

Visual Perception of the Heritage Building Facades in the Administrative Center Area of Malang City

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Abstract

The Administrative Center Area of Malang city, which is located around the tugu square, is one area that plays an important role in the development of the eastern part of Malang City, which has many historic buildings from the Dutch colonial heritage. The purpose of this study is to find out the similarities and differences in perceptions between the public and practitioners and academics in the field of architecture in assessing the visual elements on the historic building facades and to find out which facade visual elements are significant according to the public, practitioners, and academics in the field of architecture on the visual quality of the historic building facades in the Administrative Center Area of Malang city. Developments and constructions in the Administrative Center Area of Malang city, which do not pay attention to the area context as a historic area, can slowly cause a shift in the shape and meaning of the city structure which can affect the visual character of the building facades in the area. The shift in the visual character of the building facades that do not pay attention to the area context in a historic area can harm environmental aesthetics, causing a decrease in the visual quality of the historic area. This study uses quantitative research methods with a public perception approach. To measure people's perceptions, a differential semantic scale is used which contains two opposite words. The results show that the assessment between two groups of respondents with different occupational and educational backgrounds has the similar assessment results on each facade element. Facade elements that are significant to the visual quality of the historic building facades in the Administrative Center Area of Malang City are the facade shape and color.

Keywords

visual perception; facades;
heritage buildings; quantitative
method



I. Introduction

The Administrative Center Area of Malang City, which is located around Tugu Square, is a historic area that has influenced the Malang City development which is oriented towards the east from Jalan Kayutangan in the Dutch East Indies era. This area has many historic buildings from the Dutch colonial heritage which are currently Malang City landmarks such as the Malang City Hall building.

During the Dutch East Indies era, the area around Bunder Square was a major part of the second phase of Malang City's development and construction plan (Bouwplan II). In Bouwplan II, it was decided to build a new center of city government, namely the Jan Pieter Zoen Coen Plein area (abbreviated: J.P Coen Plein) which is now known as Bunder Square because its core is an open field in the form of a circle, which in Javanese is called *bunder*. This decision was taken after a new generation of Dutch people who came after 1900 were dissatisfied with the previous Merdeka Square which was considered too indigenous. They wanted to give the impression that the city had a western-style and

wanted the center of the city's government to move from the Merdeka Square. Around Bunder Square, various official and monumental buildings were constructed, such as the Malang City Hall Building, the HBS/AMS School (now State Senior High School 1 Malang), as well as the residences of the military commanders, and so on.

Manurung (2008), reveals that the existence of historic buildings with distinctive colonial architecture can provide qualities that can attract people's attention to an area. Architecture is the main visual element that forms the basis of urban imagery so that the design activities produced by a city are the most tangible form visually and then can present its era so that the existence of an area cannot be separated from the existence of history and the surrounding buildings (Sachari, 2007).

Development is a change towards improvement (Shah et al, 2020). Developments and constructions around the Administrative Center Area of Malang city that do not pay attention to the area context as a historic area can slowly cause changes and shifts in the shape and meaning of the area structure which can affect the visual character of the building facades around the area. The shift in the visual character of the building facades that does not pay attention to the area context in a historic area can harm environmental aesthetics, causing a decrease in the visual quality of the historic area. According to Subadyo (2009), the pattern of landscape distribution of the road corridor in the Tugu-Balaikota area (the administrative center of Malang City) has a relatively decreasing beauty with increasing distance from the City Hall office or the Bunder Square (Tugu).

The Administrative Center Area of Malang City should maintain its visual quality and characteristics so that it can improve its image as a historic area. Visual quality is an assessment that arises from the perception, and feelings of humans when they see something or are related to the visual senses (Aziz et al, 2019). Siswanto & Setiawan (2015) in their research explain that visual perception is the human ability to interpret, analyze and give meaning to what is seen by the eye. The perception function is to recognize or recognize what objects exist and localize or determine where the object is (Eymeren, 2014). Purwodarminto in Anandaju and Sunaryo (2019) says that perception is a direct response of an absorption or human process to know certain things through sensing. Through visual perception, a person can understand the environment around him through the sense of sight.

