could give more money to actual music-related topics instead of the building. He does think it would be a pity to demolish it but thinks that it is not sustainable to keep the building like this. Now it is too big and only a few spaces are actually used. He also emphasizes the good acoustics of the concert hall and that that is a unique hall in Winterswijk.

Jan, a member of the Guild of Winterswijk that gave tours, isn't really attached to the building. "Yes, it is a prominent building, but the location is not that well, just outside the center and the building costs a lot of money." He would rather have a smaller and more efficient building or see it as a part of the Culture Quarter.

The project developer we saw in the municipality wants to demolish the building. He thinks the building is not that valuable and in a bad location. A Culture Quarter in a good location would make that part of the center livelier and the music school is an essential part of this building.

In the municipalities of Winterswijk, Aalten, and Oost-Gelre the opinions are dual. On the one side, they do think the music school is very important, but on the other side, it runs mainly on subsidies and that costs the municipalities quite some money. All the municipalities want to lower their subsidies, and Aalten even wants to stop them and go on without the connection with Boogie Woogie. But currently, Winterswijk is giving extra subsidies to Boogie Woogie because the music school needs this financially. The majority in the municipality would rather see a Culture Quarter that can activate a part in the city and is connected to the center, and that costs the municipality probably less money. They think music education is the most important, and not in which building this exactly happens.

Kees-Jan Frank of the Monuments Advice Bureau in Nijmegen said that "The question remains how unfortunate it is that the old building goes down. Because it is a characteristic building that is worth considering." Not even two years ago, t the request of Winterswijk, he researched the historic buildings in the center, to include them in the central vision.

"I share the opinion of the committee. But you see at these types of buildings that not everyone likes them and that they cost a lot of money".

(Tanja Kits 09-01-19, 13:08 Source: De Gelderlander)

I. INTRODUCTION

1.1 BACKGROUND

WHY DO WINTERSWIJK INHABITANTS WANT TO DEMOLISH THIS BUILDING?

Financial problems

The guide said that Boogie Woogie is not cost-effective at all so it costs a lot of money. He would like to see a new cultural center that makes money and is more connected to the city. In this center also the cinema would come, but the owner of the cinema, that also owns 35 buildings in the area around the cinema, is not working along with this. The area around the Boogie Woogie is a bit impoverished according to him.

Boogie Woogie in Winterswijk would go bankrupt without extra money. If the three municipalities in the eastern Achterhoek do not give an extra subsidy, the music school Boogie Woogie goes bankrupt. The cultural center needs 450,000 euros in the short term, and the annual subsidy must also be increased from 2019. If that does not happen on time, the doors of the school in Winterswijk will close and music education will stop.

(Sjoerd van der Werf 30-08-18, 06:57 Source: De Gelderlander)

The inefficiency of the building
There are many height differences in the
building, that make it very hard to enter with
for example a wheelchair or old people. As
these height differences an inherent part of
the design, it may be hard to alter them. The
board of the Boogie Woogie wants to make
it more accessible but currently, they don't
have the money for it.

State of the building

There is quite some maintenance that needs to be done but there is no money for that. Also things like the lack of insulation that make the heating costs very high play a part in the decision. In a smaller and more efficient building, probably more money could go to the music itself.

Relation with the surroundings
The building is not in a very good location,
just outside the center, a bit of a dead-end.
there is a parking lot behind this building.
Also, the building is on a small hill and therefore has less contact with its surroundings.

WHY DO WINTERSWIJK INHABITANTS WANT TO KEEP THIS BUILDING?

Unique concert hall

The concert hall in Boogie Woogie has very good acoustics and could because of that be worthwhile to keep. It fits about 280 people and that is just right for activities like school plays, and it is quite cheap to rent and because of that accessible to everyone.

Cheap, well-insulated music rooms to rent The music rooms are rent-able by the people of Winterswijk and are quite cheap. This makes the rooms accessible for a lot of people, for example, bands that want to practice. The rooms are very well insulated.

Social activities

A lot of social activities take place in Boogie Woogie and it forms the space where volunteers can meet or practice. It is of course not said that this could not happen in another place. and can because of this stimulate creative activities in Winterswijk.

Memories

A lof of Winterswijkers have probably been to this building for a class, a course or a concert, and it is part of the city, even though it is not that much in the center. This argument is a bit subjective though.

Characteristic

the garden around the building, which was completely laid out in style. The honeycomb paving was adapted to the architecture of the building.

Realize

At the government level, more attention is now being paid to the cultural-historical values of buildings from the period 1965-1985, according to Roger Crols of the Gelders Genootschap, "But in many municipalities, that realization is not yet there. They are much more concerned with the reconstruction period, so until 1965".

Crols is also on the Winterswijk Cultural History Advisory Committee. The Boogie Woogie building falls under structuralism, he says. A movement that was also called human architecture. "It could all be a bit friendlier, with many corners and more made to the human scale. The former Doetinchem library on the Raadhuisstraat, which recently had a different purpose, is also included."

(Tanja Kits 09-01-19, 13:08 Source: De Gelderlander)

I. INTRODUCTION

1.2 PRECEDENT RESEARCH

CULTURAL BACKGROUND

What was the cultural background when this music school was first established?

HISTORY OF MUSIC EDUCATION IN THE NETHERLANDS

Music history has existed since prehistorical times. In the Middle Ages music education was mainly religious as most music was religious, so it was done in churches and monasteries. Since the renaissance, more non-religious music came up and rich parents paid musicians to teach their children music as a part of their education with also, for example, mathematics, rhetorics, and languages. For a long time, music education was something only rich people could afford. In the late 18th and early 19th century, people's opinions were changing about education, and the idea grew that there should be a certain extent of equality in the education of children. In 1806 a law on education was made, but it is not clear if music education was named as a part of the curriculum. From 1860 on singing was a compulsory part of the curriculum of schools. At that time was thought that music would "civilize" people as it would teach them to appreciate art by doing it themselves. The songs that were taught to children were also about things to teach them good behavior and society. In schools that were part of a certain religion, also religious songs were part of the curriculum. The private music teachers were still there for the upper class.

(Source: Hartkamp, 2005, p. 7)

In the 1930s music education was reformed, and also instrumental music was now part of the curriculum. Also in secondary schools music was introduced. This was for talented children that couldn't afford

private music lessons could follow these at school. Private music schools were founded (again) after WWII but not available for everyone. Since the 1950's it was seen as more important than before that children enjoyed music so songs were sung that fit their lives and experiences. In the 1970's the possibility was there that primary schools could hire professional music teachers of music schools to teach music, but because there was too little budget and not enough teachers, it ended up in a decade with hardly any music taught in primary schools. At the end of the '90s, there was more attention for music education at schools again and since then it has been a standard part of the curriculum.

(Source: Hartkamp, 2005, p. 17,22-27)

Is the purpose of the original music school still maintained?

HISTORY OF MUSIC EDUCATION IN WINTERSWIJK

From 1866 until shortly before WWII Winterswijk had a "music master", who was an organ player of the Jacobskerk and next to that music teacher, assigned by the municipality. After WWII music lessons are mainly given in the house of the student, and the two music foundations that originated didn't have their buildings. In 1961 the Foundation General Winterswijk Music School (Stichting Algemene Winterswijkse Muziekschool) is founded. The municipality funds the foundation and they are housed in the building of the Dienst Gemeentewerken (a municipality building) in the Spoorstraat.

The music school was very popular and soon the building became too small. Plans are made for a new building. The design was made by the architects Ir. A. Schwenke and Ir. B.G. Bosch (both building engineers) and the building was finished in 1972. For its time it was a technical masterpiece. Groenlo, Lichtenvoorde, and Aalten also join the music school, and in 2000 the name is changed in Boogie Woogie. This name refers to the famous painting of Piet Mondriaan. Mondriaan is important for Winterswijk because this famous painter lived from his 8th until his 20th in Winterswijk and it is said that he learned to paint here. With this new name, referring to the famous painting of Mondriaan, also new themes are added to the music school, like dance and theatre. It becomes more a cultural center than just a music school and refers to the cultural past of Winterswijk.



Fig 1.7 Music lesson in the music school (source: Nationalebeeldban

I. INTRODUCTION

1.2 PRECEDENT RESEARCH

ARCHITECTURAL BACKGROUND

WHAT WAS THE GENERAL ARCHITECTURAL TREND IN 1970S IN NETHERANDS?

WAS STICHTING BOOGIE WOOGIE AF-FECTED BY THAT TENDENCY?

As a student from a small Asia country, I was intrigued by Stichting Boogie Woogie. The form of the building, the same brickworks for interior and exterior, combination of wooden ceiling and bricks, everything was interesting.

However, during the tour in the building, I heard that this building is built in a typical 1970s Dutch style. Everything I thought interesting is not special for Dutch people and somehow it would be boring.

So before I start my research, I did precedent research about the 1970s Dutch architecture style. Although It is hard to define what the 1970s Dutch architecture style is, I classified a big stream of structuralism that is represented by Herman Hertzberger and Aldo van Eyck and a substream by the architects like Piet Tauber and Jos Bedaux who more particularly focused on the relationship between form and function. Namely, they have done "tailor-made architecture".

Structuralism

Structuralism is a response to the Nieuwe Bouwen. This style was very functionalistic and had sobriety and functionality as their most important items. Also, in the post-war period, materials were scarce, which enhanced this sober and often uniform architecture. Already in the fifties, critics against the Nieuwe Bouwen started. (Van Heuvel & Verbrugge, 1996, p. 279-281)

The magazine Forum, with since 1959 Jaap Bakema and Aldo van Eyck in the editorial staff, played a role in this. The opinion propagated in the magazine was that the minimal living circumstances that were determined in the pre-war period, had become the standard for social housing in 1945. Also, the architecture had no relation with the urban surroundings. In Forum they proposed more fantasy and less repetition in housing and for example bigger balconies for apartments that didn't have their garden. Aldo van Eyck pleaded attention for space experience: "Make of each window and each door a place, a cluster of places of each house and each city. Make of each house a small city and of each city a big house." Instead of big volumes, they wanted to return to the human scale with buildings constructed of smaller elements. Also, they wanted to remove the former separation between living, working, and recreation that leads to neighborhoods that were only busy during certain hours due to their mono function. (Van Heuvel & Verbrugge, 1996, p. 279-280)

The orphanage of Aldo van Eyck is seen as the first example of real structuralism in the Netherlands. The orphanage was built for the housing of 125 children in eight living groups. The building consists of an inner street with around it self-contained housing units. It is structured as a grid of columns and load-bearing brick walls, and the roof has some cupolas of concrete. But in its clear structure, it does refer to the work of Berlage and for example Sanatorium Zonnestraal of Jan Duiker. The floor plan with alternating spaces is made to use the sunlight as efficiently as possible. The spatial transitions from outside to inside and between spaces are very important in this design. (Van Heuvel, 1992, p. 16; Van Heuvel & Verbrugge, 1996, p. 280-281)

The Centraal Beheer building by Herman Herzberger is another very famous example of Dutch structuralism. In this design, the basis is a freely applied grid with towers at the corners and the main traffic routes are laid out diagonally and function as meeting places. The structural grid differs at each specific function. There are visual connections between different floors, and bridges connecting different places. Meeting places play a central role in the design. (Van Heuvel, 1992, p. 18-20)

The characteristics of structuralism were various and sometimes a bit contradicting.

- Attention to growth and cohesion. Sometimes buildings were very specific for a specific group like the Orphanage, but the Centraal Beheer Building had flexibility as an important character. The structure plays an important role in really structuring the building and showing the dimensions and rhythm of a building. Often a building was built up of smaller elements in a free and playful way

to add human scale.

- Building from the encounter. People play a central role and relations of users and encounters between them are very important. For example, low walls that invite you to sit down or look at the activities of others, or interior streets that make people meet.
- Multiple-use. The use of details that stimulate multiple uses, for example, extra deep window sills that function as seating spaces.
- Multiple land use and urban insertions. Often the new structuralist projects were placed in and designed regarding their existing urban surroundings. They also tried to repair or enhance existing structures by their structural additions.
- Urban grids, to replace the traditional plan and give a more free infill for diverse functions.
- Diversity in practice, as each architect designed different buildings and building complexes and they, could look quite different. (Van Heuvel, 1992, p. 20-26)

Piet Tauber

An important but not so famous architect of the second half of the 20th century was Piet Tauber.

A son of an architect, Piet Tauber already drew buildings since his childhood. He was born in 1927 and he studied architecture in Delft from 1946-1953, where then there were two main currents in the styles: the traditionalism of Granpré Molière and Berghoef; and the modernism of Van den Broek and Van Eesteren. In his studies and later Tauber followed his own path, he didn't belong to either of the ideologies. He didn't work in one style and that makes him hard to classify. (Keuning, 2012, p. 6-7)

In the speech he gave when he became a professor at the TU Delft he talked about "Building after Assignment" [Bouwen naar Opdracht]. With Assignment he meant the future function of a building: the use, connection to society, relation with the surroundings et cetera. All of this should work together and should fit the human scale. Also, for him five aspects were very important in each design: local, functional, physical, social and cultural aspects. The building should comply to all these factors, so every building will be very specific because the function, assignment etc. are specific. This approach led to tailor-made buildings that were very specific to their function. (Keuning, 2012, p. 6-7, 42-43)

One of his projects was the Provincial library of Leeuwarden. Tauber won a competition to design the library in 1958. The building consists of a horizontal volume with in the middle a more vertical volume for the book storage. (Keuning, 2012, p. 89)

Jos Bedaux

Jos Bedaux was born in 1910, his father was a contractor. He started to work for his father when he was 17 and follows drawing classes; and slowly he develops into an architect. He worked in a broad variety of styles. He started in a traditionalistic style, sometimes relating with classicism and later he started to work more in modernism. But always the traditionalistic and the modernistic are both visible in his works. Often more modernistic designs did have traditional materials or details; and often traditionalist designs had a modern touch as they did not follow historising styles. (Leenen & van Es, 2010, p. 8, 11-13)

Ratios and measurements were very important in his designs; and he gave big importance to the relation between the program and the spatial organisation. So again, a building should be specific for its function. (van der Ven, de Heer, Bergma, & Doms, 1989, p. 27)

1.3 RESEARCH QUESTION

Through the precedent research, I am interested in tailor-made architecture which means that the form of architecture is designed for the function very delicately.

And also I think my project building, Stichting Boogie Woogie, is also more on the Piet Tauber and Jos Bedaux side rather than structuralism. One of the reasons why I think like this is that this building is not focused on the multiple-use but focused on very specific functions.

So based on the precedent research and background controversy over the building, I formulated the research questions and proceed the research based on these research questions.

MAIN QUESTION

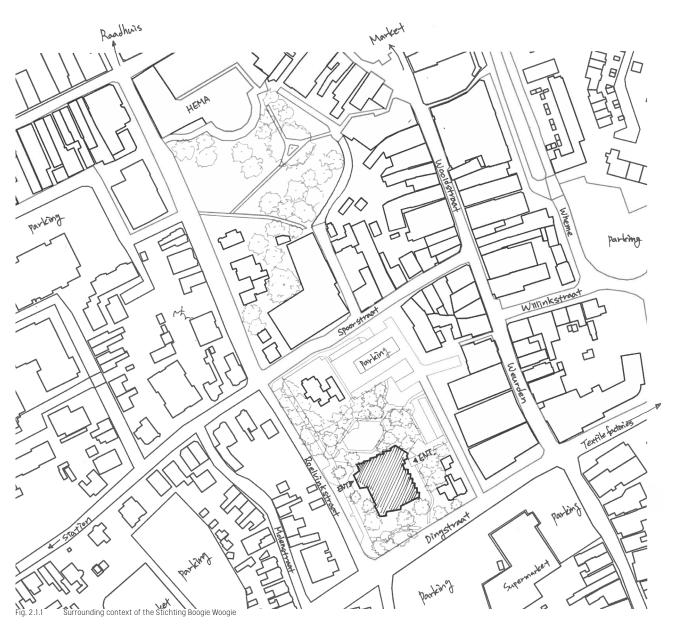
HOW DO FUNCTIONS INFLUENCE THE FORM OF THE BUILDING?

SUB QUESTION:

What kind of musical culture center is necessary in winterswijk?

What is the spatial value of Stichting Boogie Woogie? How the values are achieved and missed?





INTRODUCTION

The term 'Site' has different meanings but, according to Brand, site is just 'the geographical setting, the urban location, and the legally defined lot, whose boundaries and context outlast generations of ephemeral buildings.' (Brand, 1993)

In this analysis 'Site and Surroundings' refers mainly not only to the geographical location of the building but also to cultural relations with surroundings. Because I thought that this music school might have cultural influences for the community in Winterswijk.

I have done '2.1 Surrounding and Site' analysis with Lars Barneveld and Marloes Bier

2.1 SITE AND SURROUNDINGS

MUSIC NETWORK

DOES BOOGIE WOOGIE HAVE A NETWORK WITH NEARBY CITIES?

Boogie Woogie is an important music school in the Achterhoek. It has auxiliary branches in Aalten, Groenlo, and Lichtenvoorde.

In Aalten it is in event center De Hofnar. In the next half year, there are 14 theatre shows/concerts in the big concert hall. You can also rent the big concert hall for 1600 persons or two smaller rooms, one for events and one for meetings. Boogie Woogie uses some rooms in this event center for the music classes. Apart from that the local theatre association had shown there, a bridge club plays two evenings per week, a man choir practices every Monday and a music association also practices here. Next to this, the rooms are rented out for workshops and meetings of companies. ("Zaal Huren," n.d.) In Aalten they will stop the bonds with Boogie Woogie and stop the subsidies from august 2020. (Esselink, 2019)

In Groenlo (municipality Oost-Gelre) it takes place in Social-Cultural Centre de Mattelier. In this center, there is room for theatre, concerts, films, local associations, meetings, and workshops. For the next half of the year, there are 9 theatre shows or concerts planned, from local theatre to a concert about Simon and Garfunkel. There are about 2 films per week in the cinema hall in the center. You can rent out several different rooms, from 1-6 persons to the big halls of 300-400 persons. Also catering to the room can be arranged. Of these smaller rooms,

there are 4 rooms with sound insulation that can be used for music lessons. Two of the medium-sized halls, for 20 to 25 and from 25 to 75 persons, named Het Blik and Banninkhof, can also be used for dance classes. The biggest hall for 300-400 persons has a built-in podium for performances. Boogie Woogie teachers teach music here in this school. ("Gebruikers van de Mattelier," n.d.)

In Lichtenvoorde (municipality Oost-Gelre) this is also a music school, in the Patronaatsstraat 29. Boogie Woogie teachers also teach here. Oost-Gelre will keep the bond with Boogie Woogie but they halved the subsidies in July 2019 and may even stop the subsidies in half a year. (Kits, 2019a)They are content with the music education that Boogie Woogie offers but they want more tailored lessons, and they are not prepared to also pay for the big and costly building in Winterswijk or the plans of the Culture Quarter. (Esselink, 2019)

Muziekschool Oost-Gelderland: Doetichem, 's-Heerenberg en Ulft. The building dates from 1968, which is recently renovated. When it was built it was really modern with separate foundations per room so that sound leakage would be less and slanting walls for better acoustics. They have music classes for children from young to older, and also for grown-ups. These lessons are to learn a music instrument, classical instruments as well as pop instruments and also for bands or orchestras, and singing as well. They also have dance classes and music classes. Also here they want to merge it with the local cultural

center De Gruitpoort and theatre Amphion. In this merge, they want to use the music school less as that is the oldest building and is outside the center whereas the other two are in the center. But at least for the coming 5 years, the music school will stay in its building. (Haggeman, 2018)

Apart from these there are some smaller music schools and private instruments and singing teachers. So Boogie Woogie is the biggest in the region except for Oost-Gelderland, but one auxiliary branch is thinking about stopping the bonds and continuing with music education on their own.

Concluding, Boogie Woogie is an important music school in the east Achterhoek. It is the main school of the bond with Groenlo, Lichtenvoorde, and Aalten, but Aalten has plans to go on independently, and maybe Groenlo and Lichtervoorde too. If all the music schools that are connected to Boogie Woogie would disappear, people would have to go to Doetichem, which is quite far.

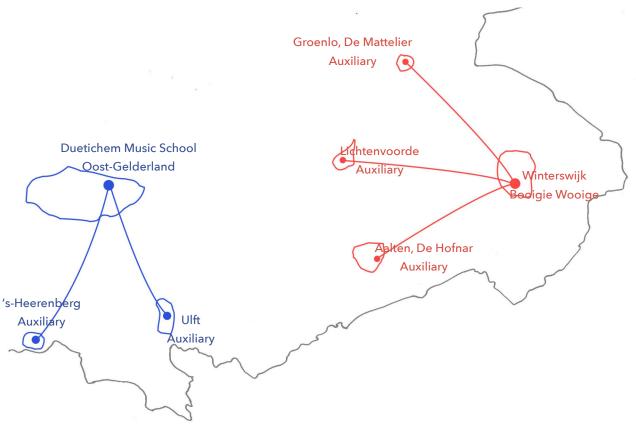


Fig. 2.1.2 Inventarisation of the music schools in the region and their connections, M. Bier

2.1 SITE AND SURROUNDINGS

MUSIC NETWORK - CONCERT HALLS

In Aalten event center De Hofnar there is a really big concert hall for 1600 people, it has no seats in it but a permanent podium.

In Groenlo in Social-Cultural Centre de Mattelier, there is a concert hall for 300-400 people. Cultural center De Gruitpoort in Doetichem has a theatre with about 100 seats and a podium. Theatre Amphion in Doetichem is used for plays and concerts but also rents out rooms. It can house up to 2000 people.

In Bredevoort in the Koppelkerk, a former church is a cultural center where also concerts are held. It also houses lectures, expositions, and a book café. Bigger concerts are held in the church hall and smaller ones in the café.

In Zelhem is theatre De Brink that has a middle-sized theatre hall.

Concluding, there are quite some theaters or concert halls in the region. In Winterswijk Boogie Woogie is important as the concert hall there is way smaller than that of theatre De Storm and therefore is used by another target group. But the halls in Aalten and Groenlo are about the same sizes so maybe people could go there.

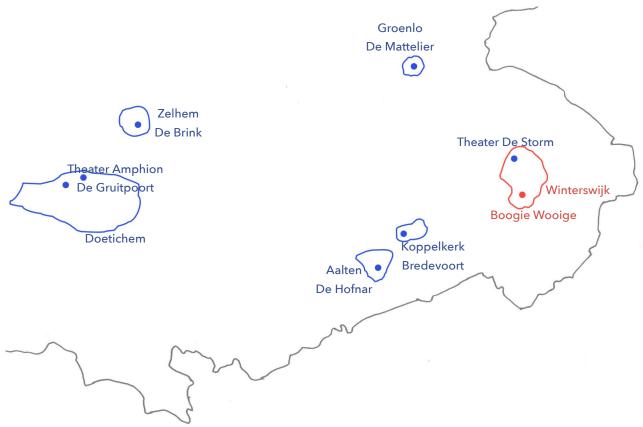


Fig. 2.1.3 Inventarisation of all the concert halls/theatres in the region, M. Bier

COMMUNITY

MUSIC AND OTHER CLASSES AND RENTING OUT ROOMS

The main purpose of Boogie Woogie is music classes, in smaller or bigger groups. A variety of instruments can be played, from trumpet to horn to guitar and drums. Also classical and pop singing lessons are given. Next to this, also ballet classes are given, and painting and yoga classes. So it is more than just a music school. During the days some of the classrooms are used but it is never really full except for Wednesday afternoons. At night also bands use the repetition rooms, and private parties can rent the rooms, for example, to practice. Also, it is possible to rent instruments. ("Aanbod Cursussen," n.d.) Johan, the janitor said (17-09-2019) that if the music school was open until later at night probably more bands would use the spaces to practice.

