

Visual Characteristics of “Ground Floor Pedestrian-Friendly Facades” in “Reproduction of Public Area” Based on “Socioeconomic Activities” in Kampung around Campus

Ramos P Pasaribu^{1,*}, Uras Siahaan² and Rumiati R Tobing³

¹ Doctoral Student of Architecture, Faculty of Engineering, Parahyangan Catholic University, Indonesia.

Lecturer of Indonesia Christian University, Department of Architecture, Indonesia.

² Professor of Architecture, Indonesia Christian University, Department of Architecture, Indonesia.

³ Lecture of Architecture Faculty of Architectural Engineering, Parahyangan Catholic University, Indonesia.

ABSTRACT:

An interesting phenomenon found in Indonesia today is "the growth of a city with the characteristics of a kampung (urban village)". One such appearance can be found in Kampung Kemanggisan around the campus of Bina Nusantara University (Binus), Syahdan, which is among nine kampungs in Jakarta that was selected as the kampung under study. Along Haji Senin Street, college students and residents need each other in trading activities ("Socioeconomic Activities"). This causes a change in the function of land and buildings and triggers the emergence of "Ground-floor Pedestrian-Friendly Facades". This research is important because the kampung needs a balance between the building and the environment. The aim of this study was to reveal how the visual character of Ground Floor Pedestrian-Friendly Facades influences the "reproduction of public area" based on "socioeconomic activities" along Haji Senin Street in terms of activities, functions, spaces, shapes, values, and time. Using a qualitative method (a case study), a visual character was found in the form

of a "Ground Floor Pedestrian-Friendly facades" facade composition, which is dominated by non-geometric, asymmetrical shapes, spaces in the ground floor as a place of business, which are visually accessible to pedestrians, has contrasting colors, an opening shape that is not rhythmic and in a proportional human scale. The results of this study are expected to be input for the Government of DKI Jakarta to create a pedestrian friendly-facades.

Keywords: Visual characteristics, “ground floor pedestrian-friendly facades”, “socioeconomic activities”, kampung, campus.

I. INTRODUCTION

An interesting phenomenon in Indonesia today as explained by Salim [1] is ““the growth of a city with the characteristics of a kampung”. This is what is happening in Jakarta with the college campuses and kampungs around them (figure 1).

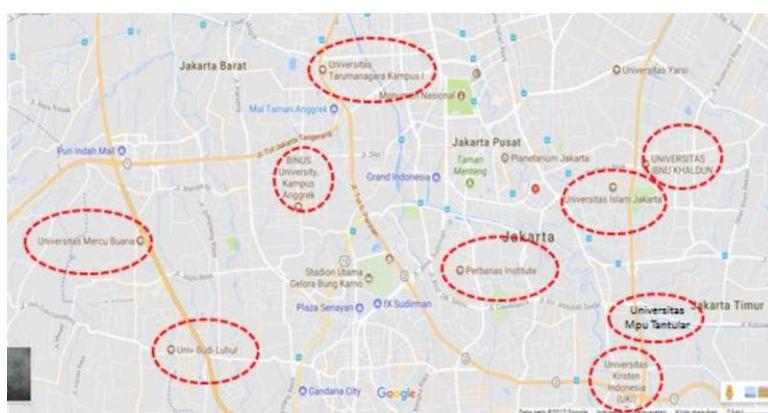


Fig 1. Location map of nine college campuses in Jakarta: Tarumanagara University, Bina Nusantara University, Mercubuana University, Budi Luhur University, Perbanas University, Indonesia Christian University, Mpu Tantular University, Ibnu Qaldun University, Moeslem Cempaka Putih University.

* Corresponding Author



Fig 2. Map of the nine kampungs around college campuses in Jakarta.

The relation between the campus and the kampung as explained by Ala [2], that “We saw the kampung and the university need each other”, also occurs between the Campus of Binus and Kampung Kemanggisan, where the college students dominate

the activities along Haji Senin Street (figure 3) to fulfill their daily needs such as *Kost* (type of private rental housing [3]), meaning “boarding house” in Indonesian [4]), food, etc.



Fig 3. Map of Kampung Kemanggisan around the Campus of Binus, Syahdan.

Residential buildings around the Parahyangan Catholic University (UNPAR) campus has undergone some changes as explained by Salura [5] that “In the long run, the residential houses along this street had changes in its functions; they are now becoming commercial units”. What was initially simple housing is now medium housing with the upper floor as “*Kosts*”, and the ground floor as a place of business, resulting in what is called “*Kosts*-shop”. Changes in land and building

functions have an impact on the appearance of the facade which is dominated by open facades with a ground floor that can be reached visually by pedestrians, something that can be called “Ground-floor Pedestrian-Friendly Facades”.

In addition to changes in land and building functions, the type of activity inside the business space and outside the building also influences the appearance character of the facade. The

manner in which activity support and opportunities are developed, coordinated with, and integrated into the existing urban physical fabric appears to be the critical issue [6]. The daily needs of the students in the kampung are responded by kampung residents by changing their buildings into the "Ground-Floor Pedestrian-Friendly Facades" which show activities and space on the ground floor (interior space, front yards, streetside) as places of business that looks attractive to passing pedestrians.

In DKI Jakarta, kampung is still a concern of the Government. It represents the complexity of urban problems [7]. The facade of buildings plays a role in creating a balanced environment which is oriented towards those who use "pedestrian-friendly" buildings [8]. The significance of this study was that considering pedestrians are the dominant street users in the kampung environment around the campus, and facades are visual expressions of buildings that are first appreciated by the public [9], then the "Ground Floor Pedestrian-Friendly Facades" display of the buildings can help maintain a balanced "environment-friendly" neighborhood to pedestrians.

The importance of this research, especially for the densely populated urban areas of the city around the campus in Jakarta, is to maintain the balance of a pedestrian-friendly environment. This requires the characteristics of a pedestrian-friendly building facade. The aim of this study was to reveal how the visual character of the facade which is dominated by the composition of the Ground Floor Pedestrian-Friendly Facades reproduces public areas in the kampungs around campuses in Jakarta through the approach of activities, functions, spaces, shapes, values, and time. The results of this study are expected to be input for the Government of DKI Jakarta to create a balanced environment that is user-oriented and pedestrian-friendly buildings. [8].

The study is focused on the buildings along the Haji Senin Street which functions as place of a "Kost" on the upper floors and place of business on the ground floor. Using a qualitative method (case study), it was found that through the relation between the criteria for the appearance including functions, spaces, shapes, values, time, activities and geometric facade composition like symmetry, contrast, depth, rhythm, human scale, and the proportionality, the facade composition criteria based on appearance of "Ground Floor Pedestrian-Friendly facades" were obtained along Haji Senin Street, which is dominated by non-geometric, asymmetrical shapes, spaces in the ground floor as a place of business, which are visually accessible to pedestrians, has contrasting colors, an opening shape that is not rhythmic and in a proportional human scale.

Several authors have written about kampung around the campus [see [5,10,11,12,13]. The novelty in this research was that changes in land and building functions along Haji Senin Streer, Kampung Kemanggisan, around the Binus campus from simple houses to mixed dwellings has an impact on changes in building functions, where the upper floor is made as a boarding place and on the ground floor as a place of business that displays "Ground Floor Pedestrian-Friendly Facades" which create a visually balanced pedestrian-friendly environment.

The questions in this study are:

1. What is the process of selecting Kampung Kemanggisan around the Bina Nusantara (Binus), Syahdan campus as the location of the object of study?,
2. How does the process of reproduction of public areas affect facade changes along Haji Senin Street in Kampung Kemanggisan?,
3. What is the approach in understanding the appearance of the "Ground floor Pedestrian-Friendly Facades" along Haji Senin Street?
4. What are the composition criteria for the "Ground Floor Pedestrian-Friendly facades" along Haji Senin Street?,
5. What is the dominant façade composition based on the "Ground Floor Pedestrian-Friendly Facades" approach along Haji Senin Street?

II. MATERIAL AND METHOD

This study was conducted with a qualitative research method (descriptive research as well as case study). The author selected unusual cases in the collected case studies and used maximum variations as a sample strategy to represent a variety of cases and describe various perspectives on these cases [14].

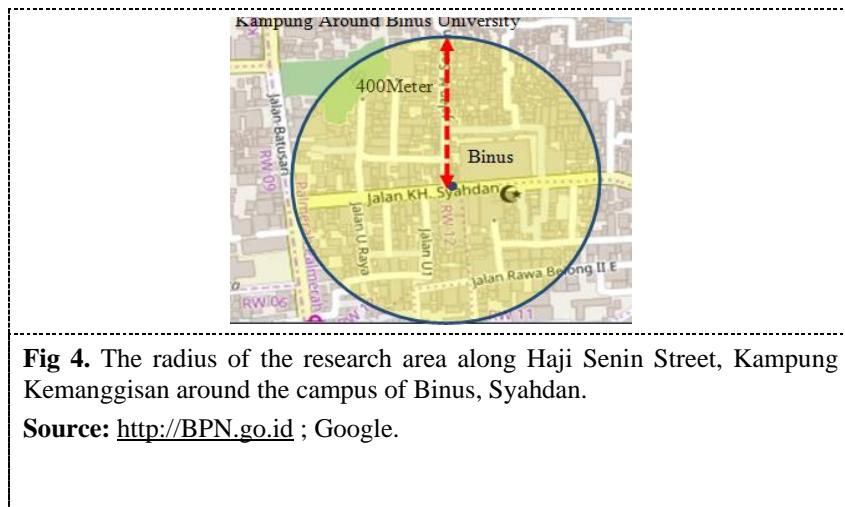
The sampling used in the study were maximum variation sampling. The author focused on the buildings along Haji Senin Street that met the criteria of: boarding on the upper floors; place of business on the ground floor which had 3 characteristics in relation to the public/private area, which are "permeable, active, and social", and has public visual view space/PVVS (the internal space is directly visible to pedestrian/open/no obstruction and through transparent glass medium).

