

FINAL PROJECT - RA.141581

# RESHAPING URBAN SPACIOUSNESS: JAKARTA FLOATING PARK

FAUZAN PERMANA NOOR 08111440000037

Supervisor Endy Yudho Prasetyo S.T., M.T.

Departement of Architecture Faculty of Architecture, Design and Planning Institut Teknologi Sepuluh Nopember 2018



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#### LEMBAR PENGESAHAN

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Periode	: Semester Genap Tahun 2017 / 2018

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Surabaya, 2 Juli 2018

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#### RESHAPING URBAN SPACIOUSNESS : JAKARTA FLOATING PARK

#### Fauzan Permana Reg. no : 08111440000037

#### ABSTRACT

Acting as a Capital of Indonesia, Jakarta has become a core of government, economy, commerce, also cultural hustle of the country. Occupied by 14,464 habitants per km2, its density is twice more than Tokyo, creating a bustling metropolis.

The needs of living, commuting and productivity spaces slowly degrading the Green Open Spaces of the city, thus lowering the quality of the city space itself from 32% in 1965 to 9,8% in 2017. Ironically, the active & dense area of downtown Jakarta where the necessity of green spaces are the highest, are the one where such spaces cannot be found. An intervention therefore needed to refine the city spaces.

Implementing 3-dimensional approach on one of the core of Jakarta's downtown area, harmonious with government encouraging a development of walkable city and transit-oriented development, architecture should be able to escalate the quality of space in Jakarta.

The design resulted in a simple intervention in the city, if placed accurately would not only improve the space quality but also integrating areas fractured by other elements of the city.

Keywords : 3-dimensional, city, green open space, urban space, quality.

#### FOREWORD

Praise to Almighty Allah SWT for the gracious mercy and tremendous blessings that enables author to finish this final project report titled "Reshaping Urban Spaciousness : Jakarta Floating Park". With its challanges and difficulties that were able to be overcame fortunately with directions and guidances of many involved parties. Therefore on this occasion author would like to aknowlodge those parties for their support:

- 1. Allah SWT.
- 2. Endy Yudho Prasetyo, ST., MT., as supervisor which constantly giving critics, advices and guidance throughout the process on this final project.
- 3. Defry Agatha Ardianta, ST., MT., as coordinator I Tugas Akhir.
- 4. Angger Sukma Mahendra, ST., MT., as coordinator II Tugas Akhir.
- 5. Parents, partner, colleagues and all of the parties which has been very helpful by giving prayers, advices, refrences, facilities and support for this project. God bless you all.

This project aims to trigger our awareness about city spaces. The high price of driving everyday and the value of a good public space. This project argues that the city shouldn't be left behind when it's in trouble, that difficulties were to be overcome. This project tries to provide an answer for an existing urban complicacy.

Yet, it is obvious in the process of this project, there's still a lot of flaw here and there because of the limitations of knowledge, experience and time. Therefore, critics and advices are welcome to improve it. Hopefully this project would be of use for architecture in Indonesia and for the readers.

Surabaya, 25th of June 2018.

Author

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# CHAPTER 1 INTRODUCTION

#### 1.1 Background

#### 1.1.1 Jakarta's Quality of Space

As the capital of Indonesia, Jakarta is the centre for economy, industry, government, culture and commerce. With its inhabitant's density exceeding 14.000 people/km2, a lot of spaces are undermined to be used to facilitate commuting automobiles. Yet the 7% (42.000m2) of total city's area is already used as roads and planned to be expanded to 12%. The catch is, those soon-tobe-roads spaces are open public spaces such as plazas, parks, pedestrian ways. Eventhough the roads will accomodate the city's commuting needs, in all conscience there are many ways to do it, aside from the simple solution of more roads.

