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### **STUDIO**

Shared Heritage Studio Bandung

### **TUTORS**

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### PROJECT TITLE

Eterna

### **PROJECT LOCATION**

Bandung, Indonesia

### DATE

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'A project about the challenge of solving the wider societal water problem while conserving heritage and creating an opportunity for escapism within the bustling city'

# Introduction

Graduation project

### SHARED HERITAGE STUDIO

The Shared Heritage studio is a multidisciplinary collaboration between ITB, TU Delft and the Dutch Ministry of Education. Culture and Science. The studio focuses on the shared heritage, in the colonial city Bandung, Indonesia. According to the Cultural Heritage Agency shared heritage are the traces of a connected past between the Netherlands and many nations and cultures around the world, commemorating the rich and complex history that we share. Think of buildings, archives, shipwrecks, museum collections and intangible heritage. The goal of the graduation studio was to evolve this colonial shared heritage city centre of Bandung into an inclusive, thriving and healthy environment for working, living and leisure. While doing this the understanding of how to deal with the development of shared heritage in Indonesia was of great importance.

### **APPROACH**

This understanding has developed into a personal vision on shared heritage and an approach on what the role of an architect can be in this context.

My vision on shared heritage is mainly focused on seeing is as an inspirator, an inspirator for a sustainable future. By looking at our shared and rich past thinking towards the future, we can create valuable designs for the present. Hereby we can learn from the past and other cultures. This is emphasized by the following quote.

'Heritage was the answer to sustainability, most adapted and sustainable answer to daily life of populations. Deeply routine in cultural life.'

Willems, W. and Van Schaik, H. - WATER AND HERITAGE

I think thereby that shared heritage should be the driver for sustainable development. By highlighting valuable elements of the past, we can create stronger designs for the future. This approach matches with the vision on how to assess 'cultural value'. Nicholas Clarke1 states that cultural value should not be and art-historical or cultural historical study of the past, but an assessment of the societal value of the residue of the past within a specific socio-cultural context a with a forward-looking perspective. Hereby shared heritage has a strongly linked to sustainable development.

To design a project that is linked to the sociocultural context of the shared heritage city, my project started with a fascination that is inextricably linked to a sustainable future. This has subsequently been developed into a problem statement and ambition.

<sup>1.</sup> Clarke, N. J. (2018, october 11). Heritage and Architecture, Studio Bandung MSc 4. Cultural Value submission, 2018.

### **FASCINATION**

Water is the element with which we cannot live without, but which is also continuously the subject of discussion when it comes to climate change, shortages and dangers in the world.

## 'Water is the driving force of all nature.'

- Leonardo da Vinci

During my master, I always wanted to integrate my fascination with water into my designs. Lam convinced that as architects we can contribute to a vision on how we can and have to live with water in the future. With my graduation project I am using this power of working together with water to add value to the shared heritage center of Bandung, west Java. A place that offers a big challenge for that. The city has to cope with floodings. shortages, water pollution and thereby health issues, because of extreme urbanization. These problems have led to the research into the relationship between people and water within the heritage structures of the city. This researched focused on the values of the historical water system, the current problems and the future possibilities.

### **AMBITION**

My research into this societal problem in a shared heritage city centre has led to the ambition to promote the peace, space and beauty that water can offer within the shared heritage centre of a growing city in order to reconnect people with nature and offer

a place for personal nourishment and awareness. Therefore, this can create a showcase for similar circumstances in the world. Hereby the project deals with the challenge of solving the wider societal water problem while conserving heritage and creating an opportunity for escaping from the bustling city. This leads to a strategy with different scales of impact. First, it focuses on the scale of personal nourishment and escapism. With the design of a bathhouse. And secondly, the urban scale with the design of an ecological water system to have a positive impact on the water structure. The project location, Jalan Braga nr. 43, is situated in the middle of the historical city. The building, build around 1915, makes the connection between the bustling shopping street. Jalan Braga and the enclosed garden adjacent to the Cikapundung river and the Kampung and it harbours water traces of flooding and historical water systems. This challenging site thereby fits into the ambition of the project.