The author listed the kampungs around the campus in Jakarta based on the following selection criteria of kampung as the location of the object of study:

1. It is dominated by student activities.
2. Commodification of public open space and homogeneity of space by trade activities within the kampung occur.
3. It has direct access from kampung to campus.
4. It has a high population density, which is 400 people/Ha.

Based on these criteria, there are 9 kampungs around college campuses in Jakarta, and Kampung Kemanggisan (along Haji Senin Street) around the Binus, Syahdan campus was selected as the location of the object of the study.

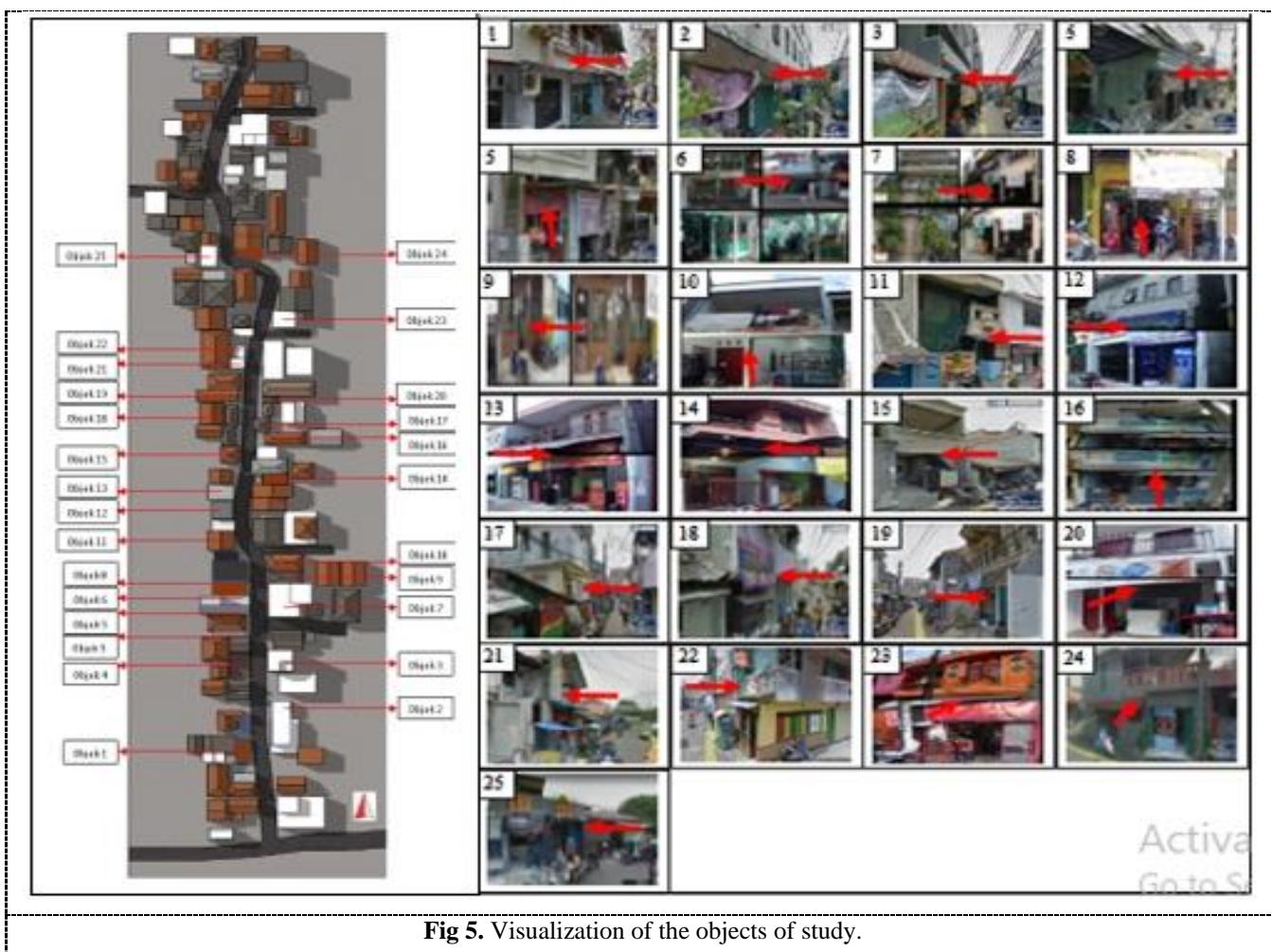
The author put a limitation on the research area along Haji Senin Street, which was a distance within the radius of 400 meters from the Binus campus considering the walking distance of students from the boarding houses to the campus / vice versa along Haji Senin Street.



This study used a dominant analysis technique, which is a “dominant forms of analysis” that contains important techniques (pattern matching, explanatory development and time series) [15]. The pattern to be matched was the similarities in the function of buildings where there were a “PVVS”, the upper floors as *Kost* and the ground floors as place of business.

Out of 63 houses on Haji Senin Street, 25 houses (see figure 2) were shortlisted as houses with similar facade where the upper floor is used as *Kost* and the ground floor as a business place.

“A façade that is transparent, healthy, and actively gives a good human urban space in the best possible place are up close and at eye level [16]. In this research the author focused on the best place, namely “Ground Floor Facades”.



III. RESULT AND DISCUSSION

III.I. The selection of Kampungs around College Campuses in Jakarta as the Location for Research Object.

The initial research identified and selected kampungs in Jakarta around college centers. Based on the survey, 9 universities were

found to meet the criteria as an alternative location for research object, and Kampung Kemanggisan was next to the Bina Nusantara University campus was selected (see table 1).

Table 1. Analysis of Kampung Selection as the Location of Research Object

Kampung around Nine Higher Education Institutions in Jakarta	Criteria for Selection of Kampungs as Locations for the Object of Case Study	Initial Study Case Identification
 <p>Kampung around Tarumanagara University Population density : 1965 = <200 People/Ha (Jakarta Master Plan 1965 - 1985) 2005 = 201-300 People/Ha. 2010 = 323 People/Ha (Spatial plans Jakarta 2010) Allotment of land = Housing. Building floor coefficient = 1.0 (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. - There are commodification of public open space and homogeneity of trading activities. -Dominated by commercial / trading activities. -There is direct access from kampung to campus. -Dominated by student activities. 	<ul style="list-style-type: none"> -Dominated by student activities. -There are commodification of public open space and homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first
 <p>Kampung around Bina Nusantara University Population density 1965 = 0 People / Ha (Jakarta Master Plan 1965-1985) 2005 = 201 - 300 People / Ha. 2010 = 422 People / Ha (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -There are commodification of public open space and homogeneity of trading activities. - Dominated by commercial / trade activities. -There is direct access from campus to kampung. 	<ul style="list-style-type: none"> -Dominated by student activities. -There are commodification of public open space and homogeneity of space by trade activities. -Direct access from kampung.
 <p>Kampung around Mercubuana University Population density 1965 = 0 people / Ha (Jakarta Master Plan 1965 – 1985) 2005 = 101 – 200 People/Ha. tahun 2010 = 180 People/Ha (RTRW Jakarta 2010) Allotment of land = Housing. Building floor coefficient = 1.0 (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -There is low space commodification. -No homogeneity of trading activities. -There is direct access from campus to kampung. -Kampung is not dominated by student activities. 	<ul style="list-style-type: none"> -Dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first

 <p><i>Kampung</i> around Budi Luhur University</p> <p>Population density</p> <p>1965 = 0 people/Ha (Jakarta Master Plan 1965 - 1985).</p> <p>2005 = 101 - 200 People/Ha.</p> <p>2010 = 247 People/Ha</p> <p>Allotment of land = Housing.</p> <p>Building floor coefficient = 1.0</p> <p>(Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -No commodification of public open spaces nor homogeneity of trading activities. -There is direct access from campus to kampung. -Not dominated by student activities. 	<ul style="list-style-type: none"> -Dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first
 <p><i>Kampung</i> around PERBANAS University</p> <p>Population density</p> <p>1965 = 200 - 300 people / ha (Jakarta Master Plan 1965 - 1985).</p> <p>2005 = 201 - 300 people / Ha.</p> <p>2010 = 325 people / Ha</p> <p>Allotment of land = Housing.</p> <p>Building floor coefficient = 4.0</p> <p>(Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -There are commodification of public open space and homogeneity of trading activities. - Dominated by commercial / trade activities. -There is direct access from campus to kampung. - Dominated by student and employee activities. 	<ul style="list-style-type: none"> -Dominated by student activities. -There are commodification of public open space and homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first
 <p><i>Kampung</i> around Indonesian Christian University</p> <p>Population density</p> <p>1965 = 0 people/Ha (Jakarta Master Plan 1965 - 1985).</p> <p>2005 = 201 - 300 people/Ha.</p> <p>in 2010 = 325 people/Ha</p> <p>Allotment of land = Housing.</p> <p>Building floor coefficient = 2.0</p> <p>(Spatial plans of Jakarta 2010).</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -No commodification of public open spaces nor spatial homogeneity of trade activities. -There is direct access from campus to kampung. -Not dominated by student activities. 	<ul style="list-style-type: none"> -Not dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first