MUSIC GROUPS AND COURSES

Next to individual lessons, there are also music ensembles: A Big Band, a trumpet ensemble, some pop/rock bands, a pop/rock choir, and the "free time choir" and the "free time orchestra". They all rehearse about once per week in Boogie Woogie and give concerts some times per year. There are also short courses of a few weeks, for example about pop history. ("Aanbod Cursussen," n.d.)

SOCIAL PROJECTS

Quite some social projects are done in which Boogie Woogie plays a role: All these projects with the elderly are part of the volunteer group "Long live art East-Achterhoek".

- "Long live art": A project where volunteers visit the elderly in their own homes or elderly homes and do music or culture-related event with them. For the music-related events, the volunteers can practice their songs, etc. in Boogie Woogie.
- Philosophy group "Old is in": discusses growing old and how to make the best of it.
- Project "The reading brigade": two people out of a group of 25 volunteers go every two weeks to a care institution to read for the people there. This can be texts according to a theme or local stories, even in the local dialect.
- Project "Singing in the house": small groups of volunteers visit elderly homes and give small scale concerts with songs that the elderly can also sing along. The initial workshops and the learning of the songs happened at Boogie Woogie.
- "Culture and heritage pact Achterhoek" also works together with Boogie Woogie for certain events, for example, workshops about the heritage of Winterswijk with elderly and school children together. ("Lang Leve Kunst," n.d.)

2.1 SITE AND SURROUNDINGS

CULTURAL EVENTS IN WINTERSWIJK

VOLKSFEEST IN AUGUST

Every year the last weekend of August there is a folk festival [volksfeest] together with a flower parade. This is every year a big party for the whole village with the flower parade, music, food and drinks. Also, the other villages around Winterswijk have a folk festival yearly. Since 1543 there was a fair [kermis] but there was a lot of alcohol and excesses because of that so it was abolished in 1875. In 1876 an association was founded to plan a new festival with games, fireworks and a theatre play. In the first year, they work with trial and error and in 1880 the first folk festival was there! Since 1895 there has been a parade, but not always with flowers but with for example costumes, the flower parade started in 1906. (Vereeniging Volksfeest, n.d.)

KING'S DAY

King's day is also celebrated yearly in Winterwijk. Traditionally in the morning, there is a horse sale that has been there since 1988 and children can ride ponies, there is a fair and a concert for the children. (Vereeniging Volksfeest, n.d.)

Apart from this, there are no big yearly cultural events in Winterswijk. Of course, there are activities like concerts or theatre plays in theatre De Storm or Boogie Woogie or the Stone Quarry [Steengroeve].

2.1 SITE AND SURROUNDINGS

FUNCTIONS

WHICH NEARBY BUILDINGS HAVE CULTURAL FUNCTIONS IN WINTERSWIJK?



Fig. 2.1.4 The map of functions of nearby buildings

SERVICE THEATRE SKOPEIN

This small cinema is the only cinema in Winterswijk. It has three halls that differ in size. In two of the halls it is possible to order food or drinks from your chair. On Tuesday it focuses on film house movies and the rest of the week it shows films that are also in the bigger cinemas. The Tuesday nights are cheaper than the other nights with €7,00 opposing to €10,50, to make it assessable for more people to watch the as they call it "films with an added value". Every month there is an opera or ballet show to be seen on screen. The other cinemas in the neighbourhood are in Doetichem and Enschede.

In the theatre there is also a tapas restaurant. A hall in the cinema called The Gallery can be rented out, that fits until 200 people. Also it can be rented in combination with catering

or festivities, quizzes or theme parties. The cinema is located in the city center, very close to the market at Meddosestraat 4-8. BRO did a research about the capacity of the cinema in 2014 and concluded that there is now a capacity in the city for a cinema with 355 until 640 seats, and if it would move to a location that is better reachable by car even 250 seats more. The current owner of the cinema also owns about 30 buildings in the area around the cinema. He did do research about changing a location in the past but the cinema runs well in this building so they keep it like this.

There are plans to make the Culture Quarter with the cinema in it. (Marktscan Station locations Winterswijk - final report dated 14 August 2014 - BRO)



LIBRARY

The first public libraries for the people were founded around 1900. In Winterswijk in 1904 the Volksbibliotheek der Maatschappij tot Nut van 't Algemeen was founded. Every Saturday afternoon they lended out books for free. In 1919 the Openbare Leeszaal en Bibliotheek te Winterswijk (public reading room and library of Winterswijk) was founded with private money. It was very popular. In 1980 the name was changed to Openbare Bibliotheek Winterswijk. (eeuw 119-122). The library used to be located on the Spoorstraat in a building of 1600 m2. Nowadays it

The library used to be located on the Spoorstraat in a building of 1600 m2. Nowadays it is housed in a school building at Parallelweg 5 and the reading room and office space together cover 730 m2. The main problem is that the visibility is reduced greatly as it is

not in the center anymore, and the number of visitors and volunteers has decreased. The plans of the Culture Quarter are greeted with enthusiasm by the library. The library wants to function as a meeting place, for reading a newspaper and drinking a cup of coffee and think that they contribute liveliness to the plan of the Culture Quarter.

The library lends out books and next to that offers courses, like reading in Dutch or computer knowledge. In this it also fulfills a social function but that would have been better if the library would be on a more central location.



FUNCTIONS

VILLA MONDRIAAN

This villa at Zonnebrink 4 was where Piet Mondriaan, a very famous Dutch painter, lived in Winterswijk. He lived in Winterswijk from his 8th until 20th, from 1880 until 1892. The villa was bought in 2013 and renovated and now houses a museum about Mondriaan. One part of the museum houses a permanent exhibition of the early work of Mondriaan in which his development from figurative to really abstract painting is visible. In the other part, In the house itself, there is an exhibition about the family Mondriaan in which he grew up, and the painters that taught him, and his relationship with Winterswijk and the landscape. In a newly built pavilion there are exhibitions of contemporary art. Just as when the Mondriaans lived

here, in the gardens vegetables and fruits are grown. (Villa Mondriaan, n.d.) Mondriaan is very important for Winterswijk. You can see that in the cultural center Boogie Woogie that is named after a famous painting by Mondriaan, and by for example the trash bins that have patters that refer to paintings of Mondriaan. By these things, Winterswijk wants to refer to its cultural past with this main figure.



THEATRE DE STORM

This theatre has his origins in association for the folk festival in 1876. That association also realised their own building in 1889, and concerts and festivities were held there. In 1966 that building was destroyed by a storm, and a solution had to be sought. A new cultural center was designed by architects Bernard Bijvoet and Gerard Holt and built in 1969. The centre attracted more and more national artists, and in 2009 the name was altered to De Storm (the storm) after a contest. ("Over ons theater," n.d.)

Per year there are about 300 activities, of which 100 professional plays or shows. There are about 70 thousand visitors per year. There are halls of different sizes, the big gest one fitting about 1500 people but also



smaller is possible. It is also possible to rent the theatre for events, including catering. The scale of this is way bigger than of Boogie Woogie. ("Over ons theater," n.d.)

THE QUARRY

The other theatre in Winterswijk is the Quarry [de Steengroeve]. It is possible to visit this quarry, of which the stone layers are 250 milion years old. For three weeks in summer, the organisation quarry theatre can use the quarry. The first week everything is built up, then there is a week with about 4 shows, and then in a week it is taken apart again. In the theatre work 12 professionals, helped by about 400 volunteers. (Kits, 2019c)

In conclusion, some buildings have cultural functions in Winterswijk. However, the buildings hardly conduct the functions very well because of the problems like locations, size of the buildings, and not enough space for the community. Namely, in the city center of Winterswijk, there is no cultural building that can be the gathering place for the public and community.



2.1 SITE AND SURROUNDINGS

CHRONOMAPPING

WHAT WAS THERE BEFORE THIS BUILDING WAS BUILT? WHEN WERE THE SURROUNDING BUILDINGS BUILT?

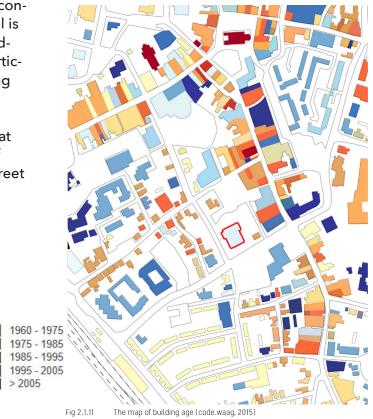
In Flg. 2.1.12, the music school was situated on the corner of the site which had a big open space with the park still existing and two small houses. Between the music school and those two buildings, there are tall barriers with walls and trees. Since these two buildings are residential, they might wanted to have sound barriers.

Not only those two buildings but also a lot of surrounding buildings have longer histories than the music school. Old buildings and newly built buildings along the streets have similar shapes and materials to keep the context of the city. However, the music school is located a bit apart from surrounding buildings so that the building could have a particular form that is different from surrounding buildings.

In Fig.2.1.12, you can see that Roelvink straat was newly created before 1955. That is the reason why the buildings in front of Boogie Woogie that are older than the street are not facing the Roelvinkstraat.

HOW HAS URBAN FABRIC CHANGED AS THE INDUSTRIAL CONTEXT CHANGES?

In Fig,2.1.12, Spoorstraat which is located above the site was the main big street in 1930 because this street connects the station and main shopping street. However, from 1955, Dingstraat which is located under the site got bigger than Spoorstraat because Dingstraat is wider for the transportation of vehicles and this street connects from station to the textile industrial complex while Spoorstraat is narrow and only connected to the shopping street.



< 1800

1800 - 1850

1850 - 1900

1900 - 1930 1930 - 1945

1945 - 1960

SITE AND SURROUNDINGS

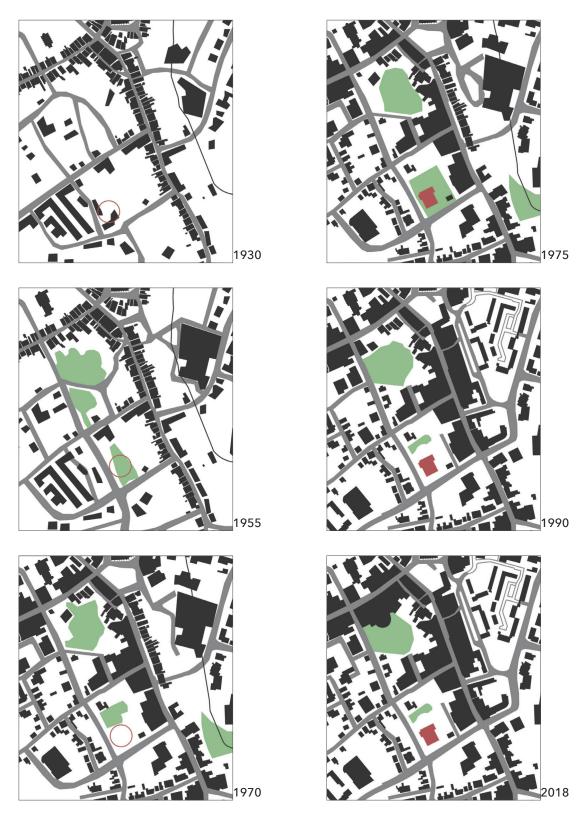
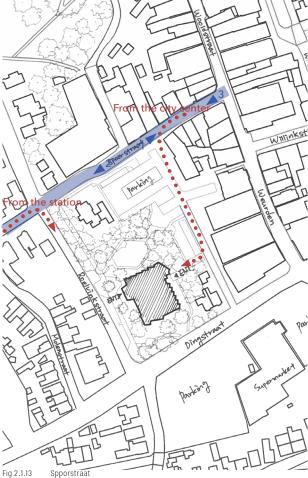


Fig 2.1.12 Chronomapping, M.Bier

2.1 SITE AND SURROUNDINGS

STREET PROFILE

SPOORSTRAAT





WHAT IS DIFFERENT ABOUT THE STREETS AROUND THE SITE?

While Spoorstraat used to be one of the main straat which have a very long history in Winterswijk, there is not much traffic on this street at this moment.

Along the street, there are some small retail and big apartments with a big supermarket. Although this street connects the station and the shopping street(Wooldstraat), the main purpose come to this street is to use the parking lot behind the music school.

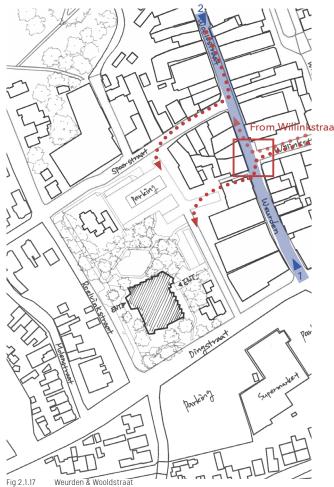




SITE AND SURROUNDINGS

STREET PROFILE

WEURDEN & WOOLDSTRAAT





WHY IS THERE A DIFFERENCE OF THE NUMBER OF USERS BETWEEN UPPER SHOPPING STREET (WOOLDSTRAAT) AND LOWER SHOPPING STREET(WEURDEN)?

Wooldstraat is the main street with the market place as a center. This street is one of the oldest streets in Winterswijk and there are a lot of commercial buildings along this street. Weurden starts from the place where Wooldstraat and Willinkstraat meet so that it feels like one continuous street.

Even though Weurden is continued from Wooldstraat, the atmosphere of these two streets is quite different. There are always fewer people than Wooldstraat. This is not only because Wooldstraat is closer to the market place, but also a lot of people who come to Winterswijk through Willinkstraat turn left to go to the city center. On the Willinkstraat, there is a big parking lot. So many people come from this street.

Also, there is a very small alley from Will-inkstraat to the site but this is so small and there is nothing special to attract people to come to the site. The greenery of the site is blocked by the buildings on the Weurden.

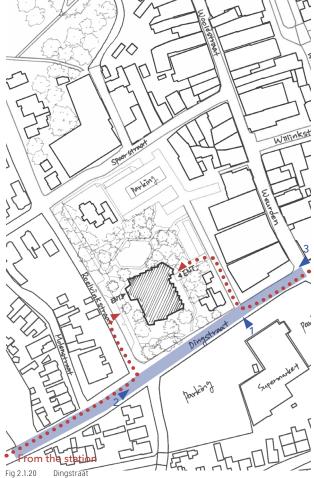


Fig 2.1.19 Weurden & Wooldstraat 2

2.1 SITE AND SURROUNDINGS

STREET PROFILE

DINGSTRAAT





Dingstraat is the main street for bikes and vehicles whereas there are not many pedestrians on this street. Because this street connects the station and industrial area as well as connects Winterswijk and other cities. There are a big supermarket and parking lots across this street and over the market and parking lot, there are a lot of residential

There are a big supermarket and parking lots across this street and over the market and parking lot, there are a lot of residential buildings. Therefore, people who use a bicycle or car normally come to the music school through this street.



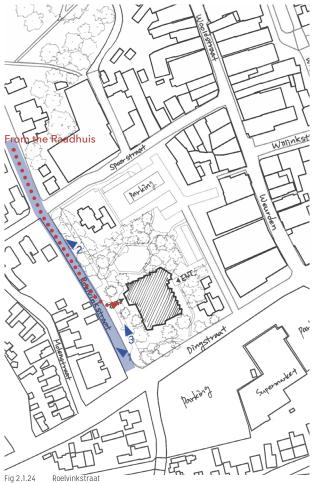
Fig 2.1.21 Dingstraat 1



Fig 2.1.23 Dingstraa

SITE AND SURROUNDINGS

ROELVINKSTRAAT





WHY DID THE ARCHITECT DESIGN A MAIN ENTRANCE TOWARD THIS STREET?

Roelvinkstraat is the newest street out of the streets near the site.

Along the street, there are mainly small residential builidngs. This street is very quiet and peaceful because lack of commercial builidngs. There are Raadhuis at the end of this street and also Jacobuskerk.

The architect made the main entrance toward this new street. As the entrance is the only entrance for the buildings on this street, the music school can have a very quiet and peaceful entrance in the park.



ig 2.1.25 Roelvinkstraat 1



2.1 SITE AND SURROUNDINGS

GREEN NETWORK

Is there any continous greenery in the city?

Along Roelvinkstraat there is a green network. This long green line which is penetrating the city center of Winterswijk makes the whole city center vibrant.

From the Raadhuis to the music school, not only these two buildings and Jacobuskerk have a lot of green areas but also behind of Hema building there is a very big park. So there are many tall trees and parks along this street.

This street has very big potential to be better by the strong connection from Stichting Boogie Woogie to the Raadhuis which is one of the main places in the city cuz this street already has the strong green connection in the city center where people can take a rest and refreshing their feeling just by walking along the street.





Urban section

SITE AND SURROUNDINGS

IN-BETWEEN SPACE OF TWO STREETS

Two streets, Wooldstraat&Weurden and Roelvinkstraat have quite different characteristics.

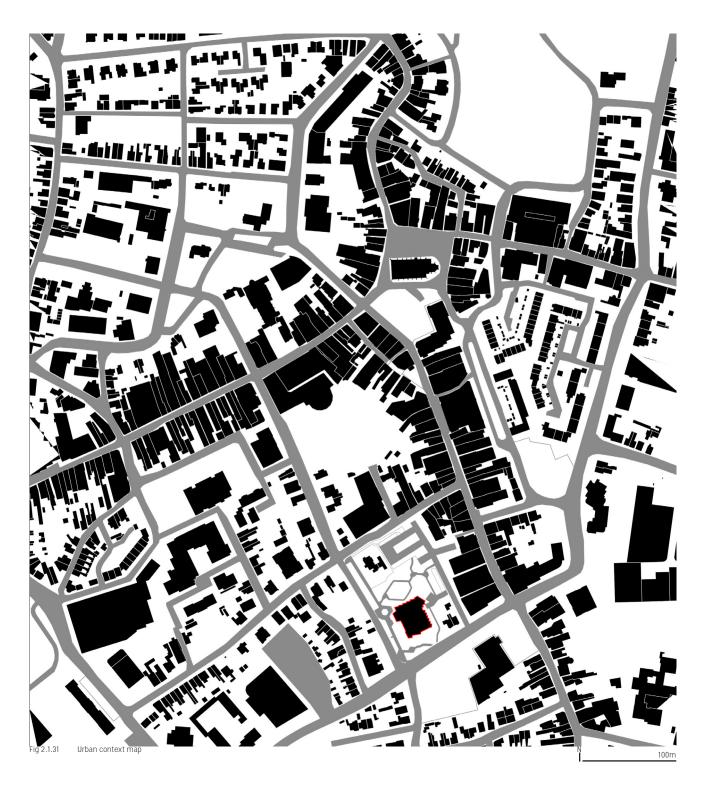
Wooldstraat&Weurden has a lot of retail and commercial buildings whereas Roelvinkstraat is a quiet and nature-friendly street with many tall trees and parks. The Raadhuis and Boogie Woogie are located on the starting point and the endpoint of these two different streets meet each other.

So both of these two building sites can be the buffer spaces for these two different streets and these two sites can have both characteristics of those streets. Thereby, the Raadhuis and Boogie Woogie could make a huge complex that has not only commercial and natural functions but also some more additional functions

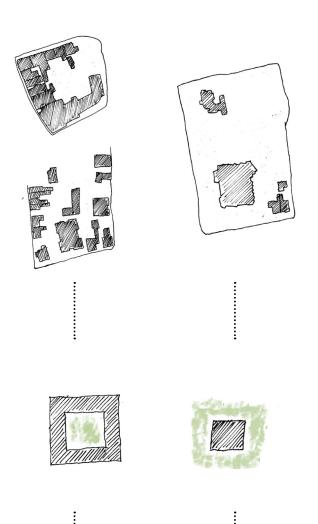


2.1 SITE AND SURROUNDINGS

URBAN CONTEXT



SITE AND SURROUNDINGS

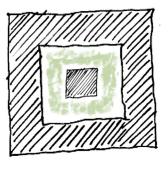


WHAT IS THE DIFFERENCE BETWEEN NEAR-BY BUILDING BLOCKS AND THE SITE OF STICHTING BOOGIE WOOGIE?

When it comes to building blocks on streets, generally buildings are located along the street. And this arrangement of buildings makes open spaces or a courtyard in the block.

In contrast, Stichting Boogie Woogie and its block have reversed composition. The building is located in the middle of the block and a park and many tall trees are surrounding the building. Due to this fact, Stichting Boogie Woogie is covered with tall trees so that it is a bit hard to look out that building from outside. However, this reversal of the building and greenery give rest space and open space for the surroundings. So eventually, this reversed block can be the big courtyard when you look at it on the large city scale.





In the city scale

2.1 SITE AND SURROUNDINGS

LANDSCAPE

WHAT IS THE RELATIONSHIP BETWEEN PARKS AND BUILDINGS?

The site has a lot of tall trees and these trees covers building facades so that it is a little bit hard to recognize that there is a music school when you stay away from this building. These tall trees not only offer greenery to the site but also have some practical functions. For example, these trees can be sound barriers not to bother neighborhood in the sites. And also these trees make this building isolated from surrounding contexts. The musical performances in the concert hall are very special experience for both visitors and performers. It is time to dive into another world full of sounds. So people can feel more like in the special place stayed away from reality through coming to this isolated building covered with tall trees.



The site has a very big difference in summer and winter because the building is covered with many huge trees. So in summer, the building is covered with leaves of trees whereas the building facade is revealed in winter.

This difference makes various sceneries of the building.











SITE AND SURROUNDINGS





Fig 2.1.38 Northwest facade of Boogle Woogle

Fig 2.1.39 Southeeast facade of Boogie Woogi



Fig 2.1.40 This is a picture from the parking lot behind Boogie Woogie. The building is covered by trees entirely

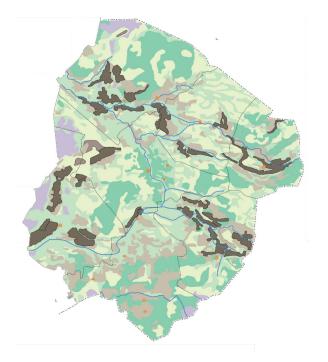
2.1 SITE AND SURROUNDINGS

GEOGRAPHICAL SITUATION OF WINTERSWIJK

The old Winterswijk originated on a drifting sand ridge along the Whemerbeek. In the midst of centuries-old farmland.

