

Significance of Historical Public Buildings in Malang City based on Syntagm-Paradigm Relation in the Aesthetics Composition of Visual Elements of Building

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Abstract

The entity of the features of an area in a city is determined, among other things, by the aesthetics of the faces of the buildings belonging to the area. Each building has its aesthetic potential to contribute to the overall architectural aesthetic of the city. Malang City has several areas, which as a whole are shaped by the unique nuances of the architectural character of historical buildings, so that a certain aesthetic value arises, which is felt through the expression of visual elements. Each of these historic buildings has its meaning for the aesthetics of the city as a whole. Therefore, this study aims to find out what significance several historical public buildings in Malang City have for the aesthetic formation that can be felt through their visual composition. The method used is a descriptive qualitative method accompanied by graphical analysis techniques. The description is made regarding the semantic analysis framework model to see the relationship between paradigm and syntagm, which is formed by the combination of different visual elements in the building. The results of the study indicate that the syntagm-paradigm relationship, as a form of aesthetic value, plays a role in determining the meaning of the building. The consistency of the occurring syntagm-paradigm relationship determines the importance of the building at a certain hierarchical level.

Keywords: significance, historic buildings, aesthetics, visual elements, architectural heritage

1. Introduction

In a city that has historical value, the visual character of historical buildings is one of the important components that form the face of the city (Kittang & Bye, 2019). The physical and visual expression of the building can ultimately reflect the existence of certain historical values with high attractiveness which are part of the city's identity (Shamsuddin & Ujang, 2008). Therefore, awareness of the identity of the city as part of the initial step in efforts to preserve historically valuable cities (heritage cities) must be followed by efforts to determine the visual character of each historical building (Uzzell, 1996).

Each building has its role in contributing to the formation of the city's identity. This means that the visual character of each building has its significance in building the face of the city and the visual character of the area (Smardon *et.al.*, 1986). When referring to the cultural significance in the heritage preservation process, whether it is architectural or non-architectural heritage, the value or meaning contained in a heritage building will determine the direction and strategy of its preservation. Good and successful preservation of buildings will ultimately affect the quality of the city's environment as a whole. One of the efforts to find value and meaning in heritage buildings apart from their historical value is the aesthetic value (Bakrie *et al.*, 2015; Penica *et al.*, 2015; Kwanda, 2013; Vecco, 2010). This aesthetic value is closely related to the visual significance of the building to the overall face of the city visually.

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The aesthetics of the building can be traced through how the visual expression of the building's facade is captured through the composition of its visual elements. The theme of the composition that can be felt by the eye of the observer reflects a certain aesthetic value, and this value plays a role in contributing to the aesthetic value of the face of the city as a whole (Smardon *et.al.*, 1986; Lynch, 1960; Nasar, 1994). The aesthetic value in a design process is a value that becomes an important consideration in design work in various types of artifacts, and various spatial scales, both within the building itself and the spatial scale of the area or city as a whole (Kartika & Perwira, 2004). Therefore, this study seeks to see the significance of the building based on the aesthetic value, in this case, through the visual composition of the building elements. The visual composition of building elements is described through the relationship between visual elements and the compositional themes formed, both within the building scale and the building group scale or between buildings.

2. Method

This study used the descriptive qualitative method. Exploration of visual elements was carried out on several objects of historic public buildings in Malang City. There are six building objects, which are Dutch East Indies architectural buildings that were designed and built during an important period in the development of urban space and architecture. The location of the buildings is spread out in the city center area, in three important zones that play a role in forming the structure of the city space, namely in the old city center (location of the Kantor Perbendaharaan & Kas Negara/ KPKN and Toko Oen), the new city center (location of the City Hall and City Station), and the main north-south axis of the city (location of the Perusahaan Listrik Negara/ PLN Office and Frateran School). (Figure 1)

