

# Teenager Perception the Apsari Park Aesthetic (Review on Vegetation Arrangement)

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**Abstract**— Surabaya community always busy with routine, including the teenagers. Many teenagers visited Apsari Park to refresh the mind. The visitors are dominated by teenager. The attraction from Apsari park is the diversity of vegetation. This study aims to analyze the teenager's perception about vegetation arrangement at Apsari park. Study design through theoretical studies. We used quantitative research method and multi-stage analysis. Data were collected by random sampling and structured interview. The research process was carried out by distributing questionnaires. The results can be a guidance in managing the design of vegetation and create a government policy about the City Parks.

**Keywords**— perception, teenagers, aesthetic, Apsari park, vegetation.

## I. INTRODUCTION

City Park, according to its function as stated in the Regulation of the Public Work Minister of the Republic of Indonesia No. 05/PRT/M/2008), is an open land that serves as a means of social and aesthetic as recreational activities, educational or other activities on the city level. Thus, City Parks are the object that become the target of communities and urban teenagers. It is because City Parks have the aspects of aesthetic value and convenience with a wide variety of facilities for instance, a variety of vegetation. Such as the concept of vegetation aesthetic, the concept of comfort and safety, as well as City Park facilities as the approachment, then it will improve the quality of city parks, either from the standpoint of aesthetics, convenience, recreation, relaxation, shade, cleanliness, as well as a comfortable and safe atmosphere for visitors, including teenagers and children [1]. City park which is clean, healthy, fresh and green serves to support the quality of open urban space, including aesthetic quality, so that teenagers can make a positive attitude as a perception on the city parks [2]. Although in quantity City Parks volume in several major

cities are still far below the standard, it does not reduce the interest of young people visiting City Park [ 2]. Surabaya has 54 active city parks with a total area of 303.561 m<sup>2</sup>. One of the parks is Apsari park with a total area of 5.300 m<sup>2</sup> [3]. Involve the community, including young people, because the result of urban development will affect the community itself [4]. The forest vegetation group that forms the city park is an approach and implementation that is intended to achieve the purpose of protection, recreation, aesthetics, and other functions for urban communities[4].

Open green space that has a plaza with all the amenities such as benches, tables, fountains, toilet, and cafe or a shaded rest area is actually an ideal and flexible garden/park idea [5]. City Park is a place to gain cool, freshness, tranquil and beautiful atmosphere for urban communities, including young people. Citypark has become teenagers' needs for facilities used as the completion of aesthetics and recreational areas [5]. City park facilities are made up of hard components such as street paving, pots or vases, playgrounds, garden lamps, statues, fountains, as well as natural components such as vegetation in the form of grasses, shrubs, ornamental plants, shade plants, naturally flowing water, air, wind and small animals who live there [6]. City park which filled with diverse vegetation has a function to support the quality of urban open spaces, including the aesthetic qualities, so that the teens can capture and deliver a positive attitude as a form of perception on the City Parks [7].

In many countries such as United Kingdom, Norway, Germany and Switzerland, the diversity of vegetation and various types of facilities owned by city parks are the most favored option by the public. [8]. In Northern England and Western Norway, the diversity of vegetation grown with various color of flowers and various types of grass owned by outer space or landscape is actually the people's preference [8]. Collaboration of

facilities for some different activities in City Park, such as sport, social, cultural, aesthetic, recreational and comfort aspects are the main criteria of a City Park as expected by the city residents, including teenagers. Teenagers and children admit that they enjoy the beauty and use various facilities in City Parks which are located close to their schools [9]. According to the regulations of the Minister of Public Works No: 05/Prt/M/2008, explained, that City Park is part of Green/ Open Space. While the green/ open space is a space in the city or the wider area, either in the form of an elongated area (track) or clustered with the use of more open and without buildings [10]. The City park is a place where vegetation grows, both of which grow naturally, as well as those planted [10]. The concept of

qualified and adequate City Parks, can be conducted with a combination approach of several concepts [11], Diversity of vegetation and other facilities which arranged tidy, may have an aesthetics role because it is essential for the maintenance of the ecological authenticity City Parks which have the kind of vegetation that suit with local needs [11].

