

SEMIOTIC & PERCEPTION OF WAY FINDING AMONG YOUNGER CONSUMERS

Nurul Wahidah Mahmud Zuhudi¹

Universiti Malaysia Kelantan

¹ wahidah.mz@umk.edu.my

Diyana Ahmed Ghazie²

Universiti Malaysia Kelantan

² diyana.ag@umk.edu.my

Jasni Dolah³

Universiti Sains Malaysia

³jasnidolah@usm.my

ABSTRACT

The purpose of the research is aiming to recognize proper design systems of way finding in Malaysia. The idea is to determine the perceptions of younger consumers is associated with the multi-combinations design of way finding been applied in Malaysia now days, been affected with their demographic profiles or flexibility of psychology aspects due to their emotions and feeling and its connection with spatial space and environment. A survey in gaining perceptions based on the design differentiation of way finding was conducted among youngsters, resulted with many kind of clues, ideas and semiotic perspective of way finding and its improvement. It was associated with 100 younger consumers (20 aged – 25 years old). Participants been explained with the basic knowledge of way finding in Malaysia and responded with the question given. It resulted with a conclusion that there are many issues and critical concern related with our design system of way finding, 56 of young consumers claimed that its friendly user, give some suggestion that by using text and its application is suited to enhance meaning of way finding in Malaysia. Furthermore, the improvement of the systems will be able to increase the good feelings of peoples. Association of 100 young consumers (male: 28, female=72) were been asked to respond on survey questions, they been exposed with different design systems of way finding in Malaysia and assortment of perceptions been gathered. The practicality of semiotic knowledge, beneficial impact of it, in relation with cognitive mapping been performed during the session. Findings revealed with many kinds of clues on the way their doing an interpretation of design system of way finding in Malaysia. The crucial impacts gathered is directly coming from the approach of way finding been applied, resulted with 56 participants claimed that the way finding design system is friendly user, contributed to relevant recommendation to use text and its application to perceive meaning of location and direction, proven by 35 participants out of 100. Significantly, the research will indicate many kinds of good perceptions on the usage of semiotics understanding with relevant way finding in Malaysia. By having a helpful and identification signage design systems, it's able to reduce frustrated feelings, confusions, tiredness, stress, and illness and save times during navigating to preferable location.

Key Words

Signage design system, Semiotic, Perception, Way finding, Younger consumer, User friendly, Text, Frustrated feelings.

INTRODUCTION

Way finding functions is to inform consumer surrounding either indoor environment or outdoor environment. It is important to show information at any strategic to guide consumer. Complex structures in the way finding are interpreted to wrong understanding to consumer mind memory. Distances, locations, symbol, sign, colour and time may be remembered differently than reality. Finding a way also is another issue to consumer who are new to the place they go. Way finding

system is part of the decision making process in selection their own route and path. Very often consumer rely on hands free kit etc. maps, brochure and road signage. In the end, if they fail to reach their designate area within their time, this will cause of frustrations and unhappy experience. Salvatore Zingale (2016) clarified that, environment we live now a days populated by all sorts of sign, commercial signs, notices, lights and decorations. We can see the application was on the road sign, building environment like stations, offices, hospital, etc. It says that signage can help consumer to find their ways but not with complex or large facilities on it (Dogu & Erkip, 2000), caused that, they might be able to get some aids during navigating. According to Lauren H.Mandel (...) there is other way to assist way-finding tools such as maps, signs, architectural cues and verbal assistance. There are good recommendation coming from Reinlambrichts (2014), way finding involves four stages which are location; route decision that guide direction, route decision; well plan destination to reach, route monitoring; to make sure route selection is in the right direction and last is destination recognition; where by the destination is reach at the right time and right place.

1.1 Semiotic

Semiotic or semiology, first emerged in early 1900, cited at olinda.com (2000) by Werner Hammersting. Ferdinand de Saussure defined that concept of language is the system of mutually defining entities. Saussure stated that, a sign is made up of two parts, the SIGNIFIER and the SIGNIFIED. According to dictionary.com semiotic is the element of communicative behaviour via language, gestures, clothing or etc. In other theory semiotic is a sign and symbolism of pragmatics, semantic and syntactic.