RIF	÷ 🚽	Set Pendu ber	iap Jam duk Jakarta tambah Corang	
Bila Seluruh P	enduduk DKI J	lakarta Berga Kota Sudney	ndengan Tan Australia *)	gan
Jakarta *) Asumsi rata-rata		192 km -	Syd	? Iney
	Sex pasang La Laki-I	Ratio = 101,3 aki-laki&Pere aki yang tida	, artinya seti mpuan, ada 1 k memiliki pa	ap 1000 3 orang Isangan
Pend Menurut	luduk dan Laju Kabupaten/K	ı Pertumbuha ota Administ	n Penduduk rasi, 2013-2	014
Kab/Kota	Pendu	iduk	Laju Pertur Pendu	nbuhan duk
	2013	2014	2012-2013	2013-2014
Kepulauan Seribu	22 713	23 011	1,29	1,30
Jakarta Selatan	2 141 941	2 164 070	1,08	1,02
Jakarta Timur	2 791 072	2817994	1,01	0,96
Jakarta Pusat	906 601	910 381	0,41	0,41
Jakarta Barat	2 396 585	2 430 410	1,44	1,40
Jakarta Utara	1711036	1729444	1,10	1,07
Jumlah	9 969 948	10 075 310	1,09	1,05
Sumber: Jakarta D	alam Angka, 2 Daerah Prov	1015 insi DKI Jak	arta 2015	

Jumlah penduduk DKI Jakarta terus mengalami peningkatan setiap tahunnya, baik dikarenakan pertumbuhan alami mayupu karena faktor migrasi. Berdasarkan hasil Proyeksi Penduduk dari Hasil Sensus Penduduk 2010, jumlah penduduk Jakarta tahun 2013 sebesar 9,97 juta jiwa. Tahun 2014 penduduk DKI Jakarta meningkat menjadi 10,08 juta (meningkat hampir 105 ribu) jiwa setahun) atau dapat dikatakan secara rata-rata penduduk Jakarta setiap jamnya bertambah 12 orang.

DKI Jakarta adalah provinsi dengan penduduk terpadat di Indonesia dimana kepadatannya mencapai lebih dari 5 ribu jiwa per km<sup>2</sup>. Dengan penduduk sebanyak 10 juta jiwa maka dapat dilustrasikan bahwa apabila seluruh penduduk DKI Jakarta bergandengan tangan maka total bentangannya dapat mengubungkan 2 kota besar yaitu Jakarta dan Sydney (jarak antara Jakarta-Sydney adalah 5.492 km, serta diasumsikan ratarata panjang satu bentangan tangan adalah 55 cm.)

Sex Ratio atau perbandingan penduduk laki-laki dan perempuan di DKI Jakarta tahun 2014 mencapai 101,3. Ini artinya penduduk laki-laki lebih banyak 1,3 persen dibandingkan perempuan, sehingga dapat dikatakan bahwa setiap seribu pasangan laki-laki dan perempuan terdapat 13 orang laki-laki yang tidak berpasangan. Dengan mengetahui bahwa jumlah laki-laki lebih banyak dari perempuan mengindikasikan bahwa pertumbuhan penduduk alamilah di Provinsi DKI Jakarta dapat terkendali.

Penduduk Jakarta Timur adalah yang paling banyak diantara 5 wilayah lainnya. Tercatat pada tahun 2014, jumlah penduduk Jakarta Timur mencapai 2,8 juta lebih. Angka tersebut bahkan hampir menyamai jumlah penduduk satu Negara Mongolia (http://www.worldometers.info). Bila dilihat menurut pertumbuhannya, Jakarta Barat adalah wilayah dengan tingkat expansi penduduk yang paling cepat. Pertumbuhan hunian di Jakarta Barat menjadi salah satu pemicu pertumbuhan penduduk yang cukup tinggi. Pertumbuhan penduduk i Jakarta Barat dalam satu tahun terkahir mencapai hampir 34 ribu jiwa.

Figure 1.1 Jakarta's Total Inhabitants in 2015 (Source : Statistik Daerah Provinsi DKI Jakarta 2015)

With the convenience of having a private motor vehicle, its growth is reaching 11% yearly, 5000 new units each day. According to BPS DKI Jakarta, in 2015 there are 13,9 million motorcycles and 3,5 million private cars with rapid growth in quantity. Let alone at work hours Jakarta also accepting 1,3 million workers daily that lives in the surrounding satellite cities. This condition is the contradictory of Tokyo, in which has less density but have a higher in its people walking index. Indonesia with the average of 3500 steps per day and Japan with 6000 steps per day, according to Activity Inequality. Jakarta's green open spaces also stuck in a bad number, 9,98% of supposedly 30%, with diminishing trend of the spaces from 37,2% in 1965 to 25,85% in 1985 to 9% in the 2000 and a slight improvement in 2010 at 9,8%.