### REFLECTION

In this reflection paper I will reflect on my graduation process, how my ambition has developed, the societal relevance of my project and the way research is done during this year and how this influenced my project. Hereby I mainly focus on the cultural value side of my research. Beside I will reflect on my vision to shared heritage and how this emerges from my design.

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Research phase: value assessment

### **RESEARCH METHODS**

The goal of my research was to understand the complex relationship between water and the city of Bandung, to get an understanding of the historical values of the city centre and to research the use of the space. All aspect you can only experience by visiting the area.

Hereby I combined two different research methodologies. First of all, the site research was really important for the understanding of this project. In my opinion the site must have been felt, smelled, heard, tasted and seen. A building has to match with its 'language of space', to achieve a good project. Talking to people and observing the behaviour and use during the day has had a major impact on my design. It has shaped my story for my design. Secondly, I used the cultural value matrix (appendix I). A research tool offered by the chair of Heritage and Architecture. The tool is based on the theories of Alois Riegl1 and Stewart Brand2 and meant to be used to detect the essential qualities of heritage buildings in their present state and to understand them better in relation to the historical evolution. This research methodology led to a good understanding of the building and its surroundings, which provided the basis for a redesign for the future. This method could then be used for the physical grading of the building (appendix II). The following value assessment is an elaboration of the understanding of the building and its surroundings.

### VALUE ASSESSMENT

The building at Jalan Braga nr. 43, currently in use as Art gallery has historical value that is represented by the location between two historical axes of the city. Braga street and the Cikapundung river. Besides, the original facade with historical elements from about 1915 has historical value. Around 1915 this building was possibly built as a cinema. This can be deduced from the large volume of the front part of the building, where daylight can barely enter. With this reference to the old function the large volume represents use value. Besides, the historical character of this space is strengthened by the pressed tin ceiling with high historical value. This commercial side of the building is in contrast with the rear of the building, which

was originally designed as a residential part and still fulfills this function. The combination of these two parts of the building, which manifests itself in a more formal and informal character, represent a high use value. The rear of the building also embodies a high age and historical value. The age value emerges from the weatherworn skin and structure. The gallery represents a unique way of connecting the various rooms and thereby contains historical value. In addition, another aspect of the historical value of this access can be recognized by the separate entrance on Braga street that has been created for the residential part.

Rarity value is represented by the enclosed garden and the height difference between

<sup>2.</sup> Riegl, A. (1982). The Modern Cult of Monuments: Its Character and Its Origin. Oppositions, nr. 25, 21-51

<sup>3.</sup> Brand, S. (1995). How Buildings Learn: What Happens After They're Built. New York: Penguin Publishing Group.

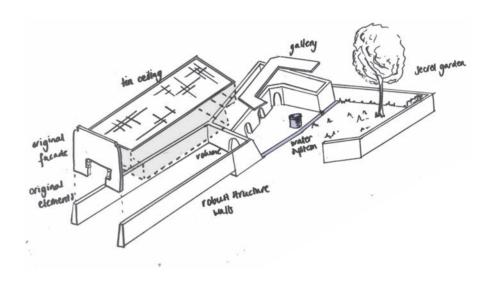


Figure 1: Exploded view of most valuable elements

Braga street and the river that is used to create different zones in the building. From Braga street you descend slowly towards the river and you will be surprised by the enclosed garden that offers an oasis of peace. The garden is enclosed by high walls that protect the site against flooding.

This garden is connected to an original water system with a high historical value. Not only drainage from the street was regulated with this sluice, but also the watering of the garden. In addition, the well provides a source of water for daily use.

The robust structure of the basement also makes the reference to the possibilities of flooding at the location. These walls constructed of natural stone, represents relative art value.

The spirit of place is represented by the character of 'Paris of java' with the commercial function in the historical shopping street on the one hand and on the other hand the community feeling of the Kampung, which is represented by the Braga art community at the river side.

This building represents historical value because of the contextual scale and the old water system. On the scale of site, which contains the connection between Braga street and the Cikapundung river and the secret garden, the building embodies a high rarity value. Its aesthetics represent age value and a high use value. Besides, on the elemental scale Jalan Braga nr. 43 represents relative art value. This composition of the most valuable elements of the building is combined in a sketch of the exploded view (figure 1).