1.2 Perception

Definition of perception is more on act or awareness of something through sense. In other description, perception is the process whereby people translate sensory of impressions into a coherent and unified view of the world around them. Example; the perception of many was that the speech given by Reverend Doctor Martin Luther King Jr was solely advocating for racial equality and justice (cited at businessdictionary.com)

Many general thought raise based on the practicality of symbol or shape, colour and its purpose to give direction which lead to the way of young consumer perceive and stimulate the meaning. According to Allison McCartney (2014), perception towards way finding design is people read shapes not letters. The shapes that they play around is the size of typography where by they used a mixed of capital and lower-case letters (tittle case) that facilities quick reading and understanding from far. Besides using the words on the way finding design, which tell consumers what to do and where to go, the colour, shape and position of the way finding expedite the communication process as well.

Way finding is part of people's daily lives. Every where we go we will have to find our ways through cities, through buildings, streets, highways all by refer to the road sign or way finding. Martin Raubal stated, perception of way finding focus on the exploration of mental representations rather than the information needs for way finding. According to Martin, in many cases people find it difficult to perform way-finding tasks in an unfamiliar environment because they are not provided with adequate knowledge. They either lack sufficient way finding information or their architectures are badly design and therefore not readable. And because of that, people will feel stressful when one gets lost either in an airport, a large building, or on a university campus.

1.3 Consumers

The definition of consumer is an individual who buys products or services for personal use and not for manufacture or resale. A consumer is someone who can make the decision whether or not to purchase an item at the store and someone who can be influenced by marketing and advertisements. Any time someone goes to store and purchase a shirt, book or anything else they

are making that decision as a consumer. Alison Smiley decided to say, the relation between consumer and way finding is the sign need to be located so that they are clearly visible to roadway users. Example if the location of the sign is at the highway, it need to be located on the driver's line of sight, preferably on the right hand side of the road, where drivers expect to find signs. It is important the sign need to be in contrast colour with the background against which the driver can see it clearly.

LITERATURE REVIEWS

Definition of Way Finding

Way finding or road sign or also can be known as signage can be referred as information systems in order to guide consumer through physical environment. By using way finding, it can enhance consumer understanding and experience of the place or location, especially in complex built environments such as urban centre, health care, educational campuses and transportation facilities. Because of architectural environments became more complicated, consumer need visual aids such as map, directions and symbols to help guide them to reach their destinations. In these high-stress environments, effective way finding systems contribute to a sense of well being feeling, friendly user, safety and secure. In other word, way-finding function is to show information at strategic points, which is to guide consumer into the right directions. Mostly, design system of way finding is according to human behaviour; where by the characteristics of the sign must be clearly consist visual communication system and concise message where consumer does not need to think further. Clarification of information should remain with the simple elements, avoid unnecessary parts, and show what is needed to describe in relevant to the space, location or navigation path. To make way finding works and easier for consumer, do not forget about these characteristics; landmarks, orientation, navigation. Landmark; can be created by using art objects, buildings, street art, way finding signs or striking elements in landscape. These elements combined will shape the identity of an unknown area as seen from own perspective. With the use of landmark and marking elements an area will become more visible and will be easy to understand in human memory. Orientation; in order to navigate, the most important things to understand is need to know where are the build environment and where other destinations are located. Preferable it is good to know the distance in time from place to another. This is where maps are common used to indicate the location. Navigation; is the physical reference to a particular area, setting or destination. By using a static sign consumer will be guided along their path towards destinations.

2.1 Way Finding Design

Creating a signage system for an area, building or architectural structure, it is essential to develop a strategic way finding system, which will help to build a modular way finding system that will adapt to the build environment and the consumer expectations for orientation and navigation purposes. In doing way-finding system, research is an important to understand the build environment, problem, what information needed in the system. There is four important types of signs need to remember: information signs, directional signs, and identification signs, warning signs. To make a signage design system work appropriately, a design grid is used to order to deliver information and to scale the signs to different sizes, etc. Do not need to put information into one sign, this will not help it will make things come worse, easily over looked and hard to deliver.

2.2 Way Finding (Signage) Typeface

Typeface that usually used in signage is sans-serif with a simple easy to read and straightforward design. When using this type of typeface its actually help consumer to be more understand and easy to read. Therefore, the choice of a signage typeface is one of the key factors in order to make a way finding system work. When selecting a typeface for a signage there are few important things need to follow; a clear straightforward type design, san serif, easy to recognizable letterforms, type weight,

spacing and using X-height for good readability.