Visual image assessment of a historic area is determined by the visual elements of the building facade (Askari & Dola 2009). The rows of historic building facades around the Administrative Center Area of Malang City should be able to improve the image of the area. It is also stated by Askari & Dola (2009) that the architectural style and the shape of the building facade can play a role in shaping the visual quality of the facade, especially in historic areas. The facade determines the visual strength of the building and is usually judged by the community by looking at the facade (Suri and Sugiri, 2015). A facade is a representation or expression of various aspects that appear and can be observed visually (Tarore, 2016). According to Krier (1988), the facade is the most important architectural element capable of voicing the function and meaning of a building. The root of the word facade is taken from the Latin word *facies* which is a synonym for face and appearance. Therefore, the facade is the face of a building facing the street.

In 2018 the Malang City government has designated 32 (thirty-two) historic buildings as Cultural Conservation, 2 (two) of which are located in the Administrative Center Area of Malang City, namely, Malang City Hall and State Senior High School 1 Malang Buildings. Thus it is very important to know the most influential visual elements in creating the visual quality of the historic building facades in the Administrative Center Area of Malang City so that they can be a reference for practitioners, academics, and the

government to plan steps for preserving historic buildings on facade elements, and development in the study area by paying attention to the visual elements of the facade that can support and strengthen the characteristics of the area so that the development and preservation of the study site can still pay attention to visual comfort and improve the characteristics of the area as a historic area.

This study aims to determine the similarities and differences in perceptions between community groups and groups of practitioners and academics in the field of architecture in assessing the visual elements on the facades of cultural heritage buildings, as well as knowing the most influential facade visual elements according to the community, practitioners, and academics on the visual quality of the facades of cultural heritage buildings in the Administrative Center Area of Malang city.

II. Research Method

This study uses quantitative methods by distributing questionnaires via google form to determine the assessment of the public, practitioners, and academics in the field of architecture about the role of each visual element of the facade in shaping the visual quality of the facade of cultural heritage buildings in the Administrative Center Area of Malang City. The research location is in the Administrative Center of Malang city, which is around the tugu square.

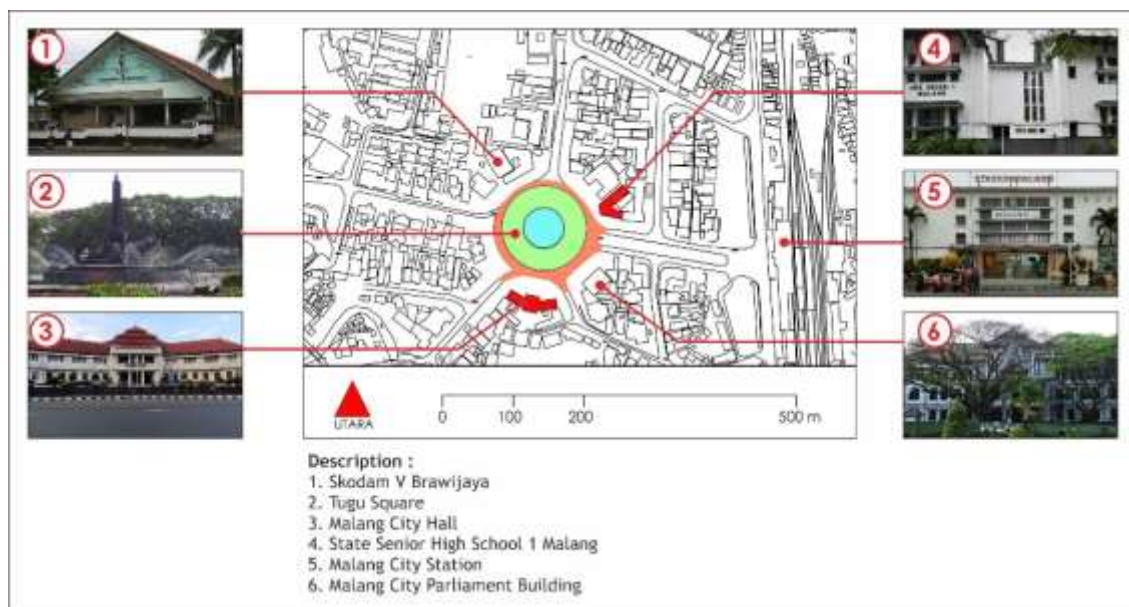


Figure 1. Location Map

The basis for the selection of cultural heritage buildings that are used as research objects at the study location is based on Malang City Regulation No. 1 of 2018 concerning cultural heritage. Based on the local regulation, there are 2 cultural heritage buildings in the study area that are the object of research, namely the Malang City Hall and State Senior High School 1 Malang Buildings.