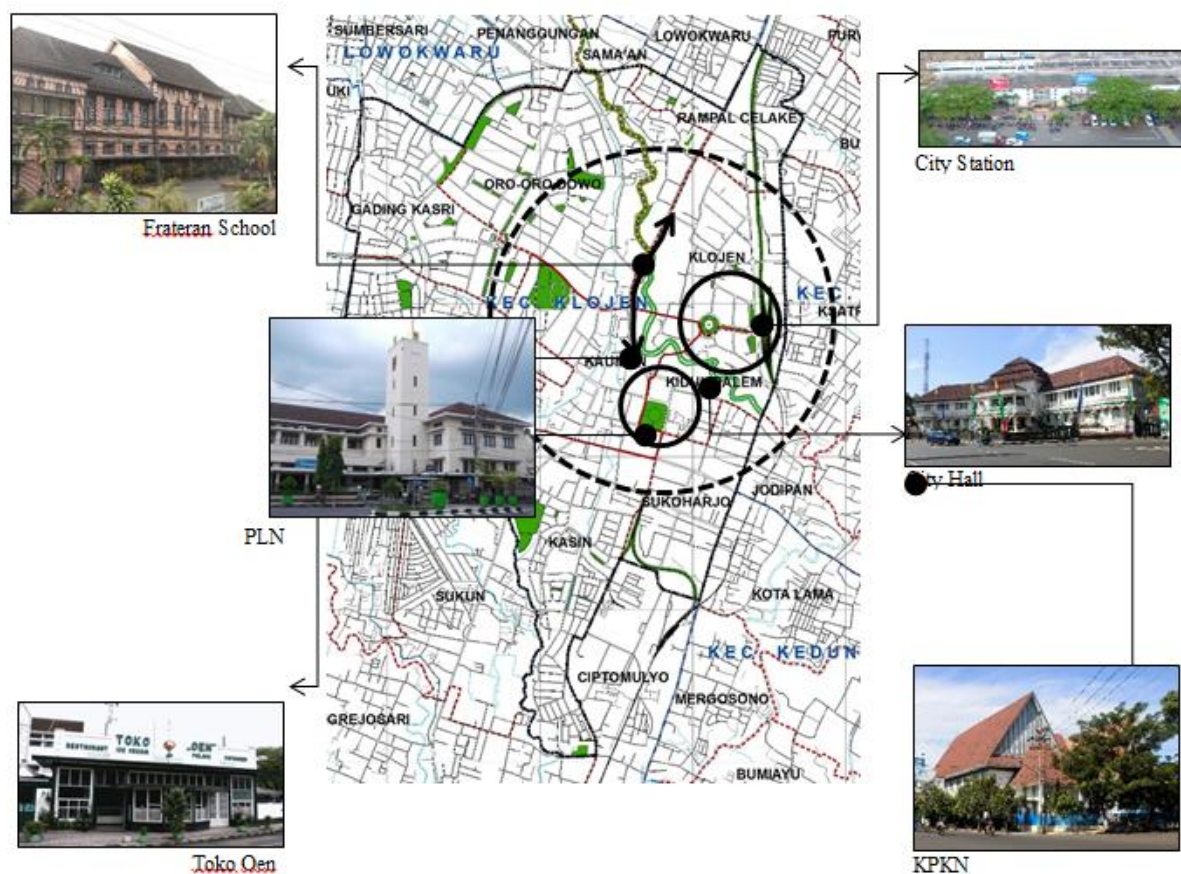


Figure 1. The Location of Six Historical Public Buildings

Exploration is carried out by describing descriptively the qualitative data of the visual elements of each building, assisted by graphical analysis techniques. The description is carried out based on the conceptual framework that paradigms are selected visual elements in a particular composition that play a role in the formation of the syntagm or theme of the visual composition.

To find out the relationship between paradigm and syntagm, the results of the description are then interpreted with the help of coding, tabulation, and pairing techniques. The scope of visual elements that are observed and explored are visual elements that are visible and arranged in the building facade, consisting of 1st significant unit totaling 9 elements (roof, door, window, eaves, stairs, balcony, ornament, column, facade area) and 2nd significant unit consists of 9 components (rhythm, color, texture, symmetry, verticality, horizontality, shape, dimension, scale, proportion, number).


3. Result and Discussion

3.1. Regularity in the Composition of Visual Elements

Regularity is one of the themes of the visual composition of the facade of the building that can be built through a paradigm arrangement, in this case, the visual elements of the building facade meet certain principles so that a strong impression of visual order appears. The theme of regularity is one of the building facade syntagms that can be recognized in all research buildings. Each building has a different narrative to express this regularity. The configuration and combination of paradigms from one building to another are different to build regularity. The narrative of regularity is built through the elaboration of configurations and combinations of paradigms to produce a certain number of phrases.

Paradigmatically, it can be seen which paradigm in each building plays the biggest role so that it becomes the main paradigm for the theme of regularity. After juxtaposing the main paradigms together in a total of 6 research object buildings, it can be seen which paradigm appears the most, both in terms of the number of phrases and the number of occurrences in the 6 buildings. This paradigm is the main paradigm of the overall theme of order, namely in this case the window, the facade plane, and the form. (Table 1)