 <p>Kampung around Mpu Tantular University Population density 1965 = <200 people/Ha (Jakarta Master Plan 1965 - 1985) 2005 = 201 - 300 people/Ha. 2010 = 325 people/Ha Allotment of land = Housing. Building floor coefficient = 1.0 (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -No commodification of public open spaces and spatial homogeneity of trade activities. -There is direct access from campus to kampung. -Not dominated by student activities. 	<ul style="list-style-type: none"> -Dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first
 <p>Kampung around Ibn Qaldun University Population density 1965 = <200 people/Ha (Jakarta Master Plan 1965-1985). 2005 = 201 - 300 people/Ha. 2010 = 325 people/Ha Allotment of land = Housing. Building floor coefficient = 1.0 (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -No commodification of public open spaces nor spatial homogeneity of trade activities. -There is direct access from campus to kampung. -Not dominated by student activities. 	<ul style="list-style-type: none"> -Not dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first
 <p>Kampung around the Islamic University of Jakarta Population density 1965 = <200 people/Ha (Jakarta Master Plan 1965-1985). 2005 = 201 - 300 People/Ha. 2010 = 253 People/Ha Allotment of land = Housing. Building floor coefficient = 1.0 (Spatial plans of Jakarta 2010)</p>	<ul style="list-style-type: none"> -Kampung is open: has more than 2 accesses to kampung. -Kampung was there before college. -No commodification of public open spaces nor spatial homogeneity of trade activities. -There is direct access from campus to kampung. 	<ul style="list-style-type: none"> -Not dominated by student activities. -No commodification of public open space nor homogeneity of space by trade activities. -Direct access from kampung. -Kampung was there first

III.II. "Socioeconomic Activities" along Haji Senin Street

How student activities intertwine with the kampung life around the campus to fulfill their daily needs creates social interaction between students and traders and a relationship between the campus and kampung as explained by Ala [3]. A well-rounded discussion about the function of soft edges in a residential context must include cultural and socioeconomic dimensions

[16]. The social interaction created between students and traders along Haji Senin Street is a relationship of "socioeconomic activities" where the college students and traders need each other. The spread of social interaction due to daily needs and activities of students colors the function of soft edges along the road between the campus and the boarding house, near the campus, near the boarding house, and in the boarding area (see figure 6 and 7).

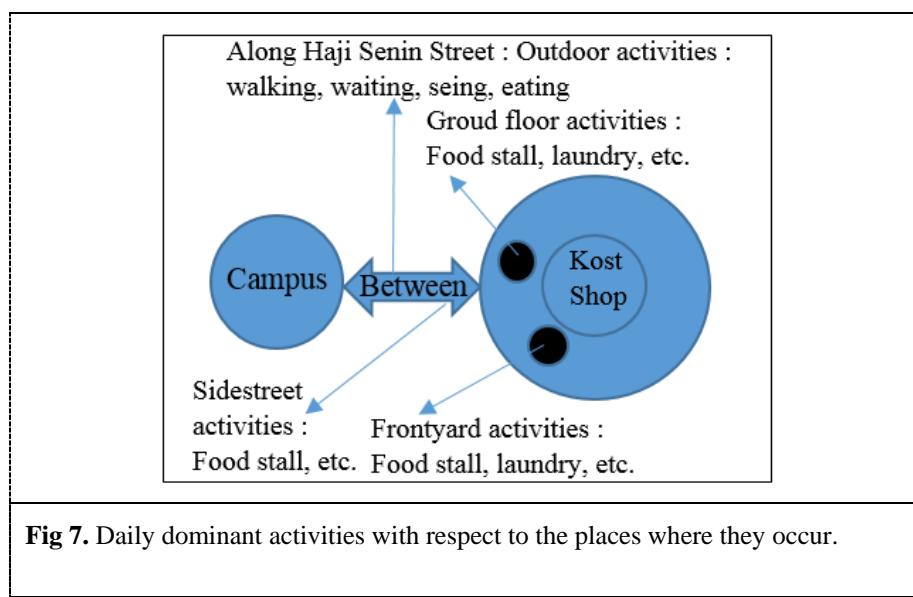
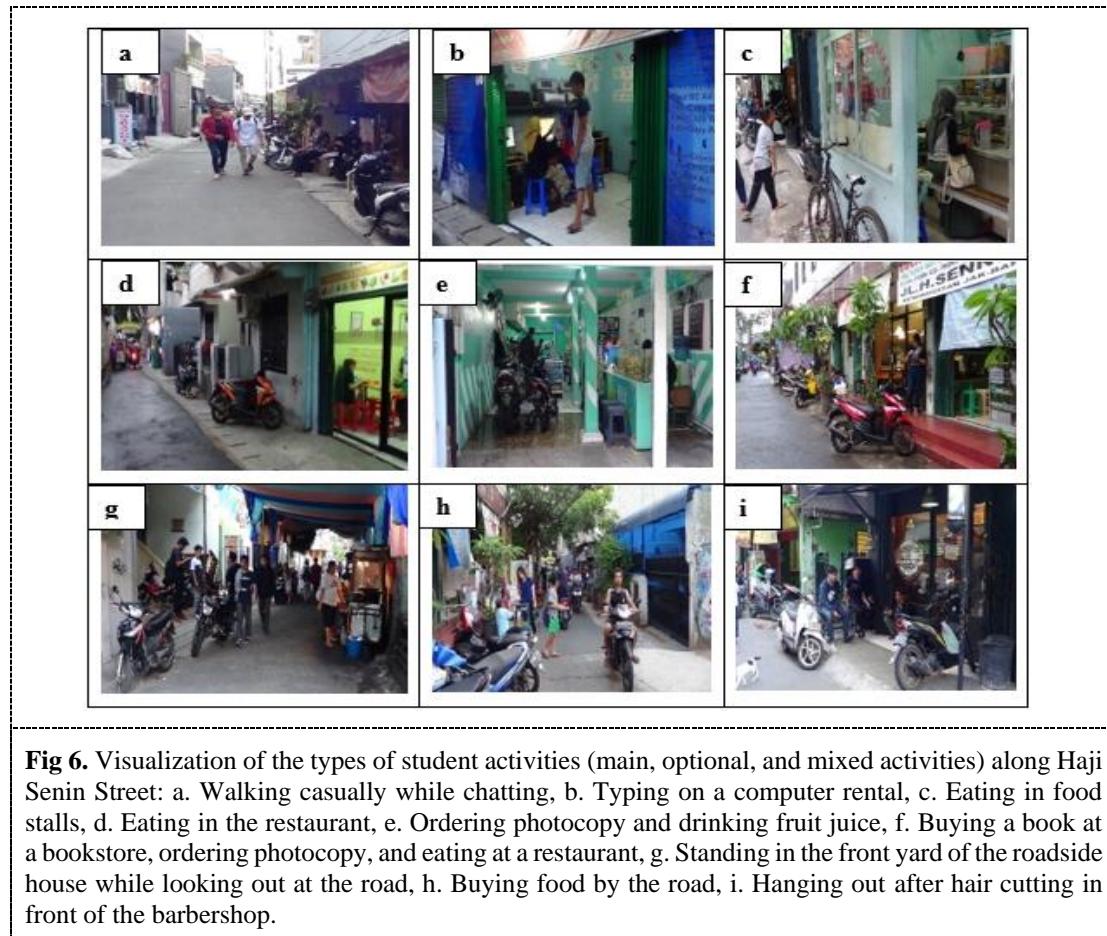


Fig 7. Daily dominant activities with respect to the places where they occur.

III.III. Reproduction of Public Areas along Haji Senin Street

Public areas are produced outside and inside. "Space is produced, space as product is never final, space is produced, consumed, and reproduced in never ending and iterative process [17]". "There are two kinds of outside space, namely

the outer space which is limited by a row of buildings facing each other and/or in the form of a street (street space) and an outer space surrounded by buildings (court yard) [18]". Public areas are produced for trading activities, front yards, and shops along Haji Senin Street (see figures 8 and 9).



Fig 8 . Public areas along Haji Senin Street.

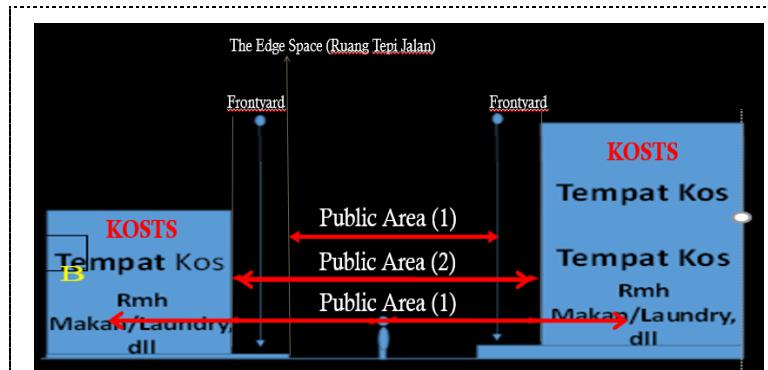


Fig 9. A slice of of public area profiles along Haji Senin Street; space between the road and interior (business place) and space between the road and the front yard.

1.1.1. Spatial Practice.

“Spatial practice” seen in the development of social interactions space in terms of the growth of the people density including social interaction activities in it. Material spatial practices refer to the interactions and physical flows that occurs in and across space as part of fundamental processes of economic production and social reproduction [19]. The people density growth of Kampung Kemanggisan around the campus of Binus, Syahdan started with 0 people/Ha in 1965-1985, 201-300 people/Ha in 2005, and 422 people/Ha in 2010 until today. It shows that there is an increase in social interaction in Kampung Kemanggisan around Campus of Binus.