### CONCLUSION

The aim of the project is to deal with a societal problem within the heritage structures to create a showcase. Hereby the problem statement asks for a design for the future in which we can live with water. Sustainability thereby requires an integrated climatic design. Taking the value assessment into account. this will result in different issues. The current building is not protected against a future in which the water problem will only increase. Parts of the building are in poor condition. rainwater is not collected, and several rooms are not ventilated and do not have daylighting. This requires different climatological interventions on building and contextual level. Furthermore, on the basis of the value assessment it can be concluded that the context in which the building is located. between Braga Street and the river, is of great importance and represents a high value of the building. Just like the combination of the commercial and residential part of the building. This combination offers a good strategy for a possible different use in the future. However. the context will also create issues for the future. What if the river is no longer heavily polluted in the future and a connection is possible? What if the future asks for the opening of the enclosed garden that is now of high value?

All these aspects and future scenarios created several opportunities, obligations and dilemmas for a future design. The following chapters will elaborate on the process of dealing with these complex questions.

Vision on shared heritage

# 'Shared heritage embodies traces of a shared and rich past which can be seen as an inspirator for a sustainable future'

This is my definition of how I used shared heritage in my design process. This vision helped me to develop a concept for my design and thereby deal with the different opportunities, obligations and dilemma's. My concept starts with looking at the values embodied by historical structures and subsequently highlighting these elements with green, water and light, tools which are essential in a sustainable future. By using these 'tools of awareness' and highlighting the historical values the design makes people aware of the sustainable future of shared heritage.

The design is thereby not only making people aware of the future in which we can live with water and reconnecting people with nature, but also making them aware of what we can learn from the past and show the different layers in the building by creating contrast and distance.



Figure 2 - 7: Chronological pictures project location, Jalan Braga nr. 43

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Iterative design process

### **ITERATIVE DESIGN PROCESS**

Based on historical research, Jalan Braga No. 43 is possibly built as cinema and it also has been a watch store. Both functions suit within the historical character of the colonial street. In the colonial period the street was a luxury shopping street with exclusive shops. For the appearance of this street the iconic buildings were of great importance. However, the street scene has changed drastically. Cars and scooters dominate the street scene nowadays, historic buildings are vacant, and many monumental facades are covered with billboards and covered walkways. Although the historic character of the street has disappeared, the covered walkways now represent use value, protecting visitors from sun and rain. However, it is important for the atmosphere in the street to make the facades , with high historical value, visible again and to stimulate the liveliness that Jalan Braga once had. This created a dilemma, which developed into a design in which the historical value of the façade and thus the impact on the street can be restored, but a pleasant climate can also be created in the street.

Looking at the historic façade of the building, the entrance area provided space for the ticket sale of the cinema. The location of these kiosk cubicles can also be derived from the current ceiling. This ticket sale ensured an interaction with the street and the program within the building. I wanted to reintroduce this interaction in my design by also connecting the function of the tea house with the street scene. This will stimulate the street's vivacity. The covered walkway will therefore be removed in the design, but to maintain its use value, the street will be provided with large

protective trees, which will create a more pleasant climate in the street, allowing people to enjoy the lively Jalan Braga in the future. Both interventions are a reinterpretation of the historical values, which are strengthened in the new design.

### The teagarden

The connection of the front and commercial part of the building with the atmosphere in Jalan Braga was therefore of great importance in the design. However, the program also caused an issue. The concept of the program is to offer the visitor the possibility to escape from the hustle and bustle of the city, to take a moment of physical and mental rest. The tea house is the first step in this transition from stress to rest. For the experience of the program it was therefore important that the bustle of Jalan Braga was not fully brought into the teahouse. The creation of a transition zone. an 'in-between part', was therefore important. The building offered this opportunity in the area that historically also created this transition from the outside to the inside, the ticket sale. As a result, the value of the large and dark space could also be retained and strengthened in the design.