Taking considerations from above points, an argument arises, to whom is a city belong to? If it's admittedly for the people, why is developments for a good public and open spaces are not yet intensified? With existing condition of mistreating of public spaces such as pedestrian way for motorcycle parking and street tenants, among other things that disturbing the flow and circulation, a simple solution of adding more roads only pending the inevitable; more traffic jams.

#### 1.1.2 Walkable City & Jakarta

According to Sanjeev Sanyal in *Centre for Liveable Cities Lecture Series: The Walkable City*, Walkable Planning is a design which allows the user to apply walking as a dominant method in their commutes. More than designing a good pedestrian way, but also about the quality of shelters, transit spots, public spaces among other infrastructures including the connectivity of multi transportation mode. In short terms, it's how well the area are connected by feet. Walking becomes an important thing in city living, creating urban buzz that makes the pedestrians and pedestrians only, to feel the city as a whole. Sanyal argues because of each cities' unique urban buzz, street cafe in Paris and Central Park of New York would bring out more fresh ideas than libraries and labs. Walkable city is a concept that has been encouraged in many major cities since the middle of 20th century, from Shanghai in China to Curtiba in Brazil. Meanwhile in Indonesia, espcially Jakarta, are still far away even only from the aspect of its public space properness. Walkable City is able to come as a solution to Jakarta's problems. High people density and the scarcity of land in Jakarta requires efficiency for its inhabitants, with walking as its main transportation mode supported by various public transportation modes and an efficient land use. According to Jeff Speck in his 2013 Ted Talks, the best strategy to develop a city nowadays isn't the old ways of attracting companies or investors, but with becoming a living place that being dreamed by the right people.



Figure 1.2 Walkability Phenomenon in Orchard Road, Singapore (source : google.com)

#### **1.2 Issue and Context**

#### 1.2.1 Jakarta's Neccesity of Green Open Spaces

Jakarta – Capital City of Indonesia, currently populated by more than 10 million people with density of 14,000 people/km2, surpassing Tokyo. Aligned, with big population count and the convenience to own motor vehicles in the country, comes a big and growing numbers of motor vehicles. Thus, the needs to accomodate those vehicles in the city is also growing. Roads only, planned to take around 12%

of the city's total size. The drawbacks? One of them is diminishing trend of Green Open Spaces. What was once 37,2% of the city few decades ago, it's now 9,8%.

With the provision of roads and more vehicular-oriented infrastructure seen as the solution of vehicle-boom, it's questionable whether the city and its content are made for the machines or the humans inside it. The road development plan quite contradictory with the improvements of public transportation that being intensified such as KRL, LRT, MRT and TransJakarta which actually supports pedestrian to walk and commute all around the city.

People commute to get to point B from point A. Is the use of private vehicles absolute? What if, with existing public mass transport available and intensified, the people only need a trigger, a benefit, to walk and become a pedestrian? A physical benefit which they can activate in and interact with? What if, we could provide a design that adds to benefits of 'walking the city'? One that can be activated by users and physically exist as a place that improve urban life quality?



Figure 1.3 Jakarta Crowded Illustration (source: author)

#### **1.2.2 Design Context**

One of the core areas of Jakarta is Semanggi, a centre of business and commerce, with Semanggi Interchange as the heart of city's economy. Surrounded by office buildings and shopping center, in addition to performs as commuter's node, Semanggi Interchangle also performs as an activity hub of the city. This resulting in high traffic density, particularly within work hours and weekdays. Semanggi Interchange has several landmarks nearby, such as Gelora Bung Karno, Plaza Semanggi and Balai Sarbini, Polda Metro Jaya, Bank Rakyat Indonesia (BRI) Tower, and Istora Mass Rapid Transit (MRT) Station which will be functioned in 2018.