In the Early Middle Ages there was a court farm of the Münsterse St.-Mauritiusstift with a church dedicated to St. James. Clergymen, artisans and traders settled in the shadow of this Jacobskerk, resulting in a modest village center. In the Late Middle Ages, Winterswijk was one of the larger archdiocesan of the diocese of Münster and an important spiritual center. The village was fortified by a canal and possibly also by a heavy brick wall.

The surrounding villages mainly consisted of farming communities. The farms were initially on or along the larger sand ridges. Unlike in Prehistory, they had a fixed location during this period. Probably from the Carolingian period also fields and farms were founded at smaller sand ridges. This laid the seeds for what we now call the old hooves landscape. The sandy ground provides a strong layer for buildings. As a result, in Winterswijk, there are many buildings which have shallow foundations instead of pile foundations.



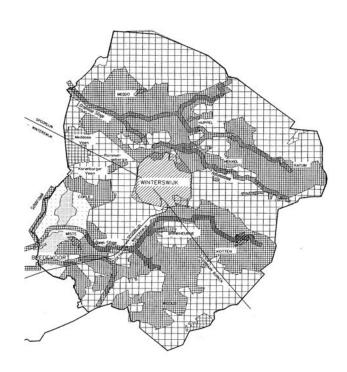


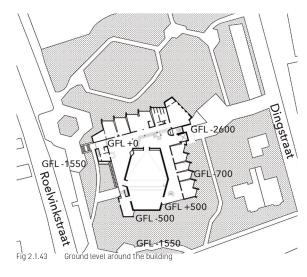
Fig 2.1.41/ Flg 2.1.42

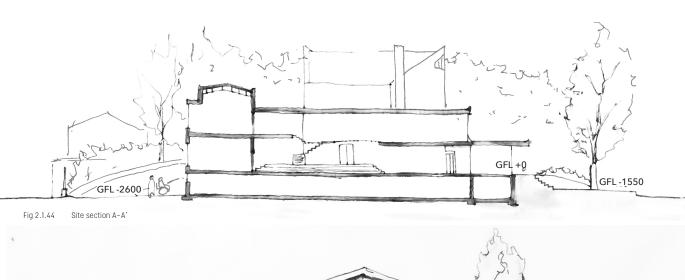
Geographical situation of Winterswijk (Cultuurhistorische Atlas Winterswijk, 2009)

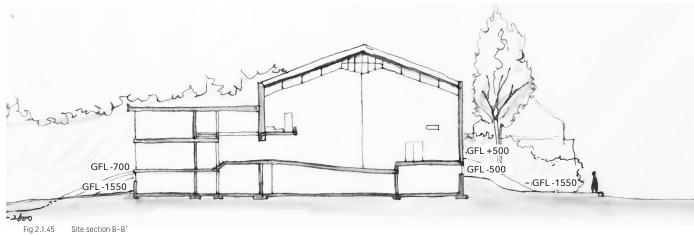
SITE AND SURROUNDINGS

HOW DID THE ARCHITECT DEAL WITH GROUND LEVEL DIFFERENCES IN THE SITE?

On the site, there are a lot of level differences. This level differences basically come from the level difference between the Roelvinkstraat and Dingstraat by about one meter. The architect designed the ground floor level of the building 1550mm higher than the ground level of the Roelvinkstraat. Thereby the level difference between the ground floor and east part of the site is about by 2600mm. So Roelvinkstraat is connected to the ground floor of the building whereas Dingstraat is connected to the basement of the building.







SITE AND SURROUNDING CONCLUSION

Stichting Boogie Woogie is located on a very interesting site where the commercial street and natural, quiet street meet each other. These two streets which are continued from the Raadhuis have different characteristics as well as history and functions.

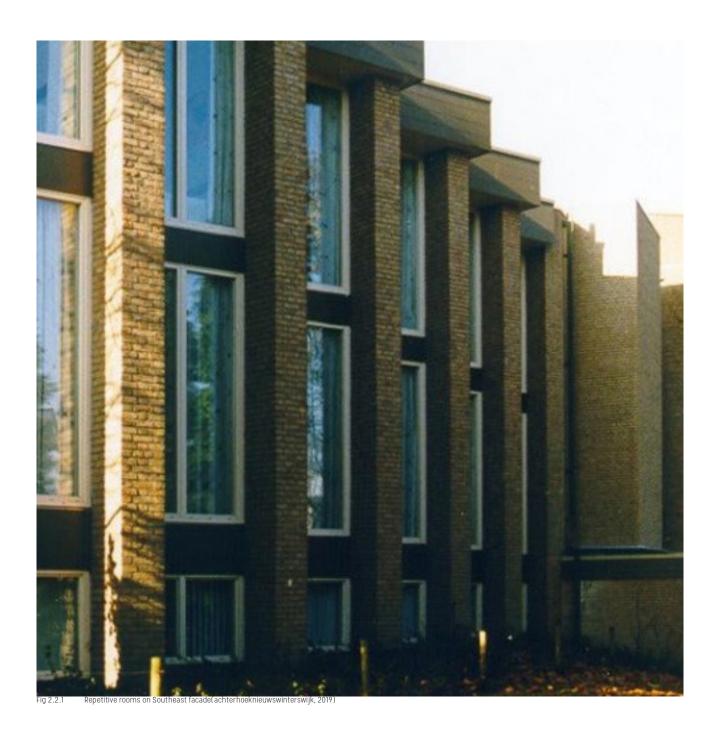
Surrounding trees and park make this site can be a refreshing space in the city. The building block has reversed form compared to surrounding building blocks. This reversal gives a different atmosphere in the city and can play a role as a courtyard in the city.

Ground level difference and a lot of tall trees make this site more interesting. The form of the building accept this level difference and connects these two different ground level in the building. Tall trees form this building like an island which helps the building and site to be more vibrant and attractive by isolating this building which has a function of the music hall from surrounding contexts.



(Cultuurkwartier Winterswijk Haalbaarheidsstudie, Explorius, 2018)

2.2 STRUCTURE



STICHTING BOOGIE WOOGIE ANALYSIS STRUCTURE

2.2 STRUCTURE

INTRODUCTION

Without a structure a building cannot remain standing. The structure consists of the foundations and the load-bearing elements. In fact, 'they are the building' and, therefore, 'perilous and expensive to change' according to Brand.

('Designing from Heritage' Kuipers, M. & De Jonge, W., 2017)

Basically structure of Stichting Boogie Woogie consists of load-bearing walls and partly concrete column-beam systems. And also, the materials for load-bearing walls are materials for Skin and Surface so this is the reason why this structure analysis is the most important in this research.

There are various kinds of structure in this building. So the main point of the structure is about figuring out how different structure systems are combined, and classifying important essential building structures and changeable parts.

I did this analysis by taking into account the below questions.

Does the structure have the possibility of extension?

Can I change the rhythm of repetitive rooms that are the same size?

How was the elevator structure extended?

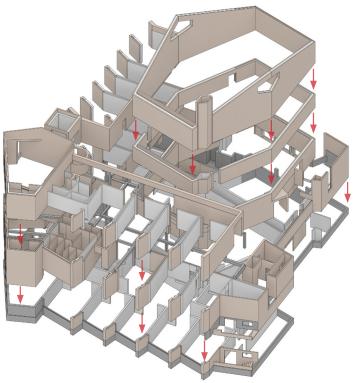
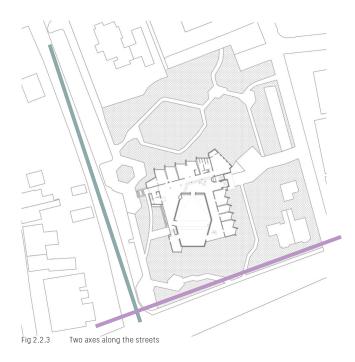


Fig 2.2.2 Load-bearing wall system

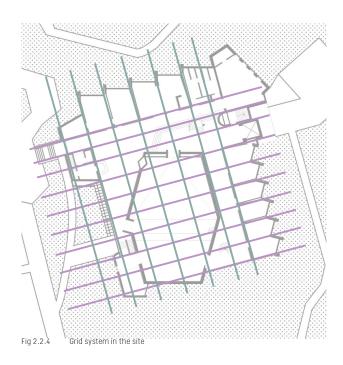
GRID SYSTEM



WHAT IS THE GRID SYSTEM OF THIS BUILD-ING? WHAT CAN THIS BUILIDING GET FROM THE GRID?

Gridlines come from two perpendicular streets. Stichting Boogie Woogie is located in the corner of the block where Dingstraat and Roelvinkstraat meet. The main lines are parallel to these two streets. Based on these two lines, the architect adds gridlines more by rotating 15 $^{\circ}$ and 30 $^{\circ}$. These diagonal lines create the rhythm of the facade and the diverse shape and size of spaces in the building.

These diagonal lines are extended to the landscape of the building. The streets and flowerbeds in the site block have also hexagonal shapes and it gives whole site and the builidng continuity.



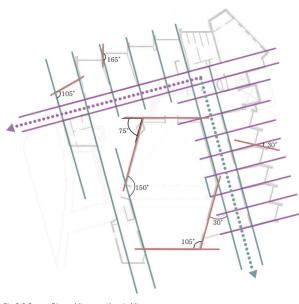


Fig 2.2.5 Diagnal lines on the gird lines

2.2 STRUCTURE

LOAD-BEARING SYSTEM

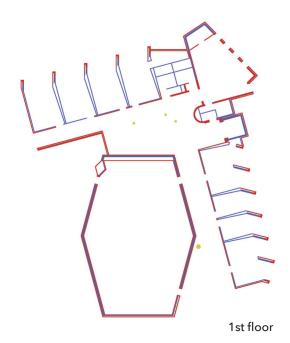
HOW ARE DIFFERENT STRUCTURAL MATERIALS COMBINED WITH EACH OTHER?

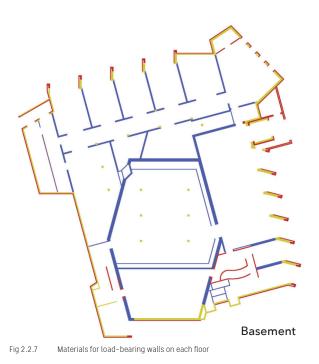
Mainly, there are three different types of structural materials are used for this building: poured concrete, concrete blocks, and brickworks.

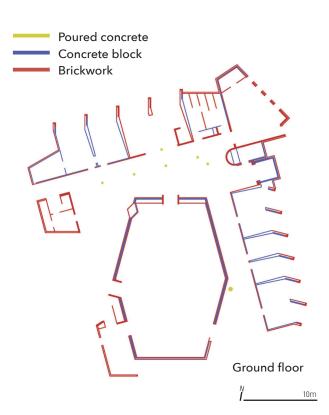
Poured concrete is used for the basement so that structure in the basement and upper two floors are quite different.

To make load-bearing walls in the basement, generally concrete blocks are used and bricks are used for only a few walls.

On the other hands, on the ground floor and the first floor, brick masonry cover almost every load-bearing walls except for some walls in the lesson rooms







Foundation, Slabs, and base of the load-bearing wall system are constructed with poured concrete. The basic combination of the load-bearing wall is shown by the diagram on the right. Outline walls of the building are built with poured concrete in the basement and bricks and concrete blocks are stacked on this concrete wall. You can check the more specific details of the combinations on the next pages.

Although this poured concrete wall and concrete slabs make the basic shell of the building, inside of the building, only a few columns are made with poured concrete.

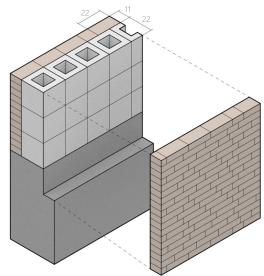


Fig 2.2.6 Basic combination of materials for Load-bearing Walls.

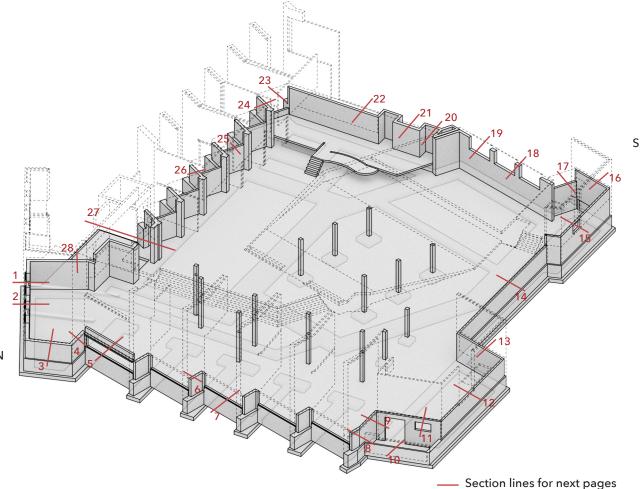
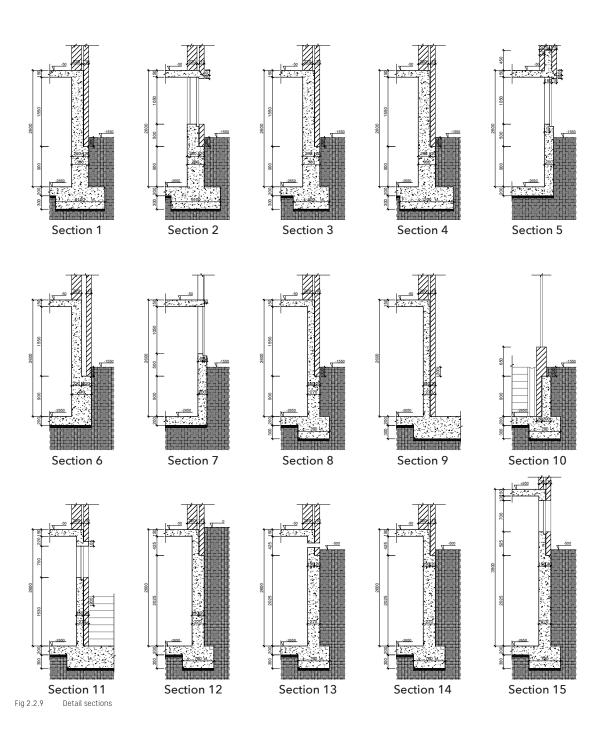


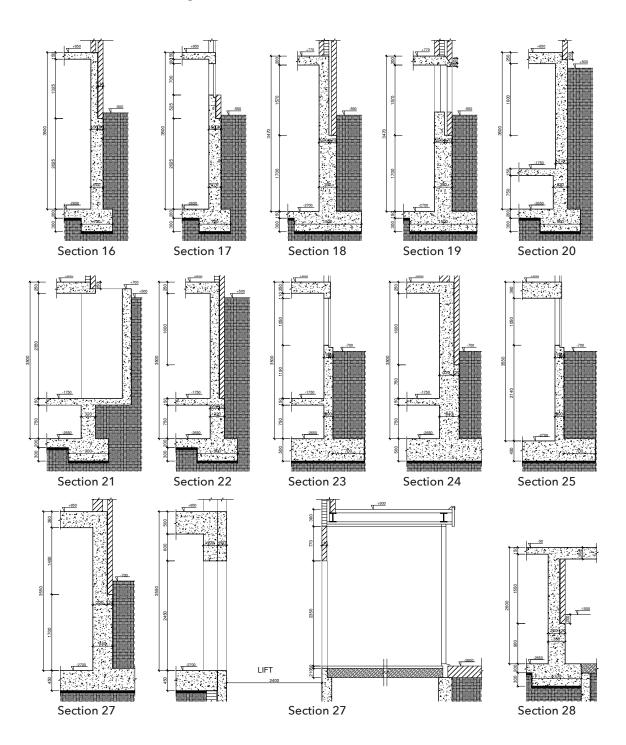
Fig 2.2.8 Poured Concrete on the Basement

2.2 STRUCTURE

These detail section drawings show not only how different materials are combined but also how the building structure has a relationship with the ground. As you can see in these drawings, this building has very complicated details to get along with ground level differences



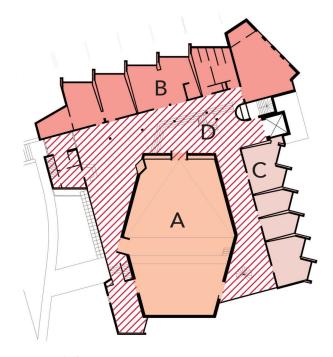
As I researched in 2.1 Site and Surroundings, this music school was constructed on the sandy ground which provides a strong layer for building. As a result, this building has shallow foundations with grade beams.



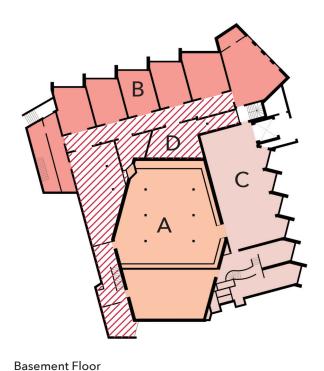
2.2 STRUCTURE

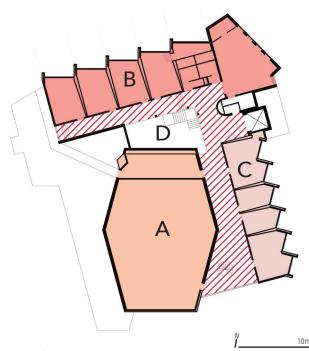
LOAD-BEARING SYSTEM

In this building, not only the basement floor has a different structure system with the upper two floors but also structure systems for the concert hall, lesson rooms, and in-between space are quite different. Therefore, as it is hard to look into all the structures at the same time, I divided the building into four parts which have the same structure system for further analysis.



Ground Floor





First Floor

Fig 2.2.10 Dividing the structures as four parts

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'A'

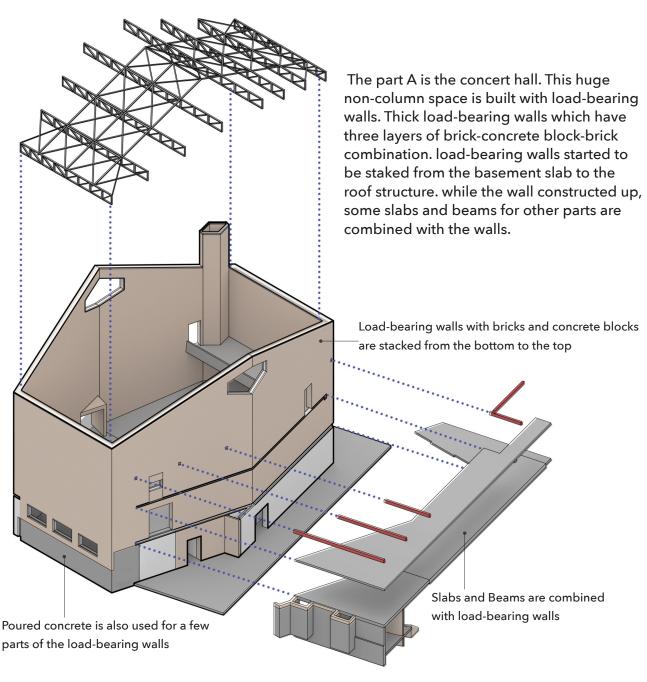
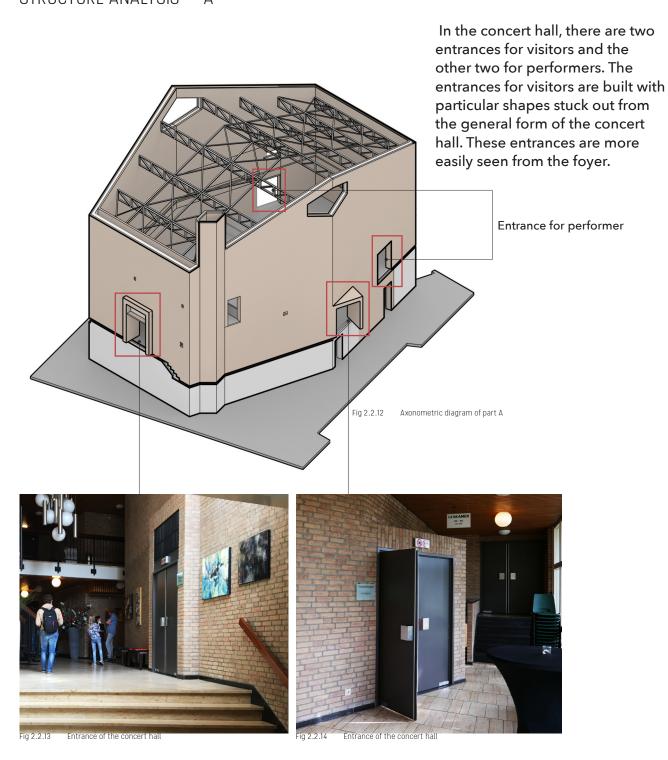


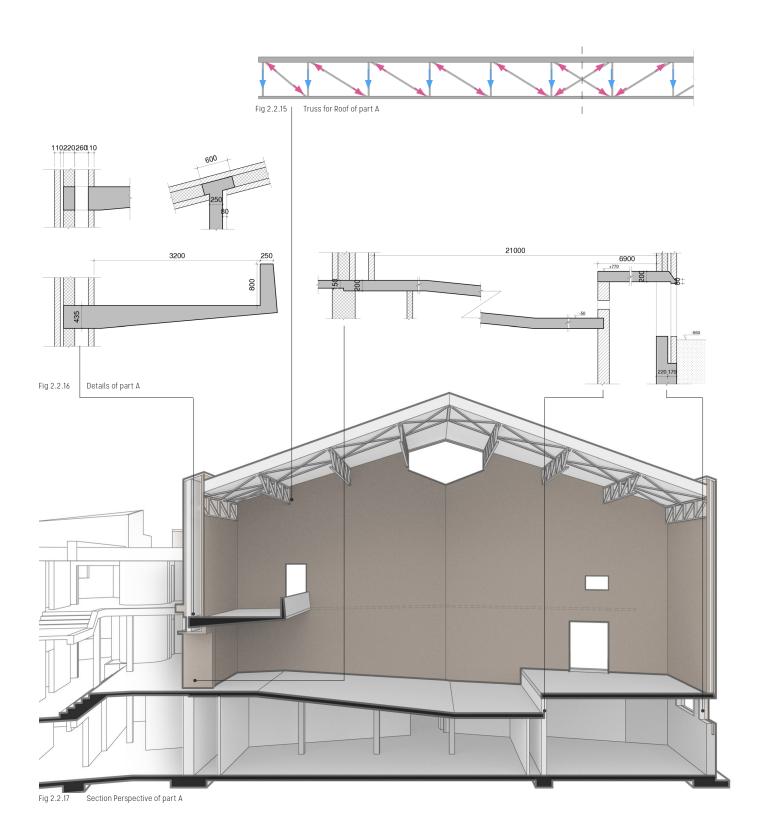
Fig 2.2.11 Axonometric diagram of part A

2.2 STRUCTURE

STRUCTURE ANALYSIS - 'A'



STRUCTURE



STICHTING BOOGIE WOOGIE ANALYSIS STRUCTURE

2.2 STRUCTURE

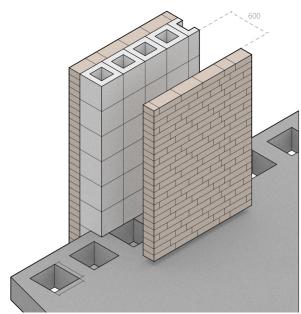


Fig 2.2.18 Construction for load-bearing wall and In-between gap for installations for ventilation

