FINAL PROJECT – RA.141581

DYNAMIC LIVELY ART GALLERY FOR CHILDREN

NORBERTUS RUBEN LUGASBASKORO
08111440000038

Supervisor
Nur Endah Nuffida, ST. MT.

Department of Architecture
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LEMBAR PENGESAHAN

DYNAMIC LIVELY GALLERY FOR CHILDREN

Disusun oleh :

NORBERTUS RUBEN LUGASBASKORO
NRP : 08111440000038

Telah dipertahankan dan diterima
oleh Tim penguji Tugas Akhir RA.141581
Departemen Arsitektur FADP-ITS pada tanggal 9 Juli 2018
Nilai : B

Mengetahui

Pembimbing	Kaprodi Sarjana
Nur Endah Nuffida, ST. MT.	**Defry Agatha Ardianta, ST, MT.**
NIP. 197610122003122001	**NIP. 198008252006041004**

Kepala Departemen Arsitektur FADP ITS

Ir. I Gusti Ngurah Antaryama, Ph.D.
NIP. 196804251992101001

LEMBAR PERNYATAAN

Saya yang bertanda tangan dibawah ini,

N a m a	: Norbertus Ruben Lugasbaskoro
N R P	: 08111440000038
Judul Tugas Akhir	: Dynamic Lively Art Gallery for Children
Periode	: Semester Genap Tahun 2017 / 2018

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Surabaya, 23 Juli 2018

Yang membuat pernyataan

Norbertus Ruben Lugasbaskoro

NRP. 08111440000038

FOREWORD

Praise to God Almighty thanks to His Grace, and His gift to us all so that the writer can finish the final project proposal with title "DYNAMIC LIVELY GALLERY FOR CHILDREN" This final project proposal report is arranged as one of the requirement to do final project on Strata program 1 at the Department of Architecture, Faculty of Architecture Design and Planning, Sepuluh Nopember Institute of Technology, Surabaya.

The author realizes in the preparation of this thesis proposal will not be completed without the help of various parties. Therefore on this occasion we would like to thank to:

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The author realizes that this final project proposal does not escape the various shortcomings. The author hopes for suggestions and criticisms for perfection and improvement so that ultimately this thesis proposal report can provide benefits for the field of education and implementation of the field and can be further developed further. Amen.

Surabaya, 27th June 2018

Author

ABSTRACT

DYNAMIC LIVELY ART GALLERY FOR CHILDREN

By

Norbertus Ruben Lugasbaskoro

08111440000038

The identity which ordered from the form of the strengthened memory of a place or an activity was defined as an artificial memory, because the memory here was undirectly been built or given by a story that was created and become a base to many people's memory. The memory that was built and strengthened about some place or some events will become an experience for some people and undirectly, the experience will spread widely because many people wants to know about some history that they can't get anymore.

The prime is how memories can be something that will give knowledge to us that can affect our behavior and life. In this part, we may reach the goal by using and process a public space and public activities for children, because children is the fastest stage of human that likely receive knowledge and unique experience for their habit in the next stage.

The dynamic concept of design is how the rooms adapt forms that seem to be moving and transforming them in a coherent dimension of space. Spatial forms free of ornament is intended for the room does not dominate for the works of the exhibited collections.

Keyword: Children, Dynamic, Gallery, Knowledge, Memory

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CHAPTER 1

PREFACE

1.1 BACKGROUND

There are several values of life that can applied by human being for their life experiences. The life experience was once designed to be the fundamental value on human experience, and children was chosen because children was the easiest stage of human growth to absorb and gain memory as much as they could. In some stage, the memory will be fading and human will lost direction to face the life reality. The most interactive activity is the one that will absorb and will be the memory and their knowledge of life. Natural memories is that which is engrafted in our minds, born simultaneously with thought. Artificial memories established from places and images that defined on to be repeated down the ages. Memorial building, such as museum has acted as generator of knowledge.

1.2 ISSUE AND DESIGN CONTEXT

1.2.1 ISSUE

In connection to people's mind, memory is the part of the memory's mind. *Mnemonic* was commonly used in the auditorial form such as short poems, acronyms, or memorable phrases, but mnemonics can also used in other types of information. There are some steps can be used to use mnemonic such as: *Imprint on the memory of loci or places.*To give the memory to the place, or undirectly give the memory using an architectural type.

Locus or *loci* is a place easily grasped by the memory. It is better to form one's memory loci in a deserted and solitary place for crowds of passing people tend to weaken the impressions. Memory *loci* should not be too much like another, for instance too many spaces are not good for the resemblance to one another, cause it will be confusing.

In form to order places in memory, a building is to remembered with which the rooms are decorated. Then, as soon as the memory of the facts requires to be revived, all these places are visited in turn and the various deposits demanded of their custodians. Then, he says, that this method ensures that the points are remembered in the right order, since it was fixed by the sequence of places in the building. There is no doubt that this method will work for anyone who is prepare to labour seriously at these mnemonic gymnastics. (Quintillian, 1886 in Yates, 1966)

There are two kinds of memories, the one is natural and the other is artificial. The natural memories is that which is engrafted in our minds, born simultaneously with thought. A good natural memory can be improved by this discipline and person less well endowed can have their weak memories improved by art. The artificial memory is a memory that strengthened by training. The artificial memories established from places and images that defined on to be repeated down the ages. The Rhetorica ad Herennium (Rhetoric: For Herennius), formerly attributed to Cicero or Cornificius, and is still used today as a textbook on the structure and uses of rhetoric and persuasion.It was told that it was the first form structure of rhetoric.

1.2.2 MEMORY RELATED TO HUMAN KNOWLEDGE

Through it definition and roll at this age, building that represent of human memory had a poignant and enduring role as a cultural reponse or 'treasure trove'. One need only consider the 'pilgrimage'of many visitors to come to the building of

the memory itself. The memorial building, such as museum has acted as generator of knowledge. The contemporary museum, which a building that represent memories, have turned into the natural landscape of inspiration, that was often for aesthetic or pragmatic reasons, but at times to invest their buildings with a specific identity.

The identity which ordered from the form of the strengthened memory of a place or an activity was defined as an artificial memory, because the memory here was undirectly been built or given by a story that was created and become a base to many people's memory. The memory that was built and strengthened about some place or some events will become an experience for some people and undirectly, the experience will spread widely because many people wants to know about some history that they can't get anymore.

The most curious one among all the human stages are the children, we know that children can easily absorb interesting activity, story and experience. And the most interactive activity is the one that will absorb and will be the memory and their knowledge of life.

1.2.3 MEMORY, KNOWLEDGE AND CHILDREN

In the youth field, the basic idea of the "young person as an active citizen" is added and the concept of "participation" is a core element of youth work. (Non-Formal Education with Children and Young People, pg. 11 – 2013).

The journey of every human life is certainly always different. But every child is born with the same essence and message. The main nature and message is that every child is a gift of the Creator, whatever the circumstances, to whomever it is given, and whenever he or she is born.

Science is more important than treasure. For the inheritance of the prophets as for treasure is the legacy of Qorun, Pharaoh and others. Science is primarily of treasure because it keeps you, if it is your treasure that guards it. (Ali bin Abi Thalib)

1.2.4 DESIGN CONTEXT

On Surabaya, there are topics or important issues that has to be evoked, the issues are about knowledge and memories for the children. Bulak is an example place that nearly full of chidren that is lack of knowledge about history.There are so much public space that was provided on Surabaya, but, there is no meaning, and no memories about the place. The public space nowadays just functioned for a gathering to some public community. Actually, there is something else more priceless can be built in a space. The activity that was abandoned are the part of Surabaya people. The most vital is about the social and culture, the culture itself can be approached by the art and by remembering the memories on some place on Surabaya, because on some place there is a priceless memories or history that can be an identity for the place.

In the explanation above, it shows us that actually Surabaya citizen need a public space that response and give them the memories that are precious to Surabaya and undirectly to fulfill the need of public space for community activities. And so, the facility should not be abandoned or really vanish when there is a new development in that place.

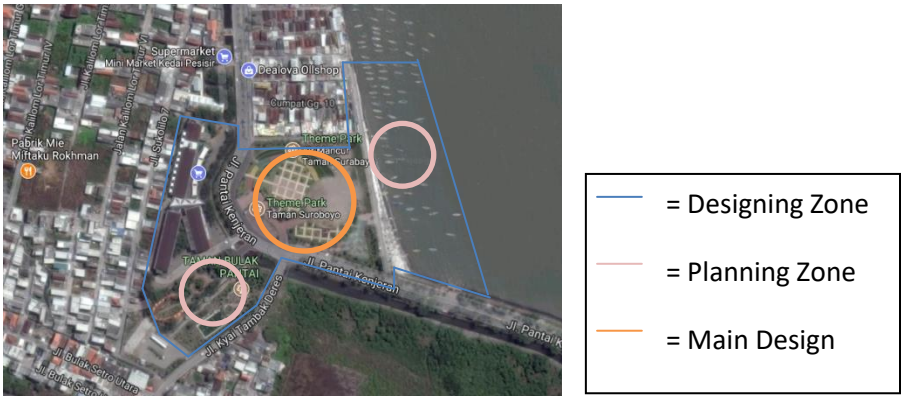

Figure 1.2.4 Picture from air of Bulak Kenjeran, Surabaya (source : *www.earth.google.com*)

In this design, the scope design chosen was a memorable space, or a space that can brings back so many memories and giving so many knowledge from it, With choosing the site at Bulak Kenjeran, East of Surabaya, East Java. The simulation of this design is to design and finding also redefineing that space configuration for architectural design what we can analyze so we can choose the old part that was already been there and we can design some new function to approach the memories we want to be the main goal.

Bulak Kenjeran was chosen for this design is because we know that Bulak have so many memories that can be built there, the memories here can be form from the activities from the people of Kenjeran.

The site that will be the place to analyze and learn is located on Bulak Kenjeran on East of Surabaya on East Java. Bulak Kenjeran is a public facility that well known with the Bulak fish market and the activity which was recreation activity and commerce activity. On that place to we can see the Taman Surabaya have been built in that place to enhance the recreation part and to bring in more visitors to the place to know Bulak Kenjeran as a place not only the fish market.

But what can be captured from the effort , is still in the short term, and there has been no significant effort to review the activity on Bulak Kenjeran fish market and Taman Surabaya. The impression that can be captured on the character of the architecture is an impression that is not compelling, lighting many lights are dead, and parking facilities were not widely available. It can be conclude that Bulak Kenjeran is not giving so much response to its other physical feature surround.

Users and visitors to this region are very diverse and from different walks of life. This diversity occurs as a result of the various facilities and activities provided. In Bulak, the visitors mostly came at the night time. And the visitors mostly come at the weekend, oftenly in night weekend, the visitors come with their family member, so at night Taman Surabaya is full of crowd. In which the family member that come

are parents and their children. So Taman Surabaya will had many children visitors at weekend.

In the last few years, users when viewed in terms of quality and quantity suffered considerably. In terms of quality, no users are simultaneously engaged, even periodically it can be said to have been quite reduced. and the problem is the absence of a solution from the design side that responds to these conditions in order to revive the attraction of the object. In terms of quantity, it clearly appears to decrease compared to the early days of its presence. This cause many of the visitors , such as children came after Bulak has open Taman Surabaya across the fish market and culinary centre.

1.3 DESIGN PROBLEM AND DESIGN CRITERIA

1.3.1 DESIGN PROBLEM

According to the explanation that related to the issue in this design project report, the problem is **how the memories can be remembered and can be recalled for people's experience**. In approaching this design goals, there are methods that can be used such as behavior architecture, narrative and sense of feeling. Narrative method directs the design to become an identity for the area. Sense of feeling method will make the area becomes memorable and the new one following growth of a period.

And the second problem is **how memories can be something that will give knowledge to us that can affect our behavior and life**. In this part, we may reach the goal by using and process a public space and public activities for children, because children is the fastest stage of human that likely receive knowledge and unique experience for their habit in the next stage.

1.3.2 DESIGN CRITERIA

Design criteria that will be the main goal for this project are:

1. Preventive measures such as initiating safe design elements as well as providing security officers invulnerable places and attracting children to play are desirable to support the phenomenon of playing in the public sphere.
2. Activities that are able to spur children to feel at play is the existence of interactive games that encourage children to continue reasoning and keep continuing.
3. The surprise elements that occur periodically rhythmically generate exciting attractions and are anticipated by the children.
4. There are several elements of public space that have more poetic / poetic characters for children. Conversely, the dark, narrow space and long hallawys tend to be avoided by children because they cause fear and got lost.
5. Circulation on building should be well laid out with attention to the hierarchy of the room in the building as well. It is also worth nothing the circulation arrangement between the main visitor circulation area and the service area so as not to interfere with each other.
6. In the gallery function required a dynamic spatial design so that in accordance with the exhibition function will be contained in it.

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CHAPTER 2

DESIGN PROGRAM

2.1 SPACE PROGRAMMING SUMMARY

2.1.1 ACTIVITY PROGRAMMING

The use of the Behavioral Architecture approach to base the thinking in designing a building to meet the original goal of improving or recalling moral knowledge to children. Since the primary user of the parameter is a child, the children's activity and their companion are the most noticed to give the child the most impact on the building. In addition to being directed to the child, the building remains also for general use, because it is impossible for parents to allow their children to explore alone in a large building.

Based on the main parameters derived from the theory of the Behavior Architecture (Jon Lang, 2010 in Experiencing Architecture), that are:

1. Users,
2. Function of Building, and
3. Affordance

   Affordance is an environmental capability to support human activity (Wikipedia) and the 2 environmental carrying capacity of humans to manifest meaning through human activity.

Table 2.1.1.1 The Relation of Affordances and Environmental Features

Affordances	Environmental Features
Walking, Running, Cycling, Skating	Flat, Relatively smooth hard surfaces
Coasting, running and Rolling down	Relatively smooth slopes
Throwing, Digging, Drawing, Dueling, and Building Structures	Graspable, detachable objects
Hanging, Jumping,-on /over and Swinging on	Attached objects
Looking out from and Passage to other places	Climable features
Providing privacy and microclimate quality	Shelter
Constructing objects and Throwing	Moldable materials (e.g dirt and snow)
Swimming and Splashing	Water

Source: Experiencing Architecture, 2015

The above parameters are used to estimate and ascertain how building can be meaningful and help the architect to achieve the goal he wants to achieve in the design.

Other parameters that can help to measure and consider things to form a basic design of an architecture that is part zoning or space programming based on the activity of the intended primary user. These parameters are parameters abstracted from the theory of behavior setting which is one of the elements that influence the

Behavior Architecture approach. The variables that become benchmarks in Behavior Setting are:

1. User
2. Activity
3. Behaviour

The primary user who is the basic (main) factor for the architecture to be designed is the child. So, all the programmed activities are the main and basic things done and the response given is the most basic of the child. Because the child can not be allowed by his family to explore in a new and spacious place alone.