Table 1. The Paradigm of the Regularity Syntagm on the Facade of the Building

		Toko Oen	City Hall	PLN	Frateran	City Station	KPKN
Main paradigm	Each of building	Façade plane Shape Colour Proportion Axis	Window Column Axis	Façade plane Shape	Façade plane Window Rhythm	Window Column Eaves Shape Dimension	Roof Window Shape
	Dominant as a whole	Window Façade plane Shape					
Number of paradigm		15	14	16	15	9	9
Number of phrases	regularity theme (a)	42	26	22*	22	17*	9
	total 6 themes (x)	103	105	63	115	47	58
	percentage a/x	40.78%	24.76%	34.92%	19.13%	36.17%	15.52%
Consistency of the regularity theme in the Toko Oen building		<div style="display: flex; align-items: center;">  <div> <p>Six visual composition themes in each building and the hierarchy of theme strength in the Toko Oen building individually: Regularity (42 phrases) (40.78%) Balance (33 phrases) (32.04%) Dynamism (10 phrases) (9.71%) Monotony (8 phrases) (7.77%) Dominance (5 phrases) (4.85%) Firmness (5 phrases) (4.85%)</p> <ul style="list-style-type: none"> The regularity in the visual composition of the PLN building and the City Train Station building is also dominant among all 6 compositional themes </div> </div>					

Toko Oen is a building with a strong sense of regularity, shown through 42 elaborate phrases, and the largest number of phrases among all buildings of the object of research. This regularity is established by the division of the facade into 3 parts of the plane and becomes a unifier of the pattern for the arrangement of other visual elements of the facade (1st significant unit, namely window, door, ornament, and eaves). In addition to having the highest level of regularity of the facade when compared to other buildings, the Toko Oen building is also the building with the most dominant regularity theme (40.78% phrase) among the 5 other themes found on the facade of the building. Thus the regularity on the facade of the Toko Oen building is not only strong in the context of the building itself but also the context of the 5 other research object buildings. (Figure 2)