In this study, the population is Malang City people and people outside Malang City who have lived in Malang City for at least 4 years. The sampling method (respondents) is non-probability with the purposive judgment sampling technique. The groups of respondents from the entire population are as follows:

1. The general public of Malang City and the general public outside Malang City who has lived in Malang City for at least 4 years. The criteria for respondents in this general public group are people with a minimum age of 18 years and physically and mentally healthy so that they can give a good assessment. This group consists of 90 people. The consideration in selecting this sample is that the general public is the user of the area in the study location, so they are considered to be able to provide an assessment based on their experience when they are in the study location.
2. The community from practitioners and academics in the field of architecture with the number of samples selected as many as 90 people. Respondents from this group were divided into 3 categories, namely 30 architect practitioners, 30 architecture lecturers, and 30 architecture students in the sixth semester and above. The determination of the number of sub-samples is based on considerations from Roscoe's theory (1975) in Sekaran (2010) which says that if a sample is to be broken down into several sub-samples, the minimum number of sub-samples is 30. Another consideration is that practitioners and academics in the field of architecture can assess the visual quality of building facades based on aesthetic principles and rules.

According to previous research, the visual elements that make up the facade consist of architectural style (Shirvani, 1985; Askari & Dola, 2009; Fauziah et al, 2012; Utaberta et. al, 2012; Santosa & Ikaruga, 2013; Kiruthiga & Thirumaran, 2017), the shape of the facade (Smardon, 1986; Askari & Dola, 2009; Fauziah et al, 2012; Utaberta et al, 2012; Santosa & Ikaruga, 2013), doors (Ching, 1979; Krier, 1988; Fauziah et al, 2012; Kiruthiga & Thirumaran, 2017), window (Ching, 1979; Krier, 1988; Fauziah et al, 2012; Kiruthiga & Thirumaran, 2017), material (Shirvani, 1985; Askari et. al, 2009; Fauziah et al, 2012; Santosa & Ikaruga, 2013), texture (Shirvani, 1985; Smardon, 1986; Askari et al, 2009; Fauziah et al, 2012; Santosa & Ikaruga, 2013), color (Shirvani, 1985; Smardon, 1986; Askari & Dola, 2009; Fauziah et al, 2012; Utaberta et al, 2012; Santosa & Ikaruga, 2013). The visual elements that make up the facade are used as an observation variable (the independent variable) to assess the visual quality (the dependent variable) of the cultural heritage building's facade.

Each group of respondents was asked to assess a scale of 1 to 7 in each variable observed with a Semantic Differential Scale with the opposite word as in table 1.

Table 1. Research variable assessment scale

No	Variabel	Semantic differential scale						
		Very Poor	Poor	Somewhat poor	Fair	Somewhat beautiful	Beautiful	Very beautiful
1	Architectural Style	1	2	3	4	5	6	7
2	Facade Shape	1	2	3	4	5	6	7
3	Door	1	2	3	4	5	6	7
4	Window	1	2	3	4	5	6	7
5	Material	1	2	3	4	5	6	7
6	Texture	1	2	3	4	5	6	7
7	Color	1	2	3	4	5	6	7

The analysis method used an independent sample t-test to determine the differences and similarities between the two groups of respondents, as well as multiple linear regression analysis to determine the most influential visual elements on the visual quality of cultural heritage buildings in the Administrative Center Area of Malang City. Determination of the visual quality category of facade elements was adopted from the research of Ramli et al (2020) which can be seen in table 2.

Table 2. Visual quality category

Scale	Category
1.00 – 1.85	Very poor
1.86 – 2.71	Poor
2.72 – 3.57	Somewhat poor
3.58 – 4.43	Fair
4.44 – 5.29	Somewhat beautiful
5.30 – 6.15	Beautiful
6.16 – 7.00	Very beautiful

III. Results and Discussion

The number of respondents is 180 people, consisting of 90 general public, 30 architect practitioners, 30 architecture lecturers, and 30 final year architecture students. Respondents with male sex as many as 104 people or 57.8%, while with female sex 76 people or 42.2%. Respondents who live in Malang city are as many as 108 people or 60%, while those who live outside the city of Malang are as many as 72 people or 40%. The respondent profile can be seen in table 3.

