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The Innovation Breakthrough in Digital and Disruptive Era
AESTHETICS SKYLINES IN MANADO

Desty Rara Retna Kalude¹, Djubir Ruslan Eddy Kembuan², Keith Francis Ratumbuisang³

¹,² Universitas Negeri Manado, Architecture Department, Tondano, Indonesia
³Universitas Negeri Manado, ICT Department, Tondano, Indonesia

Abstract. The impact of urban development is a change in the face of the city, with various building functions and heights building so that create its skyline Alone. City Manado showing exists growth city in a manner physique and non-physical so that the City of Manado has unknowingly changed the face of the city, especially in the regions Coast. Changes in the face of the city of Manado in the coastal area include changes to the skyline which was originally flat become more expressive when compared to other areas in the city of Manado. The city skyline can be an overview of what is most valued in a city, other than that the beauty of the skyline can only be enjoyed from long distance. Skyline beauty depends on observer perception and the physical form of the city. Research objectives namely to analyze the aesthetic quality of the skyline in the waterfront area of the city of Manado and analyze what factors are there Which shape it. Study This use method qualitative with approach descriptive analysis. The data analysis approach was carried out in a qualitative descriptive manner with the stages of segment division, analysis of the results recording, ground check and analysis of visual element variables. The results showed that: of the seven variables physique skyline aesthetic, only exists five variable which are contained on location study.

* Corresponding author: destykalude@unima.ac.id

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1. Introduction

The waterfront area can accommodate various activities thus making it a lively area and place to socialize public in city (1). Development area waterfront done Because has enormous potential (2). The impact of the development of the waterfront area is changes in the face of the city, namely with the presence of diversity function and height building so that affect changes in the shape of the skyline. City skyline can only be felt by observing it from a distance that incorporates parts of the larger city and ignore details element room (3). Manado is the capital of North Sulawesi province which in development showing exists change Good in a manner physique urban nor nonphysical. which can be seen in the demographic conditions of the community more variety. Unwittingly, the City of Manado experienced change to morphology face city especially on area coast edge beach Which in a manner existing experience a significant change, where beach reclamation activities occur by making it area central business District (CBD) for City Manado. These changes present the building new with height Which diverse so that there is a change in the morphology of the city's face impact on change skyline. The influence of tall buildings very large related to the city skyline because of the impact from building tall characteristic symbolic, aesthetics and impact on visual. Skyline is a symbol for the city and its citizens, reflects social identity, can become an icon as well skyline can be appreciated for having aesthetic qualities and the city's collective value carrier Aesthetics skyline according to depends on form skyline city That Alone, circumstances environment surrounding and thinking as well as trend association one brings when one looks at the skyline city. To enjoying the city need for looked from Far.) state that skylines so beautiful And skyline can represent many things happening in one city. There is four mark Which represent What Which valued city through skyline , that is: Skylines Spiritual, Skylines communal, Skylines communal, Skylines Laissez-faire, Skylines ecology. This study uses several theories, namely theory aesthetics skyline in matter this variable fisk that is variable Physique, consists from rhythm, harmonious fit, netting the sky, punctuation, abstract form, layering and framing as well as visual element theory according to) related to physical variables skyline aesthetics namely position, orientation, size, shape, interval, time and light. Skyline aesthetic theory and theory element visual combined for analyse quality aesthetics skyline. A visual condition city related with phenomenon psychological and phenomenon physique. Skylines is description from form physique city so that is an inseparable unit in see something urban conditions in matter. This reviewed from pattern morphology city. Based on theory morphology city by (4) And the physical forms of the urban environment according to (5) and urban theory design from (6) then to analyse skyline forming factors using variable yang been grouped into land use, circulation as well as form mass And building as well as theory Which on the surface namely topography And regulation government. Skylines become source visual Which very important in landscape hilly and mountainous (7). Study This performed with the intention of analysing the aesthetic quality Manado city skyline in terms of physical aesthetic variables skyline.