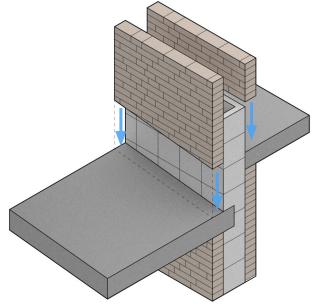


Fig 2.2.19 Construction for load-bearing wall and slab of the concert hall

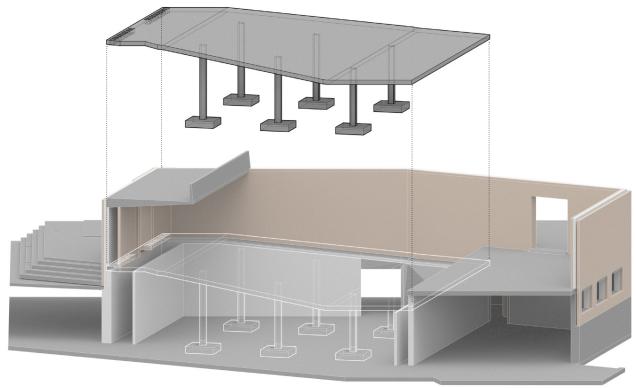
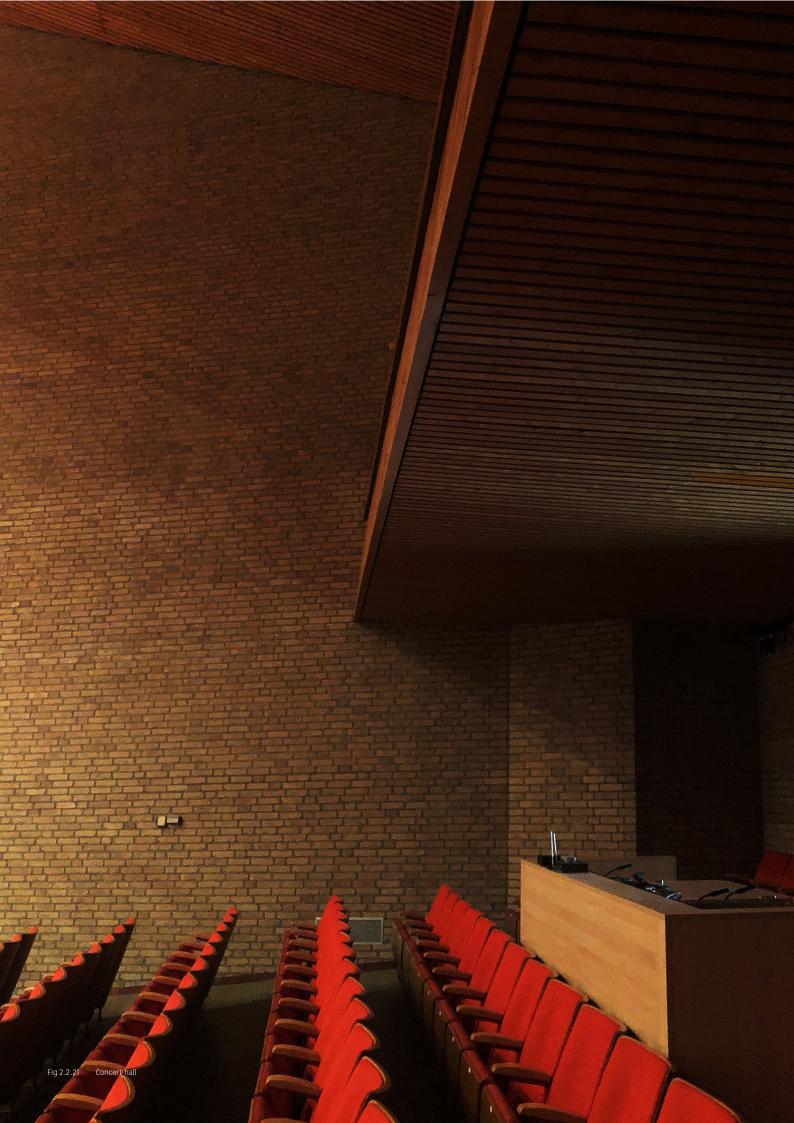


Fig 2.2.20 Section diagram of the concert hall slab



2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'B'

Part B is the repetitive lesson rooms on the northwest facade. On each floor, this part have 4 units in the same size, one bigger room with the same shape with the unit used as a toilet, and at the end of the part, there is an octagonal room. Thick load-bearing walls that are separating units start from the basement.

Repetitive rooms on the first floor and the basement floor are used as lesson rooms whereas the rooms on the first floor are used for office works and a small hall with wardrobes.

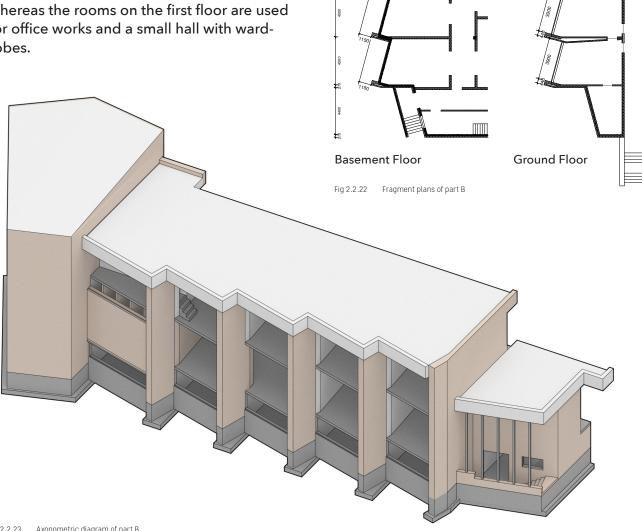


Fig 2.2.23 Axonometric diagram of part B

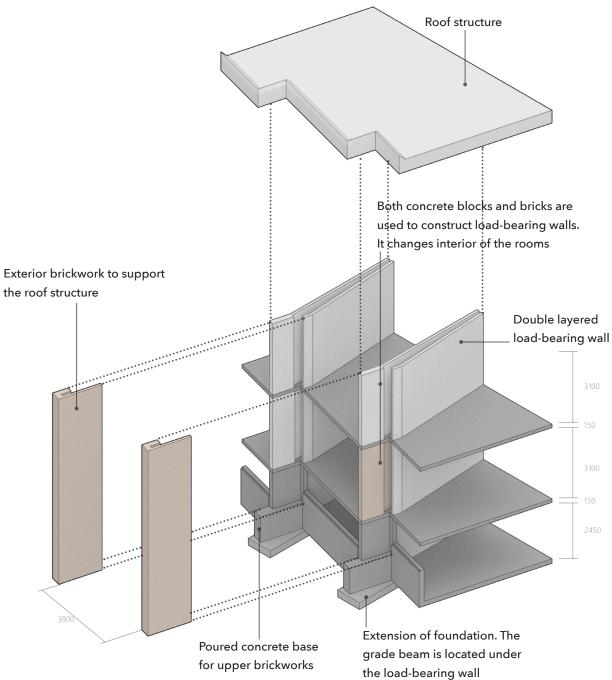


Fig 2.2.24 Construction for a basic unit of part B

2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'B'

Generally, all the structure in part B has a load-bearing wall system except for the hall on the ground floor. On the first floor, the load-bearing wall turns into the beam-column structure to integrate two rooms as a hall. And also, two rooms at the end of the facade have different shapes and sizes. Facades on the ground floor and first floor are totally open and there are windows in the basement as well for daylight.

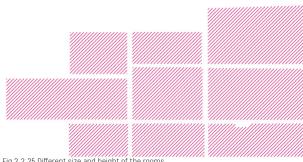
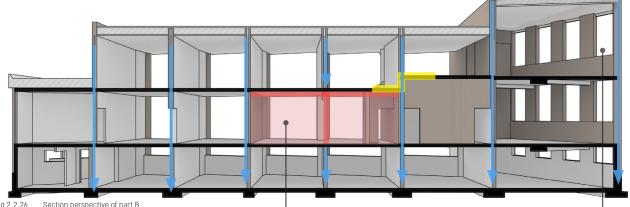
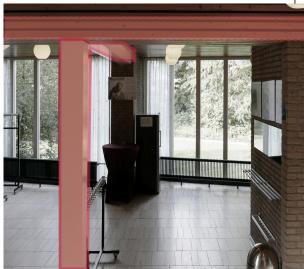


Fig 2.2.25 Different size and height of the rooms



Section perspective of part B



The hall on the ground floor with wardrobes



The octagonal room with a high ceiling

STRUCTURE

To make this particular shape of the room, this room needs additional beams.

On the other hand, other rooms do not have any beams.

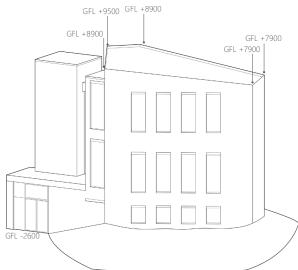
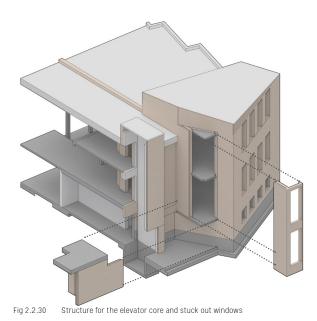
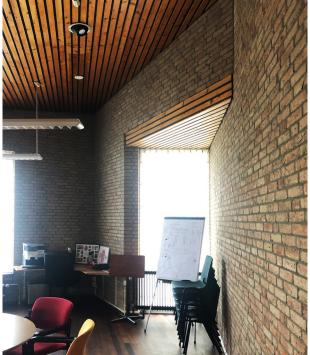


Fig 2.2.29 Different levels of the roof corners of the room





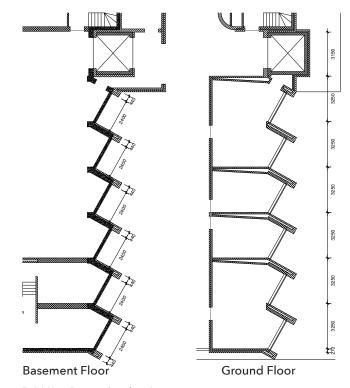


2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'C'

Part C has a similar shape with part B. This part consists of the repetitive lesson rooms on the northeast facade. This part has 6 units in the same size on each floor. The ground floor and the first floor have entirely the same composition. On the other hand, the basement has one integrated big room for a ballet studio. Compared to the unit in part B, the unit in part C is smaller and more closed to the outside. So to have enough space for musical instruments, two units are integrated as one room.



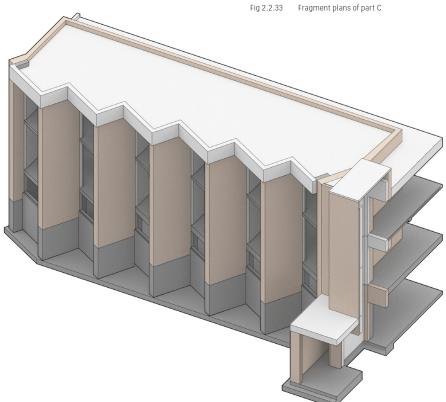


Fig 2.2.34 Axonometric diagram of part C

In the basement, part C has integrated one big room for ballet studio whereas rooms in 'B' are continued as the same size from the bottom to the top. And in this ballet studio, there are no columns and no beams. So for the wide span without any support, the thicker slab than other slabs is used.

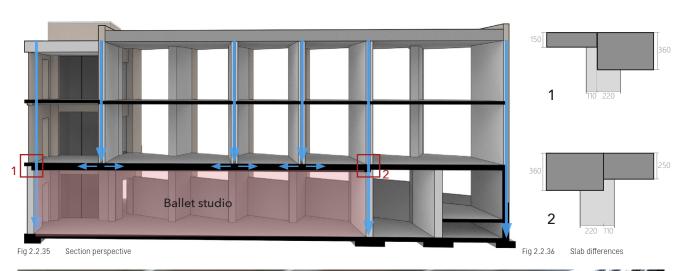




Fig 2.2.37 Ballet studio (Jan Ruland van den Brink, n.d.)

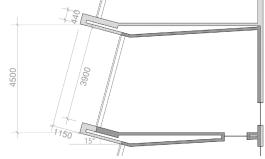
2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - COMPARISON BETWEEN 'B' AND 'C'

Compared to the unit in part B, the unit in part C is smaller and more closed. Facade walls are bent more and it makes more various rhythm when you look at this from outside.

There are also height differences between part B and part C. The ground floor level of part C is 900mm higher than part B and the first floor level is 700mm higher.



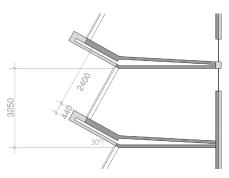
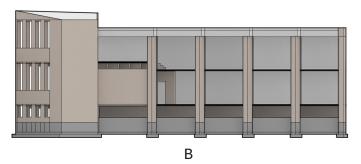


Fig 2.2.38 Measurements of the unit in part B and C 2900 700 900 3140





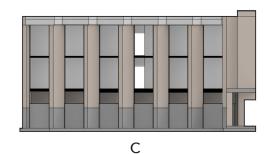


Fig 2.2.40 Different rhythm of the facade

STRUCTURE





STICHTING BOOGIE WOOGIE ANALYSIS STRUCTURE

2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'C'

WHAT IS THE PURPOSE OF THE SPACE BETWEEN THE WALLS? WHY IS IT EMPTY?

This gap is not to make two walls parallel. When it is parallel, this is not good for the acoustics. On the other hand, when it is not parallel, two walls make different reflections which can help to improve acoustic qualities. Diffused reflections make better acoustic qualities by creating more echo and resonance.

That is the reason why the architect made a gap between walls.

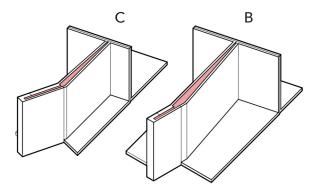
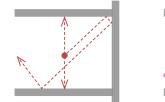


Fig 2.2.43 In-between gaps in the load-bearing walls



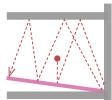
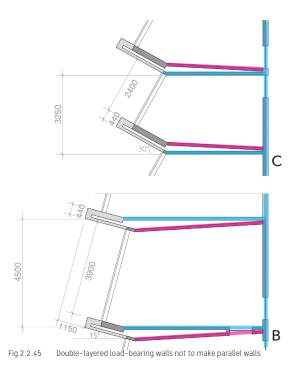


Fig 2.2.44 Reflections of sound with parallel walls and with not parallel walls



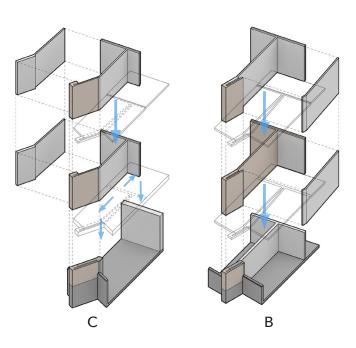


Fig 2.2.46 Construction of the double-layered load-bearing walls

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'D'

Part D is the in-between space to connect the concert hall and lesson rooms. This part has a beam-column structure to make more flexible spaces. This part includes the entrance, the atrium, corridors, and elevator core so that it plays a key role in this building for like service and routing. This in-between part makes this entire building more interesting and vibrant through a lot of level differences and composition of opening and solid walls.

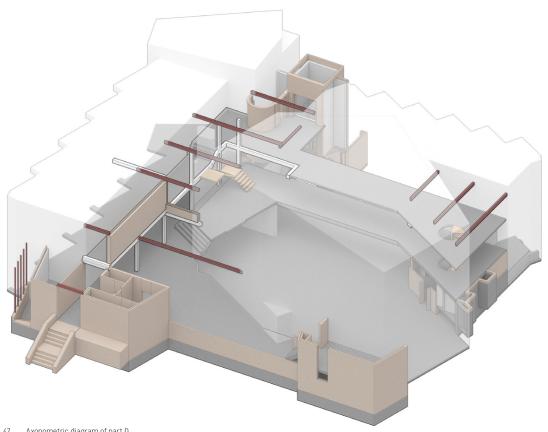
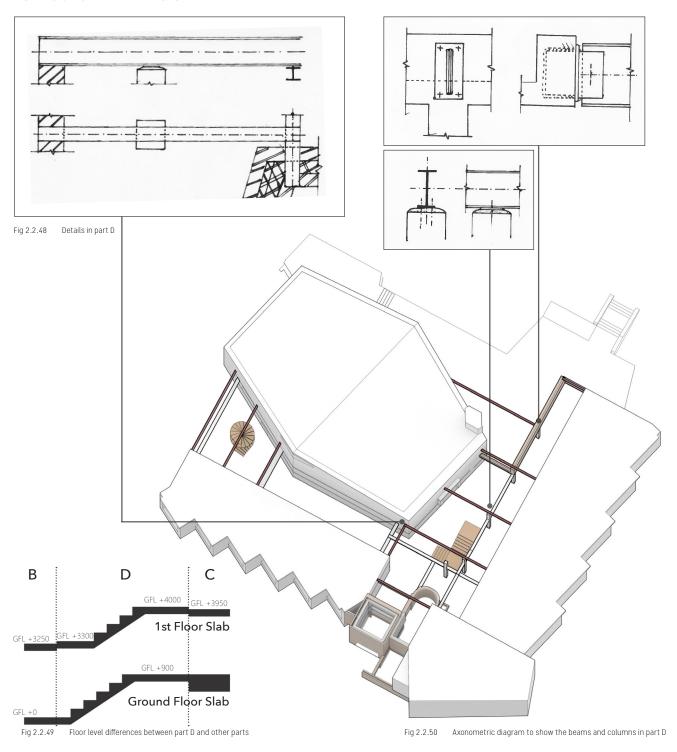


Fig 2.2.47 Axonometric diagram of part D

2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'D'

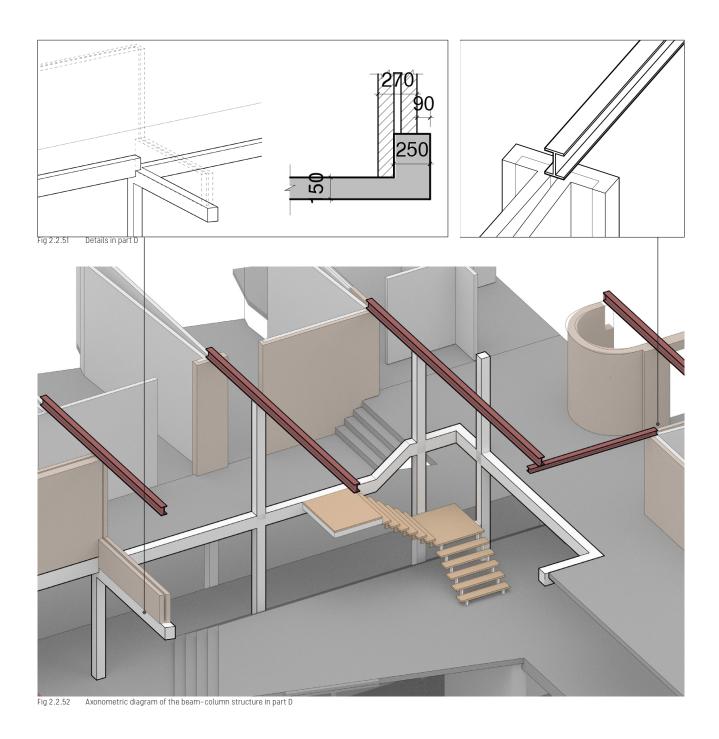




2.2 STRUCTURE

LOAD-BEARING SYSTEM

STRUCTURE ANALYSIS - 'D'





2.2 STRUCTURE

BEAM PLAN

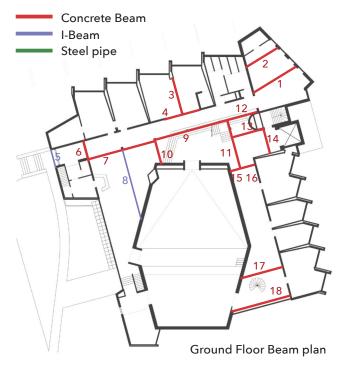
WHAT IS A ROLE OF THE BEAMS AND HOW ARE THEY WORKING?

Beams are mainly used in the in-between space(D) to connect 3 different parts which have load-bearing walls. I-beams are combined either on the load-bearing walls or the concrete columns.

Flat roof with I-beam structure is cheaper and easier to construct than a hipped roof or roof with concrete. And also it is more efficient because there is no waste of space under the roof.

In part D, there are no beams in the basement. Instead of beams, the basement has thicker slabs.

1	300 X 400	17	400 X 250
2	300 X 400	18	300 X 250
3	220 X 450	19	IPE 300
4	300 X 450	20	IPE 140 x 3
5	IPE 140	21	∑ 200
6	250 X 450	22	IPE 200
7	250 X 450	23	IPE 220
8	IPE 400	24	IPE 240
9	250 X 350	25	IPE 200
10	250 X 350	26	HE 120A
11	250 X 350	27	IPE 200
12	250 X 250	28	IPE 240
13	270 X 250	29	IPE 270
14	250 X 250	30	IPE 140
15	250 X 350	31	IPE 140
16	250 X 250	32	IPE 120
Fig 2.2.5	64 List of beams	33	IPE 120



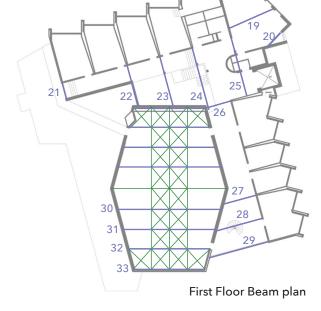


Fig 2.2.55 Beam plans

ROOF STRUCTURE

HOW IS THE ROOF STRUCTURE MADE?

The roof structure shows directions of the load-bearing system. I-beams are parallel to the load-bearing walls and supporting wooden beams are perpendicular to the I-beams. Brick walls stacking up to the inside of the roof structure so that there are more hidden brick walls inside of the roof.

The roof structure of the concert hall is higher and thicker than other roofs so there are more additional wooden beams and joints(Drawing No.5). And also in these drawings, you can check that there is no thermal insulation at all on the roof.

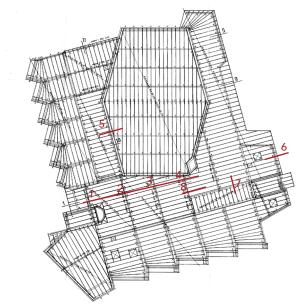


Fig 2.2.56 Roof plan

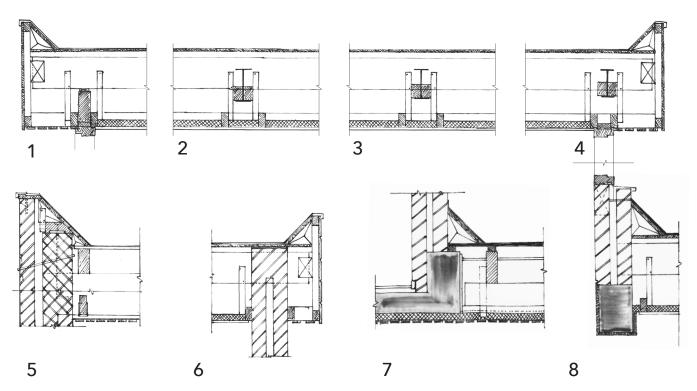


Fig 2.2.57 Roof details

2.2 STRUCTURE

STRUCTURE CONCLUSION

The combination of different types of structures makes different spaces.