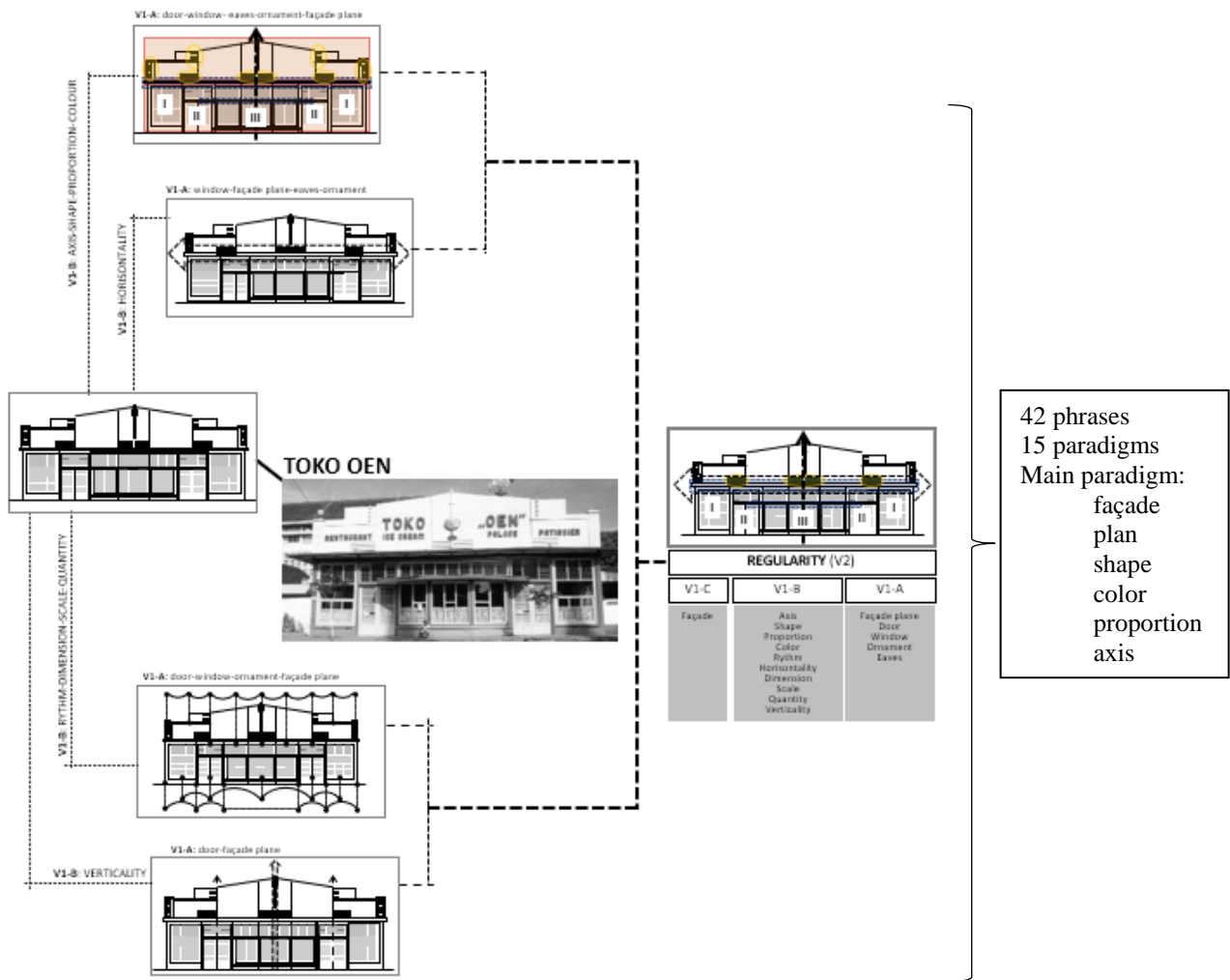


Figure 2. Graphic Analysis Result of Regularities in the Visual Composition of Toko Oen Building

Toko Oen's aesthetic potential lies in the theme of regularity found in the composition of the building's facade. Aesthetic potential arises when the dominant syntagm in a building is the strongest when compared to other buildings. The strength of the regularity theme of the Oen Store building individually can synergize with the overall regularities theme of the research object which is expressed through the shape and facade plane. (Figure 3).

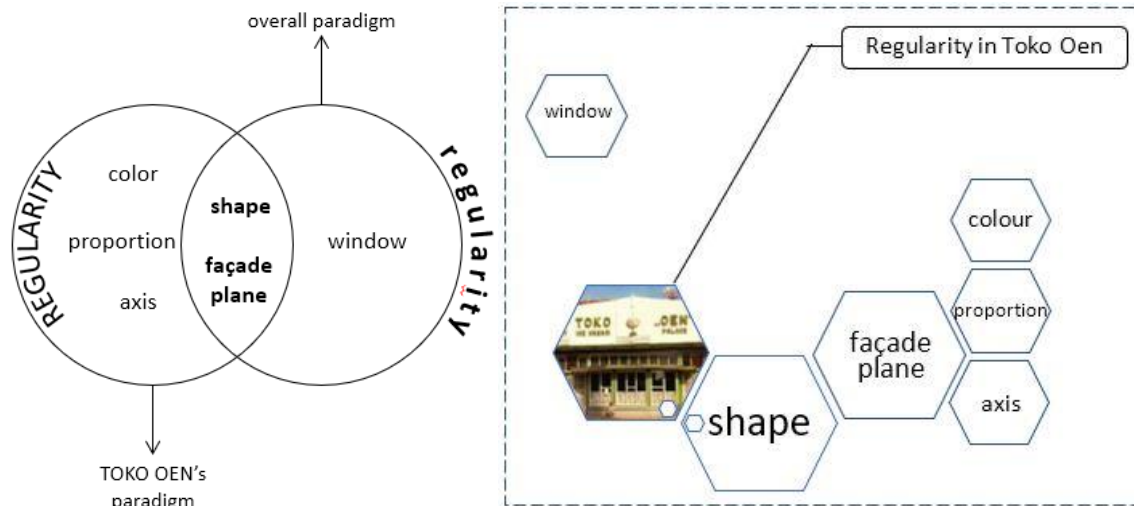


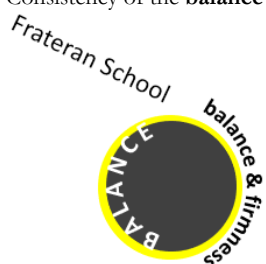
Figure 3. The Significance of the Toko Oen Building

3.2. Balance in the Composition of Visual Elements

The theme of balance is the second theme that forms the building facade syntagm which can be recognized in all research buildings. The Frateran School building is the building with the strongest facade balance compared to the other 5 research object buildings. In this balance theme, the building has the largest number of phrases, namely 42 phrases. The consistency of balance occurs in the facade of the building when this theme is the strongest (with the percentage of phrases 36.52%) when compared to the other 5 themes. (Table 2) Thus the aesthetic potential of the Frateran School building lies in the theme of balance found in the composition of the facade of the building because balance is not only strong in the context of the building itself but also the context of the 5 other research objects buildings.

In the context of the Frateran School building individually, the balance is built by the division of the entire facade into several parts in a balanced way. The resulting facade planes are a unifying plane for other visual facade elements (windows, roofs, columns, ornaments, eaves, and doors). The visual elements are arranged in a balanced manner in terms of shape, dimension, proportion, and number. The strength of the balance theme of the Frateran School building individually is very synergistic with the overall balance theme of the research object building which is expressed through all the main paradigms of the syntagm as a whole. (Figure 4).