Space for trading activities grows and in the kampung around campus. Space is seen as a commodity [20]. Since the establishment of Binus, Syahdan Campus in 1985, social interaction along the Haji Senin Street around Binus, Syahdan

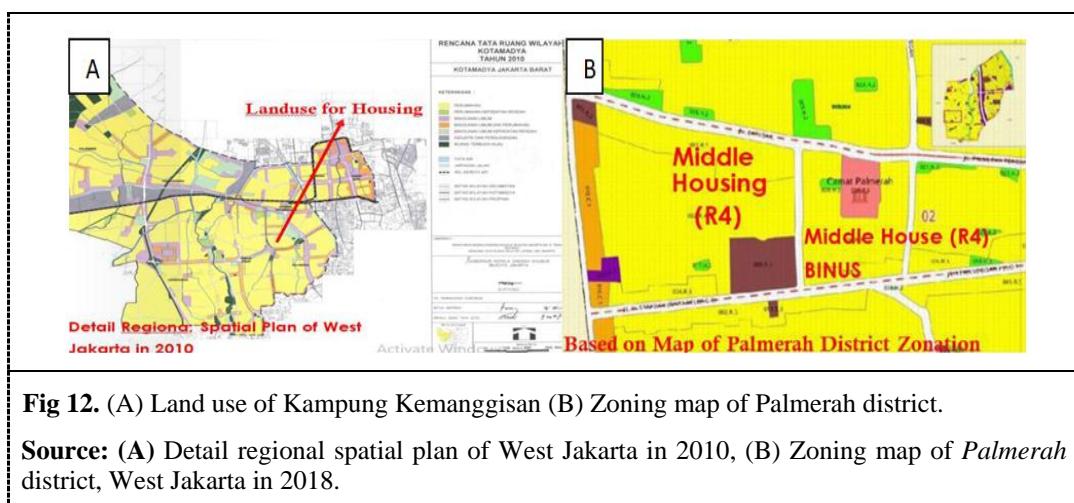
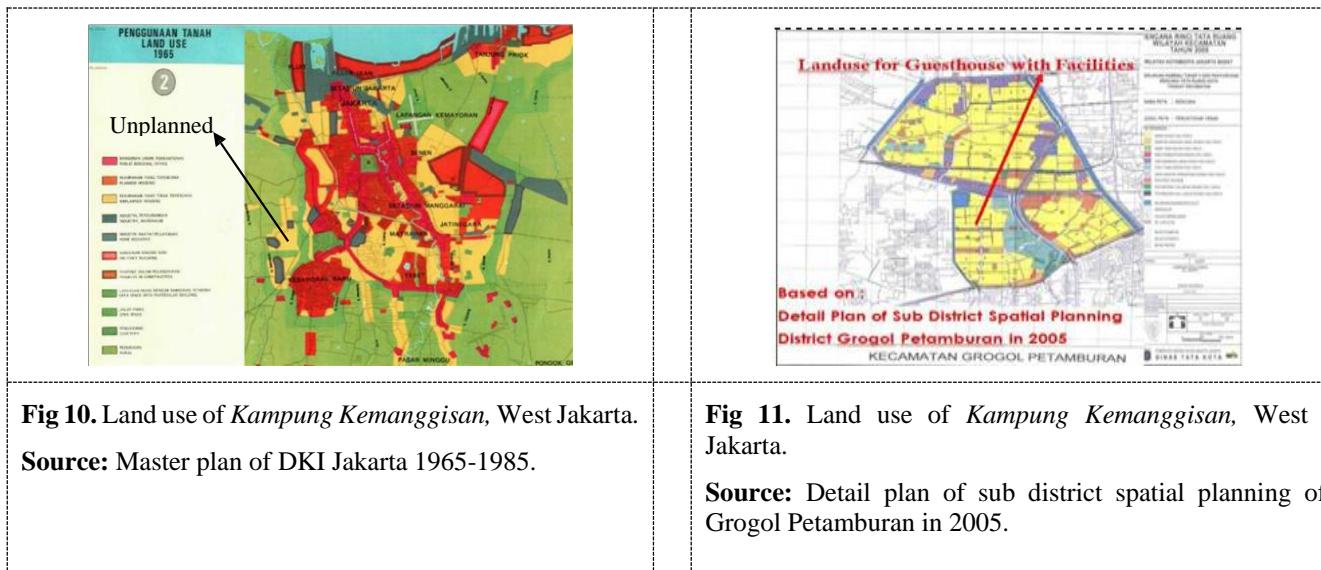
Campus has been dominated by trade activities for everyday student life. The production of social interaction space in the commodity space was produced by the relation between the aspects that effect of commodity space and density of student. There is also optimization of land use for function building, changes in landuse (to mixed trade), dominance homogeneity of trading activities and heterogeneity/variation of college student activities.

1.1.2. Representation of Space.

Growing needs of daily life demand physical changes in an environment. Representation of Space include all of the signs, symbols, codifications and knowledge that allow material spatial practices to be talked about and understood [19]. It can be seen by the representation of the concept or plan of land use of area in research conducted by the Regional Government of DKI Jakarta. Social interaction activities in a dense population

and the land use encourage the government to produce new land allotment. The production of social interaction space along Haji Senin Street was initiated by the reproduction of land use in Kampung Kemanggisan which is now around the Campus of Binus, which was initially a land use as a kampung/unplanned house and a population density of 0 people/ha [21] (see figure 10). After the establishment of Syahdan Campus of Binus in

1985 there was an increase in population density and changes in land use: population density of was 201-300 people/Ha, the land was used as guesthouses and facilities in 2005 which then produced a population density of 422 people/Ha (see figure 11), and land use for housing in 2010 (see figure 12A) and middle housing in 2018 (see figure 12B).



1.1.3. Space of Representation.

Government spaces and regulations are interpreted as social connotations by citizens/traders [the meaning of spaces is socially referred to as social connotations [22]] and allows for the reproduction of new spaces. Space of Representation are mental constructs such as utopian plans, imaginary landscapes, paintings and symbolic structures that imagine new meanings or possibilities for spatial practices [19]. Many changes in

building functions occurred along Haji Senin Street around the Campus of Binus. "In the district of Palmerah a lot of changes occurred in the public area around Binus University [23]". This was triggered by the need for supporting facilities for the university, such as boarding, dining, and other facilities along Haji Senin Street. Students' daily living needs along the street are interpreted by the homeowners/traders as opportunities to offer boarding houses and public areas such as restaurants, laundry, and so on (see figures 13A and 13B).



Fig 13. (A) Changes to the appearance of the facade along Haji Senin Street between 2015 and 2018. (B) Spread of economic activity on Haji Senin Street in 2018 which affected the appearance of the building facade.

Source: (A) Google earth, (B) Government of DKI Jakarta and field survey.

III.IV Changes to the Facade in Reproduction of Public Areas along Haji Senin Street in Kampung Kemanggisan

A residential environment that is so alive with activities can affect the function of buildings and bring about changes in building facade. "One habit gives the possibility of an activity or always provides a place to carry out habits/actions and activities [16]". The façade is a reflection of the internal space planning thus the appearance of the building function and the utilization of the space on the ground floor highly affects the appearance (characteristics) of the facades of a building [9]. In reality, the daily needs of students along Haji Senin Street affect changes in building functions, and changes in building functions affect the appearance of the building's ground floor facade. Changes in the appearance of the facade on the ground floor are dominated by facades that display activities and business spaces/shops that are open/friendly to pedestrians

visually or are called "Ground Floor Pedestrian-Friendly Facades" (see figures 6, 8, 9).

III.V. Visual Characteristics of "Ground Floor Pedestrian-Friendly Facades"

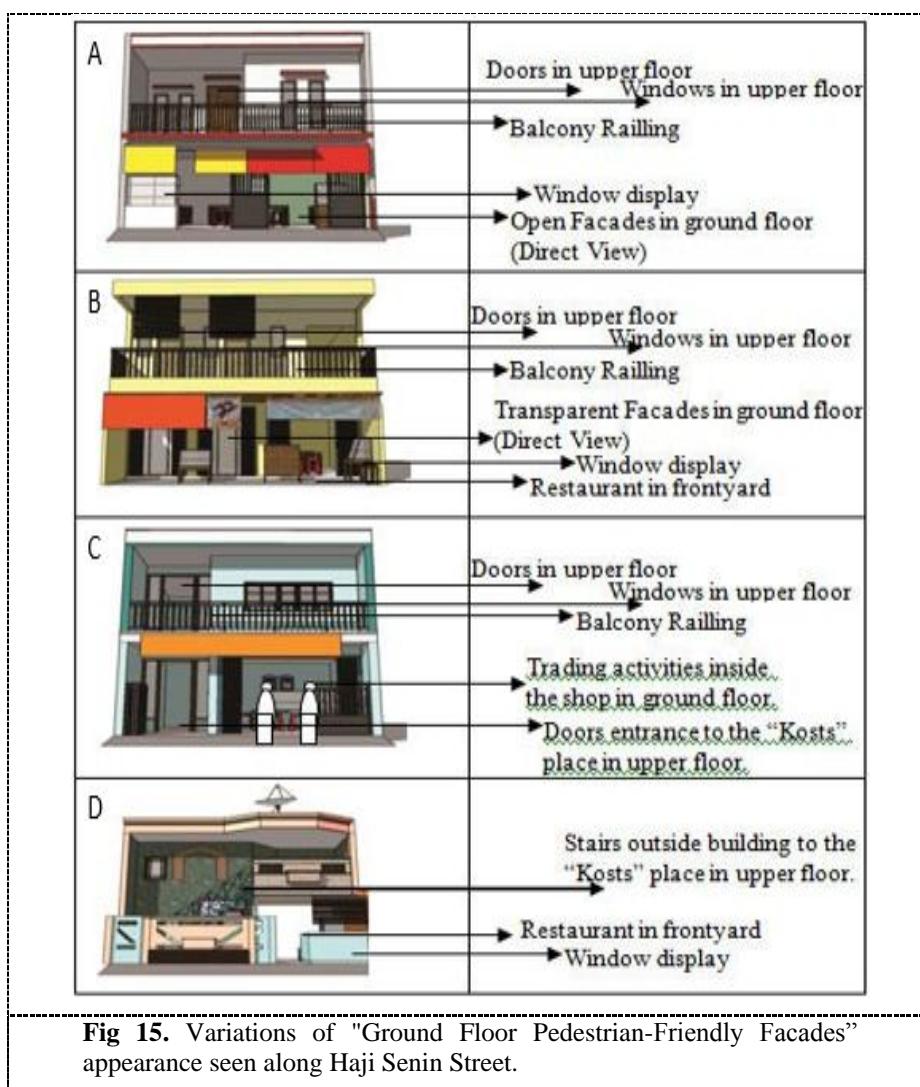
An open and transparent facade gives a pedestrian-friendly impression. Facade significantly effects peoples' behavior in the street [24]. "Buildings that are dominated by transparent facade will give the impression of being friendly to the environment [9]". A façade that is transparent, healthy, and active gives a good human urban space in the best possible place: up close and at eye level [16]. "Ground Floor Pedestrian-Friendly Facades" that are open and transparent offer visual space to the public and the trading activity can be seen by pedestrians (see figure 14).