The general structure system of this building consists of load-bearing walls while partly there are beam-column structures.

I divided this building into 4 different zones based on the structure system. Each zone has the same structure system and a similar spatial plan.

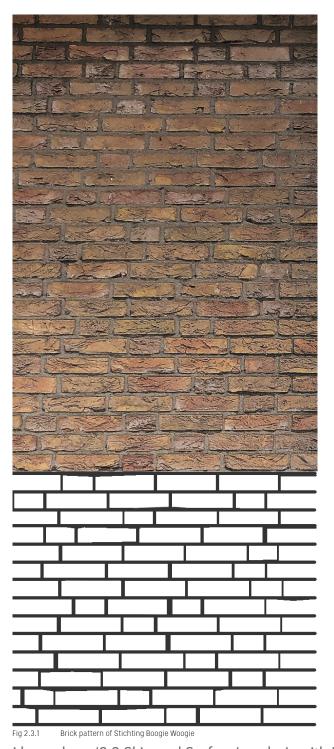
The beam-column structure of the In-between space is connecting 3 different zones which are built with load-bearing walls. It means the functions of the space are revealed by the form of structure systems as well.

The structural difference between the concert hall and small lesson rooms are the most striking part of this building. Even though the characteristics of the spaces are quite different, both spaces have particular forms respectively to derive the best spatial qualities related to the functions of the spaces.

4 kinds of different structure materials are used for this building: poured concrete, concrete blocks, brickworks, and I-beams for the roof structure. Although the ways of the combination of these different materials are very complicated, these combinations are very interesting because these combinations show not only the relationship between structure systems and functions of space but also how the structures cope with surrounding conditions like topography.

Through this structure analysis of the Stichting Boogie Woogie, I figure out that there are many interesting different points in the building. Mainly between the concert hall and small lesson rooms and in-between spaces, there is a lot of height differences, the difference in the room size, materials and so on.

2.3 SKIN AND SURFACE



INTRODUCTION

The skin, generally speaking, defines the public appearance of a building. Skins are often specially designed to be looked at. The skin may reflect one or more architectural style(s) and can suggest a change in use over time.

X

On the other hand, the surface is more directly related to the experience and function of the building. Interior is one of the easily changeable elements in the building and a small change of interior gives a bigger effect relatively.

To sum up, leaving the practicality aside, the skin is the thing about formulating images of the building form through looking at this from outside whereas the surface is about the feeling and experience when you use the building in functions.

BRICK MASONRY

Brick is the main material of this building for both interior and exterior.

The brickwork pattern is 'Wildverband' which means the way of stacking bricks irregularly without any logic. In this building, not only the arrangement of stretcher and header but also mortar thickness between bricks is also irregular.

This irregularity leads us to focus more on the shape of the wall as the whole surface itself rather than looking at the surface as the combination of separated parts.

I have done '2.3 Skin and Surface' analysis with Dinand Kruize.

2.3 SKIN AND SURFACE

MATERIALITY OF EXTERIOR

Brick is the main material of the facade. Only one kind of brick is used for the facade with Wildverband bonding pattern.

The HPL panel covering the roof structure has a similar color with bricks to be harmonized generally. And horizontal joint on the panel emphasizes the rhythm of the facade by contrast with the vertical repetition of the walls and window frames.

The pavement is made with hexagonal blocks that give a relationship between the building and landscape.

For the windows that are extended to the upper floors like windows on the repetitive rooms, HPL panels are also used to cover the slabs.

On the other hand, the color of the window frame is white but door frames on the windows are red. The color of the door can be aesthetically points on the facade. moreover, this strong color has a practical function to help to find out in an emergency.



Fig 2.3.3 Northwest facade with materials

SKIN AND SURFACE

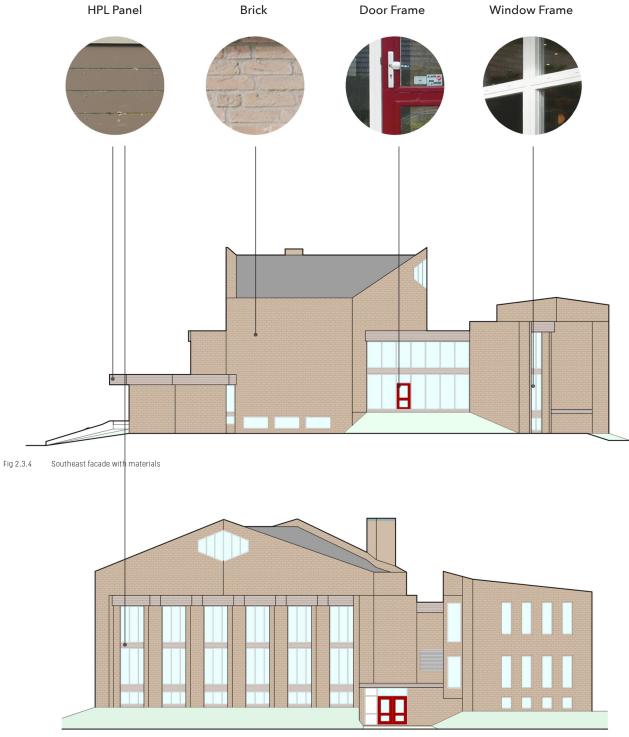


Fig 2.3.5 Northeast facade with materials

2.3 SKIN AND SURFACE

DAMAGE

WHY ARE THE BRICKS ON THE FACADE **CORNERS WORN OUT MORE?**

When you look at the picture on the right page, you can see that bricks on the corners are more worn out than other parts. This is because of the small eddy which is generated at the corner of the facade. So bricks at the corners are more weathered by wind and

On the other hand, bricks just under the roof are whiter than other parts. These whiter bricks are less weather because they are protected from rainwater and sunlight by the roof canopy. So these bricks are closer to the original condition of the brick.

Such damage is only a matter of aesthetics, since it does not structurally affect the strength. But if you try to clean up such damage, the bricks become less durable and easily dirty.

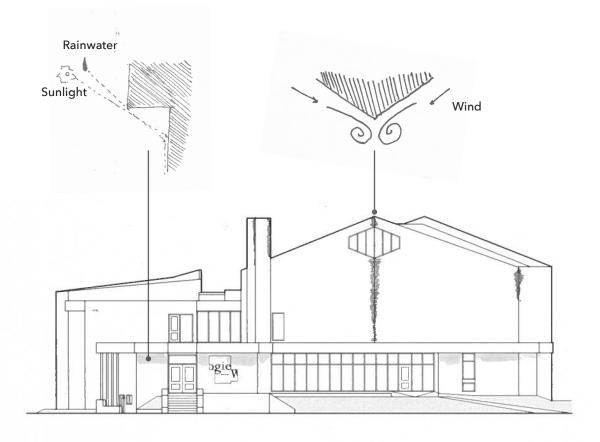


Fig 2 3 6 Damages on southwest facade

SKIN AND SURFACE







Fig 2.3.8 Damages on southwest facade

2.3 SKIN AND SURFACE

SOLID AND TRANSPARENT

Through these solid and transparent diagrams, you can see how much the form of the building has a relationship with functions. The huge solid part is the concert hall. The concert hall has to be disconnected from the surroundings to give people a quite different atmosphere apart from the reality in which they live. So in the concert hall part, there are only two small windows which are even usually covered with blinds.

In contrast, the atrium and the foyer have big openings. These spaces are for refreshing and help visitors to concentrate on the performance in the concert hall again. So for the refreshing, the foyers are open toward the city and greenery surrounding the building.

And also, you can easily guess that repetitive windows would be lesson rooms.

5m

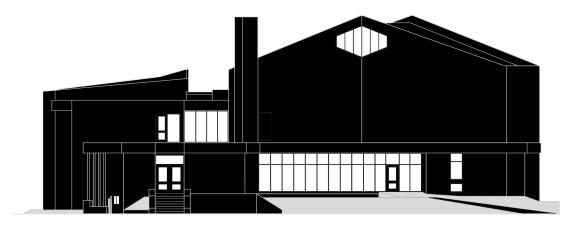


Fig 2.3.9 Solid and openings on southwest facade

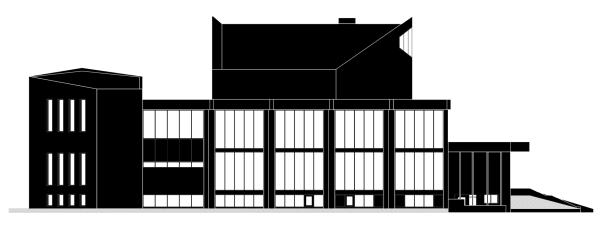


Fig 2.3.10 Solid and openings on northwest facade

The interesting thing is that the concert hall is the most public space while the lesson rooms are the most private parts of this building. The more spaces have functions for the public, the fewer windows. The more private spaces, the bigger the opening they have.

Although the foyers have big openings, the foyers have also very long solid corridors compared to the lesson rooms.

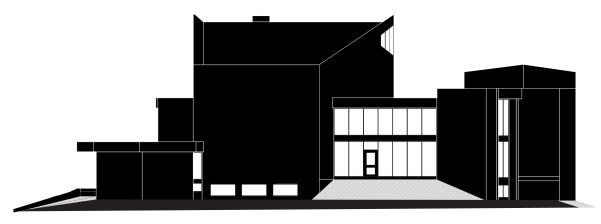


Fig 2.3.11 Solid and openings on southeast facade

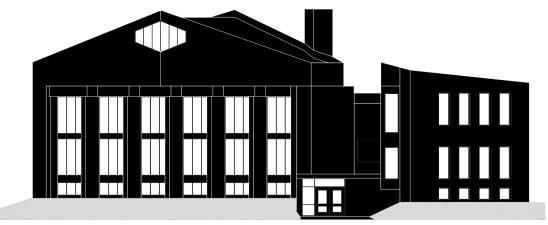


Fig 2.3.12 Solid and openings on northeast facade

2.3 SKIN AND SURFACE

GREEN ON THE FACADE

The building is covered with not only tall trees but also plants like short shrubs. Especially, because all border where the building facade and ground meet is covered with shrubs, it is hard to see that border. In particular, some parts of the facades are covered with tall vines like the photo on the next pages. These shrubs and vines extend the land-scape to the building facades and make the music school look more natural and improve

the appearance of the building aesthetically. In addition, these shrubs make people hard to approach the facade too closely. So the distance caused by shrubs keeps the privacy of the students in the basement and lesson rooms.



SKIN AND SURFACE



Fig 2.3.14 Plants on the wall of the entrance





Fig 2.3.16 Plants along the facade

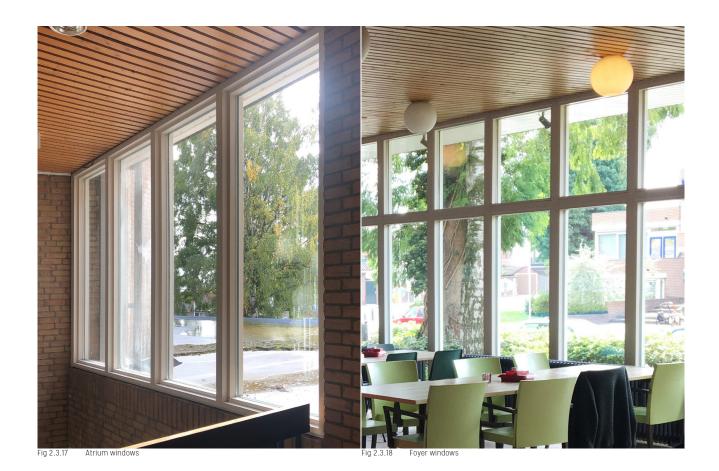
2.3 SKIN AND SURFACE

WINDOW

WHAT KINDS OF WINDOWS ARE USED IN THIS BUILDING?

Although this building has a lot of windows, almost every window are fixed windows. So these windows are only for the visual connection with surroundings and for daylight. Except for the escape doors, only two windows on the basement can be opened. This lack of openable windows causes problems at natural ventilation and natural cooling. It is

hard to get natural ventilation without openable windows, this music school depends on the mechanical ventilation which uses a lot of energy costs.



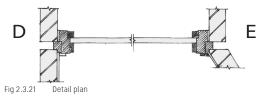
SKIN AND SURFACE Fixed window Door Ventilation window Casement window ogie_W

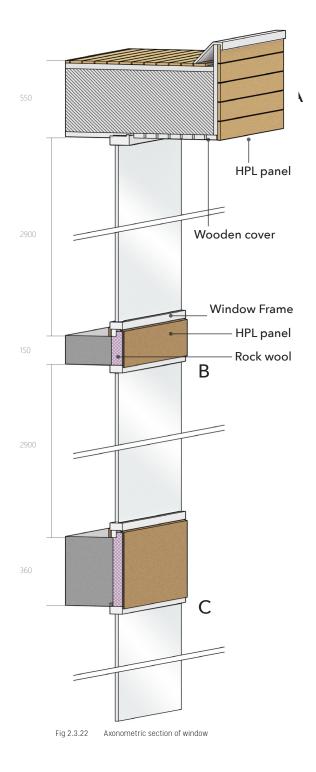
Fig 2.3.19 Classification of windows

2.3 SKIN AND SURFACE

WINDOW







INTERIOR



Fig 2.3.23 Interior of the foyer (Jan Ruland van den Brink, n.d.)

The basic combination of the interior materials is the same as the exterior: Brick and Wood. Bricks are used for the walls and Wood is used for the ceiling and stairs.

This combination of brick and wood generates a special atmosphere. Although you can see this combination for interior very easily in 1970s Dutch architecture, in this building, it feels more special because of the particular building form. Wood and brick have a similar brownish tone of color but the textures of these two materials are quite different. Brick has a cold texture whereas wood has a warm texture. And also, the pattern of the irregular

brickwork and the pattern of regularly parallel wooden ceiling covers make an interesting contrast in the building.

The floor is finished with sandstone tiles. This sandstone tiles also make a different pattern with wooden cover and bricks. As a result, these three different textures and patterns of materials enrich the atmosphere of this building.

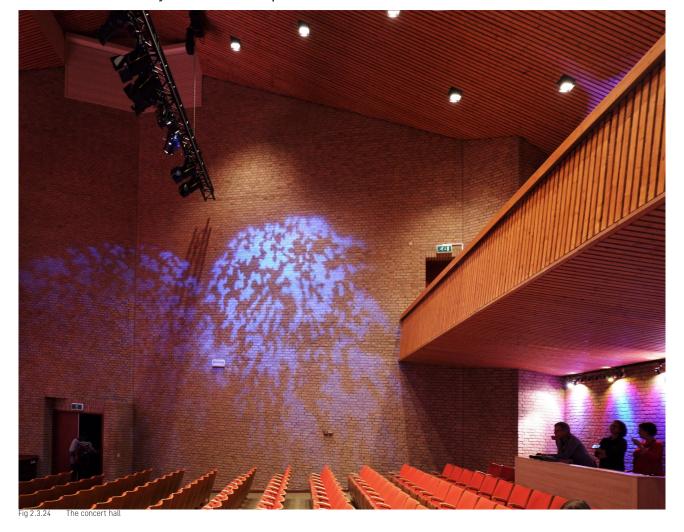
2.3 SKIN AND SURFACE

CONCERT HALL

WHAT IS THE ROLE OF BRICK AND WOOD IN THE CONCERT HALL?

The combination of brick and wood is maximized in the concert hall. The concert hall has a very special atmosphere of a huge void space with tall brick walls and a high wooden ceiling. Brick is a good material for the concert hall because the hard texture of brick can reflect sound very well. With the special

form of the concert hall, huge brick walls improve the acoustic quality of the concert hall significantly.



SKIN AND SURFACE





2.3 SKIN AND SURFACE

BASEMENT

Compared to the interior of the upper two floors, the interior quality of the basement is immensely bad. The low ceiling is not laminated and the floor also doesn't have a good finish. Except for the ballet studio, spaces in the basement hardly have a well-finished interior and very low and narrow.

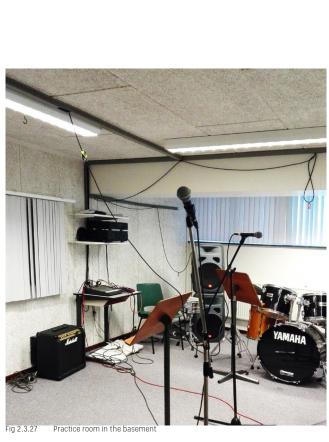


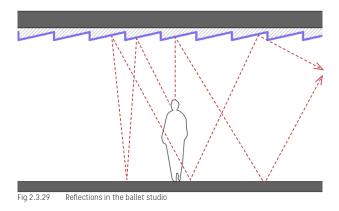


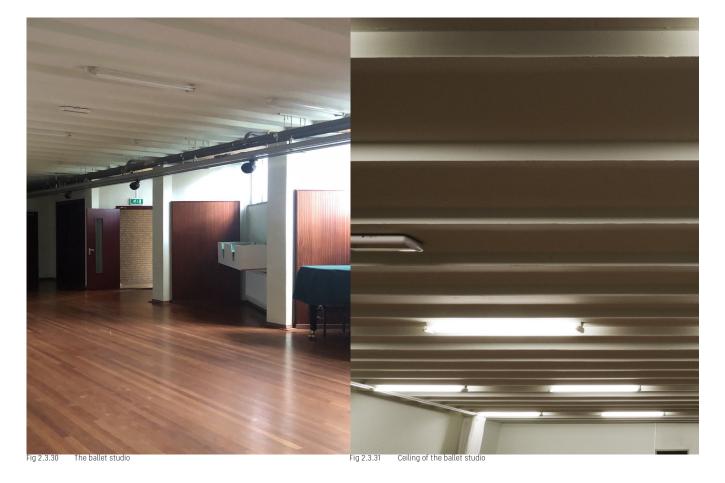
Fig 2.3.28 Corridor in the basemen

BALLET STUDIO

WHY ARE THE BASEMENT CEILINGS ZIGZAG SHAPE?

Ballet studio has a good interior quality relatively and ceiling height is higher than other spaces in the basement. There are good looking sound barriers on the walls covered with wood and daylight also comes into the ballet studio through the high windows. The ballet studio and the classroom in the basement have an interesting zigzag shape of the ceiling which can improve the acoustic quality of the rooms through diffused reflection.





2.3 SKIN AND SURFACE

SKIN AND SURFACE CONCLUSION

Using the same material inside and outside weakens the boundary between the inside and outside of the building. And this building creates a unified feeling when you experience this building. The inner space can be converted to the outer space at any time.

From the outside of the building, the openings and solid parts of the building allow you to recognize the function of the mass of the building. This is because the concert hall is bulky and two small windows are usually blinded to prevent sunlight from entering the concert hall. This solid wall allows the concert hall to be isolated from the city surroundings.

On the other hand, you can connect to the outside and inside the building using the same material. when you look at the shell of the building These three layers have the potential to be external or internal at any time.

Brick is the main building for both the outside and inside of this building, this material not only creates a special atmosphere of the building, but also improves the sound quality for concert hall functions.

2.4 SPACE PLAN

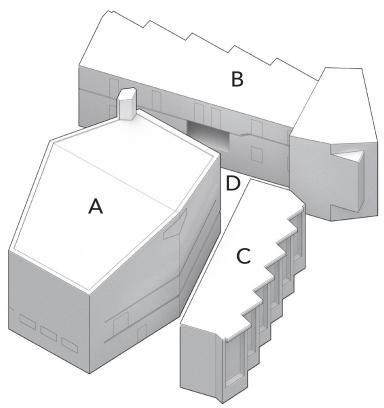


Fig 2.4.1 Dividing the building into four parts

INTRODUCTION

In this chapter, themes related to the space plan will be analyzed. Brand defines the space plan as the interior layout, where walls, ceilings, floors, and doors go (Brand, 1994). However, there is more to observe than just the physical elements that define the materialization of interior spaces and the spatial organization in the arrangement of rooms,

their forms, sizes, and proportions with each other. ('Designing from Heritage' Kuipers, M. & De Jonge, W., 2017)

In this analysis, the same as 2.2 Structure analysis, I also divided the music school into four parts. Each floor in the same parts has similar functions whereas the parts relatively have very different functions respectively.

I have done '2.4 Space plan' analysis with Lisa Noorman.

2.4 SPACE PLAN

FUNCTIONS

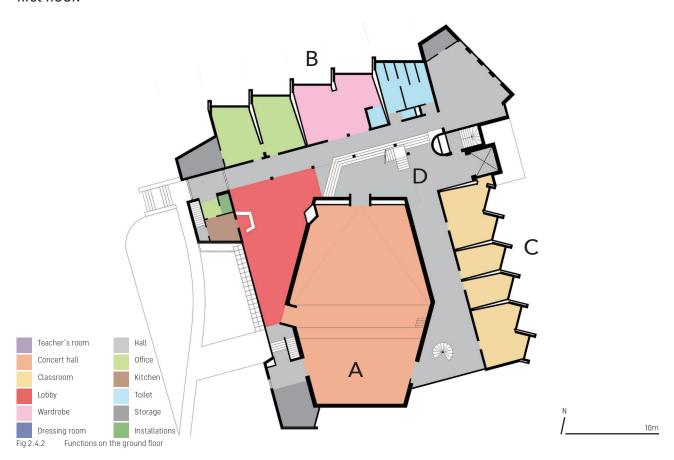
WHAT IS THE DIFFERENCE BETWEEN EACH FLOOR?

WHAT IS THE ROLE OF IN-BETWEEN SPACE?

The following maps show the present functions of the basement, the ground floor, and the first floor.

when you look at the map, functions on the ground floor are for the public and management of the music school. Although there are 4 lesson rooms in part C, mainly the lesson rooms are more in the basement and on the first floor.

Compared to the size of the concert hall, the foyer is a bit small to accommodate every visitor. In addition, there is a small bar in the foyer that makes people hard to make groups. The foyer and the atrium are divided by the concert hall and also by stairs so that the foyer and the atrium do not feel like one integrated space.



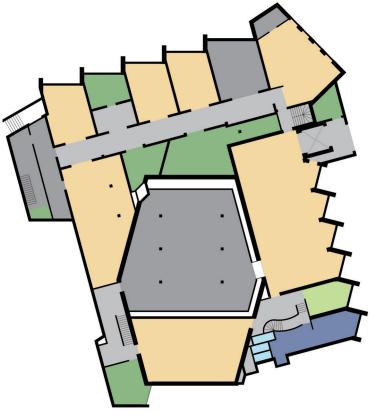
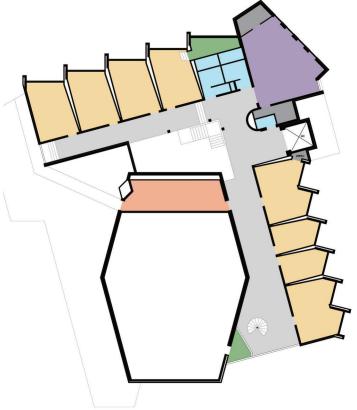


Fig 2.4.3 Functions in the basement



Functions on the first floor

HOW CAN CONCERT HALLS AND MUSIC SCHOOLS HAVE A STRONGER RELATION-SHIP?