This large and dark volume of the former cinema was of high value because it referred to the historical use. However, I used the value of this historical use by highlighting a new 'spotlight' in the building, the newly designed ecological water system. Through an intervention in the historic roof and ceiling, the plants and the water system will be highlighted with daylight, but the rest of the historical volume will be retained. The condition was that

the tin of this valuable ceiling had to be reused elsewhere in the design.

In addition, this intervention in the roof also offered opportunities for the climate conditions of the space. In the past, this volume was not ventilated at all. By using the vernacular principle of a ventilated roof made of glass, daylight can be brought in, the space can be ventilated and the old span structure is protected from rain. With this climatic intervention, the experience of the ecological water system and the use of solar panels on the roof, the tea house can be seen as an energy hub. This puts the sustainable future in the spotlight by using historical values.

### The node

The above clearly describes the dilemmas that arose during the design of the part of the building adjacent to Jalan Braga. However, the rarity value of this building is that it borders both on Jalan Braga and on the Cikapundung river. This offered the opportunity to connect Jalan Braga with the community in the Kampung situated along the river. This is why in my first designs there was a direct connection between the enclosed garden, bordering the Cikapundung river, and the Kampung. This resulted from my vision that I wanted to design something for the entire local population. A place that everyone can use and where they can experience the values of water. However, this direct connection came into contrast with my concept of creating a place where people can escape from the hustle and bustle of daily life. If I made a direct connection between the garden and the Kampung, this would not be a garden to escape, but a garden that would be taken

over by the Kampung community. This required another 'in-between part' to create an entrance from the Kampung that was not directly connected to this garden. This part had to connect the various streams of the Kampung, Braga and the programmatic components of the building, 'The Node'. Looking at the historical structure of the building, this function actually already existed. The middle part of the building makes the connection between the commercial and the residential part of the building and can therefore already be seen as a connecting part. Looking at the values of the building, this part of the building is in very poor condition and needs renewal. However, the basement of this part has a high relative art value due to the thick robust walls. These walls with historical value have therefore been an important point of the design. To strengthen this value, I created contrast with a new lightweight construction, placed upon the robust walls, allowing light to come in.

### Taman tertutup

This node also makes the connection with the garden and the bathhouse in the design. This used to be the residential part of the building, consisting of several rooms along a gallery. One of the important values of this housing typology was that there was a direct connection between the building and the garden. This is also a value to strengthen in the design. However, this caused a dilemma in the design of a bathhouse. Men and women in Indonesian culture are not allowed to see each other in swimwear. Through this, open facades were not an option. To make the connection with the green, the use of translucent façades

has become an important element in the design. You can still see the garden, which contains a part of the ecological water system, but you cannot look inside the building.

Another important value represented by this part of the building is the enclosed garden, taman tertutup. Within this garden the historical water system is located. However, this system can no longer be optimally used due to water shortages during the year. In addition, a different source of water, such as rainwater, will have to be used in the future. It was therefore important that this old water system was integrated into the new ecological water system in the garden. In order to use the values of the past as source for the future.

This unique, enclosed green space in the middle of the busy city has given rise my design and to see this place to escape from the bustling city as an important value. In an early stage this developed into a design that reinforced the enclosure and turned inwards. By building the bathhouse upon the robust wall that surrounded the garden, this was emphasized. This caused a design that was very introverted. Because of that, I had to continuously ask the question about the connection with the context during the design process. As discussed earlier, a clear entrance from the Kampung through 'the Node' ensures that connection with the community was created, but the connection with the river was missing in my first designs.

Nowadays the river is seen as a great danger by the local population and due to the heavy pollution, an opening to the river is not yet possible. However, this reflection on my own design has ensured that I started thinking about the connection with the river in a future scenario. The river historically has always been an important vein in the city. In the scenario that the cleaning of the river can be tackled on a larger scale, it must be possible to connect the enclosed garden with the river. That people can not only find their peace in the garden but can also sit along the river. This has ensured that I have designed a large door in the robust wall. This door will now fulfill the function of emergency door, but in the future, it can be opened to the river. A door to the future.