Figure 1.4 Semanggi Area in Jakarta (Source : https://snazzymaps.com)

For the development of Semanggi's Spatial Planning, there has been planned Istora MRT Station which is a part of Phase I construction of Jakarta MRT Project that will be functioned by the end of December 2018. But, in order to maximizing the use of Mass Rapid Transit (MRT) and to attract people to switch from using private vehicle to mass public transportation system, it takes an 'attractor' that can be functioned as a catalyst during the process. The design context of this project is creating a public space which located in Semanggi Interchange Jakarta, and rethinking the way we see a piece of land that as been used as a road. With boundaries the area over Semanggi Interchange, the area of the site will be determined later by 'layering' the space. In a total area of 7 hectares, and located over the Semanggi Interchange that just out to the southwest, 3-dimensional concept is used to define site that is located over the built environment. The site selection is based on the density of the area and has a proximity with Istora MRT Station that will start to operate by the end of 2018. This will provide an easy access for pedestrians from every corner of the city. Besides, Semanggi District is also one of the core node of commercial buildings, business and offices in Jakarta, with various high-rise buildings surrounding the area. And not too far from the area stands Gelora Bung Karno Sports Complex. This combination of buildings is potential to be the 'view' of the project.



Figure 1.5 Semanggi Area Aerial Image (source: maps.google.com)



Figure 1.6 & 1.7 Landmarks around Semanggi Interchange (source: google.com)

Buildings surrounding the area are buildings that are full of activity, during weekdays and even on weekends. The obstacle is, in an area within walking distance, the number of pedestrian who walks from a place to another is still very low. Besides, the intersection itself seems like fracturing the area instead of integrating, keeping each plot of land separated with minimum infrastructure for pedestrians.

*User* who spends time formally commuting in Semanggi Area are mostly classified as middle-class and upper middle society, except on several occasions such as *Persija Match Day* and *Car Free Day* event that held every Sunday Morning. While the informal activities can be found throughout the side of the roads, in the form of street sellers etcetera. This marks that people from various background basically blend within the area.

#### 1.3 Problems and Design Criteria

#### **1.3.1 Design Problems**



The project issue is set out from dense urban area that impacting on the lack of urban space effectiveness. Thus, an active green open space is needed at certain areas to comprehensively accommodate urban activities and performs as a catalyst for the growth of another urban spaces. But paradoxically, at the most dense area which located in the heart of the city, conventional lands are no longer available and inaccessible by humans, in this context, pedestrians. By seeing an area as a 3-dimensional space, design intervention can be developed within the built area, without interrupting – and even support – the current activities.

Problem of the project is how to create an architectural intervention through the Z axis to solve city-space problems and to improve the quality of city spaces using 3-dimensional concept as a perspective to see an urban space. And as to cretae the Semanggi Interchange a step towards Jakarta *Walkable City*. The purposed design aims to be a green public space, afloat in the centre of the city's built area that would act as an anchor that accomodate user's needs, thus improving quality of life.

#### 1.3.2 Design Goals & Criteria

#### Design Goals:

The purposed design aims to be a green public space, afloat in the centre of the city's built area that would act as an anchor that accomodate user's needs, thus improving quality of life.

- 1. The design should be built around natural environment, contrary to the solid, massive surrounding area.
- 2. The design should accomodate public needs
- 3. The design should be different in a way of how the common tipology be designed.
- 4. The design should have element of walkability, for the sake of diminishing the usage of private vehicles as root problem of the declining quantity and quality of existing green public spaces.

# CHAPTER 2 ARCHITECTURAL PROGRAMMING

#### 2.1 Space Programming

#### 2.1.1 Object Function

In general, the project functioned as an active green open space. Thus, the object is basically a public space, with several communal activities while also performs as a green open space for the city. This function is expected to be a massive urban greening in the heart of the city, that could triggres interaction between the users, and improving the quality of city space as a whole.



Figure 2.1 Active Green Open Space Illustration (Source : google image)

#### 2.1.2 Activities and Facilities

The main function of the project as an active green open space is divided into several categories or activities. And activities in the proposed object is majorly divided into 2, main activities and supporting activities. Main activities are the ones directly related to the aim of the project, and performs as the general description of activities that occurs within the area, while the supporting activities are more specific facilities.