Table 3. Respondent Profile

Respondent Group	Sex		Domicile			Education				Total	%
	Male	Female	Malang City	Outside of Malang City	Senior High School	Diploma	S1	S2	S3		
General Public	59	31	58	32	9	0	60	11	9	90	50
Architect Practitioner	16	14	13	17	0	1	14	14	1	30	16.67
Architectural Lecturer	16	14	22	8	0	0	2	14	14	30	16.67
Architectural Student	13	17	15	15	0	0	27	3	0	30	16.67
Total	104	76	108	72	9	1	103	42	24	180	100
%	57.8	42.2	60.0	40.0	5.0	0.6	57.2	23.3	13.3		

From table 4 it can be concluded that the data obtained have a high-reliability value, with the Cronbach Alpha value of $0.939 > 0.600$

Table 4. Reliability Test Results

No	Variable	Cronbach Alpha	Value Limit	Remark
1	Beauty	0.939	0.600	Reliable

3.1 Visual Quality Assessment of the Malang City Hall Building Façade

Malang City Hall building is one of the heritage buildings of the Dutch colonial government. This building is located in the circle of Jalan Tugu Malang City with a Dutch colonial architectural style. The idea of designing the City Hall construction emerged in 1926. At that time, H. I. Bussemaker held a competition for the design of Malang City Hall and appointed Ir. W. Lemei as a judge assisted by Ir. Ph.N.te Winkel and Ir. A. Grunberg. On 14 February 1927, it was decided by the House of Representatives (gemeenteraad) so that the best design could be realized with various changes proposed by the jury, and the decision fell to HF Horn from Semarang with the slogan Voor de Burgers van Malang (for the people of Malang). This building was built in 1927 and completed in September 1929, and then on 12 December, 2018 Malang City Hall Building was designated as a cultural heritage building.

Malang City Hall building is a two-story building with the shape of the letter “M” when viewed from a height. The architectural style of this building is a combination of De Stijl and Nieuwe Bouwen. The main building consists of a lobby on the first floor and is equipped with several service rooms located on the right and left wings of the building. The window model that looks from the front is in the form of a shingle with two fighting butterfly styles in each window. The shape of this window model is because Malang City has a sub-tropical climate with high rainfall. On the second floor of the building, there is a multipurpose room which is currently called the City Hall Meeting Room, as well as a second-floor balcony. In the original design, the City Hall balcony did not have a special roof, but in the late 1980s, a roof was added to protect the balcony from rain and hot sun. On 20 May 1953, in conjunction with the inauguration of the National Monument, President Ir. Sukarno once used this balcony as a stage to deliver his speech at the beginning of independence.



Figure 2. Malang City Hall Building

Based on the respondents' assessment of the Malang City Hall building, the average value was obtained as follows (table 5).

Table 5. The average respondent's assessment of the beauty of the facade elements of the Malang City Hall building

No	Variable	General public		Practitioners and Academics		Independent Samples t-test Sig. (2tailed)	Graph							
		Mean	Visual Quality	Mean	Visual Quality		1	2	3	4	5	6	7	
1	Architectural Style	6.222**	Very Beautiful	6.067**	Beautiful	0.294								
2	Facade Shape	6.144	Beautiful	5.978	Beautiful	0.292								
3	Door	5.644	Beautiful	5.367*	Beautiful	0.182								
4	Window	5.600*	Beautiful	5.444	Beautiful	0.472								
5	Material	5.644	Beautiful	5.589	Beautiful	0.779								
6	Texture	5.633	Beautiful	5.600	Beautiful	0.862								
7	Color	5.800	Beautiful	5.667	Beautiful	0.471								
8	Visual Quality	6.067	Beautiful	5.789	Beautiful	0.082								

$x < 4$ = Negative Rating * = Lowest Value *** = Have Different Ratings ■ General public
 $x \geq 4$ = Positive Rating ** = The highest score ■ Practitioners &

The general public considers the architectural style to have the highest visual quality as a facade element with an average value of 6.222 while windows have a low visual quality on the facade of the Malang City Hall building with an average value of 5.600. In general, the public considers that the facade of the Malang City Hall building has a visual quality on a beautiful scale with an average value of 6.067.

The respondent group of practitioners and academics also assessed that architectural style had the highest visual quality as a facade element with an average value of 6.067, while the door on the facade of the Malang City Hall building had a low visual quality value with an average value of 5.367. The assessment of practitioners and academics on the visual quality of the Malang City Hall building facade as a whole is on a beautiful scale with an average value of 5.789.