Table 2.1.1.2 The Relation Between User's Activities and Behavior

Children		
Year (years old)	Activities	Behavior
3-5	- Build a fort	- starts to differantiate place mood & meaning from their own mood
4-7	- stating 'places' of their own perception	- start to be curious how places will be used
8	- reading - grouping (same gender) - physical and endurance activities - imaginating	- wants to understand how and why things work - extremely impatient and may have hard time waiting for special events

9	- drawing to imagine - physical activities	- good at memorizing - good at handling tools - wide mood swings - secrecy
10	- cognitive activities	- friendships are highly important - fewer fears of what they did - secrecy
11	- curious about kinds of community	- Hard of sitting still - literal decision maker - importantly friendship - worrisome and afraid of things - secrecy
12	- blends with community	- Start to interest in the opposite sex - more stable friendships with melodramatics - following trends - secrecy

13	- more care about community	- moody, uncomfortable - likes to be alone, values privacy - self insecure - does not get along well with adults - secrecy
14	- friends and grouping (both gender)	- feel embarrassed by parents - high interest in: a. opposite sex b. extracurricular activities - center if attention - secrecy

Parents		
Mom	- observing	- mentally protecting her children
Dad	- observing	- physically protecting his children

	- doing the same thing as his child does	

Source: Environment and Children, 2007 and Author

2.1.2 BUILDING FUNCTION ANALYSIS

In step to realize the main goal of improving moral knowledge in children, can be done counseling or guidance in any form but counseling is one of the most boring words for children. Children love interesting things, like contrasting colors, colored objects, games, and some adrenaline things like physical games and sports.

The main function of the building is that can accommodate how a child can know and increase knowledge that in fact is a knowledge that can be obtained from informal education. **The main function too have fulfilled one of the design problem to how the memories can be something that will give knowledge to us that can affect our behavior and life**. Classic systems of education are not able to assure environmental protection, economic adaptability, or trust in other cultures values. From that statement, the knowledge given to the child is channeled in another way in a way that does not use the classical way of a definition of education itself. In the learning process of children, there are three aspects that make it a process that is very closely related to the naturalness of a child, those are:

1. Cognitive (memory of *knowledge*)

   The steps are *knowing, understanding, applying, analyzing, evaluating*, and the last and highest function, *creating.*

2. Affective (feeling and emotion)

Like cognitive objectives, affective objectives can also be divided into a hierarchy (according to Krathwohl). This area is concerned with feelings or emotions.

3. Psychomotoric (sensory or movement)

   Psychomotor objectives are those specific to discreet physical functions, reflex actions and interpretive movements. Traditionally, these types of objectives are concerned with the physically encoding of information, with movement and/or with activities where the gross and fine muscles are used for expressing or interpreting information or concepts. This area also refers to natural, autonomic responses or reflexes.

Art Space serves as a facility for education, and communication and also facilitates the development of contemporary art. This is done by exploring the creative process and new ideas from the contemporary. Art gallery in Art Space is a neutral space that serves to present contemporary art in it.

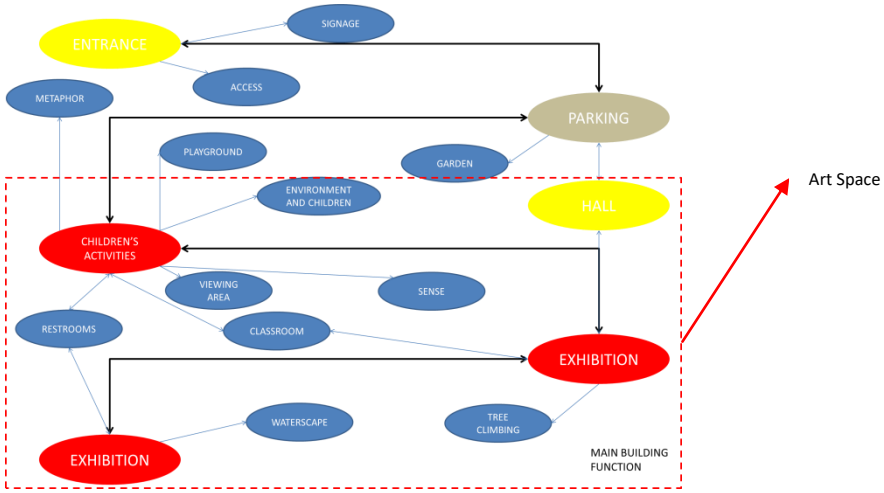

Figure 2.1.2.1 Space Programming on Site (Source: Author Analysis)

In the figure description above, described that visitor will start their visit **linearly** which means, they will visit straight at the site, from **entrance** that will drive

them to the **parking lot**, then they will go through a space for **children's activity** then they can go to **exhibition A** and **B.** According to children's behavior and activity in a place, the programming would not be as straight as described before, the circulation should be **radial** because mostly of the visitor will be children. The diagram above shows how a child can know about how he can explore in a designated area for the child's creative exploration activities and how the child can concoct the various art presented in the building into their guide (memory) of how they should behave in life in the family and how to socialize them.

From the diagram above can be analyzed what the space needs to be in an integrated design, among others:

1. There is a main entrance as the main route to access the whole building

2. There is a parking lot used to park the visitors and curators, as well as some workers in the building.

3. The existence of Hall as a place to gather or meet for visitors

4. Children's activities which is the beginning part of the main function of the building.

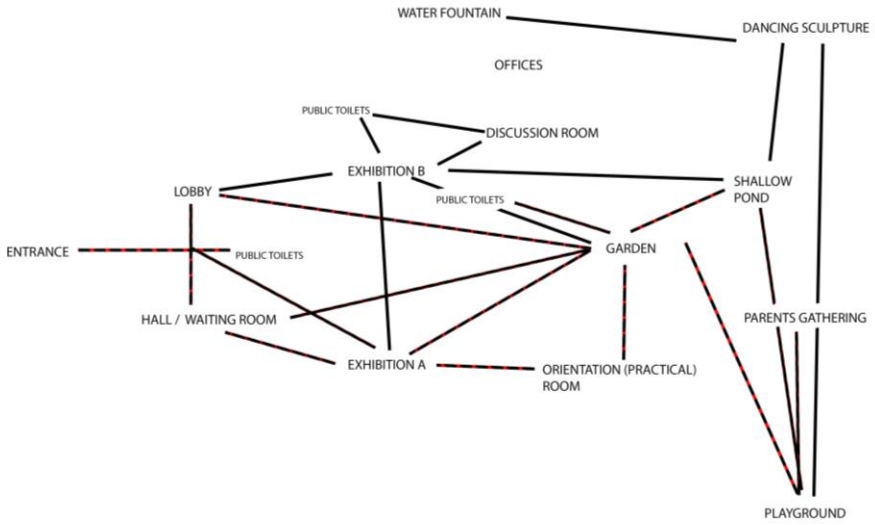

Figure 2.1.2.2 Space Programming on Site (Source: Author Analysis)

As the description below the visitor is allow to take the visit wherever they want after they get in to the site from the **entrance**, they alow to go to the **garden** without going to the rooms on the building. Or, they are allow to go to **building A (**where there are **Lobby**, and **Exhibition A)** without going to **building B (**where there are **orientation room** and **exhibition B)**. Or, either going to the building, after going through the garden, the visitor will be visiting the playground area, which consist of **parents gathering, playground, dancing sculpture** and **shallow pond**.

2.1.3 SPACE REQUIREMENTS

The thing that becomes the most benchmark here is the amount of space that is in the building that makes children not become confined inside a building with a large mass. Below is described how will the quantity form by the visitors and the workers.

- Public Area Associated with Art Collection

Table 2.1.3.1 The Room Requirements in relation With Function and Capacity

No	Room Name	Room Function	Visitor Capacity	Area and Capacity of Room in m^2
1	Display Room	Public	80	80 x 12 = 960
2	Orientation Room	Public	25	25 x 20 = 500
				Total = 1460

- Public area non-Art Collection

No	Room	Room Function	Visitor Capacity	Area and Capacity of Room in m^2
1	Parking Lot	Public	250	50 x 13,2 = 650
2	Hall, plaza	Public	50	50 x 6 = 300
3	Canteen	Public	25	25 x 96 = 240
4	Public Toilet	Public	25	25 x 8 = 200
5	Lobby	Public	150	150 x 6 = 900
				Total = 2290 m^2

- Private Area Associated with Supporting Facilities

No	Room Name	Room Function	Workers Capacity	Area and Capacity of Room
1	Kitchen	Private	20	20 x 10 = 200
2	Electrical Room	Private	8	8 x 30 = 240
3	Pantry	Private	10	10 x 7,5 = 75
4	Storage Room	Private	7	7 x 24 = 168
5	Mechanical Room	Private	5	5 x 30 = 150
6	Primary Office	Private	3	3 x 265 = 795

Total = 1628 m^2

- Private Area Associated with Art Collection (Security)

No	Room Name	Room Function	Workers Capacity	Area and Capacity of Room
1	Collection Storage Room	Private	5 workers	5 x 25 = 125
2	Main Computation Room	Private	20 workers	11,8 x 20 = 236
3	Security Room	Private	10 workers	10 x 10 = 100

Total = 461m^2

Requirement Related to Space and Activity

For as a basis for designing, a design requirement is the thing that counts the most. The most noteworthy requirement here is that most closely related to the child, where safety and privacy are paramount in a design, safety and privacy calculation. The achievement of all spatial designs, based on the use of the Behavior motif setting where the Behavior setting when associated with user activity will lower the requirements that will give the terms of how space should be in a building to make it an architecture that can meet the initial goal to be achieved designer, in other words the architect or designer. The conditions under which the children become the main users in the building that will be the design goals, are as follows:

1. Safety

   The concept will be derived on the condition that the calculation of the elements of the safety of the user of the building with the presence of spaces that are the most important part or fundamental that will be achieved.

2. Privacy

   Privacy is a concept that can be derived by using the method of sense of feeling where, a privacy will be realized with the atmosphere that has been designed to present it.

3. Learning

   The concept with the requirement of learning is a concept that will be derived with the requirement element to take into account to teach or increase moral knowledge aimed at children in buildings.

4. Social Cohesion

Social cohesion is a concept that unifies how all user connections can remain one in the same place without any differences among people.

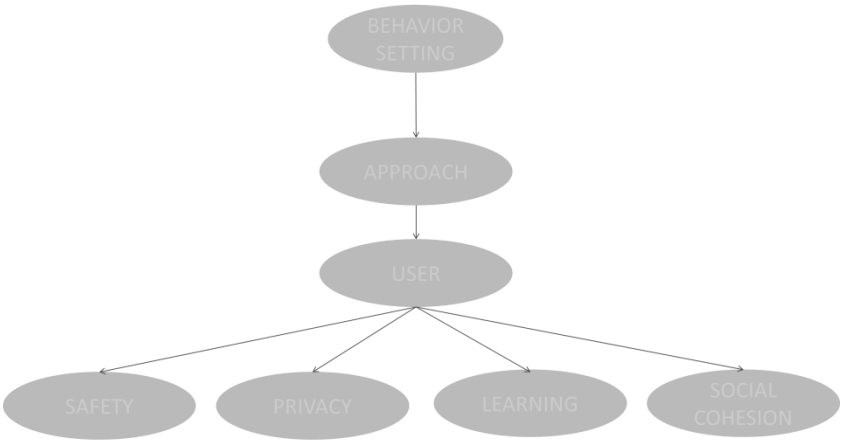

Figure 2.1.3 Space Requirement for User (Source: Experiencing Architecture)

Some requirements relating to the function of a gallery typology, among others:

1. Circulation on buildings should be well laid out with attention to the hierarchy of the room in the building as well. It is also worth noting the circulation arrangement between the main visitor circulation area and the service area so as not to interfere with each other.

2. In the gallery function required a dynamic spatial design so that in accordance with the exhibition function will be contained in it.

3. In the gallery building required special lighting arrangements so that artwork can be viewed comfortably by visitors.

Some requirements that can make room for a child's play area:

1. Interactive Activities

Based on field observations that occur in a number of game stations, activities that are able to spur children to feel at play is the existence of interactive games that encourage children to continue reasoning and continue

2. The Element of Surprises

Activities that occur in Bugis Junction Rhytmical water splash is attracting children's attention. This is because the surprises that occur periodically rhythmically generate exciting attractions and are anticipated by the children. The same thing (the element of surprises) actually happens also in the fireworks attraction played at Disneyland, which makes the children interested and feel at home to see it. Even the event is very much anticipated by children and adults.

3. Emotional Bond

According to observations, fish ponds, swimming pools and fountains are attractions of space that have emotional ties to children. There are several elements of public space that have a more poetic / poetic character for children. Conversely, the dark, narrow space, and long hallways tend to be avoided by children because they cause fear and get lost.

1. Safety In Play

Events shown in the headline Jawa Pos newspaper on Monday, 4 June shows that the presence of public space as an element of spontaneous play is not supported by the presence of safety and security factors in play. Things like this are sometimes not anticipated and realized by the designers and architects as the initiator of the design of a public building. For that in other cases, preventive measures such as initiating safe design elements as well as providing safety factors such as providing security officers in vulnerable

places and attracting children to play are desirable to support the phenomenon of playing in the public sphere.

2.2 SITE DESCRIPTION

The site is taken in Bulak, the site taken because Bulak and Kenjeran are considered as slum and dirty areas. But, actually there we know there Kenjeran park used by children and adolescents to play and exercise, some fishermen who work at Bulak Fish Center. Now, on the site where this project is located, there is a Surabaya Park which incidentally became one of the Surabaya City Government program in increasing the area of Bulak.

Generally, site is an inert, passive situation. So, we should always remember that a site is never be a weak element in designing but site is an onging set of very active networks that are tied together in a complex relationship between many elements in it. It is important to do the analysis if we are gonna design something that is integrated our design gracefully in the site networkwithout destroying its positive aspects, then we must first make ourselves aware of the nature on the site through context (site) analysis. (Edward T. White, 1983 in Site Analysis: Diagramming)

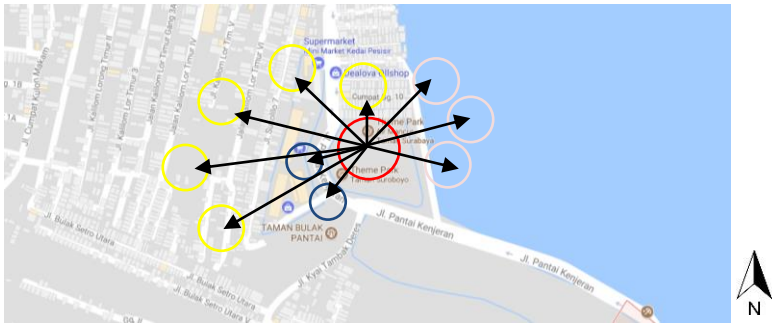

Figure 2.2.1 Diagramatic Site Analysis (Source: www.google.co.id/maps)

From the picture above we can, the moral memories that can built from Bulak Kenjeran, because we can take 5 areas that there are full of human activities there, the site is near the residential which there are we can see many inspiring morale that can experienced by people include children (Arrows from black dot direct to 5 yellow circles).