City Parks will develop continuously, along with the city itself, but it can not avoid the development from the exploitation efforts of natural resources with a variety of reasons that would lead to the disruption of ecosystem balance [12]. Simonds consider the needs of green open space in an urban area as shown in Table 1.

Table.1: The standard area of green/open space with a number of occupants according to Simonds (1983)

Area	Number of people/area	Open space (m <sup>2</sup> /people)	Use
Settlement	1.200	12	- Yard/house garden - Small-scale environmental park - Playground
Community	10.000	20	- large-scale environmental park - sport field corridor of neighborhood open space
City	100.000	40	- city park - green track - sport field - corridor between building - community open space
Region/Regional	1.000.000	80	- recreation park - city circle line forests, towns (including open space city)

Source: Director General of Spatial Planning, Department of Public Work, 2008

Surabaya City Government reform the open space that are considered ineffective to become the city parks. A number of open space owned by the city of Surabaya have been built into beautiful city park, including Apsari Park The city park has been rebuilt and equipped with a wide variety of vegetation, for both as protected trees and vegetation as an ornamental garden. Almost every corner of the city, including the remote parts not spared from

City Parks renovation so that the city of Surabaya gets the title "a thousand gardens" city.

Observations in the field shows facts, that visitors of Apsari park dominated by teenagers, either alone or together with a group. Young visitors at the City Parks come from various backgrounds. The presence of the teenagers to Apsari Park in Surabaya, due to fresh and exciting atmosphere of the various types of vegetation, with a form adapted to their respective functions.

Apsari Park, Viewed from the map of the Surabaya City, located at the main road, namely Jalan Pemuda/Pemuda street. The city park is always crowded by teenagers. The teenagers who visited to city park admits there was an aesthetic value which they can felt where in the park. The aesthetic value they felt come from a variety of existing facilities, including the presence and arrangement of various kinds of vegetation, although these perceptions arise from each individual for instance; vegetation color, the size and shape of the manicured vegetation.

## II. METHODS

The study was carried out by using quantitative research with the sampling method. Sampling was conducted using simple random technique. This method was chosen because the research analysis tends

descriptive and general. The procedures of the study are as follows: a). Find/discover the aesthetic variables of vegetation arrangement on Apsari Park with capture 100 of the teenager respondents; b). Spread questionnaires with variables that have been found; c). Setting the number of samples to an existing variable with 175 samples; d). Determining the object (teenagers) as respondents and e). Sorting the whole sample according to the variables that have been found, to find out which are the most dominant variable.

In order to get teenagers perception of aesthetic variables on the Apsari Park vegetation arrangement, we conduct interview with 100 teenager visitor of Surabaya Apsari Park, with details of category; university student, senior high school student, employee or a junior high school student The results are show in Table 2.

Table.2: Aesthetic perception on Surabaya Apsari Park according to the teenagers in accordance with the arrangement of vegetation

No.	Perception variable of teenage aesthetic on the Apsari Park vegetation arrangement	Number of voters
1	Theme	27
2	Point of intrest	35
3	Rythme	12
4	Scale	10
5.	Ballance	11
6	No option	5
<b>Total</b>		<b>100</b>

Source: Observation was done during July 2017 at the Apsari park, Surabaya

To accelerate observation at Apsari Park, then it is necessary the equipment which will be used in the observation process. From the four of vegetation arrangement variables which have been found as teenagers perception on Apsari Park Aesthetic,

In this study, we used quantitative method to evaluate the given problem. Random sampling and Structured Interview was carried out for data collection. This study was used multi-stage analysis and discussion based on the analysis and evaluation of the data. To help the line of research, then need the following equipment;

**a) The format of the questionnaire.** Questionnaire is a sheet format that has been provided, then distributed to 450 people of teenagers respondents who visited Apsari Park with intention to determine their perception about the aesthetic arrangement of vegetation at Apsari Park.

**b) Photo camera.** Camera used to record the situation of Apsari Park vegetation arrangement, either as protected trees, ornamental plants, grouping by type or by placing.