2. Method

Study This use method qualitative Because aim for explain phenomenon in a manner deep with do contact direct in field. Study qualitative more characteristic descriptive where data Which collected No form number-number However shaped words or picture (8) Location research is in area city waterfront Manado that is from Region Mega Mr until on area Hotel Lion, and limit distance location study that is from area waterfront until in Road Samratulangi and Jalan Ahmad Yani. Research sites located in two sub-districts, namely Wenang and Sario.

Primary data collection method used in study, that is: Determine the starting point and end point of the research location namely the Hotel Lion-Manado Town Square Mega Segment Determine tool record visual (image/photo). City skyline is shot Manado. Distance taking picture that is ± 650 meters from land. Determine time taking recording visual (customized with circumstances weather city Manado especially in sea) Take recording visual in a manner gradually. After getting the visual data, the researcher did ground check for now location building and element natural shaper skyline. Instrument study is tool or facility Which used by researchers in collecting data in order research is easier and the results are better, careful, complete, and systematic so that easier processed (9). Collection data primary use instrument form, camera, and map location study (10). Collection data secondary, form map utilization land and regulation government sourced from related agencies, as well as literature studies through books, article and journal Which relate with skyline and factor shaper for can complete data primary. The analytical approach is carried out in a qualitative descriptive manner, where process taking data and identification done descriptively qualitative through observation and photos/field documentation to describe area.
Technique analysis done in a manner descriptive by digging deeper into the element variables visual and aesthetic variables of the skyline. Here are the steps in analysis data namely: Segment division, research location is divided into three segments namely segment I Mega Mas, segment II Manado Town Square and Segment II Hotel Lion. Distribution segment which done based on grouping in a manner formal regions Which limit between segment with condition physique geography and boundaries of each area claimed by manager and developer area. Analysis results recording visual element shaper skyline that is building and element natural. ground check aim for identify location element shaper skyline on location study. Analysis variable element visual Which related with variable aesthetics skyline ie positions, orientation, sizes, shapes, intervals, time and light.

Result

Recording Visual Skylines

Analysis Regulation of Government

Government regulations in this case the height of the building and regulation about protection view valuable. Based on results survey in 2017, Service Work General And Housing area People City Manado Not yet own regulation about height building And regulation protect view valuable For area Boulevard On business I , so that the developers and related agencies refer on Regulation Minister Communications number km 44 year 2005 about Enactment Standard National Region Safety Operation Flight Airport Sam Ratulangi Manado.

The research location is at Surface Horizontal Outside ie radius 6,000 meters up to 15,000 meters from the end of runway 36 allowable height limit ± 227.646 meters from MSL. Hotel Four Points is a building that highest at the research location with a height of 14 floor (c. 164 meters).

Analysis System to use the land.

In accordance with the 2014-2034 Manado City Spatial Planning, system to use land location study is center trading and service with function activity trading big And retail, service finance, service office business And professional, service entertainment And recreation as well as social services.

Based on the survey results, the existing buildings on site study dominated by building commercial Which function as trading and service. Then followed by buildings with residential functions is at on layer II. Layer II is land with congested will building whereas For Layer I has a larger open space in comparison with layer II. In addition to buildings there are also rooms public open, vacant land, parking lots, roads as well sidewalks and bridges at the study area to access. Flat topography and by the distance the visual recording is taken ±650 meters from the sea you can see the hills on background or Which is at in behind location study, besides Hill seen mountain Klabat Which located in regency North Minahasa.
site. Network road Which there is on location study besides connecting between segments also become circulation in in segment. Characteristics from location study This that is is at in seaside and riverbank areas. on the area front from location study is land reclamations of the beach so that it is a waterfront area sea And each land reclamations own the developer Alone that is megamas, mantos And Lion Hotel. Apart from the seawater catchment area, there are too the riverside area, namely the Sario River between segment I and segment II. More details can in Look on table And picture in lower This.