Environment Analysis

With the total area 10.000m^2 the site will be fiendly for the visitors actually children that visits the site. In the site there are vegetation that exist there, and planted there too because if the Surabaya government project. There is so much pavement that was designed there to connects each of the modules in Bulak which is Taman Bulak, Bulak Fish Centre and Taman Surabaya as one unity.

2.2.2 2.2.3 2.2.4

2.2.5 2.2.6 2.2.7

Figure 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7 Environment at Taman Kenjeran
(Source: www.google.co.id/maps)

2.2.1 NEIGHBORHOOD ANALYSIS

Neighborhood is incudes an analysis of the surrounding neighborhood in terms of cultural, psychological and behavorial aspects. Also importance are any scheduled or informal aspects in the neighborhood such as festivals, parades or craft fairs. (Edward T. White, 1983 in Site Analysis: Diagramming)

Undirectly, the human habit that are exist in the neighborhood built visitors memory on how they see the area is.

2.2.2 AROUND THE SITE AMBIENCE ANALYSIS

Figure 2.2.2.1 Circumstances at Jalan Kumpat, North of Jalan Kenjeran
(Source: www.google.co.id/maps)

Figure 2.2.2.2 Circumstances neighborhood at Jalan Kalilom Lor Indah, West of Jalan Kenjeran (Source: www.google.co.id/maps)

2.2.3 SITE REGULATION DATA

Figure 2.2.3.1 Surabaya Regulation (Source: www.google.co.id/maps)

Spatial arrangement (*Penataan Ruang)* is a system of spatial planning process, space utilization, and control of space utilization. The detail plan of urban spatial planning (*Rencana Detail Tata Ruang Kota)* is a detailed urban spatial use plan prepared for the preparation of spatial embodiment for the implementation of urban development programs. Protected areas (*Kawasan lindung*) are designated areas with the primary function of protecting environmental sustainability that includes natural resources and artificial power sub-systems.

Building border line (*Garis Sempadan Bangunan*) is a line that should not be exceeded by the building plan to the *Garis Sempadan Jalan* set in the city space plan. Setengah dari lebar jalan. Building intensity (*Intensitas Bangunan*) is the ratio of the total area / entire floor to the land area of the printing in accordance with the plan of urban space. Intensity of Land Utilization (*Intensitas Pemanfaatan Lahan*) is the ratio of the total area of the entire floor of the building to the land area of the printing / planning area in accordance with the plan of city space. The intensity of the space (*Intensitas Ruang*) is the amount of space for a particular function that is determined based on Floor Building Coefficient (*Koefisien Lantai Bangunan*), Basic Building Coefficient (*Koefisien Dasar Bangunan*) and height of the building every region around the district in accordance with the position and function in the development of the city. Basic Building Coefficient (*Koefisien Dasar Bangunan*) is a comparative figure of the number of ground floor area against the area of land that is in accordance with the regional plan.The regulation of Basic Building Coefficient (*KDB*) is 60% site area. Floor Building Coefficient (*Koefisien Lantai Bangunan*) are

the comparative figures of the total area of the entire floor to the area of land that is in accordance with the regional plan. Regional Tipology (*Tipologi Kawasan*) is the classification of the region in accordance with the character and quality of the area, environment, space utilization, provision of infrastructure and environmental facilities, consisting of steady, dynamic and transitional areas.

Local Regulation

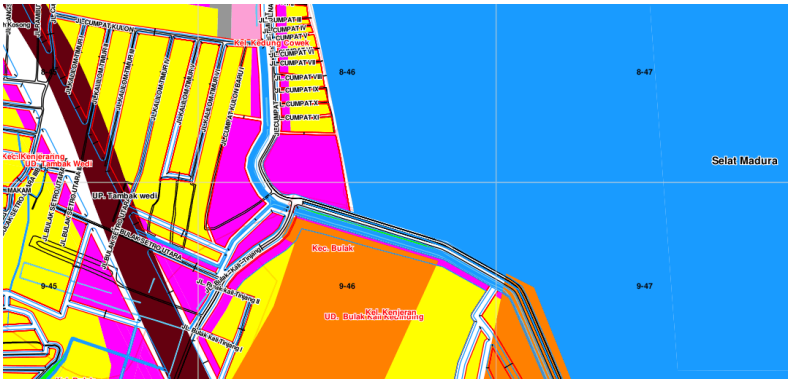

Figure 2.2.3.2 Land of Use on Bulak Kenjeran (Source: http://petaperuntukan.surabaya.go.id)

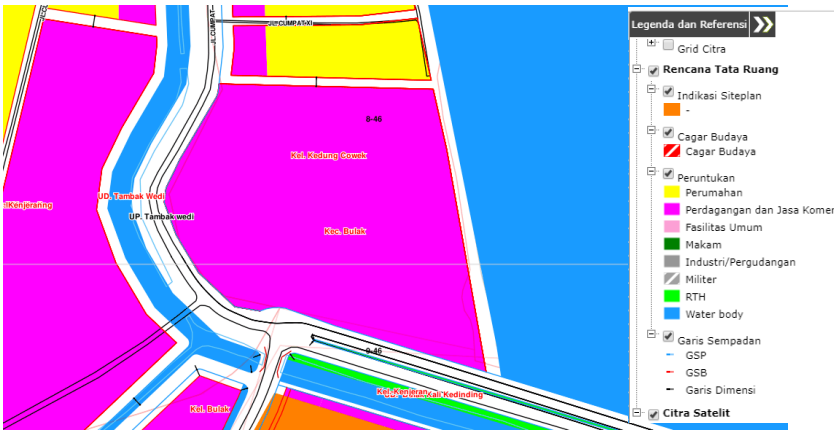

Figure 2.2.3.3 Land of Use on Bulak Kenjeran (Source: http://petaperuntukan.surabaya.go.id)

As described in the picture above, it can be seen that the land use in Bulak Kenjeran is for recreation.

On the book *Peraturan Daerah Kota Surabaya No. 12 Tahun 2004 tentang Rencana Tata Ruang Wilayah Kota Surabaya Tahun 2014-2034*, declares:

1. *Bab IV Rencana Struktur Ruang Wilayah Kota Surabaya, pasal 19 butir (5) menyatakan Pusat Lingkungan pada Unit Pengembangan III Tambak Wedi, meliputi Wilayah Kecamatan Bulak dan Kecamatan Kenjeran dengan pusat unit pengembangan di kawasan kaki Jembatan Suramadu.*

2. *Bab IV Rencana Struktur Ruang Wilayah Kota Surabaya, pasal 20 butir (5) menyatakan fungsi kegiatan utama pusat lingkungan pada Unit Pengembangan III Tambak Wedi meliputi permukiman, perdagangan dan jasa, rekreasi dan lindung terhadap ala*m.

CHAPTER 3

DESIGN APPROACH AND DESIGN METHODS

3.1 DESIGN APPROACH

We may reach the goal by using and process a public space and public activities for children, because children is the fastest stage of human that likely receive knowledge and unique experince for their habit in the next stage.

Architectural theory deals mainly with architects' ideas in designing for the elite and often for global commercial corporations. If architecture works as a discipline, reconization and embracement of values that exist in the larger population, a need exists to extents and reorganize the body of knowledge that is subsumed under the rubric "theory". (Jon Lang and Wolter Molenski, 2010 in Functionalism Revisited)

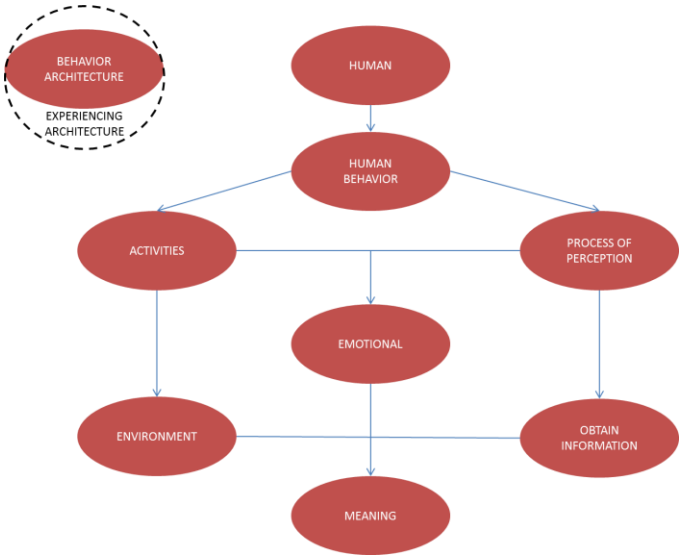

Figure 3.1.1 How Behavior Architecture Helps Source: Experiencing Architecture, 2015 and Author Analyze

The main idea which takes the lead role of an ideology and value making is the human personality and the different way of how they thinking by one person and another. The different of how a person think is cause by how they experience an event on their life (Nigel Cross, 1983). Design approach that will used on how to solve a building problem is depends to the building classification on how the building will define the value. On the problem of moral, so we more talk about how a feeling or emotion were supposed to be interpret, the building itself will be solving the problem with a non-verbal thinking.

Moral and Memory are things that can be analyzed from a child's life experience. And experince itself can be gathered and analyzed from human's behaviour.

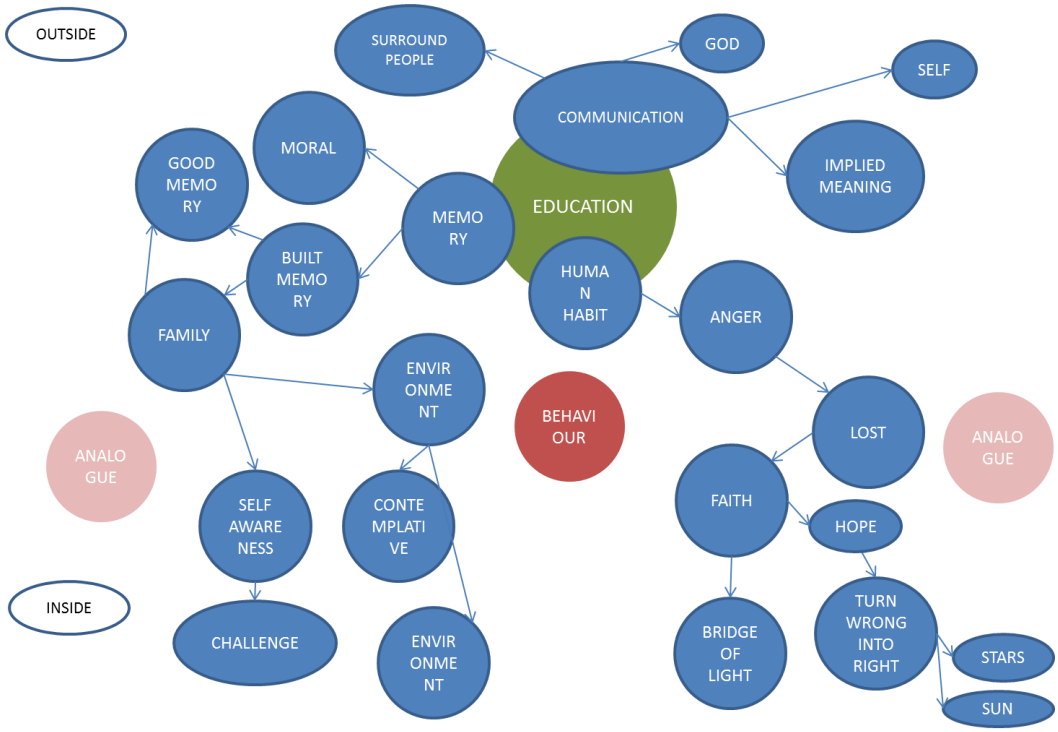

Figure 3.1.2 How the Transfer Done Source: Revealing Architecture Design, 2014 and Author Analyze

3.1.1 BEHAVIOR ARCHITECTURE

Behavior Architecture is an Architecture which the application always consider human behavior in design. This architecture appear in about 1950s which the consideration at that time was to design several spesific architecture buildings such as psychiatric hospital, a rehabilitation for drug addicts, jail, child hospital, etc. In its development process, there is a plenty of architecture building that can solved by this kind of approachment. In order an architecture that was based on human behaviour on its consideration, there are some more theories to support.

As the object of empirical study, the behavior has the following characteristics:

1. The behavior itself is visible, but the cause of the direct behavior may not be observable

2. Behaviors of various levels, simple behaviors, such as human social behavior, simple behaviors such as reflexes but others involving higher biological mental processes.

3. Behavior varies by classification: cognitive, affective and psychomotor which refers to the nature of rational, emotional and physical movement in behaving

4. Behavior can be realized and can also not be realized

3.2 DESIGN METHODS

In doing the approach, there are some methods that will be supported. Indeed theories will be become the data which will be the handle of the methods towards the design approaches. In Behaviour Architecture and to understand the approach, on

how to describe the approach that integrated to the issues, there are some ways that can be used. Design, rather than being an isolated acticity or even discrete discipline, can be seen as a way of thinking found throughout all of human activity and shared among many disciplines. As a conceptual process, it is present in any discipline which concerns itself which concerns itself with accomplishing a goal or achieving an objective. As a focus for architectural design, problem-solving method was to solve a problem which was a building and was shaped by ideas from an early concept to solve the problem. The entire problem-solving approach presupposes that viewing design as the solution of a problem is a useful strategy. Methods, here, is just structure content, tools, types of information, thinking styles, location of judgement, and points of decision making. They do not make decisions, but act as types of filter to address complex situations and can help to encourage good decision making-making by clearly defining criteria of success, but it cannot make this happen. (Plowright, 2014 in Revealing Architectural Design)

3.2.1 BEHAVIOUR ARCHITECTURE

In a situation of unlimited time and resources, it would be ideal to devote an extensive systematic research efforton every relevant design issue so that no area of potential importance would be left unstudied. Most of programming efforts are conducted under conditoin of limited time and money. The high costs of research can then be focused where the cost of error is high, and less expensive programming approaches can be used to obtain other kinds of information.

A more difficult problem is to find behavioral-based literature that is particularly appropiate for the programming problem in its vision. An organization may include journals containing special information about similar organizations or have in-house documents that identify the principal purposes as the primary goals and directions for advancement or change.

Behavioural-based programming should have the more generally applicable books and journals, while those wishing to program for particular building types that will be appropiate. As used for programming, systematic observation differs from other types of observation in several respects. Systematic observations should be conducted to answer questions raised to test spesific hypothesis developed from the results of observation and activity reviews.

3.2.2 BEHAVIOUR SETTING

Rapoport (1994) points out the complexity of this situation. He wrote "One of the strengths of EnvironmentBehaviour Studies (EBS), its interdisciplinary nature since it's beginning in the 1960s is also one of the problems with the field. It leads to fragmentation so that one's work appears in many different places- the journals of different disciplines, in a variety of other formats, and in a variety of countries...the result is a multiplicity of non-overlapping domains, sources and reading publics".