The concert hall looks like the main space of this building. However, students and teachers spend their time mainly in small lesson rooms. The lesson rooms are daily-use spaces whereas the concert hall is the space for special events where most of the time it is empty. But the reason why people feel the concert hall like the main space of this music school is that people include visitors, performers, and even teachers do experience the most impressive time in this hall. To perform one hour of performance in the concert hall, performers are supposed to practice tons of hours in the small lesson rooms. The combination of the concert hall and les-

son rooms makes this music school perfect. Rather than not co-existing in the building, these two functions are in a symbiotic relationship with interactions.

2.4 SPACE PLAN

FUNCTIONS

HOW THE TRANSITION FROM PUBLIC TO PRIVATE HAPPENS IN THIS BUILDING?

The degree of privacy is indicated in the shades of gray, darker meaning more private.

The most public space in the building is the traffic space or 'in between space' between the concert hall and the classrooms. After that, the concert hall is a public space when there are performances. The classrooms are more private spaces, since they are only accessible for students who have lessons or who have rented a room. The spaces which

are only accessible for staff of the music school are indicated as most private. These spaces are the offices, kitchen, storage rooms, teacher's room and technical spaces.

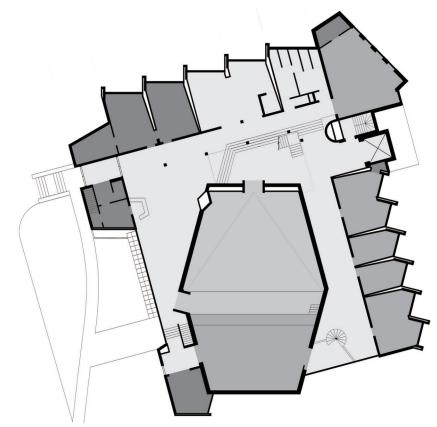


Fig 2.4.5 Public and private spaces on the ground floor

SPACE PLAN

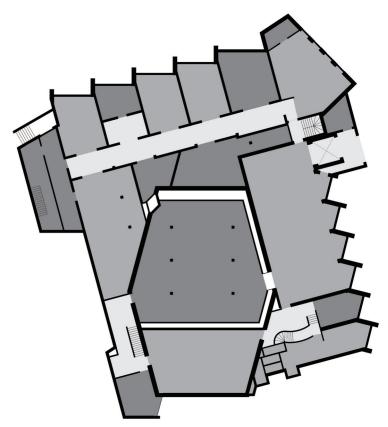
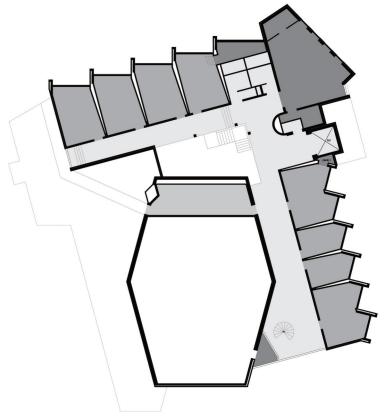


Fig 2.4.6 Public and private spaces in the basement



Public and private spaces on the first floor Fig 2.4.7

2.4 SPACE PLAN

ROUTING

ARE THE ROUTES EFFICIENT?

circulation of the building.

This analysis shows the routing through the building of different users: the student, visitor, performer, teacher, and wheelchair.

The in-between space is the main circulation area in the building. It doesn't have any circular movement since on both sides it ends in a 'dead-end', which can be seen on the floorplan of the first floor. There are small stairs

on the end, but this isn't used for the main

Route of Visitor

Visitors who are usually the audiences of the performance use the below route for the performance. To use the main entrance in the atrium, they have to go up 5steps of stairs. And to use the seats on the first floor, they are supposed to use the stairs in the atrium. Route for the visitor is relatively clear and focused on nearby the atrium. So they do not need to move a lot to the performances.

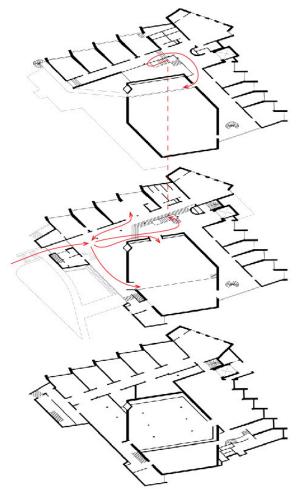


Fig 2.4.8 Route of visitor

Route of Student

The main purpose that students come to this music school is to take lessons and practice music in the lesson rooms. Usually, they use the stairs in the atrium to get to the first floor. However, to get to the basement, they have to walk a lot and the only staircase at the end of the corridor connecting every floor.

Route of Teacher

Teachers stay the longest time in this building. But there is not enough space for the teachers so they take a rest in the foyer that is the most public space in the building. Teachers use a similar route as the students.

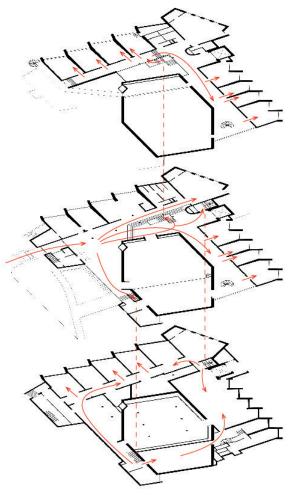


Fig 2.4.9 Route of student

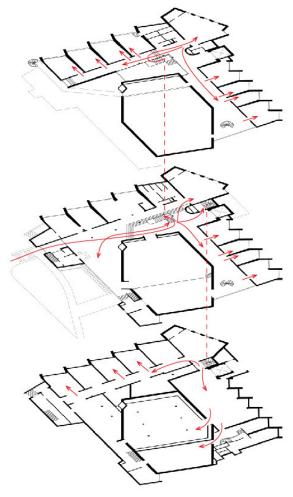


Fig 2.4.10 Route of teacher

2.4 SPACE PLAN

Route of Performer

Performers use a limited route for the movement to the stage. Before the performance, normally they do not want to show them to the public. However, because there is no place near the stage for the performers, they should prepare for the performance in the basement and they have to go up through the staircases where they can meet the audiences.

Route of Wheelchair

The most problematic route is for wheel-chairs. To use the elevator, they have to go around outside of the building and use the entrance on the basement floor. Because of the stairs in the atrium, they only can use the main entrance on the ground floor to get to the office and front door of the concert hall.

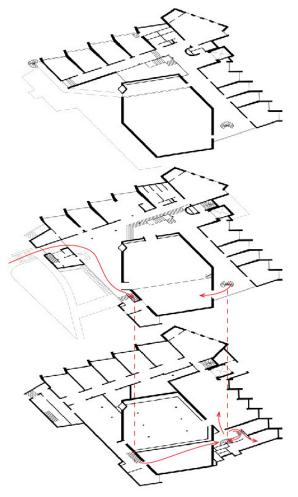


Fig 2.4.11 Route of performer

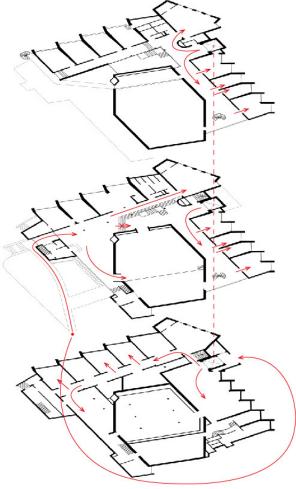
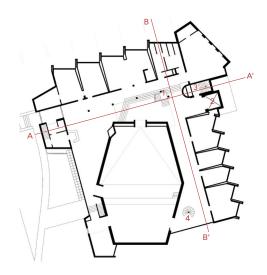
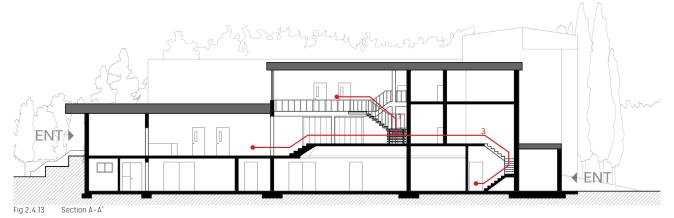


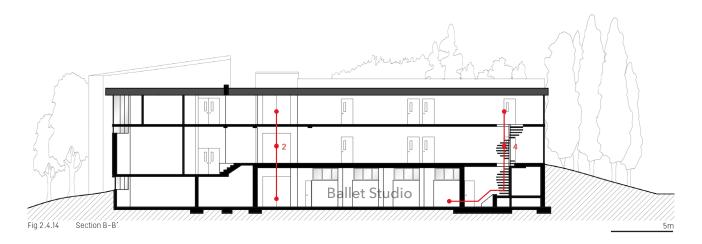
Fig 2.4.12 Route of wheelchair

How are the vertical movements and connections in this building?

In the music school, there are 4 staircases and one elevator for the vertical movement. Compared to the size of the building, this building has many staircases. However, the staircases are not efficient at all because only the farthest staircase connects from the basement to the first floor. In addition, this staircase is very small and not opened visually toward different floors. And the use of the elevator is also very limited because of this location.







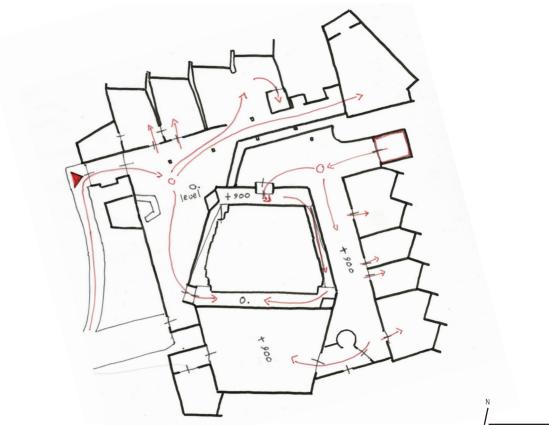
2.4 SPACE PLAN

ACCESSIBILITY

Accessibility is an important topic in this building, as it is poorly accessible for wheelchair users. In the following maps, the accessibility of the spaces for wheelchair users is analyzed. Only the accessible spaces are drawn.

Since the ground floor of the building has a split level, one part of the floor plan is 900mm higher, and there are no ramps present, there is a separation between these spaces. The only connection inside the building is through the concert hall.

When the wheelchair user enters the building through the main entrance, only a few spaces on that level and the concert hall are accessible. If they need to go to other spaces in the building, in which an elevator is necessary, they need to go to the entrance on the other side of the building and enter through the basement. Then, still part of the first floor is not accessible in any way, because of the small stairs in between floor differences.



SPACE PLAN

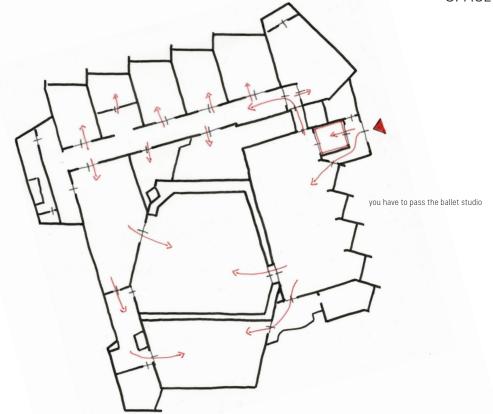


Fig 2.4.16 Accessibility for wheelchair users in the basement

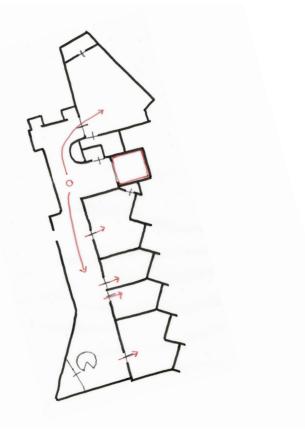
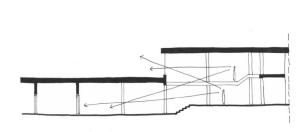


Fig 2.4.17 Accessibility for wheelchair users on the first floor

2.4 SPACE PLAN

SIGHTLINES

The following pages show the sightlines within the building and from inside the building to the outside. The focus is on the public traffic space. From multiple points in the buildings there are sightlines to two or three directions. This gives a great spatiality to the building. The atrium plays a big role in this.



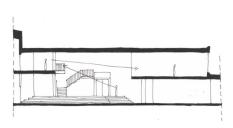


Fig 2.4.18 Sections showing the sightlines through the building



Fig 2.4.19 View 1: Sightline in the atrium on the ground floor



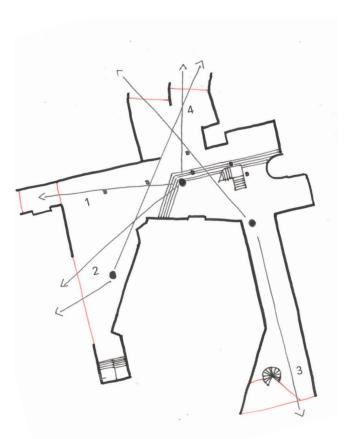


Fig 2.4.21 Sightlines on the ground floor

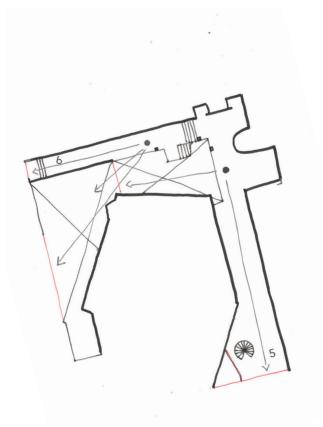


Fig 2.4.24 Sightlines on the first floor

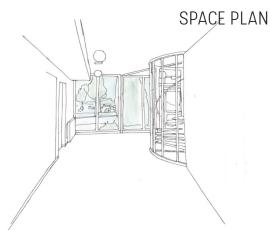


Fig 2.4.22 View 3: sightline in the corridor on the ground floor

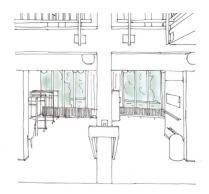


Fig 2.4.23 View 4: sightline to the wardrobe on the ground floor



Fig 2.4.25 View 5 : sightline in the corridor on the first floor

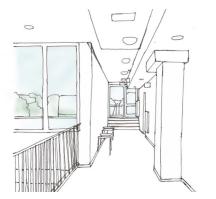
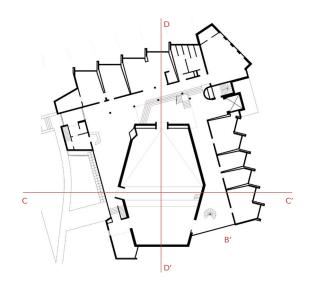


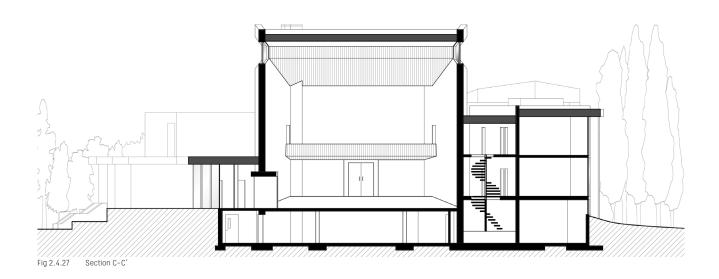
Fig 2.4.26 View 6 : sightline in the corridor next to the atrium on the first floor

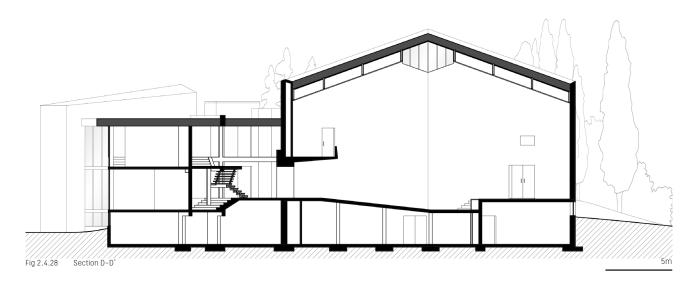
2.4 SPACE PLAN

WHAT IS THE RELATIONSHIP BETWEEN THE STRUCTURE AND THE SPATIAL SYSTEM?

WHAT IS THE DIFFERENT CHARACTERISTIC BETWEEN THE MUSIC HALL AND LESSON ROOM?







SPACE PLAN

SCALE

The below diagrams are about the scale of the different rooms. The volume of the concert hall is even bigger than the sum of all the spaces in part B and part C. This difference of scale influence the image that people conceive when they use this building.

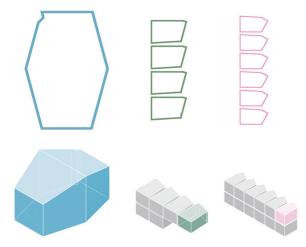


Fig 2.4.29 Comparison of the different scales of the spaces

FLOOR LEVEL DIFFERENCES

WHY DID YOU MAKE PLANS WITH DIFFER-ENT LEVELS?

W

Floor level differences come from not only topography in the site but also the function of the concert hall. To make a slope for the concert hall seats, the level difference is inevitable. The architect extended this necessary level difference to every floor in the building. As a result, it feels like this building has a wider space than it really has.

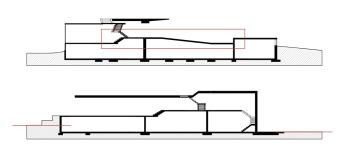


Fig 2.4.30 Floor lever differences

ATRIUM

The atrium has a function for connection. The atrium connects the concert hall to the lesson rooms, the entrance to the concert hall, and the ground floor and the first floor. Not only connecting different spaces, it can also be a buffer space between the scale of the concert hall and lesson room, and between the darkness to the brightness.

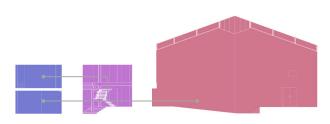


Fig 2.4.30 Role of the atrium

NATURAL LIGHT

The interesting thing is that the concert hall is the most public space but the darkest part while the lesson rooms are the most private parts full of daylight. The more spaces have functions for the public, the fewer windows. The more private spaces, the bigger the opening they have.

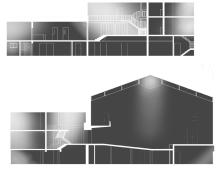


Fig 2.4.30 Daylight in the building

2.4 SPACE PLAN

SPACE PLAN CONCLUSION

THE MUSIC SCHOOL IS THE PLACE WHERE TWO DIFFERENT SPACES ARE COMBINED TO ONE.

The combination of different types of structures make differet spaces. And this different spaces harmonized as one complete builiding thorugh the space plan.

However, the space plan in this music school does not look so good to harmonize all the spaces. There are many problems like differet floor levels, small foyer, accessibility, and vertical movement.

On the other hand, there are also good points that caused from the combination of different two functions. The combination of two different functions generate a lot of interesting contrasts of spatial characteristics like scale, brightness, public and private, and building form.

And in-between space not only connects these two different functions but also can be the buffer space.

2.5 SERVICE



Fig 2.5.1 The concert hall with lighting

INTRODUCTION

The services are a very important layer of a building that is used intensively. This intensity is what we look at when wanting to decide if the services of the building are enough. The music school houses functions that revolve around the audiovisual services, but also requirements like heating, ventilation and artificial light are important for the interior comfort in the music school.

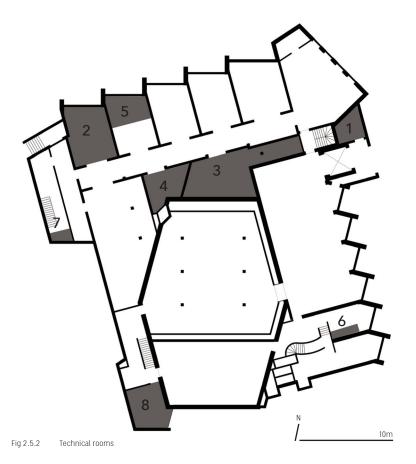
For this report, the ventilation, the elevator, the artificial light, the drainage, the heating, and the acoustics are analyzed.

I have done '2.5 Service' analysis with Tryfon Stogiannis.

2.5 SERVICE

TECHNICAL ROOMS

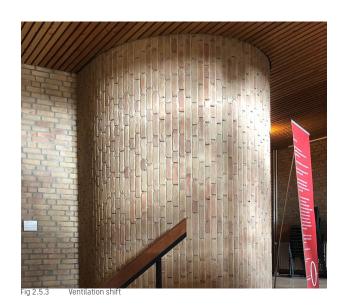
The majority of the technical spaces are situated in the souterrain level of the building and take care of the well functioning of the building. The use of spaces is combined with storage and installations are left visible in the space where allowed.

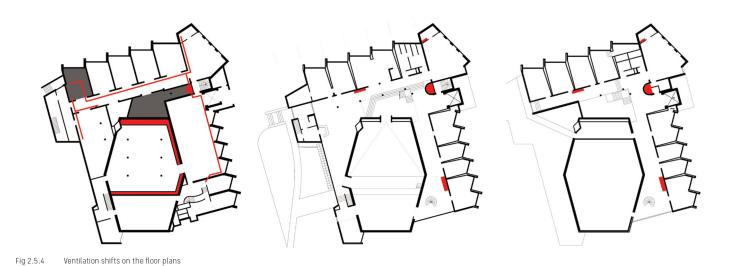


- 1. Elevator machine room
- 2. Air conditioning room
- 3. Air conditioning installation room
- 4. Central heating control station
- 5. Central heating room
- 6. Boilers
- 7. Gas meter closet
- 8. Technical service room

VENTILATION

The ventilation of the building is regulated centrally. The air conditioning units are on the souterrain level and are connected through shafts to the rooms of the building. The shafts are visible and have a clear impact on the space. The ventilation pipes are hidden under the ceiling in the entrance hall. The rooms are equipped with both mechanical supply and exhaust. The vertical transport also happens through a cylindric element that becomes a very strong spacial element.

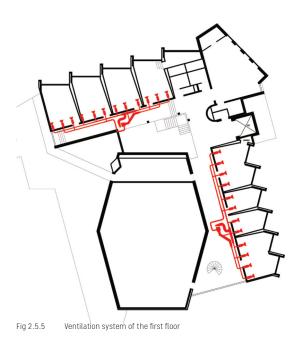


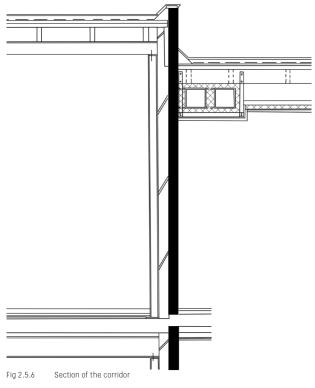


STICHTING BOOGIE WOOGIE ANALYSIS SERVICE

2.5 SERVICE

VENTILATION







Since the concert hall is a closed space without any window but a lot of people use the space, ventilation in the concert hall is very important. So the concert hall has a separate installation for ventilation. The installation is built in between the walls of the hall. The form of the concert hall was taken into account the ventilation at the beginning of the design.