Analysis Circulation

The circulatory system describes the state of movement in in something location. On location study there is circulation vehicle general and vehicle personal. Circulation of public vehicles and private vehicles viz on Road Pier Tendean, Road Sam Ratulangi and Ahmad Yani street and connecting roads between roads collector the. Whereas road Which is at in within the reclamations area and existing footpaths between Jal an pier Tendean and Jal an Sam Ratulangi as well as Road Pier Tendean And Road Ahmad Yani for For circulation vehicle personal.

Table 1. Use Land on Location Study

<table>
<thead>
<tr>
<th>Segment</th>
<th>Layer I</th>
<th>Layer II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segmen tI</td>
<td>1. Building</td>
<td>1. Building</td>
</tr>
<tr>
<td></td>
<td>2. Road, bridge And sidewalk</td>
<td>2. Road, bridge And sidewalk</td>
</tr>
<tr>
<td></td>
<td>3. Room Open</td>
<td>3. Room open</td>
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<tr>
<td></td>
<td>4. Place parking</td>
<td>4. Place Parking</td>
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<tr>
<td></td>
<td>5. Ship port cruise</td>
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<tr>
<td>Segmen tII</td>
<td>1. Building</td>
<td>1. Building</td>
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</tbody>
</table>

Analysis Form Mass and Building

Building on segment I almost all function with Good, but on several buildings that is there are shops that have not been used. Existing building is building permanent and dominant shaped rectangle long. Building shaper skyline in segment I is dominated by buildings that located in land reclamations as a commercial function ie hotels, shop houses, shopping centers and mix use besides that there is also a house of worship as a skyline forming with height on 3.5 floors or ± 12 meters. Building Which form skyline on segment II namely buildings with shop, hotel and mix use functions Were building characteristic permanent And shaped rectangle. Building with height on 3,5 floor or ± 12 meters become shaper skyline in segment II. Level density building on segmentII in the reclamations area is not too crowded because only consists of One mass big And One block shop, inversely proportional to the area that is thereafter that is seen congested.

The reclamations area in segment III is an area with level density not enough, where only There are several building masses and have space open public Which Enough wide. Building Which form the skyline in segment III, namely the building with function hotel, building the characteristic permanent and has a basic rectangular shape. Building Which become shaper skyline onsegment III is a building that has a height of 6 floor or ±24 meters.
Variable element visual very influential to skyline aesthetic physical variables, those variables elaborated for the needs this research seeks aesthetics physique urban from skyline on region waterfront area city Manado.

**Rhythm**

Assessment of rhythm is divided into three, namely dynamic, not enough dynamic and monotone. Factor Which analyzed on aesthetics visual that is variable shapes/forms and variable intervals. Results analysis variable shapes/forms on segments I, II and III are irregular shapes because put it together element natural Which organic and building Which geometric.

Based on the analysis results above the resulting rhythm on segment I, II And III is rhythm Which monotone.

**Harmonious fit**

The visual aesthetic variables analyzed were position and size. The dominating position in segment I viz position horizontal because building shaper The city skyline is dominated by buildings with functions shop with a height of ± 12 meters.

In segment II position Which dominate is position horizontally with the function of a shop building and a shopping center. In segment III the dominating position is position horizontally Because there is room open public and row trees as well as hotel Which built elongated. There is a number of sizes building on segment I, II And III ie big-high, small-tall, small-low And low-wide.

<table>
<thead>
<tr>
<th>Variable size</th>
<th>Segment I</th>
<th>Segment II</th>
<th>Segment III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big-Tall</td>
<td>Aryaduta Hotel, ITC, megamall, Service Office Tourist City Manado, GBI Menorah, Hotel Whiz, MTC and apartment</td>
<td>Hotel Ibis, Hotel Four Point</td>
<td>Hote</td>
</tr>
<tr>
<td>Small-Tall</td>
<td>GPdI Center, Hotel Biz, Indo Furniture</td>
<td>Hotel Green Eden</td>
<td>Big Hotels Fish</td>
</tr>
<tr>
<td>Small-Low</td>
<td>Office Marketing, Shophouse</td>
<td>Shophouse</td>
<td>Manos</td>
</tr>
<tr>
<td>Big-Low</td>
<td>Shophouse Mega sir</td>
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The results of segment I have harmony between nature and...
artificial man Where artificial man still understand nature without blocking the elements nature, namely Mount Klabat which is in the district North Minahasa. In segment II and segment III results assessment that is not harmonious based on the results of the analysis and identification position vertical natural Which strong.