**c) Tools and notebooks.** Tools and notebooks used to record things that are important and useful in helping the

process of data analysis. The tool and notebooks can be a ballpoint and a notebook or another.

**d) Computer devices.** Used to write all the material and incorporate photos or images recorded at Bungkul Park into the research reports, during the study.

**e) Printer.** This tool is used to print the results of the research report, either in the form of text or images and photos of observations result at Apsari Park.

**f) Scanner.** Used to transfer text, image or photo into a report that can not be copied directly, with the process of photograph reproduced in the computer, then transferred to the research report.

In this study, the terms “green space” and “public open space” were used interchangeably and presumed to be synonymous.

## III. RESULT AND DISCUSSION

In the Law No.26 The year of 2007, about spatial planning, Regional Spatial Layout Planning/ (RTRW), the city is required to have a public open space of at least 30% from total area of the city. This is in accordance with

the rules issued by the United Nations. Plan of the provision and utilization of public open space, in detail according to Regional Spatial Layout Planning /RTRW, then from 30% public open space based on the area of the city divided into 20% allocated to the public and the remaining 10% is intended for private. . City parks are generally used by people as an aesthetic accomplishment, fresh air fulfillment, recreation, relaxation, a place to eliminate boredom, a place to mingle with family or friends - as well as a variety of other activities. [13]. Shading which is formed by canopy trees (vegetation) will affect the air temperature in a street corridor, including streets in the open space area for public and city parks, because the shadows will reduce the effects of solar radiation and results in a comfortable temperature of the street corridor. That means one of the aspects which affect the comfort of city parks is the air temperature of the city parks [14 ]

City Park is a region or area of land surface dominated by cultivated vegetation for certain habitat protection functions, or environment facilities in urban areas, or network security infrastructure or agricultural cultivation. According to its function as stated in the Regulation of the Minister of Public Works No. 05/PRT/M/2008) City Park, is an open land that serves as a means of social and aesthetic as recreational, educational or other activities on the city level. One of the aspects which is often forgotten in the provision of open space in urban areas, (in this case, including City park), is the addition of user activities in the open urban space. The condition provides a signal that the facilities on the open government-owned space will be interpreted differently by the users [15].

Surabaya is located in the province of East Java Indonesia geographically located at latitude 7,21° and has a height between 4 and 8 meters above sea level, and has the air temperature between 29° to 34 °C. Surabaya City Government has made improvements to the Apsari Park since a few years ago. The location of this park is on the back of today's Apsari Park area (Figure 01 and 02).



Fig.1: Apsari Park view.

Source: Google earth Juni 2017



Fig.2: Apsari Park front view Source:Google earth Juni 2017

Source: Google earth Juni 2017

Multi-stage analysis was carried out to obtain one of the variables that has the number of polling more than half of the respondents. It is intended to reinforce the research results. If the process of collecting the pooling questionnaire lasted more than one stage, then the pooling results from the previous stages still be calculated with the intention of the collection of pooling variables are not protracted. Each stage will be distributed a questionnaire with an odd number, with the intent to avoiding the same number of pooling.

**First Stage.** Distributing one hundred and seventy-five questionnaires then conducted the pooling on the questionnaire data based on the number of variables, as many as five variables. Next calculate and recapitulate the number of pooling from each variable of City Park vegetation arrangement aesthetic perception which filled by respondent. Based on the sequence pooling number perception from these respondents on each variable, will come out pooling sequence first to fourth. From this sequence, then the last sequence considered disqualified, so that only three variables remain. These three variables used as a variable in the second stage.

**Second Stage.** The remaining three variables from the first stage, then distributed again questionnaire that contains three variables to the respondents of different teenagers at Apsari Park as many as one hundred and seventy-five pieces, with the same process the result of these pooling questionnaire sorted again into three groups according to the number of existing variables. Result from the sorting of these three variable will come out the first sequence to third sequence. If the first sequence variable does not have the number of pooling more than half of the respondents, then continued to the third sequence.