Based on the results of the Independent sample t-test analysis in table 5, it can be seen that the assessment between the general public and practitioners and academics is the similar for all dependent variables (Architectural Style, Facade Shapes, Doors, Windows, Materials, Textures, and Colors) as well as on independent variables (Visual Quality), this refers to the p-value value (t-test significance) greater than ($\alpha=0.05$), which means that there is no difference in assessment between the general public as well as practitioners and academics in assessing the facade elements of the Malang City Hall building.

The following is a matrix table of respondents' assessment of the facade elements on the visual quality of the Malang City Hall building facade based on an independent sample t-test analysis.

Table 6. Respondents' assessment of the beauty of the facade elements in the Malang City Hall building

No	Variable	Respondent assessment		Assessment Comparison
		General Public	Professional and Academics	
1	Architectural Style	Very Beautiful	Beautiful	Similar
2	Facade Shape	Beautiful	Beautiful	Similar
3	Door	Beautiful	Beautiful	Similar
4	Window	Beautiful	Beautiful	Similar
5	Material	Beautiful	Beautiful	Similar
6	Texture	Beautiful	Beautiful	Similar
7	Color	Beautiful	Beautiful	Similar
8	Visual Quality	Beautiful	Beautiful	Similar

Based on the data in table 6, all the observed variables have a similar assessment by the two groups of respondents. In the Malang City Hall building, the average assessment between the two groups of respondents is on the "Beautiful" scale.

To find out which facade elements are significant according to the community, practitioners and academics on the visual quality of the Malang City Hall building facade, a multiple regression analysis was conducted. Based on the analysis of the F test (simultaneous test) and t-test (partial test) on the Malang City Hall building data, a regression model was obtained which showed a significant influence of several variable components on the visual quality of the Malang City Hall building facade as follows (table 7)

Table 7. Linear Regression Test Results on the Beauty of the Visual Quality of the Malang City Hall Building Facade

Model	Coefficients ^a		t	Sig. t	
	Unstandardized Coefficients	Standardized Coefficients			
(Constant)	.413	.251	1.649	.101	
Architectural Style	.319	.080	.295	3.978	.000***
Facade Shape	.216	.076	.213	2.861	.005***
Door	.016	.051	.020	.308	.759
Window	.117	.059	.158	1.978	.050**
Material	-.094	.074	-.116	-1.276	.204
Texture	.144	.073	.172	1.980	.049**
Color	.214	.061	.247	3.511	.001***

a. Dependent Variable: Visual Quality of Building Facade
F-calculated = 83.206
Sig. F = 0.000***
R-Square = 0.772

Testing the partial effect of building facade elements on the visual quality of the building facade as a whole shows that architectural style, facade shape, texture, and color have a significant influence on respondents' assessment of the Malang City Hall building. This is indicated by the significance value $t < 0.05$ on the architectural style variable with a significance value (.000**), the facade shape variable with a significance value (.005**), the texture variable with a significance value (.049**), and color variable with a significance value (.001***).

Based on the results of the regression analysis on the Malang City Hall building, an R-square value of 0.772 was obtained. This shows that the visual quality of the facade of the Malang City Hall building can only be explained by 77.2% by architectural style, facade shape, door shape, window shape, material type, texture type, and color type. So that there are still 22.8% of other factors that are not included in this study that can affect the visual quality of the Malang City Hall building facade.

3.2 Visual Quality Assessment of the Building Facade of State Senior High School 1 Malang

The building of State Senior High School 1 Malang or Tugu High School is a Dutch heritage school in Indonesia. This school was founded in 1931 in the Alun-alun Bunder (Tugu Square) which is a school complex consisting of State Senior High School 1, State Senior High School 3, and State Senior High School 4 Malang. This building was designed by Ir. W. Lemei from landsgebouwendienst (State building office) East Java.



Figure 3. Building of State Senior High School 1 Malang

According to history, the current building of State Senior High School 1 Malang is a new building that was built during the post-independence Dutch colonial period. The architectural style of the school, which was inaugurated in 1950, is a mixture of colonial architectural styles and modern architecture. This can be seen from the finishing of details and decorations that are not like in 19th-century architecture.