2.3 Way Finding (Signage) Power Of Colour

In way finding (signage) design, colour is the combining factors to harmonize the sign with the environment. Colour used wrongly though can create confusion and have the opposite effect to the direction that consumer looking for. Colour that work well together improve consumer experience and readability of a sign, no matter what language it is in. Colour also will allow signage to be fit for its environment, especially in specific or traditional area. For signage, the design colour and contrast should blend in well with its environment and careful consideration should always be given to ensure colours are optimal for reading at a distance and at a different angles. For example colour text on bright background, will cause a high contrast and make the word disappear. Some experts even believe that taking light reflectance reading using a scientific approach can assess suitable colour contrast.

2.4 What Is Semiotic

Semiotic or semiology first emerged in early 1900 Werner Hammersting cited at olinda.com (2000). Ferdinand de Saussure defined that concept of language is the system of mutually defining entities. Saussure stated that, a sign is made up of two parts, the SIGNIFIER and the SIGNIFIED. Signifier is where the image or sound conveys meaning and communicate, where by signified is refer to the meaning it conveys. Example, when we see a different genders icon at restroom, we will automatically know how to react with them. We know without even think about it. This type of icon actually has been established long time ago, which we learn during our child's time. For Saussure, language itself makes meaning rather than simply conveying meaning. This meaning making is why the theories of Saussure have become important to literary theory. When people understand the language is a sign system and not just a naming of objects, people read and discuss literary works differently. And from that, people able to analyse the various meanings embedded in a text and how one text influence another. In semiotic, sign don't only need to be visual, they can be aural and sonic signs too, such as the sound of an ambulance siren, usually heard before the vehicle is seen. While according to Charles Sander Peirce, semiotic theory relate with relationship of symbol, icon and index. The understanding of all items been applied with good collaboration and compliments to each other. The interpretation been made is accordingly coming from perceptions of human, themselves and changes will be happen due to their attitude, location, or demography characteristics.

2.4.1 Signs Function

A sign can be defined as anything that can be used to stand for something else, but understanding how signs function is somewhat complicated because according to Peirce and his semiotic theory, there are always "others" involved. Something, which stands to somebody for something in some respect or capacity. (1977, p.27).

2.4.2 Icon, Index, Symbol

In Peirce theory of semiotics there are three kinds of signs; icon is communicate by resemble, index; communicate by logical connection and symbol; communicate by purely conventional and whose meaning have to be learned.

2.4.3 Denotation

Denotation generally defined as literal or dictionary meanings of a word in contrast to its connotative or associated meanings. Example word 'rose' in a dictionary, people will see it as a type of flower but in literature it referred to as a symbol of love.

2.4.4 Connotation

Connotation refers to a meaning of feelings or idea that is suggested by a particular word although it

need not be a part of the word's meaning, or something suggested by an object or situation. For example, the words youthful, childish or childlike have the same denotative but different connotative meanings. Childish and childlike have a negative connotation as they refer to immature behaviour of a person. Whereas, youthful implies that a person is lively and energetic.

Semiotic And Way Finding Possibility

Built environments have varying levels of way finding ease, and low levels of way finding ease matter because difficulty in way finding leads to stress and frustration, functional inefficiency, inaccessibility, and poor safety. When individuals are lost or disoriented, they blame themselves, feel stupid, frustrated, and anxious, and they can be angry or resent the environment because of the difficult situation the environment has put them in. Understanding the meanings way finders infer from way finding tools is critical to design facilities that can be navigated more effectively and efficiently. This would be possible through research that attempted to understand semiotically which meanings architects, interior designers, and other experts ascribe to way finding tools and how this matches or differs from the meanings way finders infer from the tools. Understanding this difference may lead to the design of way finding tools based on users' pre-existing notions of the meaning(s) of environmental symbols, decreasing feelings of looseness, frustration, and anxiety and increasing user satisfaction with a given built environment. According to Saussure explanation the sign is a two-sided psychological entity that unites concept (or signified) with sound-image (or signifier) by having signified and signifier recall each other (Raber, 2003). Saussure's semiotics requires an intentional purpose of the sign, identifies the arbitrary nature of the relationship between signifier and signified in the sign, and necessitates that explanation of meaning be accomplished within the context of society (Culler, 1986). It is important for way finding research to rely on Saussure's semiotics rather than Peirce's since way finding signs must have intentional meaning in them, the meaning of location and direction (sign), expressed through the unification of arrows or words (signifiers) and content or language (signified). The meaning of a way finding sign is not inherit to the sign or static and it may not cross societal boundaries According to Saussure any sign system must be part of community because value exists only within the community (i.e., not before it, outside it, or within its individual members) (Saussure 2006). This means that any semiotic analysis of way finding signs must occur within a given society, it must take account the context of that society and may not be generalizable outside that society.