**Third Stage.** In the third stage, remain five variables, so can be confirmed one of them will have a value of pooling more than 50%. These variables which will come out as a reference to build conclusion of the study. The results of the pooling variable by teenager respondents are shown in Table 3, Table 4, Table 5. and Table 6.

Table.3: The pooling result from teenager's respondent at the first stage with 175 respondent

Location : Surabaya, Apsari Park  
 Gender : Young man and young women  
 Age : 15 until 20 years old  
 Education : Junior High School until University Student

No	Variable based on Vegetation arrangement	Voters Category			Total
		University Student	Senior High School/Equal	Junior High School/employee	
1	Theme	18	10	12	40
<b>2</b>	<b>Point of intrest</b>	<b>26</b>	<b>15</b>	<b>11</b>	<b>52</b>
3	Rythme	14	9	9	32
4	Scale	8	6	9	23
5	Ballance	11	10	7	28
	<b>Total</b>	<b>77</b>	<b>50</b>	<b>48</b>	<b>175</b>

Source: Observation was done during July 2017 at the Apsari park, Surabaya

Table.4: Pooling result from teenager respondent at second stage with 175 respondents

Location : Surabaya Apsari Park  
 Gender : Young man and young women  
 Age : 15 until 20 years old  
 Education : Junior High School until University Student

No	Variable based on Vegetation arrangement	Voters Category				Total
		University Student	Senior High School/Equal	Junior high School/employee	Stage I	
1	Theme	27	13	15	40	95
<b>2</b>	<b>Point of intrest</b>	<b>22</b>	<b>16</b>	<b>19</b>	<b>52</b>	<b>109</b>
3	Rythme	9	13	10	32	64
4	Scale	DISQUALIFIED				
5	Ballance	10	13	8	28	59
	<b>Total</b>	<b>68</b>	<b>55</b>	<b>52</b>	<b>152</b>	<b>327</b>

Source: Observation was done during August 2017 at the Apsari park, Surabaya

Tabel.5: Pooling result from teenager respondent at the third stage with 175 respondents

Location : Surabaya Apsari Park  
 Gender : Young man and young women  
 Age : 15 until 20 years old  
 Education : Junior High School until University Student

No	Variable based on Vegetation arrangement	Voters Category				Total
		University Student	Senior High School/Equal	Junior high School/employee	Stage II	
1	Theme	19	21	13	95	148
<b>2</b>	<b>Point of intrest</b>	<b>23</b>	<b>22</b>	<b>21</b>	<b>109</b>	<b>175</b>
3	Rythme	20	17	19	64	120
4	Scale	DISQUALIFIED				
5	Ballance	DISQUALIFIED				
	<b>Total</b>	<b>62</b>	<b>60</b>	<b>53</b>	<b>268</b>	<b>443</b>

Source: Observation was done during September 2017 at the Apsari park, Surabaya

Tabel.6: Pooling result from teenager respondent at the third stage with 175 respondents

Location : Surabaya Apsari Park  
 Gender : Young man and young women  
 Age : 15 until 20 years old  
 Education : Junior High School until University Student

No	Variable based on Vegetation arrangement	Voters Category				Total
		University Student	Senior High School/Equal	Junior high School/employee	Stage III	
1	Theme	26	25	29	148	228
2	Point of intrest	34	35	26	175	270
3	Rythme	DISQUALIFIED				
4	Scale	DISQUALIFIED				
5	Ballance	DISQUALIFIED				
	<b>Total</b>	<b>60</b>	<b>60</b>	<b>55</b>	<b>323</b>	<b>498</b>

Source: Observation was done during October 2017 at the Apsari park, Surabaya



Fig.3



Fig.4

Figure 03 and 04. Attention Points.

Rows of Trees that appear dominant, both shape and color, indicate every clear point of attention.

Source: Private document, September 2017.

#### IV. CONCLUSION

The conditions of Green/Open Space, in which including City Park in the city of Surabaya, as well as other cities in Indonesia are still does not meet the standard requirements specified by the law No. 26 the year of 2007 and the UN provisions which specify that the green space on the city area of at least 30% from the whole area of the city, which consists of 20% for public and 10% allocation to private.