Based on the respondents' assessment of the State Senior High School 1 Malang building, the average value was obtained as follows (table 8).

Table 8. The average respondent's assessment of the beauty of the facade elements of State Senior High School 1 Malang

No	Variable	General public		Practitioners and Academics		Independent Samples t-test Sig. (2tailed)	Graph								
		Mean	Visual Quality	Mean	Visual Quality		1	2	3	4	5	6	7		
1	Architectural Style	5.744**	Beautiful	5.444**	Beautiful	0.063									
2	Facade Shape	5.656	Beautiful	5.344	Beautiful	0.073									
3	Door	4.600*	Somewhat Beautiful	4.178*	Fair	0.079									
4	Window	5.478	Beautiful	5.178	Somewhat Beautiful	0.160									
5	Material	5.633	Beautiful	5.311	Beautiful	0.104									
6	Texture	5.633	Beautiful	5.356	Beautiful	0.137									
7	Color	5.589	Beautiful	5.311	Beautiful	0.130									
8	Visual Quality	5.689	Beautiful	5.444	Beautiful	0.147									

x < 4 = Negative Rating * = Lowest Value *** = Have Different Ratings
 x ≥ 4 = Positive Rating ** = Highest Score

Legend: ■ General public ■ Practitioners & Academics

Based on table 8, the general public assesses that architectural style has the highest visual quality as a facade element with an average value of 5.744, while doors have a low visual quality on the facade of State Senior High School 1 Malang with an average value of 4,600. In general, the public considers that the facade of the State Senior High School 1 Malang building has a visual quality on a beautiful scale with an average value of 5.689.

The respondent group of practitioners and academics also assessed that architectural style has the highest visual quality as a facade element with an average value of 5.444, while the door on the facade of the State Senior High School 1 Malang building has a low

visual quality value with an average value of 4.178. The assessment of practitioners and academics on the facade visual quality of the State Senior High School 1 Malang building as a whole is on the "beautiful" scale with an average value of 5.444.

Based on the results of the Independent sample t-test analysis in table 8, it can be seen that the assessment between the general public and practitioners and academics is the similar for all dependent variables (Architectural Style, Facade Shapes, Doors, Windows, Materials, Textures, and Colors) as well as on the independent variables (Visual Quality), this refers to the p-value value (t-test significance) greater than ($\alpha=0.05$), which means that there is no difference in assessment between the general public as well as practitioners and academics in assessing the facade elements of State Senior High School 1 Malang building.

The following is a matrix table of respondents' assessment results about the role of facade elements on the visual quality of the facade of State Senior High School 1 Malang based on an independent sample t-test analysis.

Table 9. Respondents' assessment of the beauty of the facade elements in the State Senior High School 1 Malang building

No	Facade Elements	Respondent assessment		Assessment comparison
		General public	Professional and academics	
1	Architectural Style	Beautiful	Beautiful	Similar
2	Facade Shape	Beautiful	Beautiful	Similar
3	Door	Somewhat Beautiful	Fair	Similar
4	Window	Beautiful	Somewhat Beautiful	Similar
5	Material	Beautiful	Beautiful	Similar
6	Texture	Beautiful	Beautiful	Similar
7	Color	Beautiful	Beautiful	Similar

Based on the data in table 9, all the observed variables have the similar assessment by the two groups of respondents. In the State Senior High School 1 Malang building, the average assessment between the two groups of respondents is on the "fair" to "beautiful" scale.

To find out which facade elements are significant according to the community, practitioners, and academics in shaping the visual quality of the facade of State Senior High School 1 Malang, a multiple regression analysis was conducted. Based on the analysis of the F test (simultaneous test) and t-test (partial test) on the building data of State Senior High School 1 Malang, a regression model was obtained which showed a significant effect of several variable components on the visual quality of the facade of the State Senior High School 1 Malang building as follows (table 10).