The idea had an overwhelming effect on design practice under the notion "user requirements" and designs aimed at producing a tight fit between the users' needs and architecture created. Architectural determinism captured the popular imagination of architects and affected both practice and education. What concerns us most however is the question of architectural theory; the set of principles that we employ in the conception and creation of buildings.

Frank Gehry says, "Architecture must solve complex problems. We must understand and use technology, we must create buildings which are safe and dry respectful of context and neighbours and face all the myriad of issues of social responsibility and even please the client. Finally, all the same issues facing the painter and the sculptor. Architecture is surely an art." (Acceptance Speech, Pritzker Prize).

Supporting Theoretical Studies

Children

Children are the object of this study. Children in this case are divided into several layers of age, namely:

1. Age 0-1 years, called infancy
2. Age 1-3 years, called the toddler period
3. Age 3-5 years called the toddler period
4. Age 5-12 years of age of primary education or school age
5. Age 12-14 years, referred to as pre-teen age

According to educational experts, during its development children understand the surrounding environment by playing. For that the child sees the surrounding environment as a potential for them to be enjoyed in their own way. The surrounding environment becomes a source of learning information that enrich the repertoire of thinking and creativity of children. For it was originally, a good child growth space is a space that is able to provide information play and learn for children to the fullest. Children and space create a unique interactional interaction behavior to observe.

Children's Creativity

Science is more important than treasure. For the inheritance of the prophets as for treasure is the legacy of Qorun, Pharaoh and others. Science is primarily of treasure because it keeps you, if it is your treasure that guards it. (Ali bin Abi Thalib)

What children's need is space to meet a social community, and to experience how to behave in a social community, and how they can attrated to the gallery, there are some points that have gathered to analyze. The shaping of architecture elements

can affect to the children's creativity and moral value. According to the goals, there are some program that can be usefull, such as:

1. Utilization of natural elements

   This program will leads to raise children's creativity potential through their feelings in the environment and also this leads their motivation to play and seeks more in the environment.

2. Development of a safe almosphere in spaces

   This program leads the childreen to decrease their stress level and helps to raise theis mental tranquility as they feel safe in the space which is given to them.

3. Establishment of complexity (physical variations)

   This program leads the children to develop their feeling of challenge and using their initiative in the right way (not damaging the facility) to solve the challenges that are made for them.

4. Development of flexibility

   This program leads and help to raise their capability of environmental manipulation, that undirectly raise their will to search for the answer of their question

5. Attractive visual tricks

   This program will oftenly makes the children use their visual to solve the problem, and also raise their capability of using their imagination to make the literal meaning of something.

6. Free plan and space division using moveable partitions

This program makes the children free to do their activities, they will be feel that they were in the space that allow them to explore more in the space, the visual of interior elements or the exterior environment that is facilitated.

CHAPTER 4

DESIGN CONCEPT

4.1 FORMAL EXPLORATION

4.1.1 MAIN CONCEPT

Dynamic is a trait that represents the art that continues to grow, therefore the application of dynamic form in space is by implementing the form that continues to move, not monotonous and flexible. Application in the space of ceiling, lighting, floor pattern, partition display works and others. In addition, dynamics can be created from a directed path, clean, organized, making it easier for visitors to obtain information and perform activities in it. The dynamic concept of design is how the rooms adapt forms that seem to be moving and transforming them in a coherent dimension of space. Spatial forms free of ornament is intended for the room does not dominate for the works of the exhibited collections.

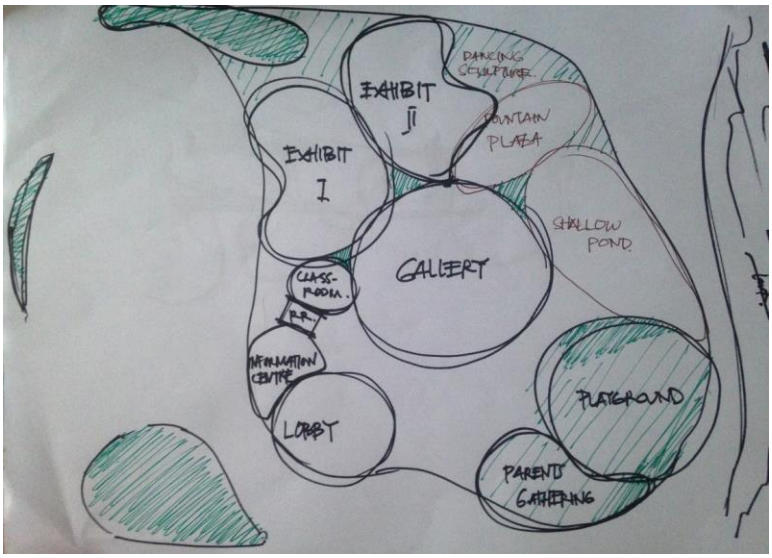

Figure 4.1.1.1 Space Programming (Source: Author Analysis)

4.1.2 AMBIENCE CONCEPT

Design method used here when setting the space more to Behavior Setting, ambience design on the building will use the methods that will be described as follows:

Narrative to Experience

Narrative is some way or method that can be used to solve an approach in design, because it is a form of communication. Narrative is also a trantition in that its exchange relies upon an initial ‘contract’ formed between the narrator and the recipient. Narrative also is a communication tactic that induces the viewer to comprehend a design proposal in terms of a ‘plot’ and to judge uts efficacy against the processes that created architecture to reach the goals (Porter, Tom in Archispeak pg. 101). When using narrative as a method, there is a part that can supports the way of the thinking. Storyboard usually used to solve the problem of narrative method, when it cisually telling us a story with roots in the comic strip frame and usually shown as perspectives, serial drawings can also incorporate a whole variety of drawing types in an account of time and movement through space in design.

Metaphor is too a way to tranform some value and meaning from some problems into another, from a subject (concept or object). Metaphor is a part of solving problem using narrative method. Metaphor may be used in poetric way, but the concept that may be generated throught it should be meaningful and substantial, this should come about through simple problem solving and understanding. Metaphor has always been with us, and as great minds are simple minds, we should follows the attitudes and paradigms of the great architects. (Antoniades, 1990 in Poetics of Architecture).

Narrative and metaphor is used to process on how the architectural element or formal aspects will be designed in the building as a form to solve the main problem.

Senses to Experience

Metaphor is the process of using language to understand one thing in terms of other things, it is an idea expressed by language that can both enrich our experience of architecture, unconscious motivations, reinforce our ties with the phenomenal world. Metaphor was proved as a useful device for expanding creative imagination.

"Vision and hearing are now the privileged sociable senses, whereas the other three are considered archaic sensory remnants with a merely private function, and they are usually suppressed by the code of culture." (J. Pallasmaa, 1994)

Le corbusier statement is clearly leading to an architecture for the eye but with his sculpturing talent and his sense for materiality he prevented his buildings from turning into sensory. These senses inserted in the building equal the human senses. In fact the building is imitating the human perception. More interesting than the gathering of this information is the answer of the building to it. In most cases the answer is only visual or acoustic. It should be possible to communicate back to all senses, since it is possible to imitate all perception methods. Then the name interactive architecture would resemble more the human interaction, which is also dominated by acoustic, haptic and visual components but still uses taste and smell for direct or indirect communication. (Kari Jormakka in Design Methods)

The usage of some senses like smell and taste appears rather difficult, but architecture is developing very quickly at the moment, so one can be confident that appropriate methods will develop to incorporate also theses senses into architecture.

Sense here are describe as a way to give the value of what will be designed. The senses meant to reach the goals that are the building suppose to solve the problems. The problems that are suppose to solve can be reach by sense, the sense is more about how people can be 'touched' in their feelings.

Arrangement and lighting management in the collection with more attention to the use of the type of lamp used. Here are some lighting concepts to use:

1. Individual lighting

   Used spot light lights are highlighted to the wall of the gallery, not in the direction of the work because it is feared that the light can cause the color fading of the work (drawing, painting, photography). This special lighting can use a tracklight system with the use of light rails on the ceiling to make it easier to change the lighting highlight.

2. General / general lighting

   Used to illuminate circulation areas with moderate illumination quantities. The combination of the type of halogen lamps with UV filters combined with incandescent lamps that make the range widespread and with the concept of mounting downlights that will create a warmer atmosphere and will also create a good color on the artwork on display. In addition, it can also be used in combination with natural lighting. Where the nature of natural lighting that is not continuous and generate heat in the room can be minimized by the presence of artificial lights. This lighting function is to facilitate rich activities, writing, reading and working and fast-moving mobility, as well as illuminating circulation pathways.

3. Decorative lighting

   Used to create a more dramatic space susana, and support the achievement of the image of space that would be displayed. This lighting system can be applied to showrooms, provided that it does not affect the artworks that are affected in showrooms.

In a building there is no such thing, structure haven't mention in a design concept, here's an illustration how the building will be built with its structure. And, it comes from how the space and rooms designed, the material that will be used is concrete, and bamboo for its facade.

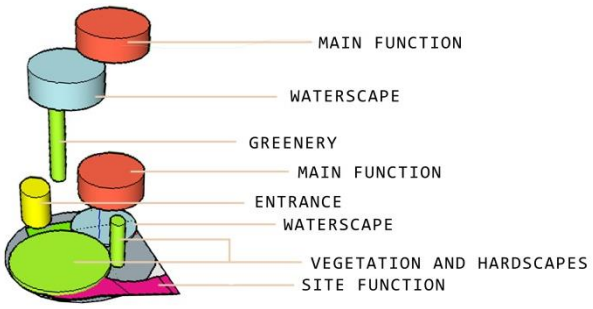

Figure 4.1.1.2 Mass Organization (Source: Author Analysis)

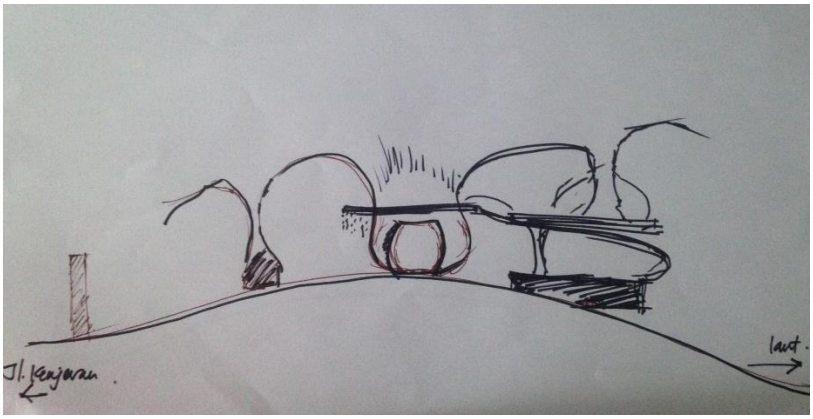

Figure 4.1.1.3 Mass Organization (Source: Author Analysis)

The main function of the building was on how children takes the value from architecture building element. So, there are some concept illustration that illustrate on

how the ambiences will guide the value that will be given to the children.

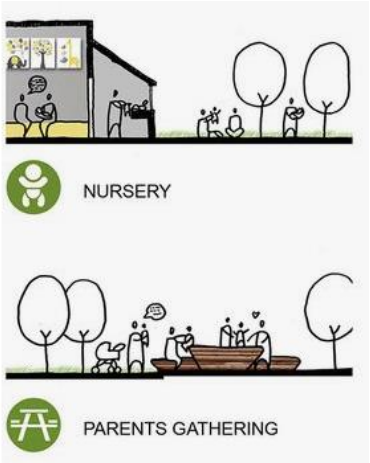

Figure 4.1.1.4 Ambience Making Concept (Source: google.com)

On parents gathering, this space facility will much works on how to bring up landscape aesthetic. This facility too, was designed and concepted on open space of the site.

Figure 4.1.1.5 Ambience Making Concept (Source: google.com)

Figures that were mentioned above, was preferably from children's activities, where waterscape is manifested from one of the children's favorites, and is manifested in the form of the fountain plaza and shallowpond. Activities that want to happen in the gallery is one manifestation of the other child's favorite, namely dancing sculpture and interactive multimedia.

4.2 TECHNICAL EXPLORATION

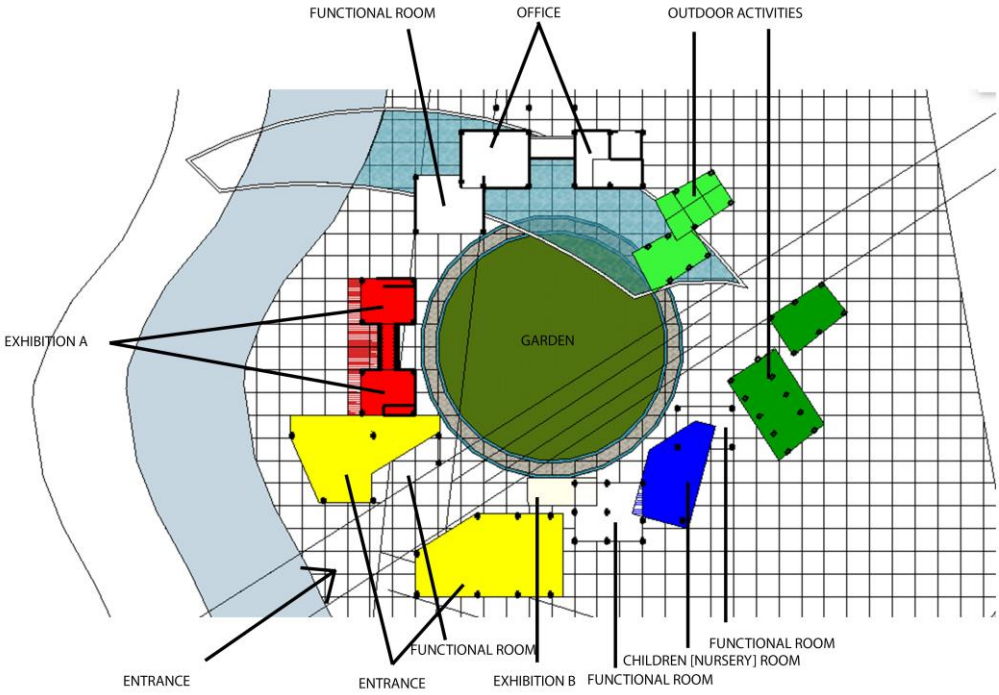

Figure 4.2.1 Mass composition impacted by Programming (Source: author analysis)

Based on the formal exploration for design, the author can apply the concepts that are abstract in the design of the building. Dynamic building design is more applied to the space program and the formation and mass composition. Dynamic that is meant in this concept is how the footprint intended to be designed has the potential to provide a dynamic flow and make feel not in a solid building. Especially since the entrants that are addressed are children, the program applied for the room is more to how the room is not boring for children.