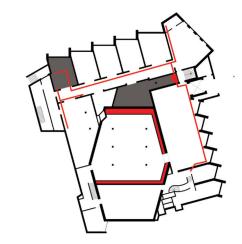


Fig 2.5.8 Ventilation system in the basement

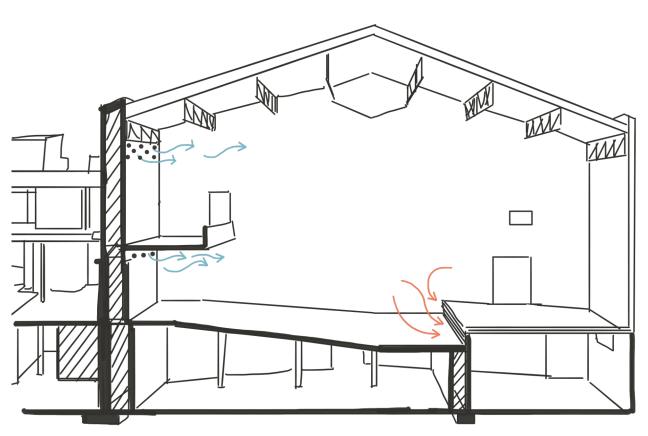


Fig 2.5.9 Ventilation system in the concert hall

2.5 SERVICE

ELEVATOR

The elevator is in a good state and is used normally. It is 1750 mm wide, 2150 mm deep and 2200 mm high, while it can carry up to 1625 Kg. It is situated across the entrance of the building and that reduces the mobility it offers. The whole entrance hall has to be crossed in order to access the elevator and the same applies in order to reach a higher level of the concert hall.



Elevator

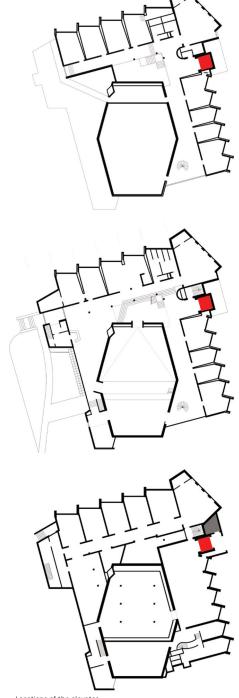


Fig 2.5.11

Locations of the elevator

SERVICE



Fig 2.5.12 Elevator room in the basement

2.5 SERVICE

ARTIFICIAL LIGHT

The artificial light of the building can be divided into a few categories relative to the function of the room they are serving. The most specialized light is found in the concert hall where there is a combination of two different systems. One is for the whole room and one is the stage lights. The ballet room also has a different light because very good visibility is needed. The rooms for the lessons are not used for any kind of performance and normal classroom-office light is used. The administrative spaces also have office light. The entrance hall is an open big space where a combination of lights is used.

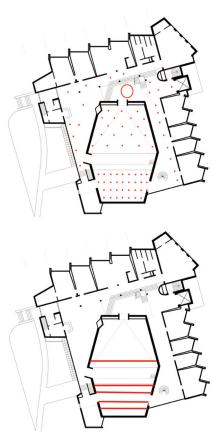


Fig 2.5.13 Lighting plan



Entrance hall



Concert hall





Fig 2.5.14 Classification of artificial lightings

HEATING

The heating of the building is happening through the radiators that became part of the space. The heating installations are situated in the souterrain level.

Heating depends on mechanical heating with radiators. The radiators are located along with the windows.

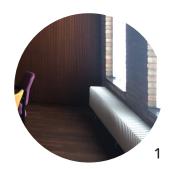






Fig 2.5.15 Radiators on each floor

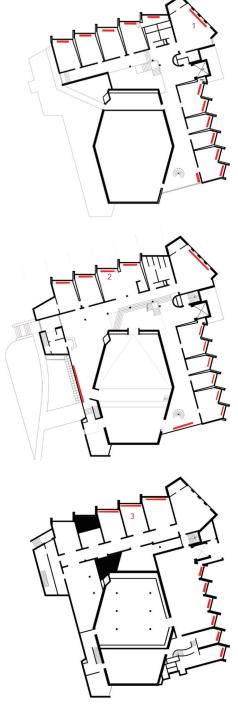


Fig 2.5.16 Locations of radiators

2.5 SERVICE

ACOUSTICS

In the building, there are a lot of materials that are used for creating the needed acoustic conditions for the practice and the performances. The floor is partially covered and on the walls, there are panels with absorbing properties. The ceilings also have a sound-absorbing function. The concert hall has a complete sound installation and is controlled in a small space next to the concert hall. Due to the small dimensions of these elements, their spacial effect is minimal.

SERVICE CONCLUSION

Stichting Boogie Woogie consumes a lot of energy for service. As I mentioned in previous parts, this building does not have thermal insulations for heating and cooling and also does not have openable windows for natural ventilation. As a result, this music school depends on mechanical ventilation and heating which generate a huge amount of energy cost. This is the main reason why the municipality and people in Wintersijk want to demolish this building.

Except for energy consumptions, the service for the concert hall like acoustics is still in quite good quality.



Fig 2.5.17 Materials affect the acoustic quality

2.6 STUFF



INTRODUCTION

Stuff is not only the abundance of movable objects in buildings but also their great variety as well as the great intimacy of objects, which makes it a near-almost impossible task for the observing architect to decide which of these should be recorded and to what level of detail.

For reasons of practicality, it is best to focus mainly on the distinguishing furniture and furnishings, and even then to be selective in the observation. It must be borne in mind that typical furniture in a medieval church or in a historic town hall (like its ceremonial

I have done '2.6 Stuff' analysis with Marloes Bier.

furniture, tapestries, mayors' portraits, and sculptures), share a long history with the place.

('Designing from Heritage' Kuipers, M. & De Jonge, W., 2017)

Every building contains stuff. Often you can divide this in general stuff and function-specific stuff. General stuff is things like chairs and tables that are almost in every building, and function-specific depends on the function.

As Kuipers and De Jonge mentioned in the book, I cannot deal with every stuff in the building. So I just focused on the stuff related to the function of the music school

2.6 STUFF

STUFF IN THE BASEMENT

BALLET STUDIO



Fig 2.6.2 On the left wall of the ballet studio is a big mirror. Alongside the left and back wall are the ballet barres, where dances can hold onto when practicing dancemoves



Fig 2.6.3 In the right bottom corner of the ballet studio are a piano, probably to play live music by the dances. Also there is a desk and some chairs, probably for the teacher.

CLASSROOM



Fig 2.6.4 $\,$ This room is probably used for music (theory) classes, that's why there is a piano and there are tables and chairs in rows.

PERCUSSION ROOM



different percussion instruments like drum kits, big drums, a marimba and a xylophone.



Fig 2.6.6 The big drums stand in the corner



Here the xylophone is visible with on the back another percussion instrument with pipes.

STUFF ON THE GROUND FLOOR

STUFF

CONCERT HALL



Fig 2.6.8 The most striking thing about the concert hall is the stage, where everything takes place. The shape makes for good acoustics.



Fig 2.6.9 $\,$ There are 283 seats. The seats are according to the janitor quite outdated, but their textile works well for acoustics.



On the stage their are technical devices like lamps and curtains on the ceiling, and there are instruments available like this piano.

FOYER AND ENTRANCE



Fig 2.6.11 — The entrance zone has nice benches to sit on and magazines to read. Around the corner there is a cloak room with also functions a bit as storage for chairs.



Fig 2.6.12 The foyer is a nice room with coloured chairs and bench, tables and nice carpets.

2.6 STUFF

STUFF ON THE FIRST FLOOR

In the Boogie Woogie building, corridors are not just places to pass through, but they are meeting places where you run into each other and have a chat. The furniture enhances this feeling, there are plants and seats.



Fig 2.6.13 The corridor on the first floor is lighter, and runs around the double high open space in the building, adding a spatial relation there. Here also homely furniture like a plant and seats.

STUFF CONCLUSION

As Boogie Woogie is a music school and cultural center, there is a lot of stuff related to music and cultural function. Also, these things can have quite a high value. Musical instruments are for example quite expensive as they are made by specialists.

Of course, there is way more stuff in Boogie Woogie, for example in all the small classrooms. For this chapter, only the important or specific stuff is inventoried, because that is specific for the function and maybe needs to be taken out when another function would be put in this building. Also, the specific music-related stuff is what makes the building special, so it can add value to it.

Most of the stuff is freestanding in the building and can easily be removed. There are however some things that are attached to it, for example, the barre in the ballet studio and the seats in the concert hall. Redeveloping a critical vision on these objects is needed to see if they can be reused and if this is desired.

2.7 SPIRIT OF PLACE



Fig 2.7.1 The front view of Stichting Boogie Woogie

INTRODUCTION

Of all shearing layers, the Spirit of Place, or genius loci, is mostly intangible and inexplicit which is perceived through the human senses when on a site.

This concerns primarily the immaterial aspects of a place, that are in turn often closely associated with memories, beliefs, local traditions, narratives, rituals, performances and such like. ('Designing from Heritage' Kuipers, M. & De Jonge, W., 2017)

Analysis of 'Spirit of place' is very subjective because it depends on my perception and what I felt there.

Therefore, on the following pages, I tried to show what I felt in Sticthing Boogie Woogie like atmosphere, texture, sound, smell and so on by editing the photographs as close as my memory of the spaces. All the photographs are arranged in a sequence of experiences.

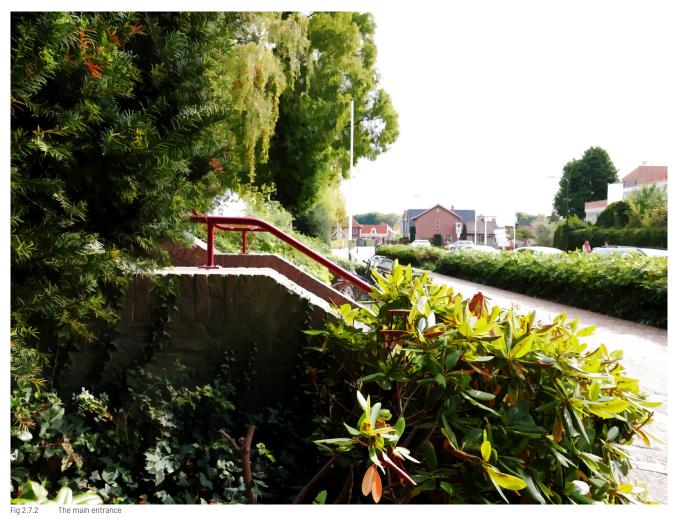
So on the following pages, I do not explain these intangible atmospheres but listed the keywords that can be sympathetic.

STICHTING BOOGIE WOOGIE ANALYSIS
SPIRIT OF PLACE

2.7 SPRIT OF PLACE

WHAT IS THE MEANING OF THIS BUILDING IN WINTERSWIJK?

WHEN YOU FIRST VISIT THIS BUILDING, IN WHAT ORDER WILL YOU EXPERIENCE IT AND WHAT WILL YOU REMEMBER?



Green, Sky, Sound from the street, Smell of wet leaves

SPRIT OF PLACE

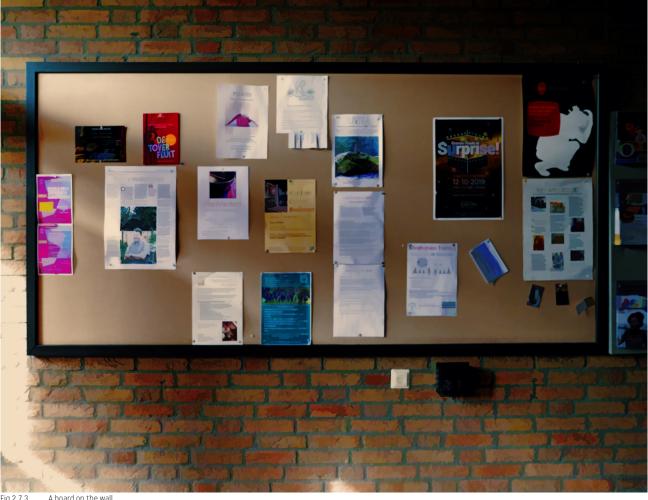


Fig 2.7.3 A board on the wall

Sunlight on the brick wall, Brick patterns, Unorganized stories on the board

2.7 SPRIT OF PLACE



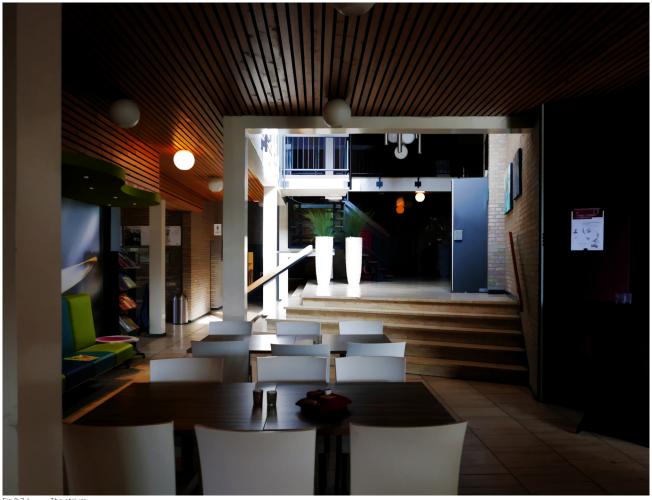
A faint sound of the piano, Sunlight from the big windows, Contrast of brightness, Incongruous colors of the furniture



Fig 2.7.5 The foyer

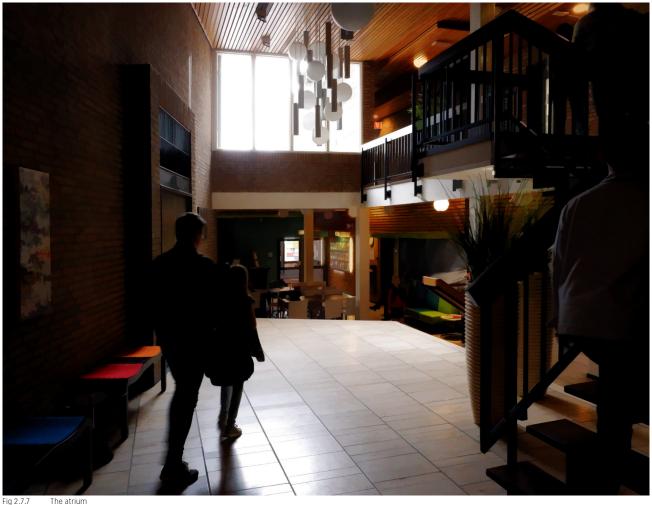
A faint sound of the piano, Sunlight on the tables, Green, Connection with surrondings.

2.7 SPRIT OF PLACE



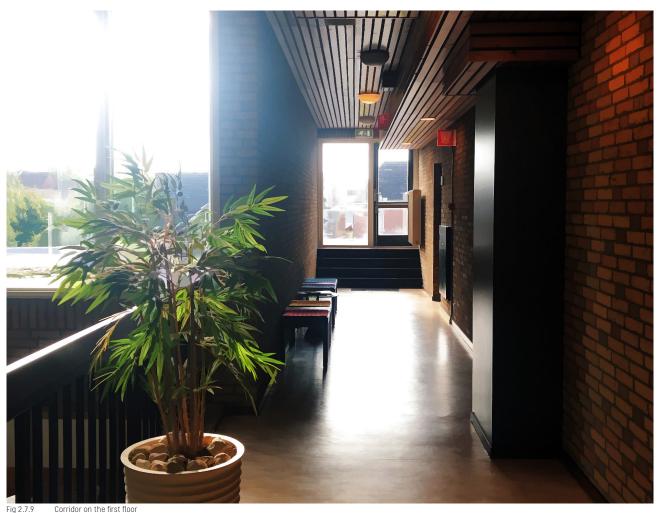
Strong sunlight from upstairs, Long corridor, Curiosity about upstairs, Contrast between ceiling pattern and bricks

SPRIT OF PLACE



Strong sunlight from upstairs on the brick wall, Level difference, Darkness in the foyer, Faraway sound of music

2.7 SPRIT OF PLACE



Bright atrium, Scneary of the city beyond corridor, Neat chairs, Unskilled sounds from the right wall

SPRIT OF PLACE

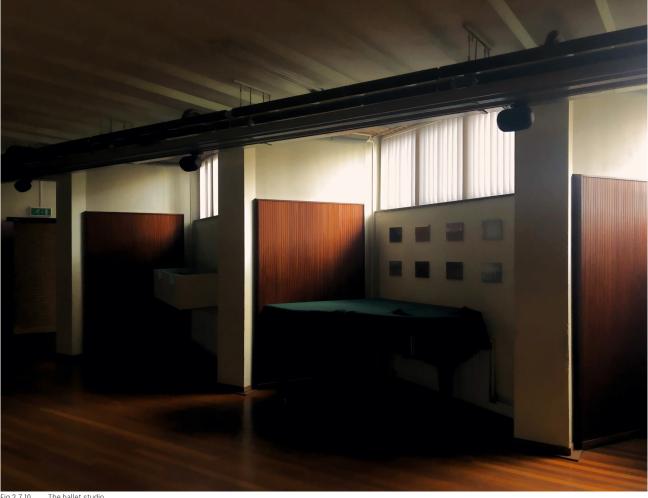


Fig 2.7.10 The ballet studio

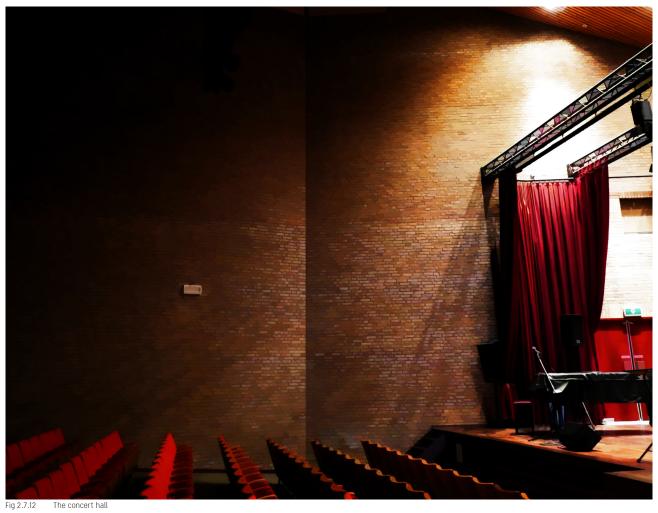
Soft sunlight from high windows, Silence, Sound of footsteps, Ivory wall by sunlight, Smell of oil

2.7 SPRIT OF PLACE



Fig 2.7.11 The concert hall

Void, Silence, Artificial lights on the huge brick walls, Repetition of seats, Focusing on stage



Void, Artificial lights on the huge brick walls, Repetition of red seats, Soft textrue of red curtain, Echo of footsteps

2.7 SPRIT OF PLACE

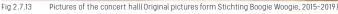
SPIRIT OF PLACE CONCLUSION

In the previous pages, a series of photographs depend on my experience and my memory. When I was in music school, students were practicing music in the lesson rooms. There are not only young students but also many old people were learning music. The performance is not the ultimate goal for the music lessons though, when students are learning music, they must conceive the dream where they are playing music on the stage. They must dream that they fill the huge

silent concert hall full of their sounds.









SPRIT OF PLACE



STICHTING BOOGIE WOOGIE ANALYSIS SPIRIT OF PLACE 135

BRAND +	RIEGL +	AGE value	HISTORICAL value	INTENTINAL COMMEMORATIVE value	NON INTENDED COMMEMORATIVE value	USE value	NEW-NESS value	(relative) ART value	RARITY value [+]	OTHER relevant values [+]
SURROUNDINGS / SETTING [+]										
SITE										
SKIN (exterior)										
STRUCTURE										
SPACE PLAN										
SURFACES (interior) [+]										
SERVICES										
STUFF										
SPIRIT of PLACE [+]										

VALUE ANALYSIS

3.1 INTRODUCTION

PURPOSE OF THIS REPORT

This analysis of the cultural value part is the last in a series of three topics. It is executed with a special scope on the spatial aspects of the cultural value.

The objective of this part is to find out the cultural, architectural, and technical values of the building. To determine what types of values I found, how these are affecting the current situation and to give our subjective priorities of these values. This gives us a clear starting point for the upcoming design phase.

METHODOLOGY

After gathering all the information in the architectural and building technology analyses, is this analysis used to find the cultural values of the building and the site. This is done with the four stages of heritage research described by Marieke Kuipers and Wessel de Jong in the backs of our mind (de Jonge & Kuipers, 2017). This means compiling historical data, identifying and classifying these through 'value mapping, differentiating these on three levels of significance and distilling a position statement on the outcomes of these three steps. However, Stichting Boogie Woogie does not have big changes over time. So the first stage 'Chronomapping' is focused on the change of surroundings.

CULTURAL VALUE MATRIX

I used the method of the cultural value matrix as a basis for this analysis. The idea behind this matrix is based on the research of two people, Alois Riegl and Stewart Brand. It combines the tangible matters of Brand with

the intangible matters of Riegl. The intangible values described by Riegl are made tangible by means of the different layers of Brand. With these matrix, it is possible to deal with all scale levels, from the site to the building details.

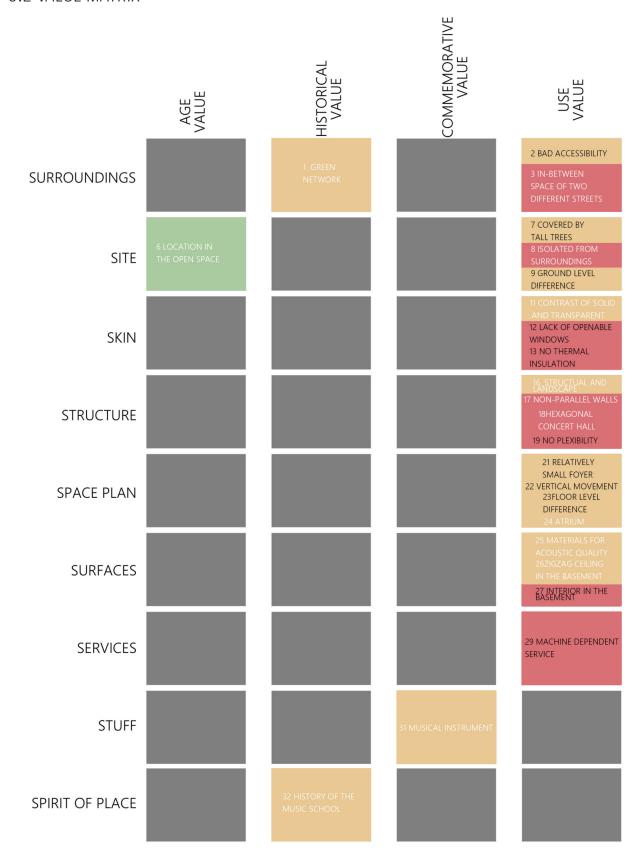
I also classifed the values as positve values and negative values. Negative values are problems found out through the analysis but this problems have opportunity to be better. The reason why I want to divide this is dilemas always come from conflicts between positive values and negative values. In order to make better decision, I made a hierarchy for each values.