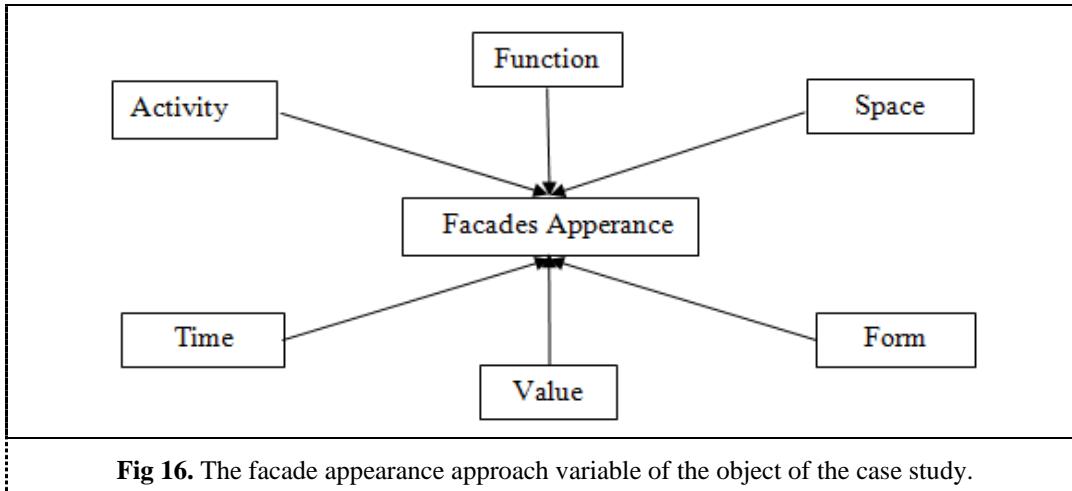
Fig 14. "Ground Floor Friendly-Facades" appearance of the 25 case study objects along Haji Senin Street.

The characteristics of a facade are seen from the appearance of the visual characters. As said Fajarwati that "The character of an architectural object is the diversity or uniqueness which is arranged into the characteristics of architectural objects or the arrangement of basic elements that are strung together so as to make the object have qualities or characteristics that distinguish it from other objects [25]". The indicators used to look for specific characteristics of roofs, balustrades, and columns are the shape, material, color, ornamentation, and the changes that might occur. Additional indicators for door, window and door elements are the direction of the opening unit, and for exterior wall elements it's the texture [26]. Based on this definition and appearance of 25 case study objects in this study (see figure 13), visual characters or visual compositions of "Ground Floor

Pedestrian-Friendly Facades" are formed by the order or interaction of elements, which include: 1.shapes, 2.lines, 3.colors, 4.textures, 5.scales and proportions on the physical elements of the door facades, windows, direction of opening (vertically/horizontally), the facade of the building, interior spaces and front yards for business activities. Based on this definition and variations in the appearance of the facade along Haji Senin Street (see figure 15), the visual characters of the facade is seen through the appearance of the facades, which includes: 1.activities, 2.space function (more or less privacy), 3.space (public view space displayed), 4.form (openness/closeness of the facade of the building), 5.value (space use and facade attributes), 6.time (look of the hour).



From the variations of "Ground Floor Pedestrian-Friendly Facades" appearance seen along Haji Senin Street, six approaches were obtained to understand the appearance of "Ground Floor Pedestrian-Friendly Facades" along the street (see figure 16).



III.V.I Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on the Activity Approach

Student activities in kampungs around the college campus have certain characteristics that are dominated by their daily routines. "Activities are defined as what is done by someone at certain intervals [20]. The activity always contains four main points; actors, types of activities, place, and time. "To an important extent, the potential for a strong outdoor space depends on what takes place in the part of the building directly adjacent to that space" [27]. Types of activities [28] include: 1.main activities, 2.specific activities, 3.additional activities, 4.symbolic activities. Student activities along Haji Senin Street are dominated by the fulfillment of their daily needs (*Kost*, food, photocopies, laundry), and other supporting activities such as additional activities/options (eating while chatting casually), and mixed activities (a combination of main and optional activities). Everyday activities of the students relating their daily needs influence the trade activities, function and arrangement of buildings, as well as the appearance of facades along Haji Senin Street. (see figure 16)

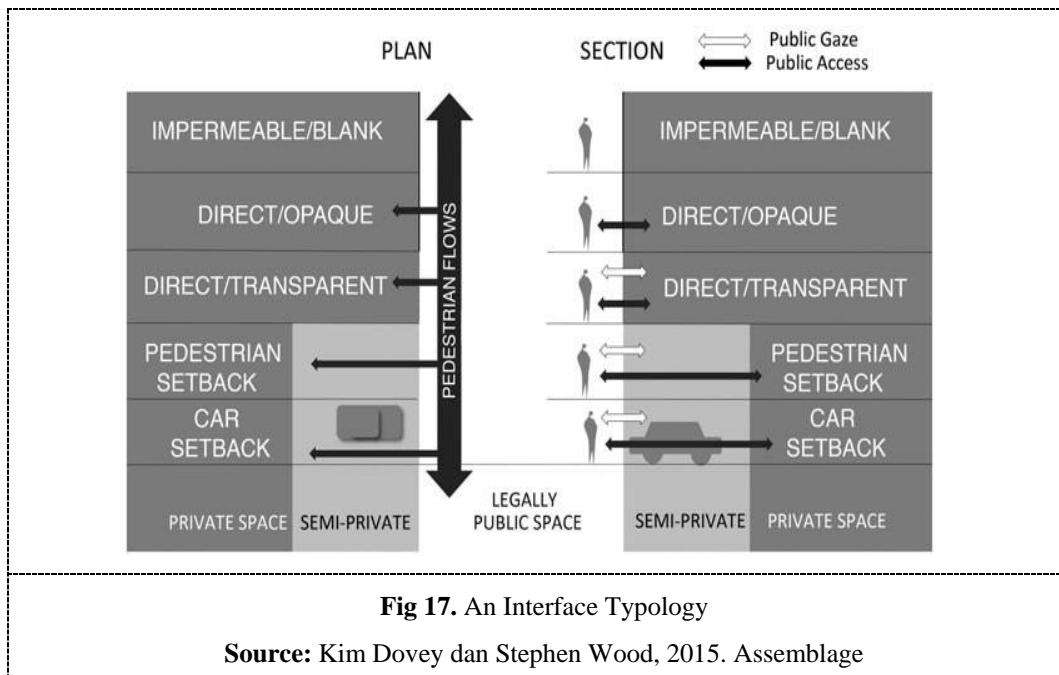
III.V.II. Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on the Functional Approach

Facade is the appearance of a building that represents the function of the building. The façade is a reflection of the internal space planning thus the appearance of the building function and the utilization of the space on the ground floor highly affects the appearance (characteristics) of the facades of a building [9]. Direct interfaces are those where pedestrians enter directly into private space from the street, without an

interstitial zone of semi-private space [29]. The diversity of building functions and the arrangement of business space on the ground floor of the building and front yard affect the variety of facade displays along Haji Senin Street. The function of the ground floor as a business space for the main activity (selling the main needs of students) is dominated by the a facade that is open and has less privacy, while the ground floor functions as a business space for optional activities (selling the optional needs of students) is dominated by the appearance of the front area building that is transparent, enclosed (with glass) and offers more privacy.

III.V.III. Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on the Space Approach

Both types of ground floor functions have an inner space that can be reached visually by the pedestrians. The interface, Dovey explained that "The interface is where we both welcome and exclude strangers ; where we negotiate "publicity" and "privacy", exposure to the public gaze and retreat from it. ... "Interfaces" are not "things" but connections, relation and flows that are geared to productive practices. ... They have dynamic interactions between parts, including people and objects, subjects and objects [29]". Dovey also explained that The 5 main types of "interfaces" in public/private interfaces are: 1.Accessible/Inaccessible, 2.Direct/Setback, 3.Opaque/Transparent, 4.Car/Pedestrian, 5.Private/semi private space (see figure 17). Haji Senin Street is dominated by "Direct Public/private Interface" and "Transparent Public/Private Interface" that visually links pedestrian with trading activities on the ground floor/front yard and produces public visual view space (PVVS).