Table 2. Paradigm Forming a Balance Syntagm on the Building Façade

		Frateran	City Hall	Toko Oen	City Station	KPKN	PLN
Main paradigm	Each of building	<u>Façade plane</u> <u>Axis</u> <u>Shape</u> <u>Dimension</u> <u>Proportion</u> <u>Quantity</u>	<u>Façade plane</u> <u>Shape</u> <u>Dimension</u> <u>Axis</u>	<u>Façade plane</u> <u>Shape</u> <u>Dimension</u> <u>Proportion</u> <u>Quantity</u> <u>Axis</u>	Window Column RhythHorizontality	<u>Façade plane</u> <u>Verticality</u> <u>Proportion</u> <u>Horizontality</u>	<u>Façade plane</u>
	Dominant as a whole	Façade plane Axis Shape Dimension Proportion					
Number of paradigm		15	15	14	11	8	6
Number of phrases	regularity theme (a)	42	36	33	15	8	4
	total 6 themes (x)	115	105	103	47	58	63
	percentage a/x	36.52%	34.29%	32.04%	31.91%	13.79%	6.35%
Consistency of the balance theme in the Frateran School building							
		Six visual composition themes in each building and the hierarchy of theme strength in the Frateran School building individually: Balance (42 phrases) (36.52%) Regularity (22 phrases) (19.13%) Firmness (20 phrases) (17.39%) Dynamism (17 phrase) (14.78%) Dominance (8 phrases) (6.96%) Monotony (6 phrases) (5.22%)					

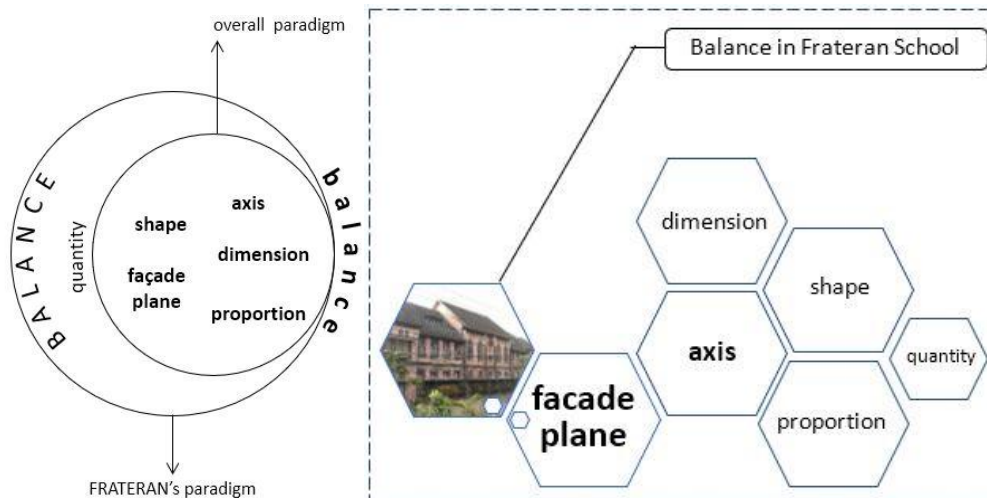
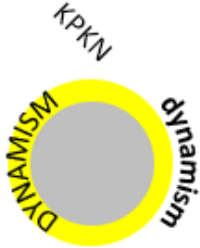


Figure4. The Significance of the Frateran School Building

3.3. Dynamism in the Composition of Visual Elements

The dynamic theme is the third theme that forms the building facade syntagm that can be recognized in all research buildings. The KPKN building occupies the highest position as a building with a dynamic facade. This is shown by the highest number of phrases among all 6 research object buildings (19 phrases). The KPKN building is also the most dominant building with the theme of balance among 5 other themes found on the facade of the building (percentage of phrases 32.76%). (Table 3) The aesthetic potential of the KPKN building lies in the dynamic theme found in the composition of the building's facade when dynamism becomes the dominant syntagm in the building as well as the strongest syntagm when compared to other buildings.

Table 3. Paradigm Forming a Dynamism Syntagm on the Building Façade

		KPKN	PLN	Frateran	Toko Oen	City Station	City Hall
Main paradigm	Each of building	Roof Rhythm Proportion	Façade plane Rhythm Horizontality Dimension	Façade plane Dimension	Façade plane Dimension Proportion	Façade plane Rhythm	Façade plane Shape
	Dominant as a whole	Façade plane Rythm Dimension					
Number of paradigm		13	14	12	10	6	6
Number of phrases	regularity theme (a)	19	18	17	10	5	5
	total 6 themes (x)	58	63	115	103	47	105
	percentage a/x	32.76%	28.57%	14.78%	9.71%	10.64%	4.76%
Consistency of the dynamism theme in the KPKN building				The hierarchy of theme strength in the KPKN building individually: Dynamism(19phrases) (32.76%) Dominance (10 phrases) (17.24%) Regularity (9 phrase) (15.52%) Balance (8 phrases) (13.79%) Firmness (8 phrases) (13.79%) Monotony (4 phrases) (6.90%)			
							