INTRODUCTION OF RIEGL AND BRAND

Steward Brand is an American writer used the concept of shearing layers from an earlier research by Francis Duffy, who used the layers: shell, service, scenery and set (Brand, 1994). A set of layers as building components, based on their lifespan. Brand continued this research and came up with the concept of six layers: site, structure, skin, service, space plan and stuff (de Jonge & Kuipers, 2017).

Alois Riegl was an Austrian art historian and he was convinced that any concept of authenticity of a monument did not derive from its origin or from eternal values, but from its present day perception (de Jonge & Kuipers, 2017). So he created two kinds of values, commemorative values such as age, historical and intention commemorative values and present day values such as use and art value (Stanley-Price, Talley, & Melucco Vaccaro, 1996).

3.2 VALUE MATRIX



VALUE MATRIX

NEWNESS VALUE	AESTHETIC VALUE	RARITY VALUE	SOCIAL	
4 DISTANT FROM SURROUNDING BUILDINGS			5 MUSIC NETWORK	
10. UNCARED TREES				
	14 WILDVERBAND BRICK MASONRY 15 DAMAGED FACADE			
	20 DIVERSE RHYTHM OF FACADE			
	28 MATERIALITY OF INTERIOR			
	30 ARTIFICIAL LIGHT IN THE CONCERT HALL			MODERATE VALUE
				LOW VALUE
			33 OPPORTUNITY FOR ALL GENERATION	POSITIVE VALUE
				NEGATIVE VALUE

3.2 VALUE MATRIX

1. GREEN NETWORK

Along Roelvinkstraat there is a green network. This long green line which is penetrating the city center of Winterswijk makes the whole city center vibrant. This green network have been existing since 1950. This green line has longer history than the music school.



SURROUNDINGS-HISTORICAL MODERATE-POSITIVE

2. BAD ACCESSIBILITY

spoor straat is not croweded thesedays and from the Willinkstraat it is hard to recognize the site because of buildings.

SURROUNDINGS-USE MODERATE-NEGATIVE

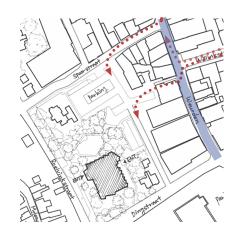
3. IN-BETWEEN SPACE OF TWO DIFFERENT STREETS

Two streets, Wooldstraat&Weurden and Roelvinkstraat have quite different characteristics.

Wooldstraat&Weurden has a lot of retail and commercial buildings whereas Roelvinkstraat is a quiet and nature-friendly street with many tall trees and parks. The Raadhuis and Boogie Woogie are located on the starting point and the endpoint of these two different streets meet each other.

So both of these two building sites can be the buffer spaces for these two different streets and these two sites can have both characteristics of those streets. Thereby, the Raadhuis and Boogie Woogie could make a huge complex that has not only commercial and natural functions but also some more additional functions else.

SURROUNDINGS-USE HIGH-POSITIVE





4. DISTANT FROM SURROUNDING BUILDINGS

A lot of surrounding buildings have longer histories than the music school. Old buildings and newly built buildings along the streets have similar shapes and materials to keep the context of the city. However, the music school is located a bit apart from surrounding buildings so that the building could have a particular form that is different from surrounding buildings.

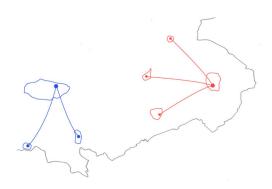
SURROUNDINGS-NEWNESS LOW-POSITIVE



5. MUSIC NETWORK

Stichting Boogie Woogie is the important music school in Winterswijk because not only in Winterswijk but also there are some branches in nearby towns. So this music school is the center of the music network in the east Achterhoek

SURROUNDINGS-SOCIAL HIGH-POSITIVE



6. LOCATION IN THE OPEN SPACE

There are a lot of changes in the block and surrounding streets and the site where the building is situated is used to be in the middle of the block. New street divided this block and give new possibilities to this site. The green space and trees behind the building are existing longer than the music school so it was designed with considering this greenery.

SITE-AGE LOW-POSITIVE



3.2 VALUE MATRIX

7. COVERED BY TALL TREES

The site has a lot of tall trees and these trees covers building facades so that it is a little bit hard to recognize that there is a music school when you stay away from this building.

SITE - USE MODERATE-NEGATIVE



8. ISOLATED FROM SURROUNDINGS

Trees surrounding the building have some practical functions. For example, these trees can be sound barriers not to bother neighborhood in the sites. And also these trees make this building isolated from surrounding contexts. The musical performances in the concert hall are very special experience for both visitors and performers. It is time to dive into another world full of sounds. So people can feel more like in the special place stayed away from reality through coming to this isolated building covered with tall trees.

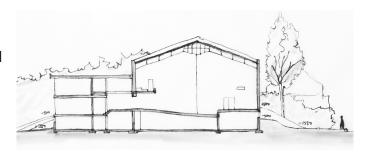
SITE - USE HIGH-POSTIVE



9. GROUND LEVEL DIFFERENCE

Ground level difference negative value because it makes people hard to access the building. And because of this level difference people who use wheelchair hardly use the surrounding park.

SITE - USE MODERATE-NEGATIVE



10. UNCARED TREES

Not only trees make visitors hard to recognize the building, but also it spoils the sceneries of the building by covering the beautiful facades.

SITE - AESTHETIC LOW-NEGATIVE



11. CONTRAST OF SOLID AND TRANSPARENT

Through these solid and transparent diagrams, you can see how much the form of the building has a relationship with functions. The huge solid part is the concert hall. The concert hall has to be disconnected from the surroundings by huge solid walls to give people a quite different atmosphere apart from the reality in which they live.

In contrast, the atrium and the foyer have big openings. These spaces are for refreshing and help visitors to concentrate on the performance in the concert hall again.



SKIN-USE **MODERATE-POSTIVE**

12. LACK OF OPENABLE WINDOWS

This lack of openable windows causes problems at natural ventilation and natural cooling. It is hard to get natural ventilation without openable windows, this music school depends on the mechanical ventilation which uses a lot of energy costs.

SKIN-USE HIGH-NEGATIVE

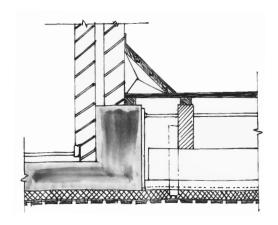


3.2 VALUE MATRIX

13. NO THERMAL INSULATION

This building consumes a lot of energy for heating because this building does not have thermal insulations on the walls and slabs. A huge amount of energy costs because of the absence of thermal insulation is the main reason why people want to demolish this building.

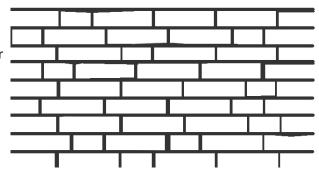
SKIN-USE HIGH-NEGATIVE



14. WILDVERBAND BRICK MASONRY

This irregularity leads us to focus more on the shape of the wall as the whole surface itself rather than looking at the surface as the combination of separated parts.

SKIN-AESTHETIC LOW-POSITIVE



15. DAMAGED FACADE

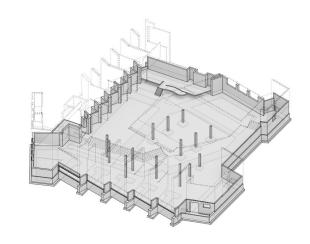
Bricks on the corners are more worn out than other parts by the small eddy which is generated at the corner of the facade. These damages could be the trace of history though, in my perspective these damages spoil the beauty of the huge brick facade.

SKIN-AESTHETIC LOW-NEGATIVE

16. RELATIONSHIP BETWEEN STRUCTUAL AND LANDSCAPE

Not only different structural materials are combined in this building but also the building structure has a relationship with the ground. Although this building has very complicated details, it is to get along with ground-level differences. And the use of different types of materials for the structure creates atmospheres.

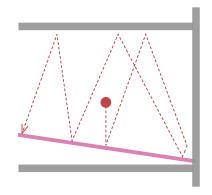
STRUCTURE-USE MODERATE-POSTIVE



17. NON-PARALLEL WALLS

This gap is not to make two walls parallel. When it is parallel, this is not good for the acoustics. On the other hand, when it is not parallel, two walls make different reflections which can help to improve acoustic qualities. Diffused reflections make better acoustic qualities by creating more echo and resonance.

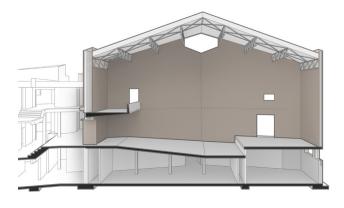
STRUCTURE-USE HIGH-POSTIVE



18. HEXAGONAL CONCERT HALL

Hexagonal form of the concert hall can also help to improve acoustic qualities. Only two walls are parallel in this concert hall so it causes diffused reflections make better acoustic qualities by creating more echo and resonance.

STRUCTURE-USE HIGH-POSTIVE



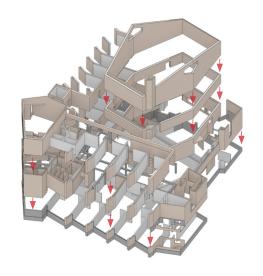
STICHTING BOOGIE WOOGIE ANALYSIS

3.2 VALUE MATRIX

19. NO PLEXIBILITY

All the structures is designed for particular functions so when you want to change the function of the space then it is hard to apply new functions to the space. Namely, there is no flexibility of the space

STRUCTURE-USE HIGH-NEGATIVE



20. DIVERSE RHYTHM OF FACADE

The rhythm of the facade changes when you walk along the facade because of the particular form and structure of the facade. These diversely changing rhythm of the facade makes this building more interesting and also help to keep the privacy inside of the rooms

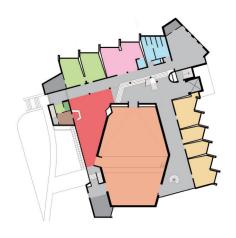
STRUCTURE-AESTHETIC MODERATE-POSITIVE



21. RELATIVELY SMALL FOYER

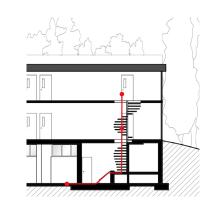
Compared to the size of the concert hall, the foyer is a bit small to accommodate every visitor. In addition, there is a small bar in the foyer that makes people hard to make groups. The foyer and the atrium are divided by the concert hall and also by stairs so that the foyer and the atrium do not feel like one integrated space.

SPACE PLAN-USE MODERATE-NEGATIVE



22. VERTICAL MOVEMENT

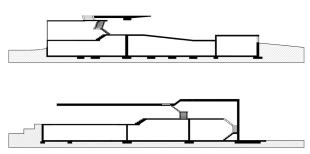
In the music school, there are 4 staircases and one elevator for the vertical movement. Compared to the size of the building, this building has many staircases. However, the staircases are not efficient at all because only the farthest staircase connects from the basement to the first floor. In addition, this staircase is very small and not opened visually toward different floors. And the use of the elevator is also very limited because of this location.



SPACE PLAN-USE MODERATE-NEGATIVE

23. FLOOR LEVEL DIFFERENCE

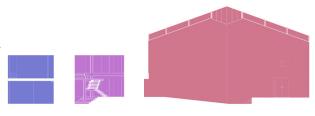
To make a slope for the concert hall seats, the level difference is inevitable. The architect extended this necessary level difference to every floor in the building. As a result, it feels like this building has a wider space than it really has. However, accessbility in this building is quite unconvenient because of these level differences especially for disabled people.



SPACE PLAN-USE HIGH-NEGATIVE

24. ATRIUM

The atrium has a function for connection. The atrium connects the concert hall to the lesson rooms, the entrance to the concert hall, and the ground floor and the first floor. Not only connecting different spaces, it can also be a buffer space between the scale of the concert hall and lesson room, and between the darkness to the brightness.



SPACE PLAN-USE MODERATE-POSITIVE

STICHTING BOOGIE WOOGIE ANALYSIS

3.2 VALUE MATRIX

25. MATERIALS FOR ACOUSTIC QUALITY

Brick is a good material for the concert hall because the hard texture of brick can reflect sound very well. With the special form of the concert hall, huge brick walls improve the acoustic quality of the concert hall significantly.

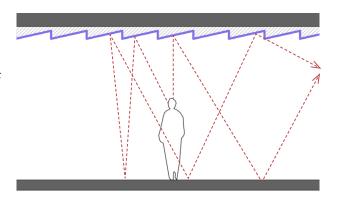
SURFACE-USE MODERATE-POSITIVE



26. ZIGZAG CEILING IN THE BASEMENT

The ballet studio and the classroom in the basement have an interesting zigzag shape of the ceiling which can improve the acoustic quality of the rooms through diffused reflection.

SURFACE-USE MODERATE-POSITIVE



27. POOR INTERIOR QUALITY IN THE BASEMENT Compared to the interior of the upper two floors, the interior quality of the basement is immensely bad. The low ceiling is not laminated and the floor also doesn't have a good finish. Except for the ballet studio, spaces in the basement hardly have a

well-finished interior and very low and narrow.

SURFACE-USE HIGH-NEGATIVE



28. MATERIALITY OF INTERIOR

Brick has a cold texture whereas wood has a warm texture. And also, the pattern of the irregular brickwork and the pattern of regularly parallel wooden ceiling covers make an interesting contrast in the building. Sandstone tiles on the flooralso make a different pattern with wooden cover and bricks. As a result, these three different textures and patterns of materials enrich the atmosphere of this building.

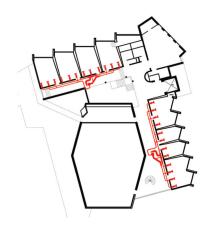
SURFACE-AESTHETIC MODERATE-POSITIVE



29. MACHINE DEPENDENT SERVICE

This building is really not good for natural ventilation and heating and cooling. So the building depends on the mechanical ventilaiton and heating/cooling.

SERVICE-USE **HIGH-NEGATIVE**



30. ARTIFICIAL LIGHT IN THE CONCERT HALL

The lighting system was renovated in 2010 and it has very good quality. This artificial lighting makes this concert hall more special.

SERVICE-AESTHETIC LOW-POSITIVE



STICHTING BOOGIE WOOGIE ANALYSIS

3.2 VALUE MATRIX

31. MUSICAL INSTRUMENT

A lot of people have used musical instruments in this music school. They have performed special performances in the concert hall and these common memories are in the instruments.

STUFF-COMMEMORATIVE MODERATE-POSITIVE



32. HISTORY OF THE MUSIC SCHOOL

For about 50 years, a lot of people have learned music in this music school. They did performance in the concert hall and spend tons of time in the small lesson rooms. So different generation have the same memory about this music school

SPIRIT OF PLACE-HISTORY MODERATE-POSITIVE



33. OPPORTUNITY FOR ALL GENERATION

Not only young students but many old people are learning music in this music school. And they do the performance together. Family, friends, and all the community member in Winterswijk gather in the concert hall to enjoy the performance both as performer and audience.

SPIRIT OF PLACE-SOCIAL HIGH-POSITIVE

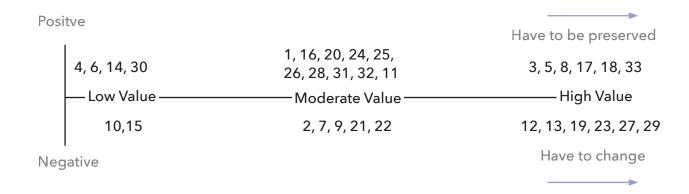


Through the value analysis, I realized that almost every layer of the music school has a lot of use values, especially in structure and space plan part. Use value is the function of the building. It means that this building was built with considering the use values at the beginning of the design.

As the form of the building follows function as a music school, the form is focused on improving the acoustic qualities and instead of getting this quality, other values like ventilation, accessibility should be abandoned. In these collisions cause dilemmas. Besides, different kinds of use values also cause dilemmas as well. For example in the value matrix, 7 and 8 collide even though these two values come from the same factor: the building is covered by tall trees.

In this collision, I think 7 has a moderate-negative value whereas 8 has a high-positive value. Then, these tall trees should be kept.

Dividing value into negative and positive helps me to make decisions in the dilemmas.



OVERALL CONCLUSION

This research began with the discourse over the music school.

Through the research, as I approached the building from various perspectives, I realized that both opinions are quite reasonable and it looks not easy to convince opposite sides. In this music school, the form and function of the building are closely related. This building was built only for the music school and the architect mainly focused on the design to improve acoustic qualities. So I could identify the architectural elements that the architect intentionally created for the function of the music school.

Meeting two different spatial characteristics is the nature of this building. The concert hall and lesson rooms have completely different spatial characteristics. Because the form of the building follows the function of it, these two different functions and spaces make two different forms.

These differences generate contrasts in the building: music hall and lesson room, connection and disconnection, big and small, daily use and uncommon use, bright and dark, open and solid, private and public.

This music school has many problems and values. These values and problems come from the combination of two different functions which have totally different characteristics. Spatial contrasts either can be the values of the building or the problems. That is why I did cultural value analysis with a positive value and negative value. Through this research, I realize that all the values and problems have double-sidedness. Values can cause problems and problems can give opportunities to create values.

BIBLIOGRAPHY

Figure

- Fig 1.2 Pace layers From "Shearing layers of change" by Brand Layer, 1994.
- Fig 1.3 Observation question example from "Designing from Heritage" by Marieke Kuipers and Wessel de Jonge, 2017
- 7Fig. 1.6 Stichting Boogie Woogie in 1980 by Nationalebeeldbank, 1980
- Fig 1.7 Music lesson in the music school by Nationalebeeldbank, 1980
- Fig 2.1.28 Green Network based on Google map,2019.(https://www.google.com/maps/place/Stichting+Boogie+Woogie/@51.96871,6.7179593,496m/data=!3m1!1e3!4m5!3m4!1s0x47b86532644c87d3:0x1c716a66e70f-16ca!8m2!3d51.96871!4d6.720148)
- Fig 2.1.46 Spoorstraat bird eye view from "Cultuurkwartier Winterswijk Haalbaarheidsstudie" by Explorius, 2018.
- Fig 2.2.1 Repetitive rooms on Southeast facade based on achterhoeknieuwswinterswijk, 2019.
- Fig 2.2.37 Ballet studio by Jan Ruland van den Brink, n.d.
- Fig 2.6.1 Musical instrument from Stichitng Boogie Woogie, 2016
- Fig 2.7.13 Pictures of the concert hall from original pictures form Stichting

Boogie Woogie, 2015~2019.

Fig 2.7.14 Pictures of performances from original pictures form Stichting

Boogie Woogie, 2015~2019.

Valuation matrix from "Designing from Heritage" by Marieke Kuipers and Wessel de Jonge, Fig 3.1.1 2017

Articles, books and social media

Kuipers, M. & De Jonge, W., (2017). "Designing from Heritage". Delft, Nederlands: TU Delft - Heritage & Architecture (Fac. Architecture) on behalf

of the Rondeltappe Bernoster Kemmers Foundation.

Clarke, N., Kuipers, M., & Stroux, S. (2019). Embedding built heritage values in architectural design education. International Journal of Technology and Design Education. https://doi.org/10.1007/s10798-019-09534-4

De Gelderlander (2019) Muziekschool in Winterswijk gaat plat. Jammer.Retrieved 09-01-19 from https://www.gelderlander.nl/winterswijk/muziekschool-in-winterswijk-gaat-plat-jammer~ab2fe0b5/

Aanbod cursussen. (n.d.). Retrieved October 22, 2019, from https://www.boogiewoogie.nl/aanbod-cursussen/Boogie Woogie. (n.d.). Retrieved September 27, 2019, from https://www.100procentwinterswijk.nl/locaties/565930927/boogie-woogie-1

Esselink, D. (2019, July 16). *Oost Gelre halveert subsidie muziekschool: voortbestaan Boogie Woogie wankel.* Omroep Gelderland.

Gebruikers van de Mattelier. (n.d.). Retrieved October 22, 2019, from https://demattelier.nl/gebruikers/Haggeman, H. (2018, April 1). "Eindelijk even rust" voor Muziekschool Doetinchem. De Gelderlander.

Hartkamp, G. M. (2005). Het muziekonderwijs in Nederland tijdens de 20e eeuw. University of Utrecht.

Keuning, D. (2012). Piet Tauber, Bouwen naar Opdracht. Rotterdam: Stichting Bonas.

Kits, T. (2019a). Oost Gelre stapt niet uit Boogie Woogie. De Gelderlander.

Kits, T. (2019b, January 19). De muziekschool gaat plat, Jammer? De Gelderlander.

Kits, T. (2019c, August 11). Die Zauberflöte in Steengroeve Winterswijk 'fantastisch succes'. De Gelderlander.

Lang Leve Kunst. (n.d.). Retrieved October 22, 2019, from https://www.boogiewoogie.nl/lang-leve-kunst/

Leenen, C., & van Es, E. (2010). Jos. Bedaux, architect 1910-1989. Rotterdam: Stichting Bonas.

Over ons theater. (n.d.). Retrieved October 22, 2019, from https://www.theaterdestorm.nl/over-ons-theater/Roodnat, B. (1977, September 6). No Title. NRC Handelsblad.

Schwenke, A., & Bosch, H. G. (1971). Bestek en voorwaarden voor het bouwen van een muziekschool te Winterswijk. Maastricht.

van der Ven, F., de Heer, J., Bergma, C., & Doms, J. (1989). Jos Bedaux, architect. Tilburg: Tilburgse Kunststichting.

Van Heuvel, W. J. (1992). Structuralism in Dutch Architecture. Rotterdam: Uitgeverij 010.

Van Heuvel, W. J., & Verbrugge, B. D. (1996). Geschiedenis van de Bouwkunst. Leiden: Spruyt, van Mantgem & de Does BV.

Vereeniging Volksfeest. (n.d.). Volksfeest. Retrieved October 22, 2019, from https://www.volksfeest.nl/volksfeest/bloemencorso/algemeen/

Villa Mondriaan. (n.d.). Het Museum. Retrieved October 23, 2019, from https://villamondriaan.nl/nl/het-museum

Zaal Huren. (n.d.). Retrieved October 22, 2019, from https://www.hofnaraalten.nl/zaalhuur

Geographical situation of Winterswijk (Cultuurhistorische Atlas Winterswijk, 2009)

Explorius(2018), "Cultuurkwartier Winterswijk Haalbaarheidsstudie" Retrieved from https://explorius.nl/nieuws/nieuw-cultuurkwartier-in-winterswijk

The map of building age (code.waag, 2015)

code.waag(2015) The map of building age.Retrieved xx-01-15 from http://code.waag.org/

Marktscan Station locations Winterswijk - final report dated 14 August 2014 - BRO