PROBLEM STATEMENTS

Way finding should be a part of the tool in decision-making or solution that lead to help people's surroundings to find their navigation place. Apart from that, the good way finding should be able to communicate the effective direction, having some initial relationship and connection with space or environment. The person's spatial behaviour will capture the overall image of the location, and this process is linkage with cognitive mapping describes with people's capability to visualize the place or location. Some issues of way finding should be revealed as it lead to bad experience to consumers or travellers that might having some wrong interpretation due the inaccuracy usage of graphic elements such as colour and symbols. Consumers might able to get lost once all the visual doesn't lead to solve location- based problems. For example, a visitor who has first experience with the hospital area, will much depending to the way finding once entering but if they lack of knowledge and information, nothing will looks familiar, and if they try to navigate by their own without asking people, maybe will lead to great confusion, waste times during navigating and frustrating. Carpman and Grant (2001) discovered that, "It is important to consider that way finding problems have their own particular cost in the healthcare environment. Stress caused by disorientation may result in feelings of helplessness, raised blood pressure, headaches, increased physical exertion, and fatigue. In addition, patients may be affected by the way finding troubles of visitors who, because they became lost, may have less time to spend with patients."

METHODOLOGY

Procedure and Participants

Association of 100 young consumers (male=28, female=72) were been asked to respond on survey questions, it was performed by exposing the different design systems of way finding in Malaysia, reflecting with location, spatial environment, understanding of semiotic elements such as icon, symbol, index, denotation and connotation (refer figures 1 below). Therefore, participants need to make their own observation, lead to meaning differentiation, based on individual conditions. The information of semiotics, and its complementary elements been discussed further, with intention to increase the knowledge and awareness of participants based on topic, the some helps of stimulation of cognitive mapping on how to deal with meaning interpretation.