In the KPKN building as the building with the highest dynamics, the roof is the 1st significant unit that plays the most role in shaping the dynamics of the building facade. The arrangement of these elements cannot be separated from the rhythmic and proportional arrangement as the paradigm of the 2nd significant unit which also plays a role in strengthening the dynamics as the main syntagm. (Figure 5) The strength of the dynamic theme of the KPKN building individually can synergize with the overall dynamic theme of the research object which is expressed through rhythm. (Figure 6)

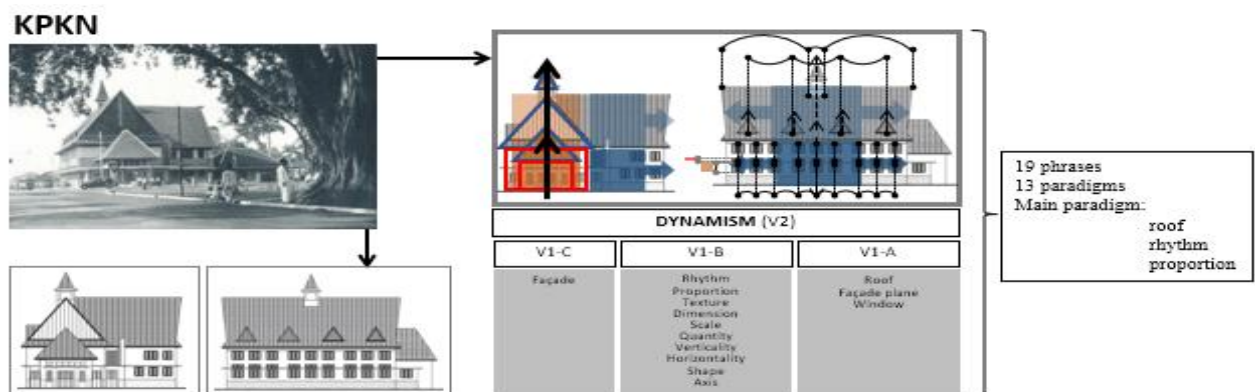


Figure5. The Main Paradigm (Roof-Rhythm-Proportion) Forming the Dynamic Syntagm of the KPKN Building Façade

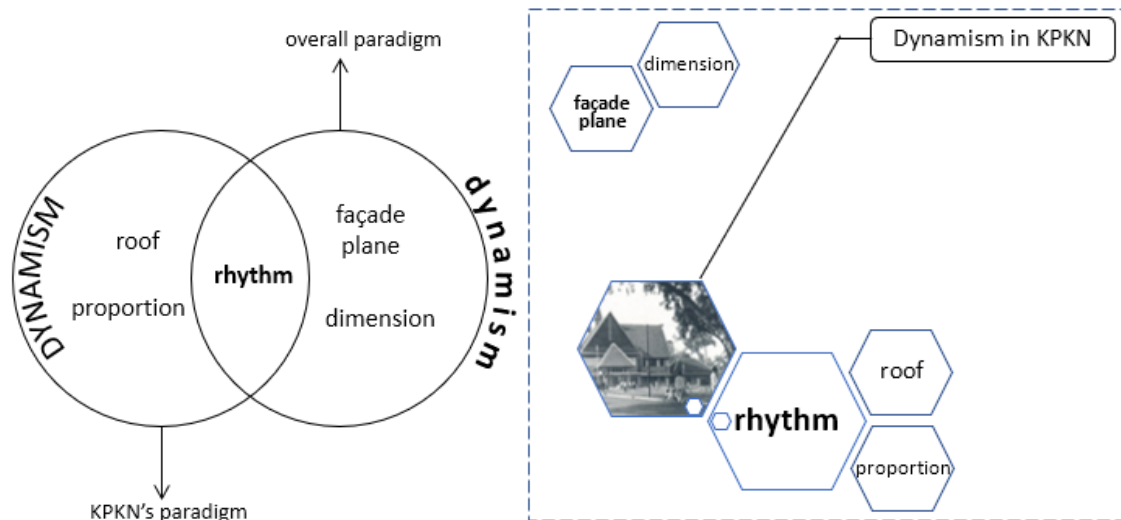


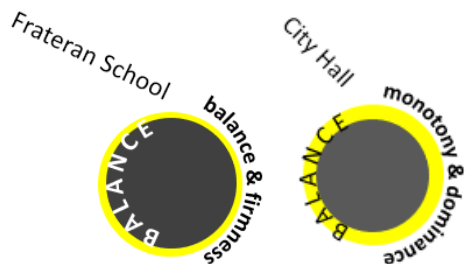
Figure 6. The Significance of the KPKN Building