In addition, this opening to the river also makes the link with the impact of my design on a large scale. The introduction of a new ecological water system will contribute to improving the societal water problem. That was once the starting point of my research. My design is thereby a showcase on a smaller scale on how waste water can be filtered before going into the river and how rainwater can be seen as a new important source of clean water.

Hereby the project is dealing with a global problem on a local scale.

# Conclusion

This iterative process resulted into the design of different moments of escape in the three different parts of the building to create awareness for the value of water. The choices I made during my design process all started by looking at the values of the historical building and reinterpreting for a sustainable future. driven by my vision towards shared heritage. The process of asking critical questions about your own design and continuously reflecting on your goal, your ambition and the context has created a stronger position towards your design. In addition. I have been able to develop a new vision on the role of the architect in this complex context based on what I learned from shared heritage.

### **ROLE OF THE ARCHITECT**

I see it as the role of the architect to connect a societal problem with architecture while conserving shared heritage for the future. Thereby my vision to shared heritage, of approaching it as an inspirator for the future, helped me to develop a sustainable design connected with de socio-cultural context. With my project I want to achieve this with the challenge of solving the societal water problem, while conserving heritage and creating an opportunity for escapism within the bustling city. To thereby really create a showcase for similar circumstances in the world

Bibliography

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Brand, S. 1994. How Buildings Learn. What happens after they're built. New York: Viking.

Riegl, A. (1982). The Modern Cult of Monuments: Its Essence and Its Development.

### **INTERVIEWS**

Abah Ropih, owner Art Gallery and pioneer of Braga Art Communit, 10 april 2018

Tabagus Adhi, Urbanist, Architect and member of the Bandung Heritage Society, 4 april 2018

Figure list

Figure 1: own illustration

**Figure 2:** Algemeen Indisch dagblad: de Preangerbode, 01-04-1931

Figure 3: Nederlands fotomuseum

**Figure 4:** https://dontworrybeingalone. wordpress.com/page/3/

**Figure 5:** http://wikimapia. org/#lang=en&lat=-6.919845&lon=107.607 651&z=16&m=b&show=/18116244/Ropih/ photo/3285862&search=bandung

**Figure 6:** http://www.serbabandung.com/rumah-seni-ropih/

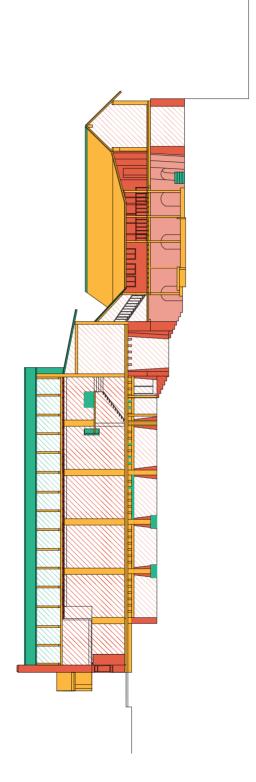
Figure 7: own photograph

# **Appendix**

Cultural value matrix and physical grading

# **CULTURAL VALUE MATRIX**

				-	•			
RIEGL	AGE	HISTORICAL	USE	ART	INTENTIONAL	NOTINTENDED	RARITY	SPIRIT OF PLACE
SURROUNDINGS	old road streeture	old colonial old water system						
SITE	of the small cinema	The heart of the braga. The seals started faultion Though of the deforms and Though of the forms and Though of the braga street.	five footway; art gallery				inden gerten	srong community (eding
SKIN	weatherswom's kin	special parts, layered facade	covered walkkay	original design				
STRUCTURE	outstace of offerm supreture	Female and a series of the ser	structure provides are 4.9 large volume	robits structured signed against the discontinger				
SPACE PLAN		suggestion of old skin	connection commercial -				using the height difference to create different zones	
SURFACES	died appearance	history the colling to			Copy of the building			
SERVICES	ampaine good	old water gallery accessystem	separae entrance for the residential and commercial part					
STUFF								Paintings lines
STORY		delising temp specker			'Rumah Seni Ropih'			revived by the community



High value Medium value Low value