The spaces inside the shop also attract the attention of the public/pedestrians. "Buildings are laid out to produce as many easy external connections as possible on the ground floor [27]". "Determination of the most optimal and efficient design of the lot/block for the environment specifically is related to the fulfillment of functional aspects, visual, and environmental quality" ... "the creation of continuity of public space, which is most beneficial especially for pedestrians includes the public space taken from the private space [8]". The trading space on the ground floor and front yard along Haji Senin Street visually becomes part of the public and an attraction for pedestrians and forms a continuity of public open space that enlivens roadside space. The ground floor becomes part of the public (as a shop/place of business). Based on the definition of spatial criteria, the appearance of "Ground Floor Pedestrian-Friendly Facades" can be displayed through the display "Public Visual View Room or RPVP"

III.V.IV. Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on the Form Approach

The characteristic of the building facade can be shown through the appearance of the building shape. "Physical elements related to the formation of visual characters that are harmonious with the environment are the shape and mass of the building, which consists of: 1.building height, 2.building cohesiveness, 3.coefficient of the floor of the building, 4.the basic coefficient of the building, 5.building border, 6.style, 7.scale, 8.material, 9.texture, 10.color, 11.marker [6]". "In appearance, the building can express or give the impression of being open if the facade of the building is more dominant in the open/transparent part [9]." Along Haji Senin Street, the appearance of physical elements is dominated by the influence of the solid/void appearance, height, human scale, rhythm, verticality, and the width of the building, as well as the number of windows. Physical elements that affect the impression of openness

include building cramming (solid and void), the location of the building's facade to the building border, height, scale, rhythm, verticality, width, number of doors, number of windows, etc.

An open and transparent facade allows visual connections between the interior and the pedestrians. Architecture is the interplay between form and life [30]. Visual permeability refers to transparency [33]. Transparency indicates that the number of entrance as well as the ability to observe ground-floor activities from the street can help create active facades [31]. "Buildings that are dominated by transparent parts or a number of transparent or open entrances will give the impression of being welcoming and friendly to the environment [9]". In this research, the shape of the open and transparent parts gives the pedestrian a friendly impression, allows activities in the ground floor business space to interact visually with the pedestrian, and involves activities from the pedestrian.

III.V.V. Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on a Value Approach

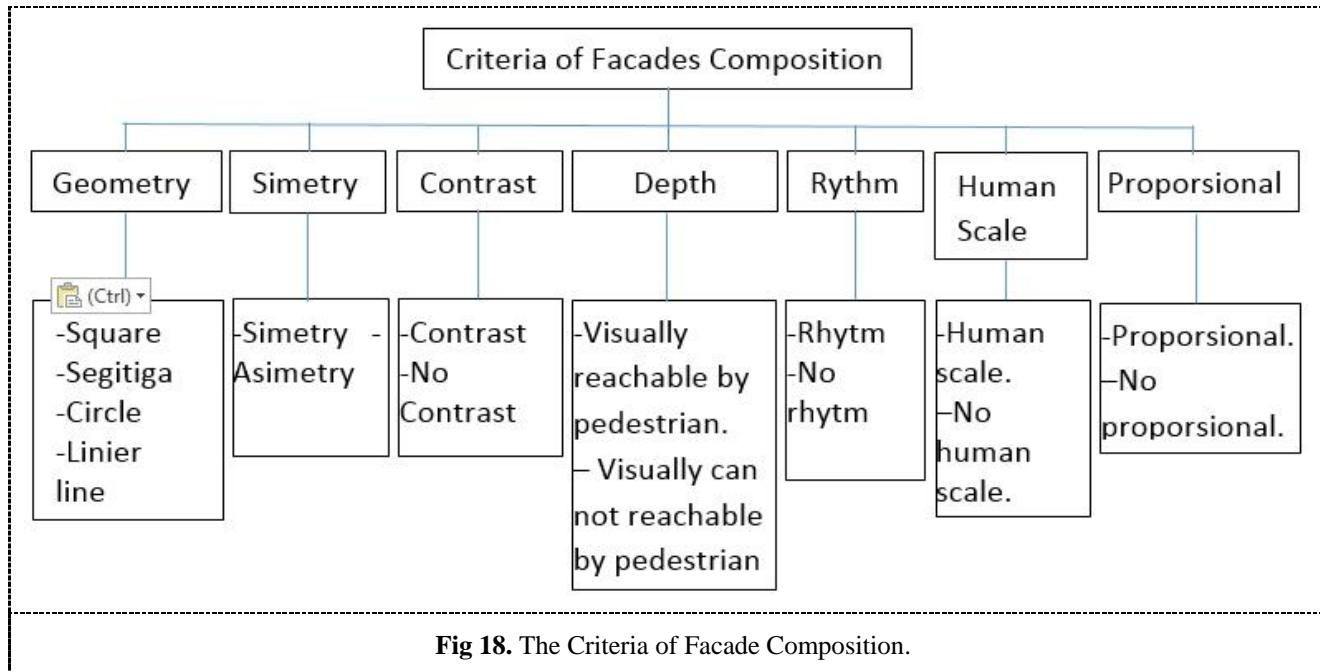
The layout of chairs, and tables, as well as the appearance of window shopping/display attributes on the shops on the side of the road can have commercial value on the display facades. "In Benjamin and Lacis' account of Naples, workshops, kitchens and living areas open directly onto the street, which is hung with washing and overlooked by balconies at many levels. Every doorway, gateway and balcony becomes both a stage and box for urban theater [27]". Along Haji Senin Street, the appearance of facade attributes such as window shopping, kitchen, etc., in addition to the appearance of urban theater also gives commercial value to the appearance of the façade. In addition, the use of the ground floor and front yard along Haji Senin Street is also dominated by trading activities that give the facade have a commercial value.

III.V.VI. Appearance of "Ground Floor Pedestrian-Friendly Facades" Based on the Looks of the Hour

The 'looks of the hour' factor greatly influences the appearance of the facade of a building along Haji Senin Street where in the afternoon it is affected by the heat of the afternoon sun. The sunlight (daytime and evening) on the room in the facade of ground floor, especially in buildings facing the west, affects the heat of the indoor air temperature, so it is necessary to resist excessive sunlight in the afternoon. The use of artificial light at night makes it look brighter than the outside space, illuminating a portion of the street space and attracting attention and offering comfort for pedestrians.

III.VI. Criteria for Composition of "Ground Floor Pedestrian-Friendly Facades"

"Ground Floor Pedestrian-Friendly Facades" along Haji Senin Street are analyzed against the façade composition criteria or elements in the facade appearance that characterize the building's facade. Façade composition includes proportions, rhythm, ornamentation, shape, material, color, and texture [32]. The composition of the building facade includes geometry, symmetry, rhythm, contrast, scale and proportion [33]. The criteria for the composition of the "Ground Floor Pedestrian-Friendly Facades" in this research (see figure 18) are geometry, symmetry, contrast, depth, rhythm, human scale, proportions, and depth. Façade composition includes geometry (square, triangle, circle, linear line), symmetry (symmetrical, asymmetrical), contrast (contrast, no contrast), depth (visually accessible to pedestrians/public, not visually accessible to pedestrians/public), rhythm (rhythmic, non-rhythmic), human scale (human scale, non-human scale), and proportions (proportional, disproportionate).



III.VII. Criteria for Dominant Façade Composition Based on "Ground Floor Pedestrian-Friendly Facades" Appearance Criteria

The criteria for the dominant facade composition of the research object as visual characteristics of the "Ground Floor Pedestrian-Friendly Facades" along Haji Senin Street resulted from the relationship between the facade composition of the research object's appearance namely function, space, shape,

value, time, and activity and facade compositions which include geometry (square, triangle, circle, linear line), symmetry (symmetrical, asymmetrical), contrast (contrast, not contrast), depth (visually accessible to pedestrians/public, not visually affordable by pedestrians/public), rhythm (rhythmic, non-rhythmic), human scale (human scale, non-human scale), and proportions (proportional, disproportionate). This can be seen in table 2.

Table 2. Analysis of Dominant Facade Composition Based on the Appearance Criteria of "Ground Floor Pedestrian-Friendly Facades"

Case Object Number : 1	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
The criteria of facade composition	Indicator ↓																			
1.Geometry	Square	v	v	v	v	v	v			v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear	v	v	v			v			v		v	v	v						
2.Symmetry	Symmetrical				v					v										
	Asymmetric																			
3.Congtrast	Contrast	v	v	v	v		v		v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v			v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable bv Pedestrian																			
5.Rhythm	Rhythmic	v	v							v		v	v							
	No Rhythmic																			
6.Scale	Human Scale			v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v			v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 2	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
The criteria of facade composition	Indicator ↓																			
1.Geometry	Square	v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear	v												v	v	v				
2.Symmetry	Symmetrical	v			v	v	v			v		v	v	v						
	Asymmetric																			
3.Congtrast	Contrast	v	v		v		v			v				v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v	v	v		v		v	v	v	v	v	v	v	v	v	
	Visually Unreachable bv Pedestrian																			
5.Rhythm	Rhythmic	v			v	v	v		v		v		v	v	v	v				
	No Rhythmic																			
6.Scale	Human Scale	v	v		v	v	v		v		v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v	v	v		v		v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 3	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear														v	v				
2.Symmetry	Symmetrical	v		v	v	v				v		v		v	v	v	v	v	v	
	Asymmetric	v					v	v												
3.Congrat	Contrast	v	v	v			v	v			v	v		v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic	v			v	v				v		v		v	v	v	v	v	v	
	No Rhythmic		v	v			v	v												
6.Scale	Human Scale	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 4	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear													v	v					
2.Symmetry	Symmetrical	v	v	v	v		v			v	v	v	v	v	v	v	v	v	v	
	Asymmetric																			
3.Congrat	Contrast	v	v	v	v		v			v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Rhythmic																			
6.Scale	Human Scale		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 5	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value				Time		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	Indicator																			
1.Geometry	Square		v			v		v		v			v	v	v	v	v			
	Triangle																			
	Circle																			
	Linear												v	v						
2.Symmetry	Symmetrical																			
	Asymmetric		v																	
3.Contrast	Contrast	v			v		v			v	v		v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v			v		v		v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic																			
	No Rhythmic		v																	
6.Scale	Human Scale		v			v	v	v		v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional		v			v	v	v		v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			
<hr/>																				
Case Object Number : 6	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value				Time		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	Indicator																			
1.Geometry	Square	v		v		v	v	v		v				v	v	v	v	v	v	
	Triangle																			
	Circle													v						
	Linear						v							v	v					
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v		v		v	v	v		v		v		v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian																			
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic																			
	No Rhythmic																			
6.Scale	Human Scale	v		v		v	v	v		v		v		v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v		v		v	v	v		v		v		v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 7	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear									v	v		v	v	v					
2.Symmetry	Symmetrical	v										v	v	v	v	v				
	Asymmetric																			
3.Contrast	Contrast	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic	v			v	v	v	v		v	v		v	v	v					
	No Rhythmic																			
6.Scale	Human Scale	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale								v	v		v	v							
7.Proportional	Proportional	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate					v	v													