3.4. Firmness, Monotony, and Dominance in the Composition of Visual Elements

The last three themes found in all buildings as forming the building facade's syntagm are firmness, monotony, and dominance. The Frateran School is the building with the strongest facade firmness compared to the other 5 research object buildings, while for monotony and dominance it is the City Hall building. The consistency of these three themes is less visible when this theme is not the strongest theme when compared to the other 5 themes in each building. Individually, the theme of firmness is only ranked third for the Frateran School building, and the theme of monotony-dominance is only ranked 4th and 5th for the City Hall building. (Table 4)

Table 4. Paradigm Forming Firmness-Monotony-Dominance Syntagm on the Building Facade

		Frateran	City Hall	PLN	KPKN	Toko Oen	City Station
Main paradigm	Firmness	<u>Façade plane Axis</u>	<u>Window Column Shape Proportion Colour</u>	<u>Façade plane Column Ornament Shape</u>	<u>Roof Shape</u>	<u>Window Door Shape Colour</u>	-
	Monotony	<u>Façade plane Window Colour</u>	<u>Window Column Shape Proportion Dimension</u>	<u>Shape</u>	<u>Window Shape</u>	<u>Door Ornament Shape</u>	<u>Façade plane</u>
	Dominance	<u>Façade plane Axis</u>	<u>Façade plane Proportion Dimension</u>	<u>Façade plane</u>	<u>Roof Rhythm Verticality</u>	<u>Façade plane</u>	<u>Window Proportion</u>
	Dominant as a whole	Firmness: shape, façade plane, window, column Monotony: window, shape Dominance: façade plane, proportion					
Number of phrases	Firmness	20 17.39% *)	16 15.23%	9 14.29%	8 13.79%	5 4.85%	2 4.26%
	Monotony	6 5.22%	11 10.48%**))	6 9.52%	4 6.90%	8 7.77%	3 6.38%
	Dominance	8 6.96%	11 10.48% ***)	4 6.35%	10 17.24%	5 4.85%	4 8.51%
Consistency of the firmness theme in the Frateran School building; consistency of the monotony & dominance themes in the City Hall building		<p>The hierarchy of theme strength in the Frateran School building individually: Balance (42 phrases) (36.52%) Regularity (22 phrases) (19.13%) Firmness (20 phrase) (17.39% *) Dynamism (17 phrase) (14,78%) Dominance (8 phrases) (6.96%) Monotony (6 phrases) (5.22%)</p> <p>The hierarchy of theme strength in the City Hall building individually: Balance (36phrases) (34.29%) Regularity (26 phrases) (24.76%) Firmness (16 phrases) (15.24%) Monotony (11 phrase) (10.48% **)) Dominance (11 phrase) (10.48% ***) Dynamism (5 phrases) (4.76%)</p>					



The strength of the firmness theme of the Frateran School building individually is not large enough to synergize with the overall firmness theme of the research object because it is only expressed through 1 paradigm, namely the facade plane, out of the 4 main paradigms. (Figure 7)

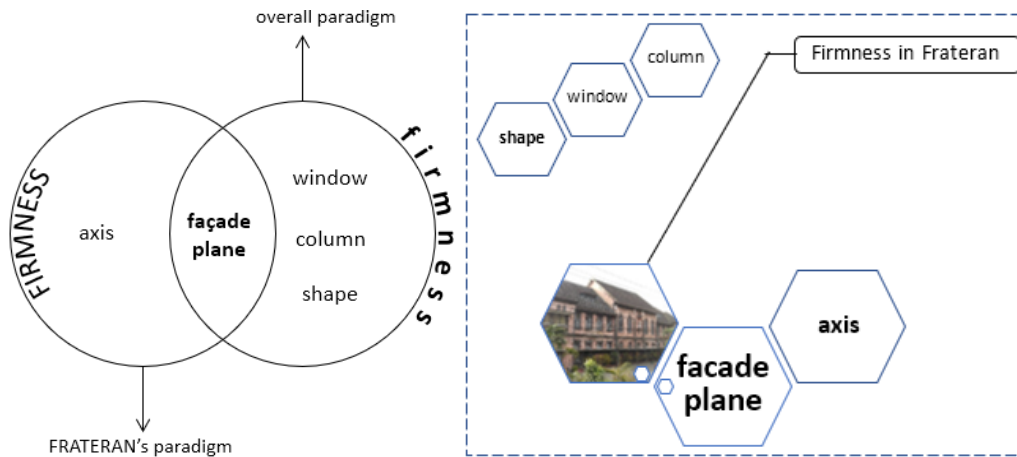


Figure7. The Significance of the Frateran School Building

The monotony of the City Hall building is built mainly by the shape of the windows and columns, as well as being strengthened by its proportions and dimensions. In addition, the arrangement of visual elements cannot be separated from the proportional and dimensional arrangement that plays a role in forming the dominance theme as part of the building's aesthetics. (Figure 8)