Figure 2.2 Program Activity breakdown (source: author)

Based on site survey, literature study, and precedent study, facilities in the object are listed as below:

#### a. Communal Area

This area performs as the main facility of the object, and can be functioned as a space for recreation, a stress-reliever, and to accomodate the needs of interacting and as a place for public events.



Figure 2.3 The Usage of Communal Space on Public Park (source: google image)

#### b. Sports Area

Exercising could accommodate the needs of recreation and triggers social interaction between people. This area also provide a space for people living in a dense city life to get some fresh air and be healthier. Albeit located not too far from Gelora Bung Karno Sports Complex, this area is informal and more recreational than those provided in Gelora Bung Karno Sports Complex.



Figure 2.4 Recreational Sports Area Illustration (source: google image)

#### c. Forest Park

The object will also provide a forest-like area, instead of just a regular park. This facility is needed to create a significantly different atmosphere within the dense city area.



Figure 2.5 *Forest Park* Illustration (source : google image)

#### d. Tenants and Public Facilities

This area performs as a supporting activity which accommodate the needs of people commuting in the area. Tenants and Public Facilities includes spaces for street sellers, praying room or musholla, information center, and toilet.



Figure 2.6 Tenants inside a Park Illustration (source: google image)

#### 2.1.3 Precedent Study on Space Needs and Program Activities

In determining the space requirement of the project, a precedent study was undertaken using 2 main objects that shows similar characteristics and context. The first object is *The High Line Park* in New York, USA by *James Corner Field Operations*, and the second one is *Seoullo 7017 Skygarden* in Seoul, South Korea, by *MVRDV*. Both objects are elevated-linear park, located in the heart of the dense area of each nations, and performs not only as an open public space but also a greenway or green nursery as shown below:



Figure 2.7 The High Line Park (left) and Seoul 7017 Skygarden (right) (Source : google.com)

Based on the precedent study, it can be seen that both objects constantly combines circulation and activities within the area. Where the width of each *platforms* use the same width as the existing objects (railroad and highway overpass, respectively) that spans about 6 to 12 meters wide. Since the project's aim is to connect, or to create a hub, from several points around Semanggi Interchange, and as to maximize activities within the design object, it could be considered to apply the same width and follow the same path as the Semanggi Interchange which located below the project. It

is also considered to slightly blurs the boundaries between circulation and activities, but still blends in general.

And as for the activity program requirements, still observing from both The High Line Park and Seoullo 7017 Skygarden, it can be assumed that city skyline and the city view, instead of covered from the objects, is better to be framed as a vista. This could be implemented when the city streets and elements itself has unique aesthetical value, and can give a different impression from the green above level, as shown below:



Figure 2.8 The High Line Park and Seoullo 7017 Skygarden's Quality of Space (source: google.com)

But despite of all considerations taken from the 2 precedent objects, a further observation of the specific site is needed, because each cities has different view and characteristics after all. Besides, survey about the acoustics and pollution that comes from the traffic below should also be considered, not just the view, because activities that will performs in the object are the ones that need tranquility and a good air quality.

#### 2.1.4 Activity Programming

According to precent study and site survey, the proposed object will performs facilities and total area as shown:

Space/Facility	Area
West Tenant Area	1680 m <sup>2</sup>
Urban Park – Q1	2365 m <sup>2</sup>
Skybridge	690 m <sup>2</sup>
Urban Park – Q2	1508 m <sup>2</sup>
East Tenant Area	873 m <sup>2</sup>
East Sports Area	2028 m <sup>2</sup>
Urban Park – Q3	1906 m <sup>2</sup>
Underpass	460 m <sup>2</sup>
Urban Park – Q4	1460 m <sup>2</sup>
West Sports Area	2028 m <sup>2</sup>
Total Area	14.998 m <sup>2</sup>

Table 2.1 Space Area Recapitulation

#### **2.2 Site Description**

#### 2.2.1 Site Location and Features

Location : Semanggi Interchange, Karet Semanggi District, South Jakarta.



Figure 2.9 Site Location (source: maps.google.com)

The site is located above the Semanggi Interchange, with total area of 14 Hectare which addressed as roads. The Semanggi Interchange itself is only accessible for pedestrians during car free day, with usage ratio of pedestrian and automobiles in the area as low as 1 : 33.6, where pedestrians could only access the site for 5 hours a week. The site is equipped with access of electricity, water supply, and drainage below. It also has natural physical features – trees and shrubs.