Case Object Number : 8	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square	v			v	v	v		v	v	v		v	v	v	v		v	v	
	Triangle																			
	Circle																			
	Linear									v			v							
2.Symmetry	Symmetrical				v								v	v	v	v				
	Asymmetric																			
3.Contrast	Contrast	v			v	v	v		v	v	v		v	v	v	v		v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v			v	v	v		v	v	v		v	v	v	v		v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic				v				v	v			v	v	v	v		v		
	No Rhythmic																			
6.Scale	Human Scale	v			v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v			v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 9	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	Indicator																			
1.Geometry	Square	v	v		v		v	v	v	v		v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear								v			v								
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v	v				v	v	v	v			v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v		v	v	v	v		v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic											v								
	No Rhythmic																			
6.Scale	Human Scale	v	v		v		v	v	v	v		v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v		v	v	v	v		v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 10	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	Indicator																			
1.Geometry	Square	v	v		v	v	v	v	v	v		v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear								v					v						
2.Symmetry	Symmetrical						v							v						
	Asymmetric																			
3.Contrast	Contrast	v	v		v	v	v	v	v	v		v		v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v	v	v	v	v	v		v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic					v						v	v			v	v			
	No Rhythmic																			
6.Scale	Human Scale	v	v		v	v	v	v	v	v		v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v	v	v	v	v	v		v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 11	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator 																		
1.Geometry	Square	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear				v			v		v		v		v						
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Congtrast	Contrast	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v		v	v	v	v		v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic																			
	No Rhythmic																			
6.Scale	Human Scale		v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 12	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator 																		
1.Geometry	Square	v	v	v	v		v		v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle						v			v		v		v		v		v		
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Congtrast	Contrast	v	v	v	v		v		v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v	v	v		v		v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v	v	v		v		v		v	v	v	v	v	v	v	v	v	
	No Rhythmic																			
6.Scale	Human Scale		v		v	v		v		v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale			v																
7.Proportional	Proportional	v		v	v		v		v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number :	The Criteria of Facades Appearance	Activity			Function			Space			Form				Value			Time		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
	1.Geometry	Square	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Triangle																		
		Circle																		
		Linear												v	v					v
	2.Symmetry	Symmetrical																		
		Asymmetric																		
	3.Contrast	Contrast	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		No Contrast																		
	4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Visually Unreachable by Pedestrian																		
	5.Rhythm	Rhythmic			v	v	v		v		v	v	v	v	v	v				
		No Rhythmic																		
	6.Scale	Human Scale	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Not on a Human Scale																		
	7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Disproportionate																		

Case Object Number :	The Criteria of Facades Appearance	Activity			Function			Space			Form				Value			Time		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
	1.Geometry	Square	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Triangle																		
		Circle												v						
		Linear													v					
	2.Symmetry	Symmetrical	v			v	v													
		Asymmetric																		
	3.Contrast	Contrast	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		No Contrast																		
	4.Depth	Visually Reachable by Pedestrian	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Visually Unreachable by Pedestrian																		
	5.Rhythm	Rhythmic	v			v	v				v		v	v						
		No Rhythmic																		
	6.Scale	Human Scale	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Not on a Human Scale																		
	7.Proportional	Proportional	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	
		Disproportionate																		

Case Object Number : 15	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v		v		v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear								v		v		v		v					
2.Symmetry	Symmetrical	v			v				v		v				v	v				
	Asymmetric																			
3.Congtrast	Contrast	v	v		v		v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v		v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic	v	v		v		v		v		v				v	v				
	No Rhythmic																			
6.Scale	Human Scale	v	v		v		v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 16	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v		v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear										v		v		v					
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Congtrast	Contrast	v		v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v		v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic												v	v						
	No Rhythmic																			
6.Scale	Human Scale	v		v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v		v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 17	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square		v	v		v		v		v	v	v	v	v	v	v	v	v	V	
	Triangle																			
	Circle																			
	Linear										v		v							
2.Symmetry	Symmetrical		v	v																
	Asymmetric																			
3.Contrast	Contrast		v	v		v		v		v	v	v	v	v	v	v	v	V	V	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v		v		v		v	v	v	v	v	v	v	v	V	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v	v		v		v		v		v	v	v	v	v	v			
	No Rhythmic																			
6.Scale	Human Scale		v	v		v		v		v	v	v	v	v	v	v	v	v	V	
	Not on a Human Scale																			
7.Proportional	Proportional		v	v		v		v	v	v	v	v	v	v	v	v	v	v	V	
	Disproportionate																			

Case Object Number : 18	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square		v	v		v	v	v		v	v		v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear							v			v		v		v					
2.Symmetry	Symmetrical		v	v									v		v	v	v			
	Asymmetric								v		v		v	v	v	v	v	v	v	
3.Contrast	Contrast		v	v		v	v	v		v	v		v	v	v	v	v	v	v	v
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v	v				v		v		v	v							
	No Rhythmic																			
6.Scale	Human Scale		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v
	Not on a Human Scale																			
7.Proportional	Proportional		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	V
	Disproportionate																			

Case Object Number : 19	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square												v			v	v	v	v	v
	Triangle		v	v		v	v	v		v		v	v							
	Circle																			
	Linear												v	v	v					
2.Symmetry	Symmetrical		v	v					v		v	v	v	v	v					
	Asymmetric																			
3.Contrast	Contrast		v	v		v	v	v		v	v		v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v	v		v		v		v		v	v	v						
	No Rhythmic																			
6.Scale	Human Scale		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional		v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 20	The Criteria of Facades Appearance	Activity		Function		Space		Form					Value			Time				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
	The criteria of facade composition	Indicator																		
1.Geometry	Square	v		v		v	v	v		v			v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear												v							
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v		v		v	v	v		v			v	v				v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v		v		v	v	v		v		v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic																			
	No Rhythmic																			
6.Scale	Human Scale	v		v		v	v	v		v		v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v		v		v	v	v		v		v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 21	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear								v		v		v							
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic																			
	No Rhythmic																			
6.Scale	Human Scale	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 22	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear									v		v	v	v						
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic									v		v	v							
	No Rhythmic																			
6.Scale	Human Scale	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 23	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear										v		v							
2.Symmetry	Symmetrical		v									v								
	Asymmetric																			
3.Contrast	Contrast	v	v		v	v	v		v	v		v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic										v	v	v							
	No Rhythmic																			
6.Scale	Human Scale	v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v		v	v	v		v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

Case Object Number : 24	The Criteria of Facades Appearance	Activity		Function		Space		Form						Value			Time			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Elemen fisik yang dimilai																			
The criteria of facade composition	Indicator																			
1.Geometry	Square	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Triangle																			
	Circle																			
	Linear										v	v								
2.Symmetry	Symmetrical																			
	Asymmetric																			
3.Contrast	Contrast	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	No Contrast																			
4.Depth	Visually Reachable by Pedestrian	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Visually Unreachable by Pedestrian																			
5.Rhythm	Rhythmic		v				v		v		v		v		v		v		v	
	No Rhythmic																			
6.Scale	Human Scale	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Not on a Human Scale																			
7.Proportional	Proportional	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
	Disproportionate																			

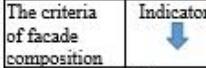
Case Object Number : 25	The Criteria of Facades Appearance Elemen fisik yang dimilai	Activity		Function		Space			Form					Value			Time		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
The criteria of facade composition	Indicator 																		
1.Geometry	Square		v	v		v	v	v		v	v	v		v	v	v	v	v	v
	Triangle																		
	Circle																		
	Linear														v	v			
2.Symmetry	Symmetrical		v	v		v		v		v	v	v		v					
	Asymmetric																		
3.Contrast	Contrast		v	v		v	v	v		v	v			v	v	v	v	v	v
	No Contrast																		
4.Depth	Visually Reachable by Pedestrian		v	v		v	v	v		v	v	v		v	v	v	v	v	v
	Visually Unreachable by Pedestrian																		
5.Rhythm	Rhythmic		v	v		v		v		v	v			v	v				
	No Rhythmic																		
6.Scale	Human Scale		v	v		v	v	v		v	v	v		v	v	v	v	v	v
	Not on a Human Scale																		
7.Proportional	Proportional		v	v		v	v	v		v	v	v		v	v	v	v	v	v
	Disproportionate																		

Image description:

- Internal space for business place.
- Front yard for business place.
- Internal space & front yard for business place.
- The door entrance (in ground floor).
- The shop window (in ground floor)
- Visual relation between pedestrians and business place (in ground floor)
- Visual relation between pedestrian and balcony.
- The appearance of shop entrance (ground floor)
- Solid
- Void
- The building facade crosses the border.
- Vertical looks of the building facade
- Horizontal looks of the building facade
- Use of ground floor for business place.
- Window shopping appearance
- Display window appearance.
- Signage appearance.
- Prevention of heat/glare effects of excessive afternoon sun.
- Lighting in internal ground floor space.