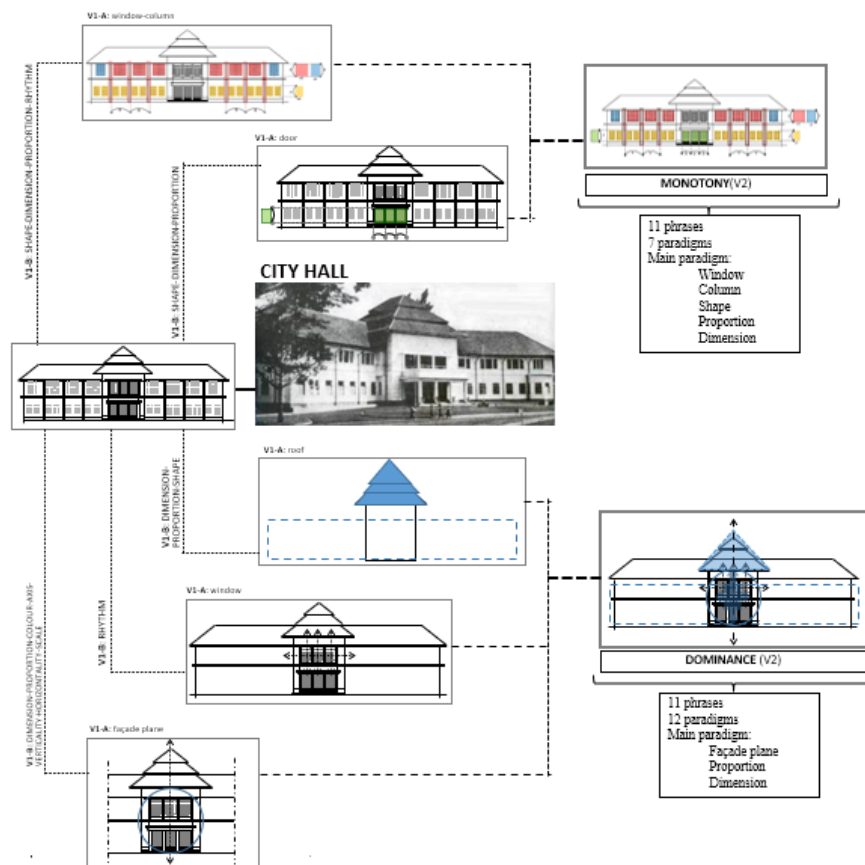


Figure8. Graphic Analysis Result of Monotony & Dominance in the Visual Composition of the City Hall Building

3.5. Building Significance

The significance of the building based on the syntagm-paradigm relation is determined by the number of phrases resulting from the elaboration of a particular compositional theme, which is the largest compared to other

buildings, in a group of buildings being studied. Significance is also determined by how the theme of the composition also has the strongest elaboration compared to other themes found in a building itself. If these two things are met, then the theme of the composition becomes the main strength of the aesthetics of the building. The clearer the consistency of the two things, the higher the significance of the building, so the greater the potential for the hierarchy of the building in the context of its existence as part of a group of buildings.

In this study, based on the description of the 6 compositional themes above, the significance of the building can be hierarchized as follows:

1. Frateran School building with the aesthetic power of balance, and the strength of the syntagm of firmness
2. Toko Oen building with the aesthetic power of regularity
3. KPKN building with the aesthetic power of dynamism
4. City Hall building with the syntagm power of balance, monotony, and dominance
5. PLN building with the power of regularity syntagm
6. City Station building with the power of regularity syntagm

4. Conclusion

In the process of interpreting the aesthetics of the composition of the visual elements of the building, the syntagm-paradigm relation as a form of aesthetic value has a role in determining the significance of the building. The significance of the building based on this relationship is how important the building is in the context of contributing to the formation of aesthetic values that can be felt through the composition of the building's visual elements. Aesthetic values are reflected in a form of a relationship between the chosen syntagm (theme of the composition) and the chosen paradigm (visual elements) that can represent the building's superiority when compared to other buildings.

The results of the aesthetic meaning of the composition of the visual elements of the building in this study can also show the hierarchy of the position of the building in a certain building group. This hierarchy is determined based on the consistency of the syntagm-paradigm relation that occurs, both in the context between different themes in a building, as well as in the context between the same themes in a building group. The higher the building hierarchy, the more visual elements must be considered in maintaining a certain aesthetic value in a place.

5. References

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