Abstract—Pada Basically, humans still need physical help in determining their daily activities such as direction and existence in an environment. This is the background in researching signs as a facility that is able to provide assistance in the form of information about a human environment, especially in the public area as an area that is used by many people. Tarumanagara University Campus I was chosen as a case study in this study as one example of research relating to signs in a public area that refers to the need for signs as pedestrian directions and location identifiers. This research consists of several fundamental theoretical foundations for things that need to be considered in making signs and their existence so that their goals can be achieved. The final results of this study will be known to what extent the signs are used and useful for users of Tarumanagara University Campus I area with the aim of providing input to relevant parties and those in need in terms of signs for campus public areas.

Keywords: sign, directions, location, identification, pedestrians

I. INTRODUCTION

Basically the public space used by many people is a community that combines space building, environmental area, and human as its users. The relationship between the physical form of an environment to humans must establish communication and interaction so that the purpose of forming an area can be useful. However, the community cannot be interwoven well if the lack of a sign system is a public tool so that the interaction of the three components can occur. It is difficult to imagine if an area with several areas but does not have a good sign system it will cause people to have difficulty in determining the direction of the goals to be achieved and information in the area.

Based on semiotics signs for pedestrians have a certain meaning based on human experience [1]. Therefore this sign system is often used as a giver of information in public spaces is signage. The purpose of signage use in an area is to provide information clearly and understand the area where a person is located. Basically, each person needs direction of travel paths and regional information.

A well-known university in Jakarta, Tarumanagara University Campus I, is one of the largest universities in Jakarta which has a land area of 32,051m² and a building area of 115,487m² (Tarumanagara, n.d.). In such a large area, it certainly requires signage as a communication tool to increase the effectiveness of human activities as users of the area. For this reason, the researcher will analyze the signage facilities in the Tarumanagara University I case study by describing the
conditions in the field and analyzing them based on the theory summary parameters and signage standardization. The results of this study can be taken into consideration in the hope that it can improve signage facilities in the public area in order to achieve maximum regional information effectiveness.

II. MATERIALS AND METHODS

A. Kajian pustaka

Semiotics (semiotics) is a word derived from the Greek "semeion" which is a sign. These signs convey a communicative information so that they can interpret something else with a sign (stand for something else) that can be thought of or imagined. According to Aart van Zoest [2] three flows appear in semiotics namely:

1. Communicative Semiotic Flow: a sign is part of a communication process as a sign used by the sender and recipient of the sign with the same meaning (similarity of understanding).

Based on the expertise of the sign, Roland Barthes stated that a sign has two meanings, namely: connotative and denotative. The connotative defines the sign as a figure of speech, while denotative gives the true meaning of a sign [3].

2. The connotative flow of semiotics: the sign is interpreted by using a figure of speech.

3. Expansive flow of semiotics: further development of connotative semiotics so that the meaning of a sign is fully related to the meaning given.

According to Jacques Havet [4], the formation of a sign (semeion) is a result of the relationship between "signifier" (giver sign / semainon) and "signified" (meaning intended / semainomenon) [4].

Zoest [2] divides the sign into three types, namely:

1. Qualisign: a sign as a sign that means its nature.
2. Sinsign: sign into a sign based on the original form, translate an event and authenticity.
3. Legisign: a sign that is a sign because of certain rules.

An expert on "signs" namely Peirce also explains that signs have the following meanings:

1. Icon: a sign that represents a form object with the same characteristics that you want to convey. Which become
2. Index: a sign with properties that depend on the existence of a denotatum (marker), is related to the causation of an object.
3. Symbol: a sign that is formed by certain rules so that it becomes a known information in general.

Signs / directions are a facility in a building and public area that functions as a provider of information about directions to users of public areas to make it easier to travel to other places within the area. Location recognition signs are a facility that functions as a message provider to provide identity recognition for a particular area. [5]

General provisions and conditions in determining the signs to be used in a public area will be described as follows: [5]

1. Material selection
   - Endurance from damage caused by humans or animals.
   - Using materials that are weather resistant.
   - The color of the material does not easily wear off or change.
   - Resistant to scratches that damage information or images become invisible.
   - Has a minimum material thickness of 0.08 mm

2. Adjustment of changes and additions
   Signs on buildings need to pay attention to changes in the layout of locations in an area with consideration of material and installation to make it easier when changes occur.

3. Easy to read and informative
   The ease of reading and understanding the signs by paying attention to the type, size, space, position, color and background of the writing. Submission of messages must be concise and clear.

4. Ethics
   Making signs must pay attention to courtesy / ethics in conveying messages in the form, symbol or meaning of language.

5. Aesthetics
   Making signs must consider an attractive appearance by referring to the existing graphic guidelines.

6. Maintenance
   Maintenance and maintenance is carried out regularly so that the function of the signs can be maintained.

7. Placement of signs
   - The signpost is not blocked by foreign objects that can block the view.
   - Does not cause visual disturbances to other signs around it.
   - Located in the area of a crossing or a long hallway with clear information.

8. Installation of signs
   Signs are installed with a height of 240cm from the
floor surface that is adjusted to the state of architecture in the area.

B. Methods

Based on the explanation of the theory above, the researcher summarizes these theories into a measuring parameter to sign directions and area information in table 1.