The Dynamic building concept is applied on the site organization that will be applied too on the building façade. The façade will not be so dynamic, the façade just designed to enfold the solid main building. Dynamic concept will to be applied at the room organization for giving more playing program to the visitor. Playing here means that the visitor will not feeling stiff while visiting the gallery. The **playground** here will be the supporting aspect for the dynamic itself.

Figure 4.2.2 Ambience enclosure (Source: author analysis)

Picture above explains how visitors will feel the situation for Surabaya Tempo Lama and to make them feel the ambience that have been applied there. The author here will trying to apply the situation which is illustrated at the picture above with the building and apply at the interior at the main exhibition that was be destined for children to develop their knowledge since early stage.

Figure 4.2.3 Ambience enclosure (Source: author analysis)

Picture above explains how visitors will see the coast of Surabaya without having to go through a long road to the other side that was near Suramadu bridge.

The author here try to reflect the illustration at the side of the **exhibition B** which be destined to be an exhibition that will give reflection of breathtaking view that can bring back memory.

Figure 4.2.4 Ambience enclosure (Source: author analysis)

The picture above tries to explain and illustrate how the coast of Surabaya will be reflected in the building at afternoon approaching to evening. This picture too tries to illustrate how the building at Surabaya Tempo Lama at noon will be. At this part of space it tries to illustrate how Surabaya will be at nowadays.

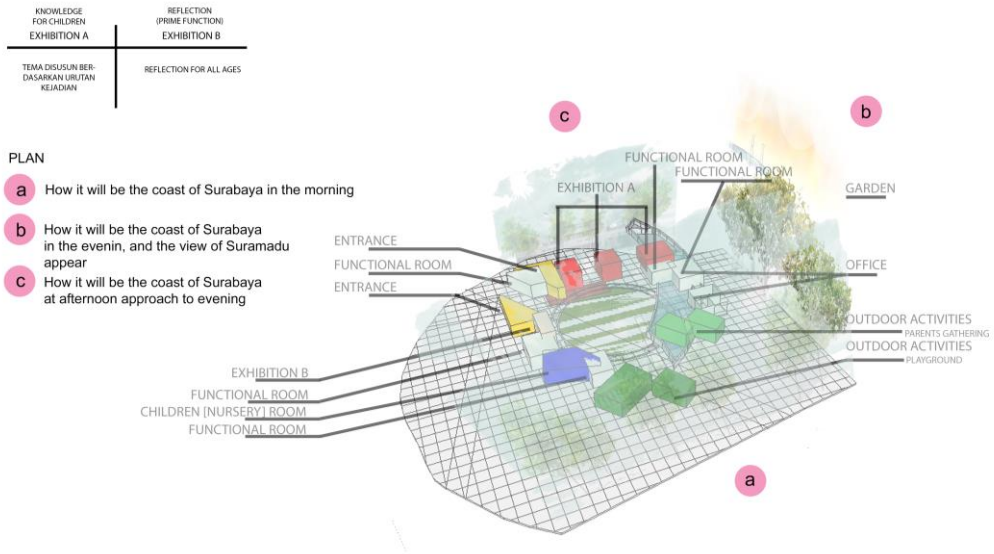

Figure 4.2.5 Ambience accomplishment (Source: author analysis)

The site programming above tries to merge with the ambience concepts before to integrate with the surroundings. Meanwhile, the site is at the coastal so it should be able to giving the abiences that the author tries to illustrate. Beside of the coastal and Tempo Lama ambience which will be the main factor to that will be counted to be realized at the design.

At the program above, the **Exhibition A**, consists of three spaces and the spaces was different to one and another. The space will illustrate the different time span of Surabaya itself. The first phase of the **Exhibiton A** was started after the visitor go through **Lobby** to first phase of **Exhibition A** past the **Transition Hall**. The **Transition Hall** will giving the visitor an experience of how it feel the change of the atmosphere of today and back to the past of Surabaya.

For the second phase, the visitor will past the first phase of the **Exhibition A** by a stair and there is a mural that attached at the wall to present the time transition from Surabaya Tempo Lama to Surabaya Masa Peralihan. The mural tries to illustrated that at Surabaya Masa Peralihan began a lot development and using many kind of arts.

For the third and last phase, the visitor will be served the part of Surabaya Sekarang. In this phase, the visitor will be given the view of the Suramadu bridge, the kenjeran sea and how the buildings in front of them has to integrate with it.

CHAPTER 5

DESIGN

5.1 FORMAL EXPLORATION

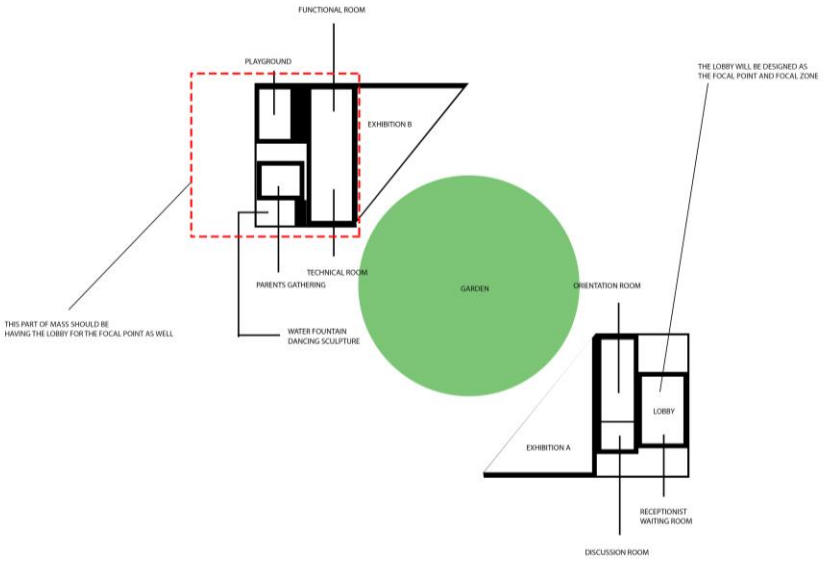

Figure 5.1.1 Mass enclosure (Source: author analysis)

The formal exploration here meants how the concepts before tries to realize to be an architectural design. The most applied-able part of the concept starts from the program for the site. The program in the design exploration have some addition, and the addition was at the focal point and the focal zone. **The building was priors an open space and natural vegetation to make the dynamic and a natural environment**. The natural open space here meant to be the focal point of the site. A focal point does not have to be a tower or a risen solid material, a zone to can be a focal point.

The exhibition divided into **exhibition a** and **exhibition b**, and also makes the building mass splits into mass A and also mass B that have lobby for each mass the different part of the lobby is, in mass A the **lobby** becomes a gathering point also

a gate to start the journey. The **lobby** for mass B is more referring to a **waiting room** that will be used as a room for waiting children to or from the **nursery room**, and also a **hall** that will be the starting point for the visitors to get to **exhibition b**.

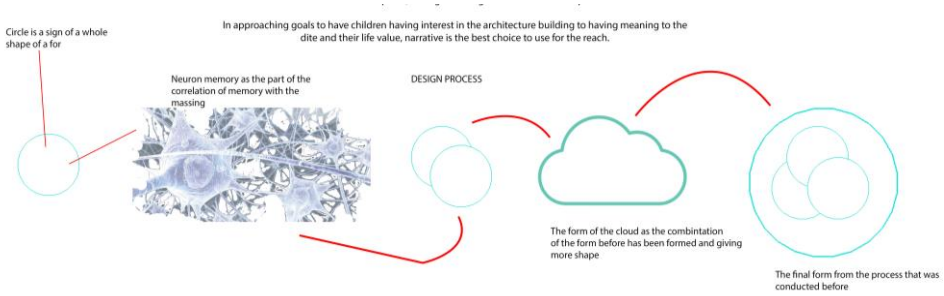

Figure 5.1.2 Mass transformation process (Source: author analysis)

Once the program was done, the next step that has to be done is to explore the form and the site itself to more giving a form and shape for the site. While examine-ing about form and shape, it should be explored about the integration with the dynamic concept, children's habit and the program. The shape exploration with dynamic concept integration should be a veil to make the integrity among the activity and the room built.

The program was formed from the visitor circulation that will be flexible, and **radial**. The program that will be integrated with the children's habit will be forming a shape that connects to one another like memory or neuron memory that works in our brain. When the connection of shapes and the program have been done, the form can be stacked to one another and make a shape of a cloud. The form of a cloud formed as the combination of the form before and giving more shape. The final form from the process is explained at the picture above that the program has integrated with the shape, so it will be suit for children.

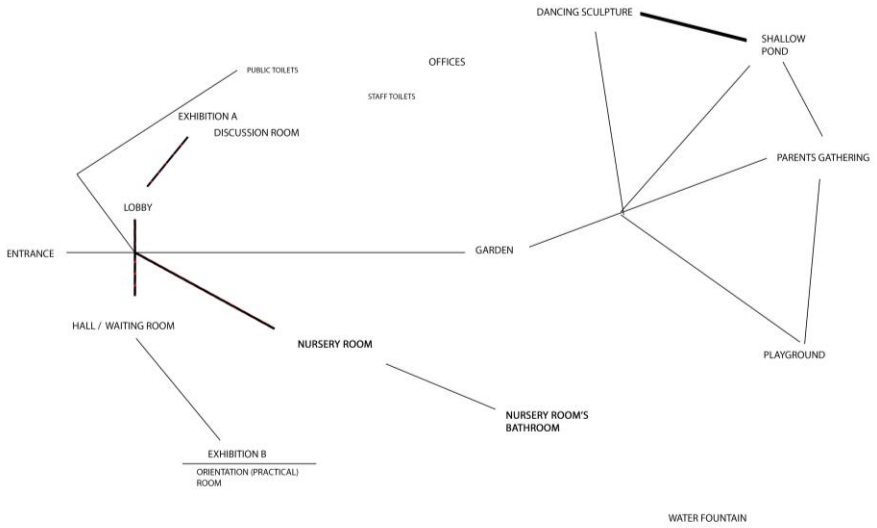

Figure 5.1.3 Visitor Circulation Programmin (Source: author analysis)

The program in here is the added and changed program adapting to children's habit . Children's habits of making programs are not allowed to be rigid and unidirectional, but must be a room that can be accessed flexibly, and the room to be through is not rigid and inaccessible for the children.

The journey starts when the visitor gets into the site through **entrance,** they can go to **Lobby** in Mass A, **Garden**, or **Hall/Waiting Room** in Mass B to continue their visit on the building.

From the **lobby** the visitor can continue the visit to the **exhibition A** first phase through **Transition Hall**. After the first phase, the visitor decide where they will go, whether they will go back to the lobby or they can keep on the visit till the third phase of **exhibition A**.

From the **entrance**, the visitors can direct get to the **garden** without passing or go through the masses, and garden gives access to visitor to get to the **playground**, **parents gathering**, **shallow pond**, and **dancing sculpture**. The four programs that designed to be on the site to supports the exhibition that have goal to give knowledge

to the children. Whether the goal is to give knowledge to the children so the author considered the **playground** to give facilities to the children to vent the children's nature habit that was to play. **Parents gathering** was designed in the site to give parents space for them to look after their children while they freely play at the **playground** or at the **shallow pond**. **Shallow pond** was designed to be functioned like **playground**, the two programs supports the goal of the design and that was giving knowledge to the children lively.

From the **entrance**, the visitors can go to the mass B, which starts from the **hall/waiting room**, that can directly entrusted the children at the nursery room, while the parents that lives near the site, and works far from their home. Or the visitors can get to the **exhibition B**. **Exhibition B** was designed to try getting the other goal and that is giving the experience that can recalling memories.

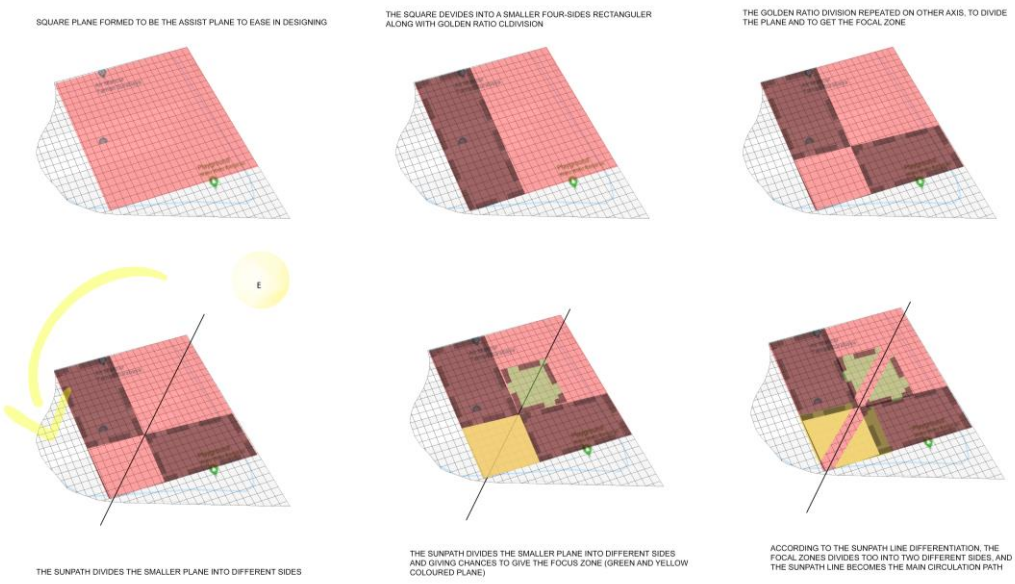

Figure 5.1.4 Site Analysis Process (Source: author analysis)

The site is not a simple plane. Square plane formed to be the plane to support and give ease in designing. The square plane divides into a smaller four-sides rectangular along with golden ratio division. The golden ratio division repeated on

other axis, to divide the plane and to get the focal zone. The sun path divides the smaller plane into different sides. The sun path divides the smaller plane into different sides and giving chances to give the focus zone (green and yellow coloured plane). According to the sun path line differentiation, the focal zones divide too into two different sides, and the sun path line becomes the main circulation path.