Table 10. Linear Regression Test Results on the Beauty of the Visual Quality of the Building Facade of State Senior High School 1 Malang

Model	Coefficients ^a		t	Sig. t
	Unstandardized Coefficients	Standardized Coefficients		
(Constant)	.476	.253	1.880	.062
Architectural Style	.152	.081	1.885	.061**
Facade Shape	.286	.069	4.143	.000***
Door	.018	.034	.534	.594
Window	.138	.059	2.335	.021**
Material	.010	.068	.150	.881
Texture	.075	.071	1.050	.295
Color	.255	.051	4.971	.000***

a. Dependent Variable: Visual Quality of Building Facade

F-calculated = 68.586
Sig. F = 0.000***
R-Square = 0.736

Testing the partial effect of building facade elements on the visual quality of the building facade as a whole shows that the shape of the facade, windows, and color have a significant influence on respondents' assessment of the State Senior High School 1 Malang building. This is indicated by the significance value $t < 0.05$ on the facade shape variable with a significance value (.000**), the window variable with a significance value (.021**), and the color variable with a significance value (.000***).

Based on the results of the regression analysis on the State Senior High School 1 Malang building, the R-square value of 0.736 was obtained. This shows that the visual quality of the facade of State Senior High School 1 Malang can only be explained by 73.6% by architectural style, facade shape, door shape, window shape, material type, texture type, and color type. So that there are still 26.4% of other factors that are not included in this study that can affect the visual quality of the facade of the State Senior High School 1 Malang building.

From the results of the discussion on the two research objects, it was found that the assessment between the public, practitioners, and academics in the field of architecture is similar regarding the role of each facade element on the visual quality of the building facade of Malang City Hall and State Senior High School 1 Malang. The Malang City Hall building is a landmark around the area, while State Senior High School 1 Malang is an educational building so people know the building well. The group of practitioners and academics gave an assessment based on consideration of the historic aspects of the building and the area, as well as the principles of design and aesthetics, as well as based on the experience of space in everyday life at the study location. Community assessments with practitioners and academics assessment with different occupational and educational backgrounds have the similar assessment results in Malang City Hall and State Senior High School 1 Malang buildings, so it can be concluded that each facade element has a role with the similar level of beauty according to the community, practitioners and academics.

From the discussion results on the facade elements that are significant according to the public, practitioners, and academics in the field of architecture on the visual quality of the historic building facades, it is found that the elements of architectural style, facade shape, texture, and color have a significant influence on the visual quality of the facade of the Malang City Hall building. State Senior High School 1 Malang facade shape, window, and color give a significant influence on the visual quality of the facade of State Senior High School 1 Malang.

In general, the facade elements that affect the visual quality of the historic building facades in the Administrative Center Area of Malang City are the facade shape and color. This is in line with what was said by Krier, (1988) who explains that the facade can describe the face of the building where the function and meaning of the building can be expressed. The facade determines the visual strength of the building and is usually judged by the community by assessing the facade (Suri & Sugiri, 2015). The facade is an element that has a very significant impact on the beauty of the Colonial building (Ramli et al, 2020).

Askari & Dola (2009) in their research entitled *Influence of Building Facade Visual Elements on Its Historic Image: Case of Kuala Lumpur City, Malaysia* explained that color is the most influential element on the facade of historic buildings. While white and gray are the most suitable colors for historic buildings, this can also improve the quality of road

corridors. Majidah, et al., (2019) argues that color has a much deeper and broader meaning than the concept of just a layer of paint on a surface or a decoration tool. Color is the basic (main) element of a design and the most expressive, which is believed to be the most important visual experience that serves as a powerful channel of information for the human cognitive system and plays an important role in improving memory performance.

IV. Conclusion

Based on the results of the analysis and discussion, it can be concluded that the assessment of the general public with the assessment of practitioners and academics in the field of architecture with different occupational and educational backgrounds has the similar assessment results in Malang City Hall and State Senior High School 1 Malang buildings, so it can be concluded that each facade elements have a role with the similar level of beauty according to the community, practitioners and academics.

The visual elements of the facade that most influence the visual quality of the facade of the Malang City Hall building according to the community, practitioners and academics are architectural styles, facade shape, texture, and color. Meanwhile, the facade visual elements that most influence the visual quality of the building facade of State Senior High School 1 Malang according to the community, practitioners, and academics are the shape of the facade, windows, and color.

In general, the facade elements that affect the visual quality of the historic building facades in the Administrative Center Area of Malang City are the facade shape and color, so these two elements need to be maintained to preserve facade elements in historic buildings that can influence the visual quality of historic buildings in Administrative Center Area of Malang City. Meanwhile, the visual elements that do not have a significant influence on the visual quality of the historic building facades at the study site need further evaluation and aesthetic studies. This is an effort to create environmental aesthetics at the study site, by paying attention to the visual elements of the facade in each building according to the regional context.

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