#### 2.2.2 Noise, Pollution, and Wind Analysis



Figure 2.11 Wind Direction Diagram (source: author)

#### 2.2.3 Accessibility

As stated above, Semanggi District is one of the most dense area in the nation's capital, Jakarta. An area of which not only functions as a destination, but also as one of the main access of commuting in Jakarta. Automobiles are massively taking the area, making it one of the worst traffic in the city, especially during work hours in weekdays. The current mass public transportations that are commonly used within the area are TransJakarta (a bus rapid transit system), which integrated with *Angkutan Pengumpan TransJakarta Busway* or APTB (a TransJakarta feeder—also a bus rapid transit system) and combined with *Kopaja* and *Metromini* on several routes.

Furthermore, there is also an on-going construction of Istora MRT Station, a part of Phase I Construction of Jakarta MRT Project, that is planned to be operated by the end of 2018. From the stated above, the proposed object is possible to be designed without any parking space for automobiles, to reduce the needs of private vehicles and encouraging people within the site area to walk, and implementing the walkability concept from and to the object. Thus creating a better environment and greener city.



Figure 2.12 Traffic Analysis Diagram (source: author)



Figure 2.13 Site Accessibility and Potential Major Parking Area (source: author)

In order to maximize the use of the proposed object, and as to attract people with private vehicles to switch to mass public transport modes, a design that can be performed as a catalyst for the process is needed. Inside the proposed area there are various passive green open spaces that can be used to support the object's main structure, or created as *pocket spaces* with activities. These spaces can not be an active since it is not accessible from the ground level.



Figure 2.14 Passive Green Open Spaces on Ground Level (source: author)

#### 2.2.4 Legal Aspect



Figure 2.15 Jakarta's Spatial Planning (source: https://tataruang.jakarta.go.id/publicmap/index.html)

In Jakarta's Spatial Planning, as well as Perda Pengadaan Bangunan (Regional Regulations on Procurement of Buildings), none of which mentions regulation for elevated objects above a main road, except Regulation of The Minister of Public Works No. 19/PRT/M/2011 about Technical Requirements of Road and Technical Road Planning Criteria, which stated that the minimum height or vertical distance of fly over and the road below is 5,1 meters, thus can defines as the 'clearance' vertical area.

# CHAPTER 3 DESIGN APPROACH AND METHOD

#### 3.1 Design Approach

#### **3.1.1 3-Dimensional Space**

According to Francis D. K. Ching in *Architecture: Form Space, and Order*, plane comes as a result of a line extended in a direction other than its intrinsic direction. In the composition of a visual construction, a plane defines the limits or boundaries of a volume. And while architecture as a visual art deals specifically with the formation of three-dimensional volumes of mass and space, therefore a plane plays as a key element in architectural design. Here we can conclude that plane can construct boundaries in space to the user, as it is made of lines – either a concrete or imaginary ones. When it is imaginary, what are the elements that construct the lines? In *The Ecological Approach To Visual Perception*, James Gibson stated that visual perception and sense of spaces don't emerge from sole interpretation, but through direct interaction between humans and environment(Gibson, 1979).



Figure 3.1 Points, Lines, Planes, and Volume Illustration (Source : Architecture Form Space and Order, Francis D.K.C)

According to Gibson, space and boundaries does not arise from interpretation or formal manifestation, but fundamentally shaped through direct interaction between humans. Where user 'experience' the boundaries itself when they interact and pass through it. With such understanding, we can rethink and recreate the city spaces that are 'occupied' for the automobiles, and with current technology, planes in the Z axis can be formulated to fulfill the human needs., giving that the space made will be able to fully interact with the users.