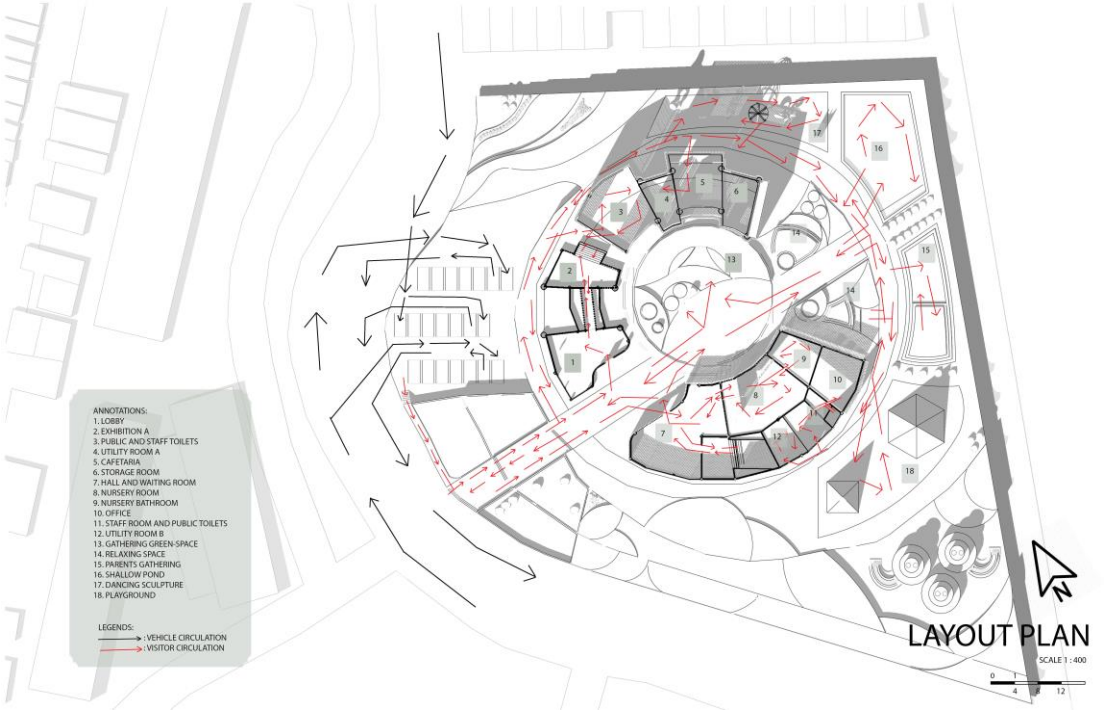

Figure 5.1.5 Layout Plan (Source: author analysis)

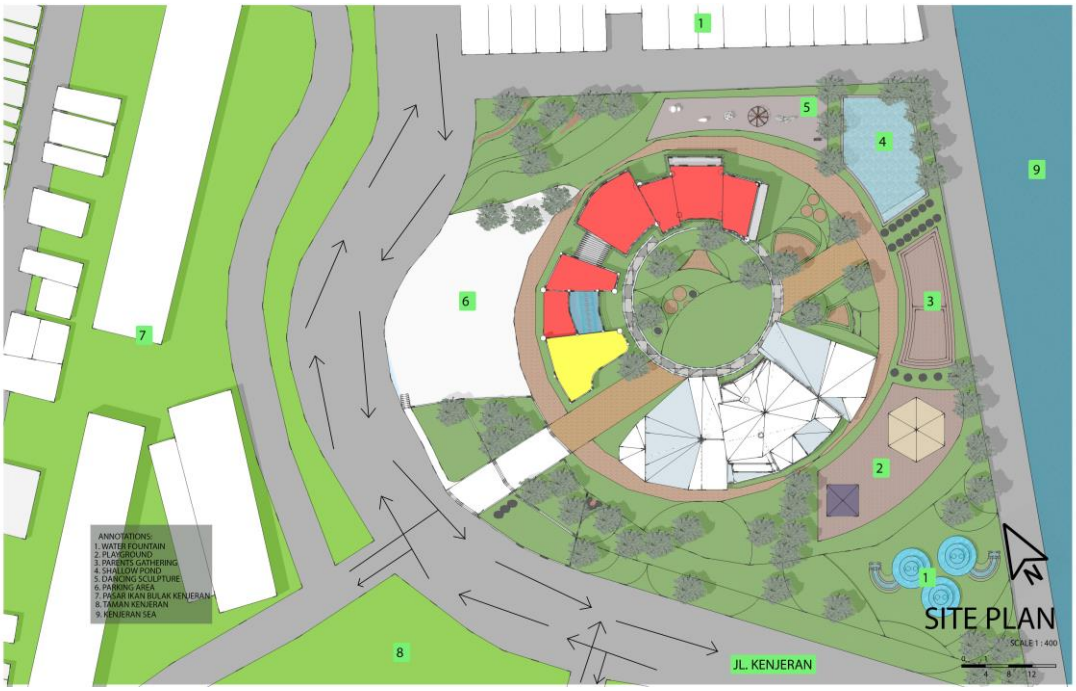

Figure 5.1.6 Site Plan (Source: author analysis)

Figure 5.1.7 North Façade (Source: author analysis)

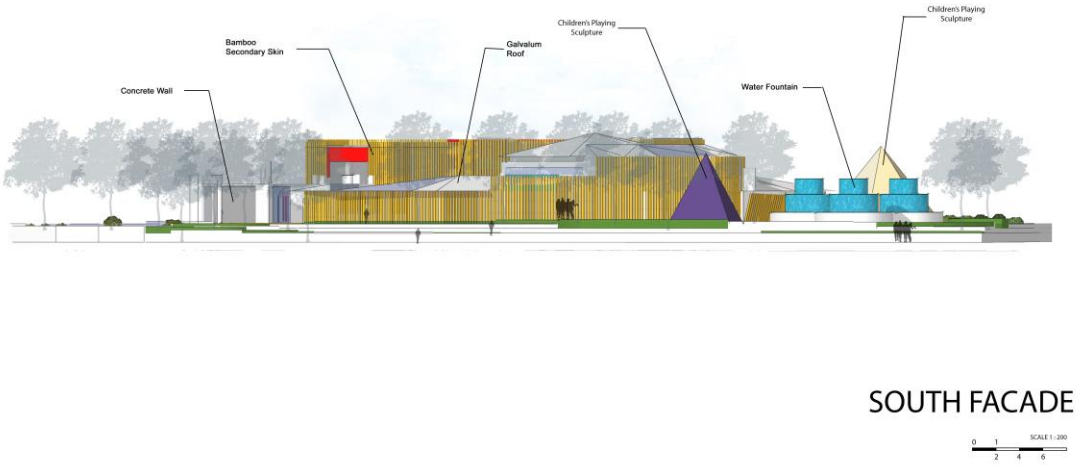

Figure 5.1.8 South Façade (Source: author analysis)

Figure 5.1.9 Section 4 (Source: author analysis)

5.2 TECHNICAL EXPLORATION

In this design enclosure and accomplishment , the author fit up the building design with utilities so the building was not just a design proposal. The design will be built by the supporting parts for the building that logically been thought carefully.

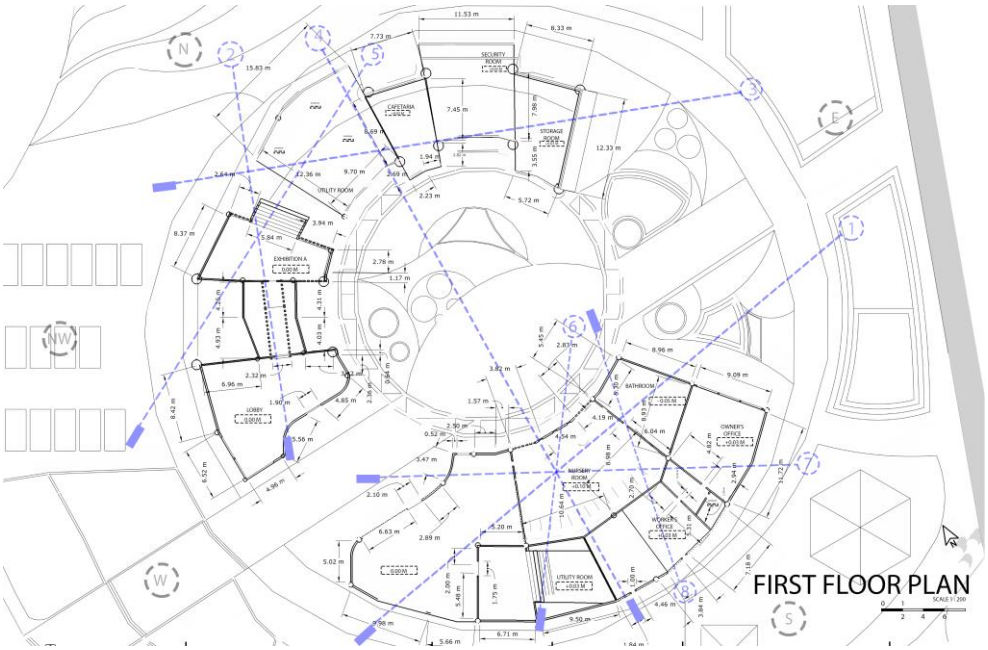

Figure 5.2.1 First Floor Plan (Source: author analysis)

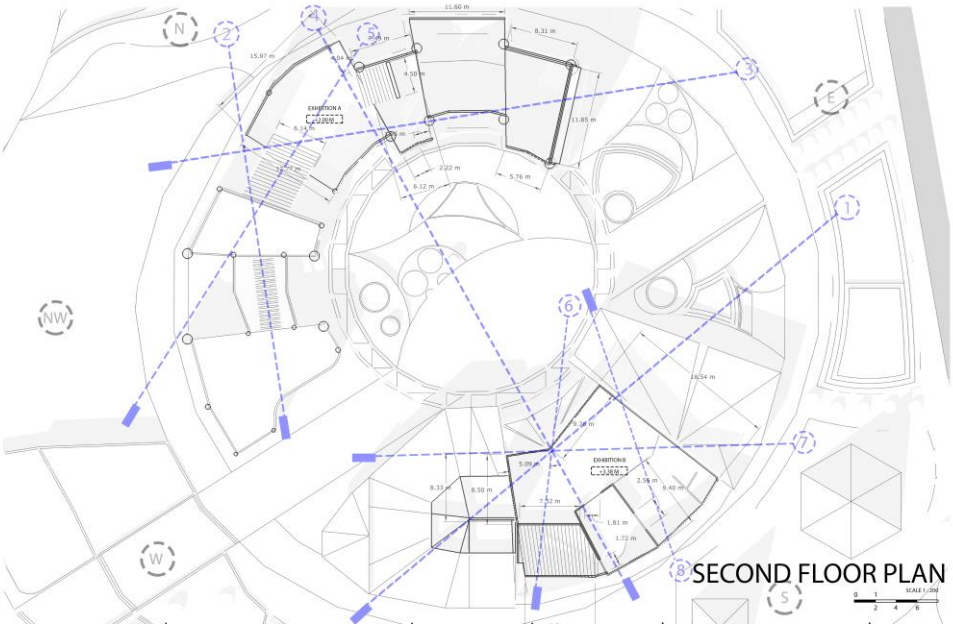

Figure 5.2.2 Second Floor Plan (Source: author analysis)

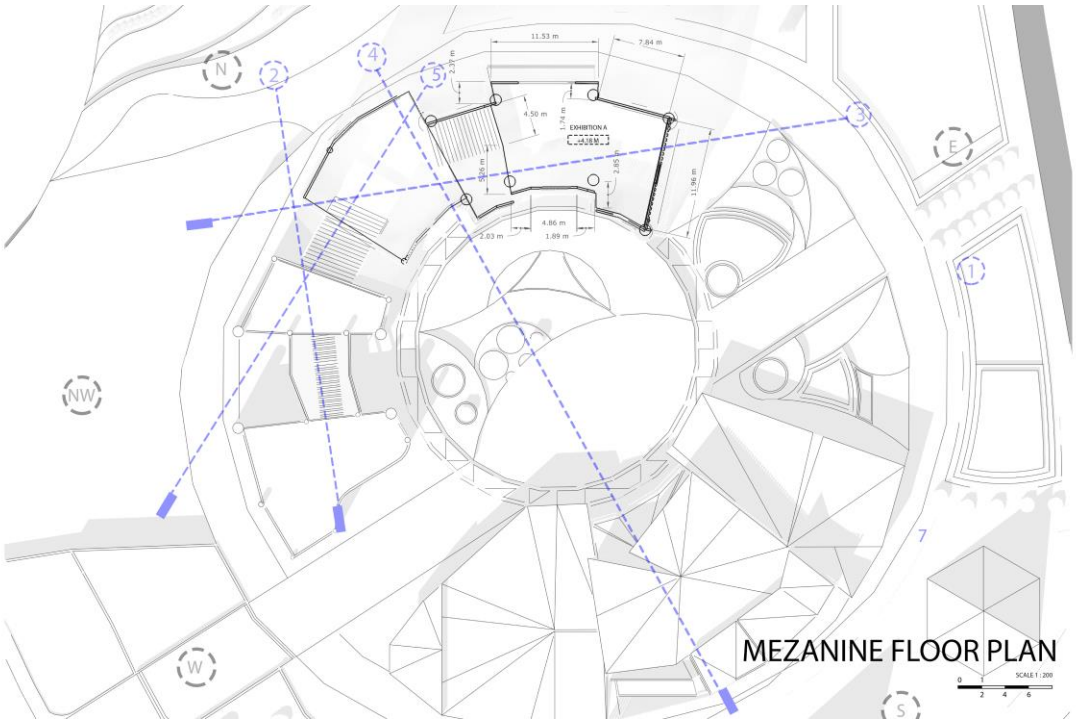

Figure 5.2.3 Mezanine Floor Plan (Source: author analysis)

Figure 5.2.4 Perspective Section (Source: author analysis)

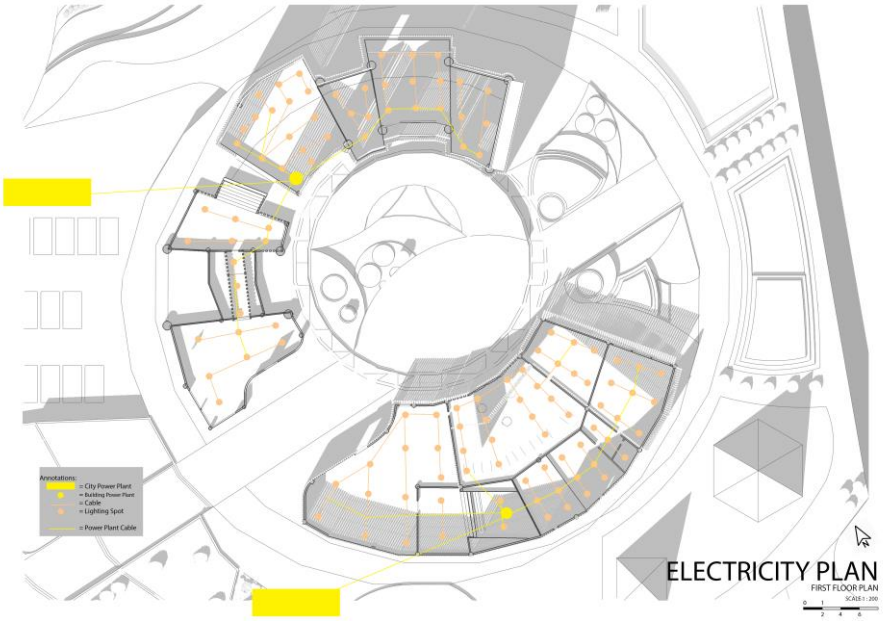

Figure 5.2.5 Electricity First Floor Plan (Source: author analysis)