Netting the sky

Indicator evaluation netting the sky ie shape And position on the shape of the building. Shape analysis results, form roof building Which There is on segment I dominated by flat or plate roof forms, meanwhile there is two form roof shaped dome that is buildings with the function of houses of worship. In segment II form building Which dominant shaped rectangle long with form roof flat or plate, arch and roof saddle so produce line form building Which straight, curved And triangle. On segment III building with roof flat or plate-shaped to form a skyline with function building that is hotel.

Effect disguised or decreasing level brightness. Because of the distance factor is farther so that showing effect disguised or decreasing level brightness.

Layering

Visual recordings were taken during the day, so the layered effect relies on the brightness of the light to identify color differences between figures and ground. From which side can the light source come from? just to emphasize the layering, can be from the front element, direction behind nor side. Source light Which strong will emphasize figures with accentuate it both in terms of brightness and color, and the element that is the ground will be faintly visible or unclear. Based on the results of field observations and results analysis, light Which obtained is natural light i.e. sunlight due to observation And taking picture done on Afternoon day. Quality light Which obtained No too maximum due to the weather changing from overcast to bright and to overcast as described in time analysis. Natural light is light cannot be controlled by humans, so on moment taking recording visual skyline happen inconsistent light changes. In Segment I,II and III color quality on layers I and II are not there is a visible difference, so the layered effect is not seen whereas for background Already can see layered effect because of the distance factor is farther so that showing effect disguised or decreasing level brightness.
Framing

Observe skyline city more meaning if There is Which frame it. Simon Bell (1993) said that if the elements form space then the elements and that space is a form complete. This is supported by Wayne Attoe (1981), ie the beauty of the skyline increases when views are restricted framing. Visual recording (photo) was taken from direction sea to in city so that framing based on What Which There is on skyline That Alone. Based on the results of the analysis of the position variable visual elements and shape on segments I, II and III, organic forms skyline is at in in form asymmetric so that become focal point And only closed by two line namely the underscore (meeting sea and land) and the line top (lines on the skyline).

Framing the city skyline on time Evening can done with use artificial light i.e. a lamp by putting it on every building that forms the skyline in order to be a unified line that has aesthetic value. Wayne Attoe said that the most frequent framing made is with water (sea, lake or river) and results from change topography (cliff, Hill) or element linear Which clear like toll or track.
3. Discussion

Wayne Attoe (1981) say that rhythm is repetition form Which identical. Rhythm Which generated on skyline area waterfront city Manado which is the Central Business District (CBD) is a monotonous rhythm. This is because lack of building tall shaper skyline on research location And building Which There is in domination by building with function shop as well as many trees Which tall And big so that tall The trees are almost equal to the height of the building. Matter This results in less variation in height building on location study.

Harmonious fit according to Wayne Attoe (1981) is element artificial man Which No bother circumstances natural, Where artificial man understand genius loci . So under development physique city very need For notice element natural. City Manado is city Which rich will In nature, geographically the city of Manado is located in the bay. Manado is surrounded by hills, so it is necessary to properly process these natural elements so as not to is lost And become something Which worth on the physical beauty of the city. On the results of research, visually there is Mount Klabat which is a natural element that strong Which need maintained although mountain is not in the city of Manado especially in in the research location as well as the hills that are in behind segment III. On research sites there is one place where river water flows, namely the Sario River but visually there is no river mouth Which is at between segment I And segment II.

Based on results study that on location research lack of harmonization between natural elements and artificial man.

Netting the sky is harmony between height building And sky. Based on results research there are no identified buildings form net sky. Based on results analysis there are buildings with a vertical position but not strong enough to form netting the sky, besides that the position of the building at the research location is still dominated by position horizontally.