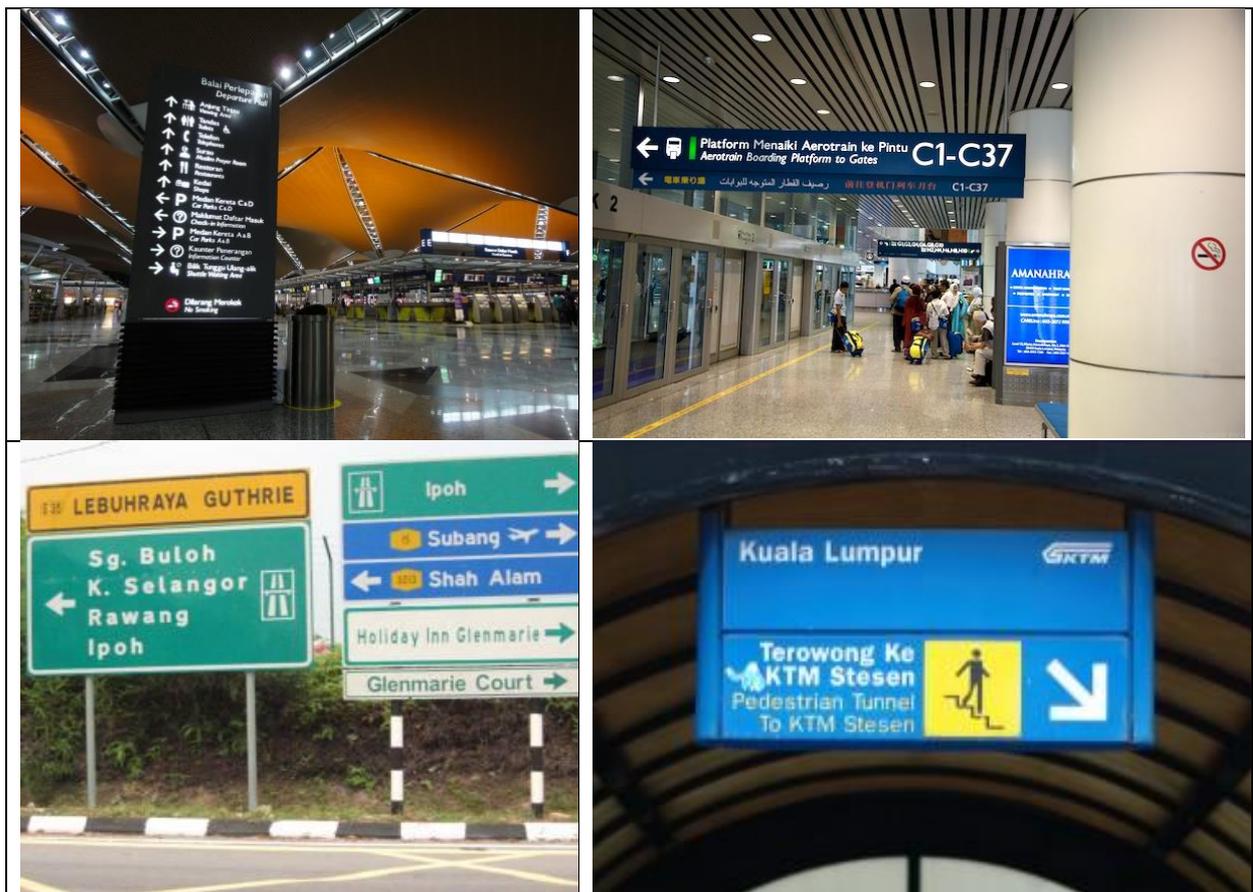


Figure 1: Differentiation of Design System in Malaysia

RESULTS & DISCUSSION

The way peoples interpreting any kind design of signage is reflecting with the way they able to recall the memory of codes, signs, icons, in relation with locations and spatial area. The understanding of cognitive mapping been applied through out of research. Cognitive mapping is "... a process composed of a series of psychological transformation by which an individual acquires, codes, stores, recalls and decodes information about the relative locations and attributes of phenomena in his everyday spatial environment." (Downs & Stea, 2005: 9). It concerns a spatial cognition: how we think about space; and how people learn and use spatial information about environment. We notice that our memory has to integrate spatial information with non-spatial information (Garling & Evans, 1984). Cognitive mapping has been used in three different behaviors:

- i- A descriptive title for studying how people learn and remember spatial information about an environment.
 - ii- A descriptive phrase for the process of thinking about spatial relations.
 - iii- A descriptive name for understanding cognition in general.
- (Kitchin & Freundschuh, 2000)

It has been a basic principle to use the mapping when dealing with internal manners. They are internal representations or models of the world in which we live (Portugali, 1996). "The stronger a mental map we have, the more confident we are about walking to our destination and exploring new areas on foot" (Transport for London, 2007:15). Kitchin has produced a collection of phrases in literature review related to spatial representations including abstract maps (Hernandez 1991); cognitive images (Lloyd 1982); cognitive maps (Tolman, 1948); cognitive representations (Downs & Stea, 2005); cognitive schemata (Lee 1968); environmental images (Lynch 1960); mental maps (Gould 1966; Gould & White 1974); topological representation (shemyakin 1962). The synonymous terms is referring for internal spatial representation of environmental information. The purpose of the survey is to examine the response of way finding in Malaysia among young consumer. The survey contains 2 sections; section A is more in gaining a feedback and response on how they perceive the design of way finding in Malaysia. While section B concentrated more on ideas and recommendations needed in future. With total of 100 participants (72 females & 28 males), the question will be answered by using number rating from one to five. Only the higher score result considered as the best feedback to describe about the research purpose. According to result shows in Section A (Table 1) below, between gender male and female, majority female (total of 38) agreed that way finding in Malaysia is easy to look compared to male (total of 13) which they think it is not easy and hard to look. While for *easy to feel* (F:35 > M:16), *understandable* (F:40 > M:14), *informative* (F:36 > M:12) on way finding still female the higher compared to male, as for female it felt more convenience. While feedback and response on appropriate *symbol*, *icon*, *suitable text* and *colour*, female think that it is more appropriate and suitable because for them it is easy to read and refer when they used the signage if compared to male felt burden and hard. For *correct direction towards location* and *getting lost using way finding* female is still higher with both total 66 compared with male only total of 27, because for female they agreed that by refer to signage (way finding) they felt that the time is much more safe and they can reach the destination without late and lost. While for additional *aids besides using way finding*, female still the higher total of 32 compared to male 10 only, because according to female they still need other additional aids such as stand by person at certain places such as public transports area. While for *helpful* and *friendly use* part, both total with 75 females agreed that most of the way finding in Malaysia is actually help them to reach their destination compared to male only total of 27.