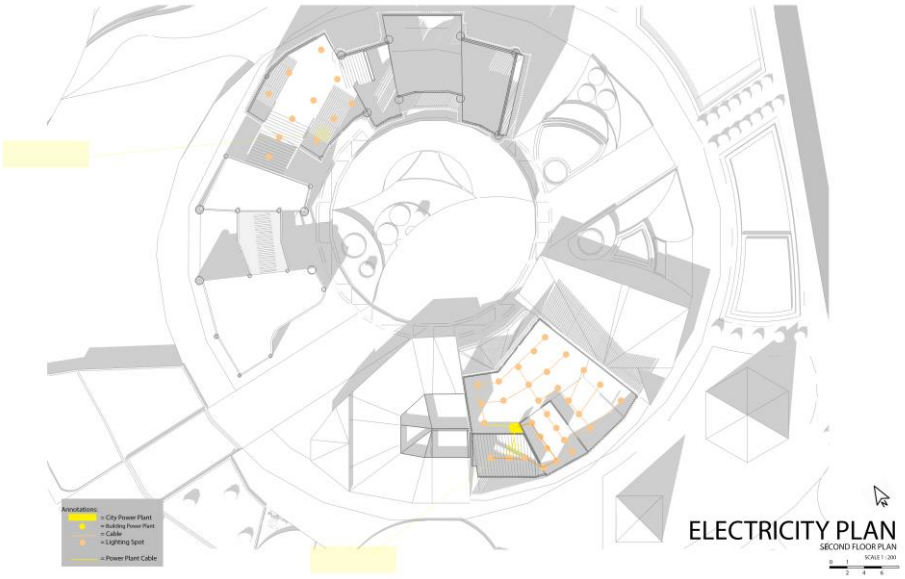

Figure 5.2.6 Electricity Second Floor Plan (Source: author analysis)

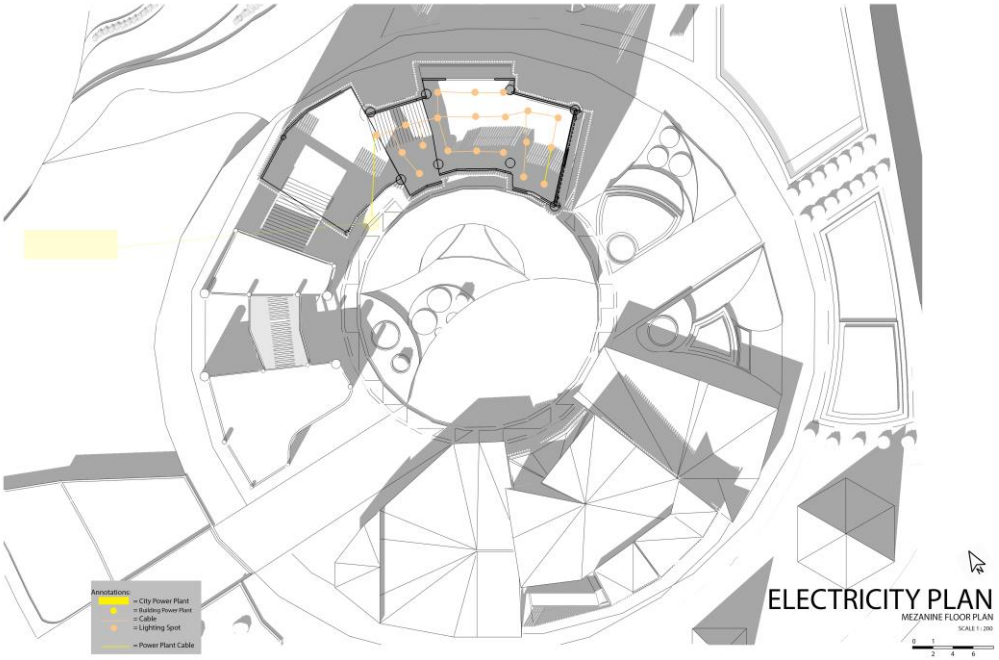

Figure 5.2.7 Electricity Mezanine Floor Plan (Source: author analysis)

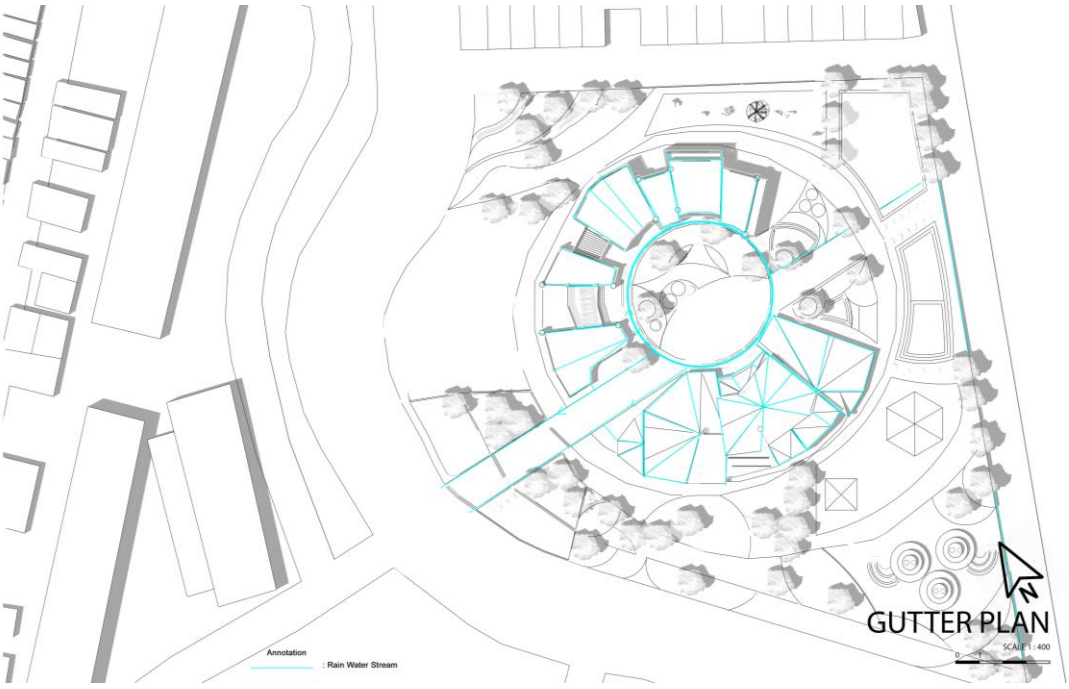

Figure 5.2.8 Gutter Plan (Source: author analysis)

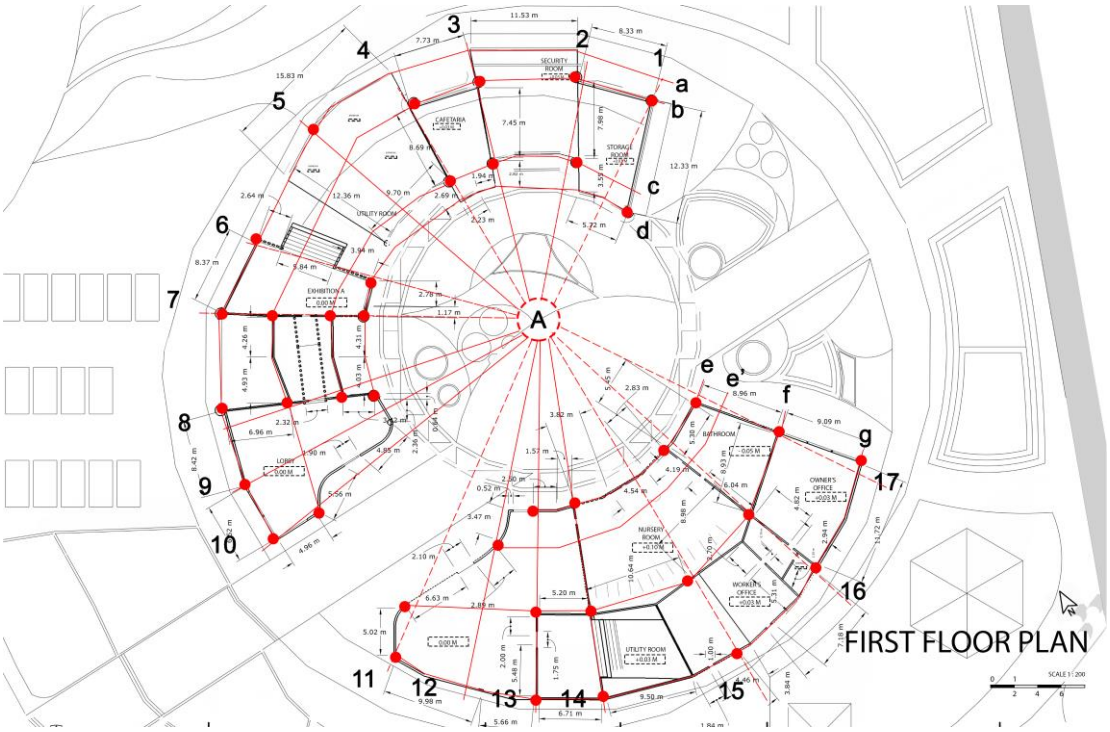

Figure 5.2.9 First Floor Structure Plan (Source: author analysis)

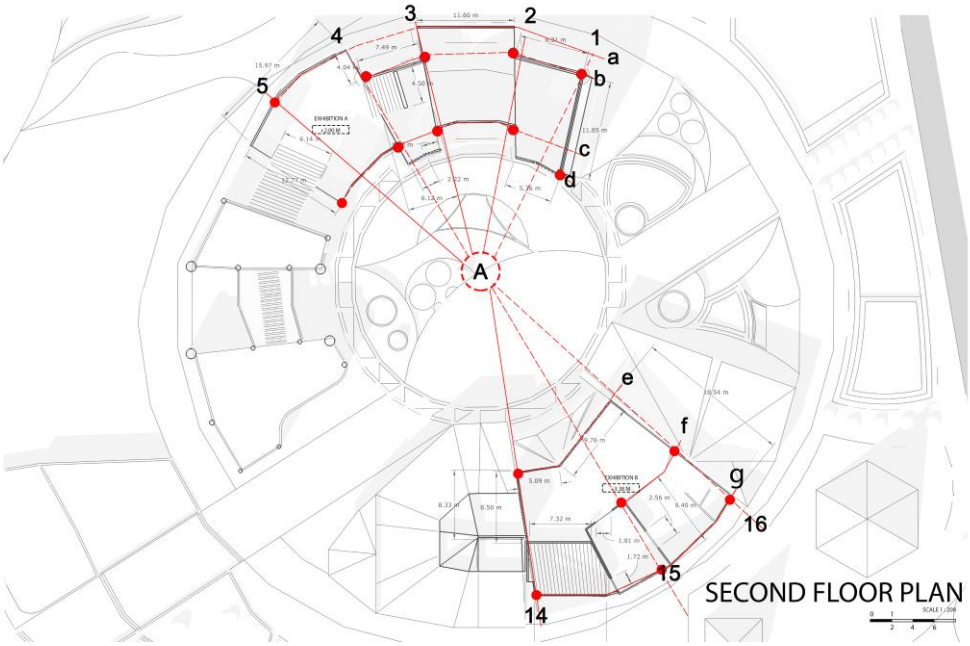

Figure 5.2.10 Second Floor Structure Plan (Source: author analysis)

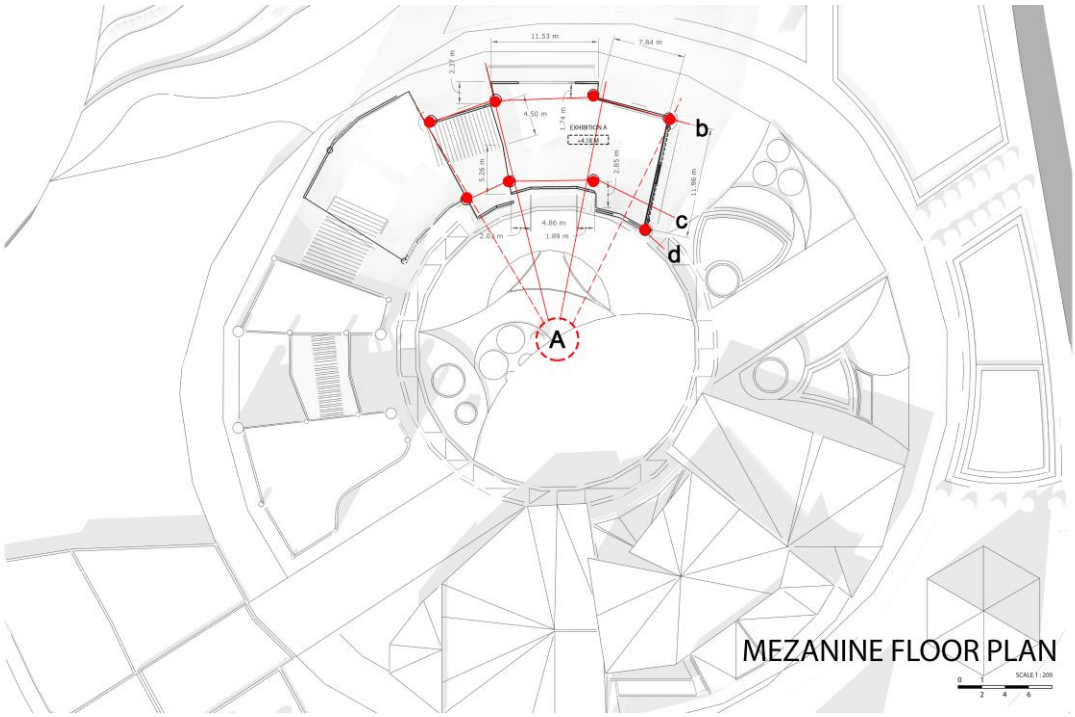

Figure 5.2.11 Second Floor Structure Plan (Source: author analysis)

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CHAPTER 6

CONCLUSION

The memory that was built and strengthened about some place or some events will become an experience for some people and undirectly, the experience will spread widely because many people wants to know about some history that they can't get anymore. The dynamic concept of design is how the rooms adapt forms that seem to be moving and transforming them in a coherent dimension of space. Spatial forms free of ornament is intended for the room does not dominate for the works of the exhibited collections.

In completing goals that the issue tries directs to the design, **the memories can be remembered and can be recalled for people's experience.** The design have tried to accomplish the problem by establishing a design that differ the function of ordinary gallery with the art gallery that more memorable and give re-caller for human's memory. Technique to accomplish the problem with using light refractions that will giving some flash back of memories of someone.