Punctuation is a landmark, mark or focal point on the city skyline (Attoe, 1981). There is punctuation can strengthen form or give focus attention. Based on the research results in segment I there is structure single that is Tree Love Which be a marker, whereas in segment II there is mix-use buildings , especially the Four Points Hotel becomes a marker for segment II. In all three segments the, there is one segment Which No own marker or focal point or something that stands out. On segment III building or element Which will made as punctuations must own height above 24 meters to be seen, kindly the entire visual skyline captured on tape

Visually, Mount Klabat is a sign of the skyline location study.

Abstract shape skyline character at night is there is a rhythm of light, while for the day the day is when the fog or smoke breaks into within the city (Wayne Attoe, 1981). Research done on Afternoon day so that depend on condition atmosphere, but these conditions can only be obtained on time Evening approaching Morning, time afternoon approaching Evening so that on study This No there is exists element abstract form.

Wayne Attoe (1981) say that combination fog, pollution air And condition lighting can make effect layered, matter the in support by Simon Bell (1993) that the figure must be more prominent from ground . Based on results study, not enough the existence of a layered effect ( layering ) at the study site due to the brightness and color quality of layers I and II Still No there is difference Which significant making it visually difficult to distinguish the layers. The layered effect is visible between the background and the layers on segment because it is supported by the brightness level fading or blur so differentiate they.

Topography on location study Enough flat However overall the city of Manado is a city that surrounded by Hill. According to Attoe, city with topography Which flat, its skyline depends on the building. So that For get skyline which has aesthetic value then the city government and developer need notice condition topography existing city of Manado to be an added value for its skyline . Government regulations, including regulations regarding protect view valuable And regulation height building. Location study Which Not yet own regulation Which Specific about provision the so need notice topography And height building as well as things Which influential to image and identity the city of Manado.

Land use is a key element in urban areas design that determines the basic design in two dimensions to create a three-dimensional space. Administration land at the research location, namely trade and services with diverse activity can become Power pull alone with make building Which more expressive. One of the obstacles in land use that is owner building use land Which should For area border building And border river used For establish building. This has an effect on the skyline city which can be an empty space or an interval For create rhythm Which harmonious.

Circulation describes the state of movement within something location. Pattern circulation on research sites that is pattern linear One direction matter the to reduce congestion. Circulation at the research location is one-way lane for privately owned motorized vehicles as well as general to reduce congestion inside city. Based on the
research results, there are boundaries road Which should in use as room intermediaries used to construct buildings, it affects the shape of the skyline where space these can be intervals between buildings in order the creation of skylines Which harmonious. The buildings that form the skyline of segment I at domination by buildings with a height above ± 12 meters that is buildings with functions shop. On segment The buildings that make up the skyline are at above 12 meters, while in segment III of the building that form the skyline , namely buildings with height above 24 meters. Based on research results, skyline Which There is own rhythm Which monotone because less varied building heights and intervalsWhich less identified.

4. CONCLUSION AND SUGGESTION

Based on results study writer conclude that:

1. Aesthetics skyline in matter These seven variable physiques that is rhythm, harmonious fit, netting the sky, punctuation, abstract form, layering and framing Which has analysed in element visual, found that on skyline area waterfront city Manado only there is five variable Which There is ie rhythm, harmonious fit, punctuation, layering and framing. To get maximum results you need exists study skyline Which done at the time night and on point observation Which different.

2. Topography, government regulations, land use, circulation And form from building very influential to form from skyline area Manado city waterfront. It is because of the fifth closely interrelated factors form the skyline beautiful, so that nothing can take precedence, and something is ignored.

There is a need for further research with a distance of observation And point position observation Which different so that become input for government For become material consideration in build city Manado Which has a skyline that has a high aesthetic value as well as can become Wrong One objective tour in sea. Government And developer must arrange development physique city with Good so that in build And float city Manado become city Which proud by the people and provide protection against urban objects that want to highlighted on skyline city especially from natural the beautiful one.

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