Figure 3.2 3-Dimensional Space Illustration

#### 3.1.2 Walkability

On his speech at TEDx MidAtlantic in 2013, Jeff Speck mentioned The General Theory of Walkability in urban design, which consists of 4 main aspects: Necessity of activities (needs), safety (safer than the previous system), comfort, and interesting walk. From all 4 aspects, we can translate it into 3 main concept on architectural design:

#### a. Necessity of Activities (needs)

Here we can conclude that people will walk, or move, when they needed to. By giving a mixed-use program on an architectural object, it could triggers people to move from one facility to another. The object could also be designed by combining circulation and activities, rather that forming deadlock spaces like cul-de-sac to triggers movement. Nearby buildings are also important to serves as attraction for people to move or walk, thus by combining circulation and activities, the proposed object could performs as a space to pass through, not only as a destination.

#### b. Safety

On a regular sidewalks or pedestrian way, the risk of people walk by only a couple of centimetres away from a high-speed automobiles cause insecurity towards the street, while this condisition could be worsen if placed alongside the main road. Therefore, circulation corridors on the proposed object are designed bigger than the regular sidewalks, plus it is located above the vehicles road. By giving such condition, it is expected that users on the proposed object will feel safer, bigger and more invincible than the automobiles below them.

#### c. Interesting and Attractive

A person will be attracted to another form of being, a conclusion from biophilia concept. And by implementing sufficient amount of vegetation throughout the design, it can give an interesting and attractive impression for the user, especially when the object is located in the heart of the city with a massive amount of concrete and rigid materials.

#### **3.2 Design Method**

In general, there are 3 methods implemented on the proposed project. Intergrated with the previous approach and issue, these 3 methods performs as the technical step to create object's real form and path. The first one is using juxtaposition as a conceptual tools, then using grid and fillet method as the formal tools, and super-imposition as the programmatic tools.



Figure 3.3 Design Method

#### 3.2.1 Conceptual: Juxtaposition

By placing the object closely with the radial flyover, thus creating a visual that will highlight them both. And by doing so, this will enhance the area's identity and performs as the city's icon.



Figure 3.4 Juxtaposition Method Implementation

#### 3.2.2 Formal: Grid & Fillet

This method is used on 2 elevations on the Z axis of the site to specify in which area in the site are buildable. The elevation's height are decided with safety reasons for both pedestrian and the traffic below, by also using exisiting trees or vegetations as a repulsor. The platforms of which are formed would then be filleted to achieve an organic-aesthetic form.



Figure 3.5 Grid Method Implementation (1)



Figure 3.6 Grid Method Implementation (2)(column points)

GRID TO COLUMN

#### **3.2.3 Programmatic: Superimposition**

Two elements of circulation and activities which determined by different parameters are put on stack together on the site. The circulation is made mostly by external factor of surrounding point of interests, due to the object serving as a place of commuting in the area. The activities, however, are determined by in which area will it has sufficient space for activities, with existing trees and vegetations act as repulsor for the platforms.



Figure 3.7 Superimposition Method Implementation



Figure 3.8 Similiar activities are designed on both areas divided by an axis

# CHAPTER 4 DESIGN CONCEPT

### 4.1 Formal Exploration



#### Figure 4.1 Site Exploration



// FROM FRACTURING,



// TO INTEGRATING.



Figure 4.2 Main Concept of The Project

The main idea of the project would shift the area that fracturing its surroundings, to integrating them instead as an urban anchor.



Figure 4.3 User Target & Projected Activities



Figure 4.4 Activities Organization / Massing Concept



Figure 4.6 Site Characteristics as a Parameter of Activity Distribution

### 4.2 Technical Exploration





Figure 4.8 Site Massing and Activity Studies



Figure 4.9 Circulation Study on Users Around The Site





Figure 4.10 Dividing Building's Content based on Site Condition



Figure 4.11 Grid Implementation Creating The Object's Initial Form



Figure 4.12 Result of Massing, Grid & Activity Zoning on Site

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# CHAPTER 5 SCHEMATIC DESIGN

### 5.1 Formal Exploration







U SECTION - ELEVATION 1 : 300



West Sports Area - 1 : 300



























### 5.2 Technical Exploration









# CHAPTER 6 CONCLUSION

The design become an intervention in downtown Jakarta. While re-using a plot of land in which Semanggi Interchange lies, as an anchor it accomodate user's needs in living and commuting. And as an object at downtown area, it also integrates the surrounding areas, where it was fractured before by connecting point of interests around the site and inducing activities between them. Therefore, the object would improve the quality of public open green space in Jakarta.

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