Table 1
Feedback/response on the concept of way finding in Malaysia

Section A - Feedback/response on the concept of way finding in Malaysia	MALE	FEMALE
Is it easy to look?	13	38
Is it easy to feel?	16	35
Is it understandable?	14	40
Is it informative?	12	36
Use appropriate symbol?	16	32
Use appropriate icon?	12	36
Use suitable text?	11	35
Use suitable color?	12	37
Is it good enough to find a correct direction to your location?	17	38
Have you ever lost by using way finding?	10	28
Do you always need some other aids to find location rather than use way finding?	10	32
Do you think it's helpful?	13	33
Do you think it's friendly user?	14	42

For result in section B, with the same total 100 of respondents (72 females & 28 males), the question will be answer by using number rating from one to seven. Only the higher score result considered as the best feedback to describe about the research purpose. According to the result shows (Table 2) below, with total of 48 females recommend that for future way finding design to use text that perceive meaning and colour to show the difference location or meaning compared to males only total 18 respondents that way finding need to be improved. While for part *eye contact message* and *appropriate medium used for future*, both result shows females with total 39 respondents suggest to increase more on eye contact towards way finding and medium on way finding need to be improve by using mediums such as 3D sign board or light up lettering but again according to male with total 16 respondents only suggest to have some changes for future. While for *hierarchy* position, 22 females agreed that way finding need to have a proper hierarchy in terms to catch reader eyes but again according to male only 8 respondents said that the hierarchy is important. While for *specific language used to differentiate location, particular colour, specific size to differentiate location, using vibrant symbols or icon to grab attention* and *using translation*, according to females with total result 61 agreed that way finding need to have some changes in future such as using specific language, colour, and sizing to differentiate location this is easy for young consumer that don't really understand the text they can refer to the colour or size but compared to males only total 23 agreed need to have changes. While result for using vibrant symbols or icon and using translation for way finding design, females with total 49 respondents said that, way finding can use vibrant symbol or icon to show the different or maybe use translation word to represent place this is to make other people easy to understand the way finding but for male only 14 respondents agreed. For way finding to use *specific age, gender, culture, political views, heritage value, and shows religion*, with total combined results 123 from females agreed that, way finding need to have this sort of categories to show Malaysia towards outsider compared to males only 50 agreed that way finding need to add on this category.

Table 2
Recommendations in improving the concept of way finding in Malaysia

Section B - Recommendations in improving the concept of way finding in Malaysia	MALE	FEMALE
Use text to perceive meaning	11	24
Use color to differentiate meaning	7	24
Increase sizing to grab eye message	8	18
Use appropriate medium such as 3D Signboard or Light up Lettering	8	21
Relocate new position or hierarchy	9	22
Use specific language to differentiate location	8	18
Use particular color to differentiate location	8	20
Use particular sizing to differentiate location	7	23
Use vibrant symbols or icons to grab attention	7	26
Use translation	7	23
Way finding with for specific age	6	22
Way finding with specific gender	8	21
Way finding shows culture	11	24
Way finding shows political views	9	16
Way finding shows heritage value	7	22
Way finding shows religion	9	18

CONCLUSION

Therefore, most of the youngster preferred that way finding in Malaysia need to be improved for future due to the current and existing way finding now is not a friendly user. By improving the design, color, text, size and etc. it will help young consumer easy to understand the direction. In this research, researchers provided a questionnaire that answer to young consumer opinion about way finding design, the application and the importance of the way finding towards them. In way finding, the implication of cognitive mapping is able to give some proper meaning in order to communicate with spatial environment. The stimulation of meaning, gathering of perceptions, resulted with the ideas and clues towards the improvement for the future. Based on the previous survey being done, most of the young consumer preferred that way finding should be more understandable, easy to look and should put some additional aspects during navigating. Therefore, there is some suggestions to clearly described the design system of way finding with help of text as a medium to deliver the meaning effectively. Consideration on that aspects would probably enhance the level of understanding perceived by peoples surrounding, suit with the spatial environment and will reduce the stress of feeling, confusion, frustration, illness and unhappy experience once navigate.

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