Apsari Park as one of the City Parks in Surabaya, majority visited by teenager from age 15 to 20 years. They are consist of university students, students and young people as employees of the company.

In accordance with these result, then the variable of vegetation arrangement as **Point of intrest**, is the teenagers perception on Surabaya Apsari Park Aesthetic, when viewed from the perspective of the vegetation arrangement. It was chosen by 270 respondents means that equal with 54.217%, already more than 50%. (exceeding 50% + 1)

#### REFERENCES

- [1] Blanc, Nathalie, 2012. *From Environmental Aesthetics to Narratives of Change. The International Journal of Aesthetics to Narratives of Change*. Vol.10. December 2012.
- [2] Bianchi & Federici, 2010. *Cities are Fun, Aesthetic and Urban Landscape. The International Journal of Urban and Aesthetics Landscape. Published On line April 2010*. Departement of Economic Sciences and Cream Cassino University.
- [3] Buhari, Chalid, 2013, Profil, Penerbit Dinas Kebersihan dan Pertamina Kota. Surabaya.
- [4] Gjerde, Morten, 2010. *Study to Determine Functions the City of Forest on the Question of Urban Environment. The International Journal of Urban Environment and Architecture*. School of Architecture, Victoria University of Wellington, New Zaeland.
- [5] Byrne, Jason & Sipe, Neil, 2011. *Green and Open Space Planning for Aesthetical Urban Consolidation-A review of the Literature and Best Practice. The International Journal of Environment Protection*. Departement of Asian and International

- Studies, Griffith University, Brisbane Australia.  
Published On line July 2011.
- [6] Hakim, Rustam, 2009. Ruang Terbuka dan Ruang Terbuka Hijau.  
<http://rustam2000.wordpress.com/ruang-terbuka-hijau> (10 Oktober 2009)
- [7] Kerimoglu & Gezici. 2012. *Emerald Article : Culture, Tourism and Regeneration Process in Istanbul. The International Journal of Culture, Tourism and Hospitality Research*. Vol. 4 Iss: 3 pp 252 – 265.
- [8] Lindemann, Matthies & Junge, 2010, *The Influence of Plan diversity on People`s perception and aesthetic appreciation of Glassland Vegetation*, *The International Journal of Environmental Aesthetics*, Zurich Open Repository and Archive, Winterthurerstr.190, CH-8057 Zurich, University of Zurich.
- [9] Moore. R, 2008, *Appreciating Natural Beauty as Natural*, *Journal of Aesthetic Education*, 33,42-59.
- [10] Permen Pekerjaan Umum 2008, No: 05/Prt/M/2008, Pedoman Tentang Penyediaan Dan Pemamfaatan Ruang Terbuka Hijau di kawasan perkotaan
- [11] Shah & Atiqul Haq, 2011. *Urban Green Spaces and an Integrative Approach to Sustainable Environment. The International Journal of Environmental Protection*. Published On line July 2011. Departement of Asian and International Studies. City of Universty of Hong Kong. Hong Kong China.
- [12] Simonds, 1983. *Landscape Arcitecture*. McGraw-Hill Book Company. Science & Technology Encyclopedia, 2013. *Perception*.  
<http://www.answers.com/library/Sci%252DTech+Encyclopedia-cid-60690>*The International Journal of Perception*.
- [13] Suharto, 1994, Dasar-dasar Pertamanan : Menciptakan Kerindangan dan Kerindangan, PT. Media Wiyata, Jakarta.
- [14] Winansih, Antariksa, Surjono, & Leksono, 2015, *Thermal Confort at the Street corridor arround Public Place, case study Alun-alun Malang*. **Received: September 1st 2015; Accepted: September 14th 2015; Available Online: December 31st 2015**  
DOI: <http://dx.doi.org/10.18860/jia.v3i4.3102>.
- [15] Wulandari, Lisa Dwi, 2007, Konsep Metafora-Ruang Pada Ruang Terbuka Perkotaan, Studi Kasus : Alun-Alun Kota Malang. Disertasi Program Doktor, Program Pascasarjana Jurusan Arsitektur, Institut Teknologi Sepuluh Nopember Surabaya.