IV. CONCLUSION

Understanding the appearance of "Ground Floor Pedestrian-Friendly Facades" along Haji Senin Street can be done through the approaches of: 1. Activities, 2. Functions, 3. Space, 4. Form, 5. Value, and 6. Time.

The activity approach as a way to see the facade based on the type of activity in the business space on the ground floor includes the main activities, selected activities, and mixed activities (main and mixed activities).

The functional approach as a way to see the facade in terms of the function of space in the business space on the ground floor based on the level of privacy includes rooms with more privacy and rooms with less privacy. The private space is usually a business space which is kept away from noise, visual, and air temperature outside.

The spatial approach as a way to see the facade based on public visual view space (PVVS) that can be reached visually by pedestrians includes:

The shape approach as a way to see the facade based on the appearance of the shop entrance (in the ground floor) includes solid, voids, facades of the building that crossed the building border, the vertical and horizontal appearances including the rhythm of the doors, windows and area of the building's facade that crosses the building border.

Based on the analysis of the dominant facade composition based on the "Ground Floor Pedestrian-Friendly Facades" performance criteria (see table 1) it was found that:

The facades appearance is dominated by the main activity criteria with the appearance of the facade composition which is dominated by square, asymmetric, contrast, rhythmic, human scale, and proportional form.

The appearance of the facade is dominated by the criteria of low-privacy space functions with the appearance of the facade composition which is dominated by square, asymmetric, contrast, visually reachable for pedestrians, no rhythmic, human scale, and proportional form.

The facade appearance is dominated by "Direct Public / Private Interface" public visual view (PVVS) criteria with the appearance of the facade composition dominated by the space between the road and the business place on the ground floor dominated by square, symmetric, contrast, visually reachable for pedestrians, no rhythmic, human scale, and proportional form.

The appearance of the facade is dominated by the criteria for the shape of the building facade's elements (doors, windows and walls) whose placement crosses the building border and the arrangement is leaning horizontally with the appearance of the facade composition which is dominated by square, asymmetric, and contrast form which is visually reachable for the pedestrians, and the shape of the door, the rhythmic window, the area of the building's facade crossing the border of the building without rhythm, human scale, proportional form.

The appearance of the facade is dominated by the economic value criteria of the use of space on the ground floor as a place of business, display of "window shopping", appearance of "window display", display of the shop / stall name (signage) with the appearance of the facade composition which is dominated by a square, asymmetric, contrast form that is visually reachable for pedestrians without rhythmic (window shopping, window display, signage) and proportional form.

The appearance of the facade is dominated by the 'looks of the hour' criteria including the "prevention of excessive afternoon sunlight" looks, "artificial lighting" looks at night with the appearance of the facade composition dominated by no geometric elements, asymmetric, contrast form that is visually reachable for pedestrian, without rhythmic, human scale, proportional form.

Overall, the facade composition of each facade appearance criterion along Haji Senin Street is dominated by square, asymmetric, contrast form that is visually reachable for pedestrian without rhythmic, human scale, proportional form. (See table 3).

Table 3. The dominant facade composition through the facade appearance approach as a whole object of study.

The criteria of Facades Composition ↓	The criteria of facades appearance ➡	Activity	Function	Space	Form	Value	Time
Geometry: Square		V	V	V	V	V	V
Symmetric							
Asymmetric		V	V	V	V	V	V
Contrast		V	V	V	V	V	V
Visually reachable by pedestrian		V	V	V	V	V	V
Rhythmic		V	V		V	V	
No rhythmic				V	V	V	V
Human scale		V	V	V	V	V	V
Proportional		V	V	V	V	V	V

ACKNOWLEDGEMENTS

We would like to thank to villagers in along Haji Senin Kampung Kemanggisan and Government of Palmerah District which has allowed to use their area as a place of research.

REFERENCES

- [1] Budihardjo, E. *Sejumlah masalah pemukiman kota* (Bandung: Alumni), 1992.
- [2] Ala, I. et al. *Super kampung* (Jakarta: Jurusan Arsitektur Untar), 2012.
- [3] Wulandari, D.W. Mori, S. Characteristics of the spatial structure of kosts private rental housing *Journal of Asian Architecture and Building Engineering*, 13, 2014, 309-316 <https://doi.org/10.3130/jaabe.13.309>
- [4] Wulandari, D.W. Mori, S. Nature and operation of kost private rental housing in urban settlement development of Jakarta, Indonesia *Journal of Civil Engineering and Architecture*, 9, 2015, 1362-1369 <http://doi:10.17265/1934-7359/2015.11.011>
- [5] Salura, P. The confusing language of building facades observed along ciumbuleuit road in bandung *Journal of LANGUAGE AND LITERATURE*, 4, 2015, 101-105 <https://www.academia.edu/9900942/07.2015>.
- [6] Shirvani, H. *The urban design process* (USA: Van Nostrand Reinhold Company), 1985.
- [7] Dinas Perumahan Provinsi DKI Jakarta. Perumahan permukiman di DKI Jakarta, permasalahan perkampungan kota. <http://Jakartapedia.bpadja.2006>.
- [8] Menteri Pekerjaan Umum. *Peraturan Menteri Pekerjaan Umum No.6/PRT/M/2007*. (Jakarta : Dirjen Cipta Karya Departemen Pekerjaan Umum), 2007.
- [9] Sastra, M.S. *Inspirasi fasade rumah tinggal* (Yogyakarta: ANDI), 2013.
- [10] Pasaribu, R.P. Siahaan, U. Tobing, R.R. Re/produksi ruang interaksi sosial berbasis kegiatan perdagangan dalam kampung kota di sekitar kampus *Jurnal AGORA*, 16, 2016, 52-59 <http://dx.doi.org/10.25105/agora.v16i1.3211>
- [11] Pasaribu, R.P. Siahaan, U. Tobing, R.R. Commodities space for social interaction space in the kampung around campuses at Jakarta. *Journal of Architecture&ENVIRONMENT*, 16, 2017, 113-132. <http://dx.doi.org/10.12962/j2355262x.v16i2.a3195>
- [12] Mulyana, E. *Karakteristik kampung-kota di sekitar perguruan tinggi*, magister thesis, (Indonesia: Program Studi Perencanaan Wilayah dan Kota-SAPPK Institut Teknologi Bandung) <http://pwk.lib.itb.ac.id/index.php/bibliografi/detail/21481>, 2016
- [13] Tyaghita, B. Utami, W.N. (2018). Public/private interface dan pengaruhnya pada livability kawasan perimeter Universitas Brawijaya dan UIN Malang *Jurnal AGORA*, 16, 2018, 1-13 <http://dx.doi.org/10.25105/agora.v16i1.3206>
- [14] Creswell, J. *Penelitian kualitatif & desain riset* (Yogyakarta: Pustaka Belajar), 2014.
- [15] Yin, K.Y. *Studi kasus* (Depok: Rajawali Pers), 2014.
- [16] Gehl, J. *Cities for people* (London: IslandPress), 2010.
- [17] Paul, C.A. *The ashgate research companion to media geography* (England: Ashgate), 2014.
- [18] Darjosanjoto, E.T.S. *Penelitian arsitektur di bidang perumahan dan permukiman* (Surabaya: itspress), 2006.
- [19] Knox, P. Pinch, S. *Urban social geography* (New York: Prentice Hall), 2010.
- [20] Haryadi, S.B. *Arsitektur lingkungan dan perilaku* (Yogyakarta : Proyek Pengembangan Pusat Studi Lingkungan Dirjen Dikti Depdikbud Republik Indonesia,) 1995.
- [21] Gubernur DKI Jakarta. *Master plan of Jakarta 1965-1985* (Jakarta; Pemerintah DKI Jakarta), 1965.
- [22] Hoed, B.H. *Semiotik & dinamika sosial budaya* (Depok: Komunitas Bambu), 2014.
- [23] Agustina, A. *Transformasi kampung betawi asli Rawabelong di periferi Jakarta* (Jakarta: Pusat Studi Metropolitan Universitas Tarumanagara), 2015.
- [24] Freeth, M. et al. (2018). Visual engagement with urban street edge *Journal of Urbanism*, 12, 2018, 259-278 <https://doi.org/10.1080/17549175.2018.1552884>
- [25] Gayatri, P. et al., Karakter visual fasade bangunan kolonial Belanda rumah dinas BAKORWIL kota Madiun *Jurnal arsitektur NALARs*, 13 (2), 2014, 99-112. <http://jurnal.umj.ac.id>
- [26] Fajarwati N.A. *Pelestarian bangunan utama eks rumah dinas residen Kediri Arsitektur e-Journal* 4(2), 85-105, 2011
- [27] Bentley, I. et al. *Lingkungan yang tanggap pedoman bagi perancangan* (Bandung: Abdi Widya), 1988.
- [28] Rapoport, A. *Human aspect of urban form* (New York ; Pergamon Press), 1977, 19.
- [29] Dovey, K. Wood, S. Public/private urban interface : type, adaptation, assemblage *Journal of Urbanism*, 8 , 2015,1-16 <http://dx.doi.org/10.1080/17549175.2014.891151>
- [30] Gehl, J. et al. Close encounters with buildings *URBAN DESIGN International*, 11, 2006, 29-47 <http://doi.org/10.1057/palgrave.ud.9000162>
- [31] Hassan, D.M. Ground-floor façade design and staying activity pattern on the sidewalk *Ain Shams Engineering Journal*, 2019, 1-9 <http://doi.org/10.1016/j.asej.2018.12.006>
- [32] Krier, R. *Elements of architecture* (London : St. Martin Press), 1983, 61-66
- [33] Ching, D.K. *Architecture : form, space and order*, (New Jersey : John Wiley & Sons), 1979.