Table 1. Parameters used to review the criteria for pedestrian directions and location identifiers at Tarumanagara University Campus I

| Nu | Category          | Indicator                                                                 |
|----|-------------------|---------------------------------------------------------------------------|
| 1  | Material          | The shape and color are resistant to damage to living things and weather.  |
|    |                   | Has a minimum material thickness of 0.08 mm.                              |
| 2  | Flexible          | Signs on buildings need to pay attention to changes in the layout in an area with consideration of material and installation to make it easier when changes occur. |
| 3  | Informative       | Submission of messages is easy to read and understand.                    |
| 4  | Ethics            | The form of symbols and the language used must be polite and ethical.      |
| 5  | Aesthetics        | The sign design attracts attention and is supported by sufficient lighting. |
| 6  | Maintenance       | Maintenance and maintenance is carried out regularly.                     |
| 7  | Placement of signs| The instructions are not obstructed by foreign objects that can obstruct the view. |
|    |                   | Does not cause visual disturbances to other signs around it.              |
|    |                   | Located in the area of the junction or long hall with clear explanations.  |
| 8  | Installation of signs | Signs are installed with a height of 240 cm from the floor surface that is adjusted to the state of architecture in the area. |

Sumber: Rangkuman Peneliti, 2019

The results of the survey location survey data collected are then analyzed by comparing the field conditions with the parameters summarized in table 1. Then a conclusion is drawn that explains the analysis of the directions and location identifiers for pedestrians in the public area.

C. Study Case

This research was conducted at Tarumanagara University Campus I located on Jalan Letjen S.Parman No.1, Grogol Petamburan, West Jakarta. The researcher chose this Tarumanagara University area because it is an area with several buildings that are quite extensive, namely 32,051 m2. Signage as information on location information and road guidance are limited to certain areas, namely on the ground floor of the Tarumanagara University area.

Figure 1: Plan of Tarumanagara University campus I

III. ANALYSIS

A. Presence of signs

Analysis of signpost research on the ground floor area of Tarumanagara University Campus I will explain about the field conditions related to designs and information:
In the campus entrance area, there is a direction for pedestrian directions with a relatively good design so that it is easy to understand. Information on building name information is clearly stated on each front of the building to facilitate the location of the surrounding people, but in the canteen area and direction of the parking lot there is a lack of information on outdoor location information, the location is actually not very visible from the outward direction.

Direction for road direction to certain parts of the area lack information on road directors such as direction to lift, stairs, certain building functions. Location information is in certain areas that are common but for special are is rather difficult to achieve.

**B. Materials**

The use of materials in signs at Tarumanagara University Campus I for building information uses materials that are able to withstand the weather and last long time. The material used is iron and stainless for outdoor signs placed in outdoor areas exposed to sun and rain.

This signs is used to mix road markers and directions to enter campus area.

**C. Flexible**

The shape design of signs in public area is quite flexible and easy to change and move because of the signs use stand-alone foot poles so that they are easy to move. But for some signs placed on the walls of the building so that they cannot be replaced easily or moved.

**D. Informative**

The use of language and symbols on signpost is quite clear with sizes and colors that are easily visible and legible.

**E. Ethics**

Use of good and polite language on signs with the language that do not offend or with symbols that seem negative.

**F. Aesthetics**

The shape of the sign on location information and road guide has a good design and is easy to read.

**G. Maintenance**

The treatment at the sign at Tarumanagara University Campus I still has good color and shape so that it continue to provide the information needed.

**H. Placement**

The location for placing information signs and area information seems inadequate. In certain areas, there is no information displayed on regional facilities so it is quite difficult to understand the function of a building facility. Information is only limited to the name of the building and the division of the faculty from each building. Adverb placement in the direction of the road and direction is not enough so that visitors often find it difficult to reach the area objectives to be achieved.

**I. Installation**

Installation of signs is easily visible from a normal distance and with the number of signs that are visible. Besides that, the installation of signs is safe and does not interfere with other the function in an area.

Based on the explanation of the data above, the signalling facilities at Tarumanagara University Campus I area will be analysed as follows:
Table 2: Analysis of pedestrian directions and location identification signs at Tarumanagara University Campus I

| No | Category | Indicator | Note |
|----|----------|-----------|------|
| 1  | Material | The shape and color are resistant to damage to living things and whether | Ū |
|    |          | Has a minimum material thickness of 0.08 mm | - |
| 2  | Flexible | Signs on buildings need to pay attention to changes in the layout of location in an area with consideration of material and installation to make it easier when changes occur | Ū |
| 3  | Informati-ve | Messages is easy to read and understand | Ū |
| 4  | Ethics    | The form of symbols and the language used must be polite and ethical | Ū |
| 5  | Aesthetics | The sign design attracts attention and is supported by sufficient lighting | - |
| 6  | Maintenance| Maintenance is carried out regularly | □ |
| 7  | Placement of signs | The signpost is not blocked by foreign objects that can block the view | □ |
|    |          | Do not cause visual disturbances to other signs around it | □ |
|    |          | Located in a long junction or aisle area with clear | - |
| 8  | Installation of signs | Signs are installed with a height of 240 cm from the floor | □ |

Source: result of the author’s analysis, 2019

Based on the table above, out of 11 criteria indicators, there are 3 of them that have not been reached while 8 of them have been reached.

IV. CONCLUSION

Based on the result analysis, the directions and locations identifiers for pedestrian at Tarumanagara University Campus I are still good and meet the criteria based on these indicators. Of the 11 indicators, only 3 did not reach the criteria based as an assessment parameter. This category that has not been achieved has to do with the procurement of sign and design signs that do not meet some parts but there are no significant shortcomings. It is expected that this research can be used as a consideration for the development of signs in the public area.

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