In process to attempting goals that the issue tries directs to the design**,** in **how memories can be something that will give knowledge to us that can affect our behavior and life.** The design have tried to accomplish the problem a design that giving memories and giving knowledge in the same time to the children, so children will not feel that the design is too harsh for their age. The design in this report describe that there is two type of giving knowledge, in indoor and by outdoor activities. Outdoor activities more giving knowledge and with more refreshing ambience also view of the nature arund the site.

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BIBLIOGRAPHY

Antoniades, Anthony C. 1992. ***Poetics of Architecture***. New York. Van Nostrand Reinhold.

Azeri, Amir Reza Karimi.2014. ***Effective Design Principles in Promotion of Children's Creativity in Residential Spaces***. Turkey. Procedia.

Day, Christopher. 2007. ***Environment and Children: Passive Lessons from the Everyday Environment***. Burlington. Elsevier.

Froebel, Frjedrich. 1885. ***The Education of Man***. New York. A. Lovell & Company.

Hourston, Laura. 2004. ***Museum Builders II.*** Great Britain. Wiley-Academy

Ilmu, Pecinta. 2016. ***Untaian Kata Mutiara Tentang Ilmu Pengetahuan.*** http://www.putramelayu.web.id/2016/11/untaian-kata-mutiara-tentang-ilmu.html access on 26th September 2017 at 11:19 PM

Jormakka, Kari. ***Basics Design Method***. Birkhauser.

Lang, Jon and Walter Molinski. 2010. ***Functionalism Revisited Architectural Theory and Practice and The Behavioral Sciences.*** United Kingdom. Ashgate Publishing Limited.

Miller, Jason. 2014***. The 7 Domains of Early-Childhood Development.*** http://blog.novanatural.com/2014/11/09/the-7-domains-of-early-childhood-development/ access on 27 November 2017 at 5:43 AM

Lang, Jon. 1974. ***Designing for Human Behavior: Architecture and the Behavioral Sciences.*** Van Nostrand Reinhold.

Malenggang, Yasin Bin. 2016. ***Kebahagiaan Anak Adalah Mutiara Terindah Orang Tua***. https://www.vemale.com/keluarga/96160-kebahagiaan-anak-adalah-mutiara-terindah-orang-tua.html access on 26th September 2017 at 11:19 PM.

Plowright. Philip D. 2014. ***Revealing Architectural Design***. New York. Routledge.

Porter, Tom. 2004. ***Archispeak an Illustrated Guide to Architectural Terms.*** London. Spon Press.

Routledge. 2012. ***Museum Meanings***. New York. Routledge.

Stirling, James. "***Ronchamp: Le Crobusier's chapel and the Crisis of Rationalism***". Architectura Review, 1992.

White, Edward T. 1983. ***Site Analysis : Diagramming Information for Architectural Design.*** United States of America. Architectural Media.

Wikipedia. 2017. ***Rhetorica ad Herennium.*** https://en.wikipedia.org/wiki/Rhetorica_ad_Herennium access on 24th September 2017 at 7:58 PM.

Wilson, Leslie Owen. 2016. ***Three Domains of Learning – Cognitive, Affective, Psychomotor***. https://thesecondprinciple.com/instructional-design/threedomainsoflearning/ access on 25 November 2017 at 03:40 PM

Yates, Frances. 1966. ***The Art of Memory Volume III***. London. ARK Paperbacks.

APPENDIX

APPENDIX A

FIGURES OF EXTRA DOCUMENT IMAGE

- FAÇADE (IN SCALE 1:200) in total : 4 figures
- SECTION (IN SCALE 1:200) in total : 7 figures
- PERSPECTIVE SECTION in total : 2 pictures
- VIEWS in total : 8 figures

EAST FACADE

SCALE 1 : 200

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FINAL PROJECT
RA.141581
EVEN 2017-2018

FINAL PROJECT'S TITLE:
DYNAMIC LIVELY ART GALLERY FOR CHILDREN

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LUGASBASKORO
08111440000038

SUPERVISOR :
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NORTH-WEST FACADE

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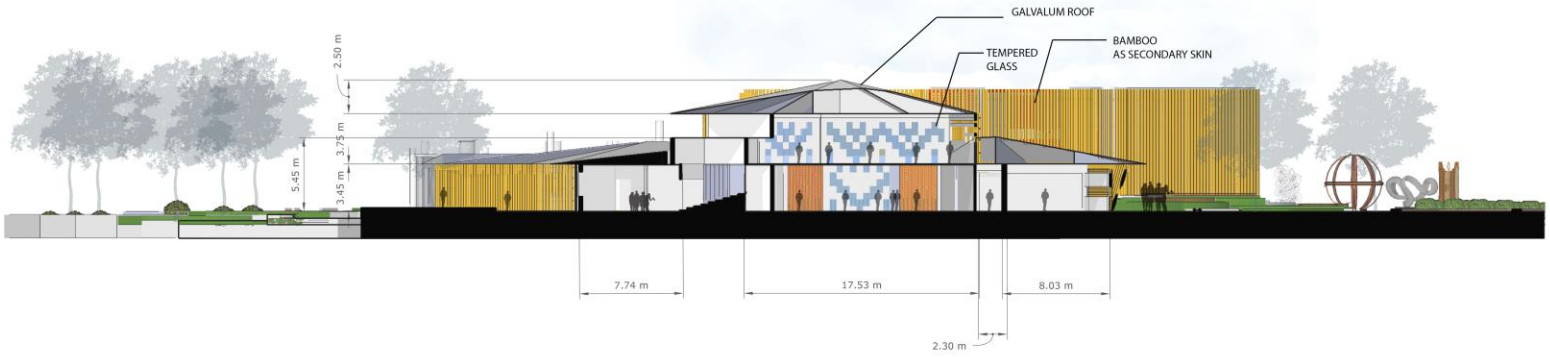

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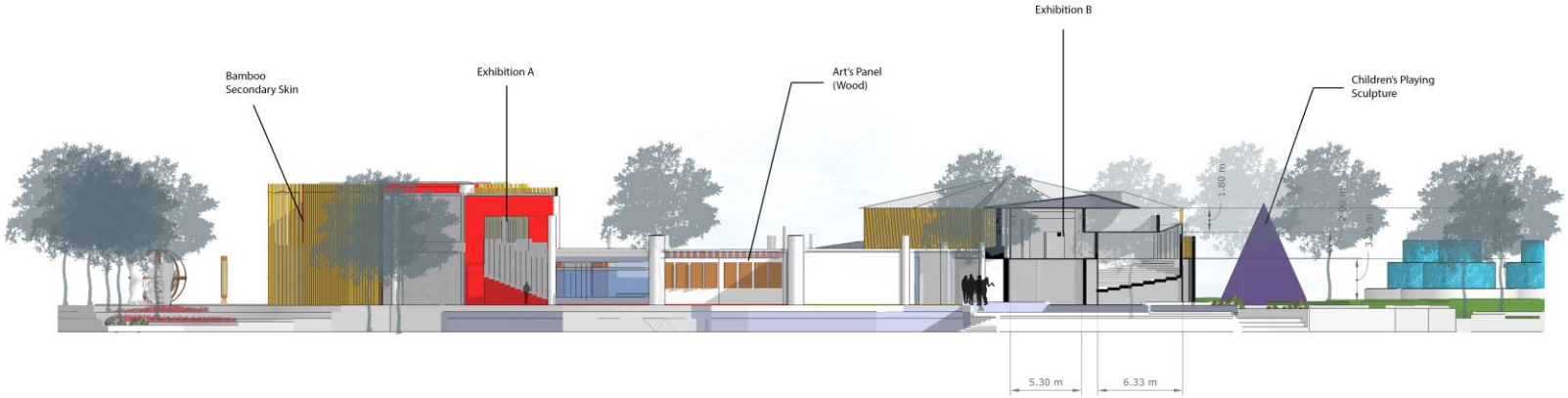

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SECTION 8

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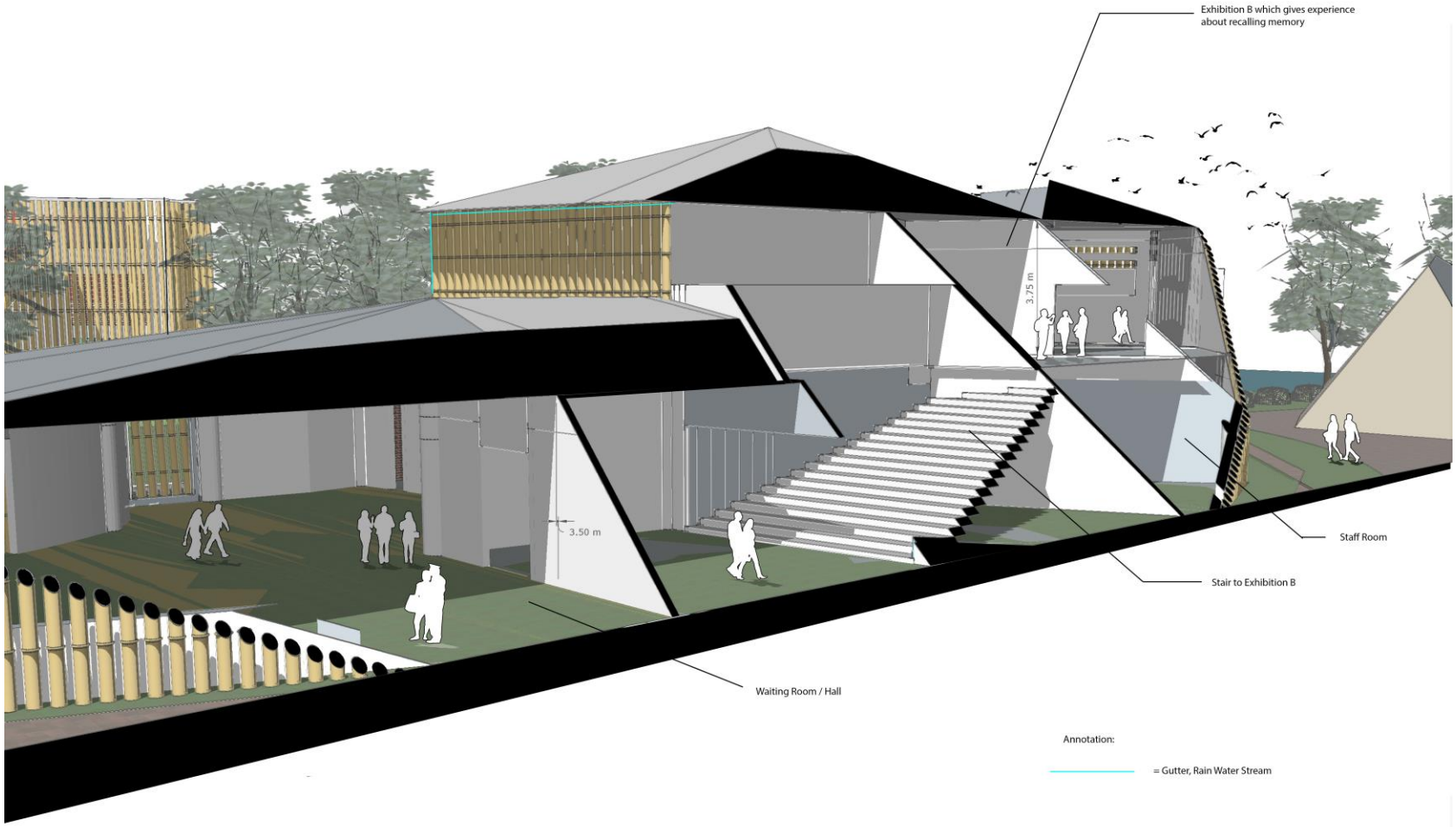

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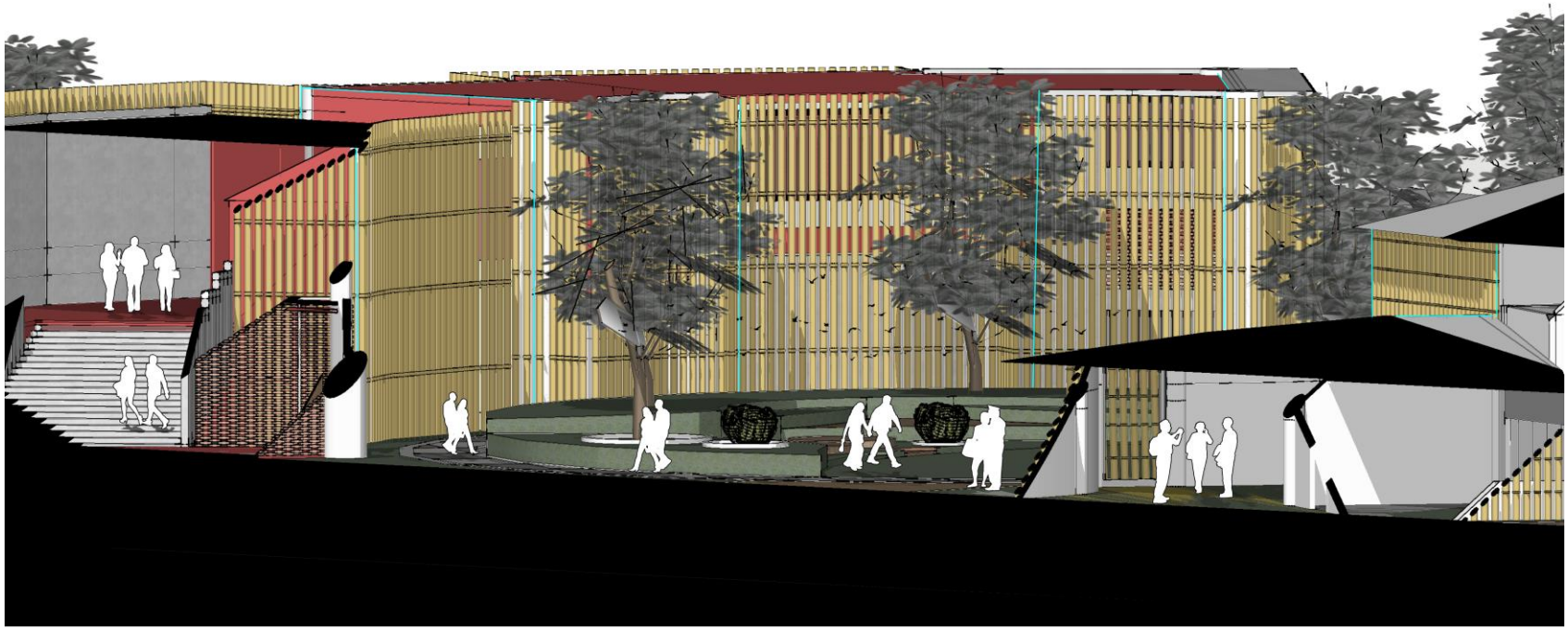

Annotation:

= Gutter, Rain Water Stream

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BIRD EYE VIEW

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GARDEN VIEW

PLAYGROUND VIEW


PARENTS GATHERING


TRANSITION HALL

EXHIBITION A - 1

EXHIBITION A - 2

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EXHIBITION B