A Design Guideline of Sign System Based on DPD Concept in Traditional Heritage Villages

Hwang-Woo Noh*, Keiko Kitagawa¹, Jae-Soo Yoo², Sun-Gyu Park³, Sang-Hoon Oh³, Byung-Won Min³, and Yong-sun Oh³

*HanbatUniv_Korea_ 1Seitoku Univ_Japan_

²Chungbuk Univ., Korea, ³Mokwon Univ., Korea

*hawoo-roh@hanmail.net.kitagake@seitoku.ac.jp.

vis@chunqbuk.ac.kr. vsunoh@mokwon.ac.kr

Sign system currently used for traditional heritage villages in Korea does not have any well-defined concept and method so that somewhat improper signs can be developed like for general urban or tourism area. In this paper, we present a new method or guideline of sign system based on DPD(disaster prevention design) concept for our traditional heritage villages. We can enhance both safety of residents and satisfaction of visitors throughout this guideline. According to our investigations on the heritage villages, sign systems in Korea are mainly developed for tourism, on the other hand, sign development in Japan mainly focuses on prevention or protection against big disasters like earthquakes. Considering residents and their safety, we can submit a proper guideline to develop sign system for our traditional heritage villages based on the concept of DPD which can be applied to each space. Asan'Oeam Village' and Beppu'Onsen Village' are used as application sites compared between Korea and Japan.

Keywords: Sign system; DPD; Traditional Heritage Village; Design guideline; Safety;

1. Introduction

There is no doubt that traditional heritage villages are our valuable resources which make us experience traditional cultures and cultural assets and properties [1]. Recently, a lot of signs are established all over the spots in traditional heritage villages. But we cannot find any proper concept or principle in development of these signs. We can indicate that every sign and sign system installed in traditional villages are somewhat imprudently developed. In this paper, we present a design guideline of sign system for traditional heritage villages based on DPD(disaster prevention design) concepts as follows; 1)a new concept of sign system based on DPD, attaching what the meaning of DPD is? 2)Difference of sign systems in traditional heritage villages between Japan and Korea? 3) What is the most effective sign system based on DPD concept considering their characteristics of traditional heritage villages.

We survey various books, articles, and websites searching to investigate signs and sign systems appliedfor traditional heritage villages in Korea and Japan. Especially, we select Asan'Oeam Village' and Beppu'Onsen Village' as application sites for the purpose of comparison between Korea and Japan.

2. SIGN SYSTEMS FOR HERITAGE VILLAGES IN JAPAN AND KOREA

2.1 Concept of Sign System

'Sign' is a kind of mark notifying certain meaning we want to transfer, including signature, expression, symbol, and signals etc. And 'Sign System' can be defined as a method of making signs and transferring the contents of them as signals. In other words, a sign is a basic element of communications including its own meaning and content. As a matter of user, it can be seen as an instrument of information exchange to understand and act adaptive on some environment [2].

2,2 Classification of Sign System and Its Elements

According to their features and purposes, we can classify signs as guidance, induction, inscription, regulation, and explanation etc. In addition, important elements of sign system consist of visual element, structural element, and constructional method. Visual element, which is the most important of information transferring, includes layout, color, character, and pictogram etc. Structural element, which decides its durability and stability, includes material, feature, and texture. Finally, constructional method corresponds to sign's position and environment including model, illumination, and closure.



Items		Analysis of Asan'Oeam Village	Analysis of Beppu'Onsen Village'
Visual Elements	Layout	Characters, Figures, Pictograms, Arrows are used. Simple and space free.	Maps, Characters, Pictograms, Arrows are used. Full display and readability.
	Color	Gray / White / Yellow ground. Black / Red Characters and Pictures.	White ground. Black / Red / Blue / Yellow Characters and Pictures.
	Character	Gothic / Myungjo styles	Gothic / Cali-graphystyles
	Pictogram	Arrows / Forbidden signs	Arrows / Forbidden signs
Structural Elements	Material	Metal / Timber / Plastic (acryl resin, PVC sheet etc.)	Timber / Metal / Plastic (PVC sheet etc.)
	Feature	Square with rounded edges, Rectangles	Squares, Rectangles
	Texture	Smooth, hard, and Shiny	Rough, Crude, and Solid
Constructi onal Methods	Model	Stand (Column or Mobile) / Attachment	Attachment / Stand (Column or Mobile)
	Illuminati on	Outer / Reflection / No light	Reflection / No light
	Closure	Silk Printing / Sheets	Paint / Sheets

2.3 Necessity of Disaster Prevention Design

DPD(disaster prevention design) is defined as 'a kind of design activity that protects life and property of human beings, minimizes damages, and makes the recovering process rapid and easy against any kind of disasters' [3]. Increment of uncertainty, interoperability, complexity, and cumulative characteristics expected in the future society makes the DPD concept more serious and necessary. Moreover, we need to change our design concepts into DPD because aging and super aging of our society are getting more serious as well as some causes of artificial disasters including social weak party, social variation gap between rich and poor. Naturally, the focus of DPD is moving from facility to human-oriented, from recovery to precaution-oriented, from physical rescue to psychological healing etc.

2.4 Analysis of Traditional Heritage Villages in Korea and Japan

Spaces needed to sign design in a heritage village can be divided into two parts. One that we can call 'public space' consists of main entrance, walkways, waterways, empty land, public toilets, and fire-fighting facilities etc. The others are called 'private space' including houses, gates, walls or fences, and cultivated lands etc.

- 2.4.1 AsanOeam Village: is one of the most famous tourism courses in Korea having 400,000 tourists a year. It was nominated as 'important folk material' No.236 in 2000 [4]. Table shows an analysis of sign system applied to the village on the left hand side. Signs in the village were established in view point of tourists so that a lot of residents can feel inconveniences.
- 2.4.2 BeppuOnsen Village: has a lot of hot springs generated by volcano activities 1,200 years ago. It was

nominated as 'international spa cultural city' in 1950. The concepts of sign system in Beppu are mixed both old ones and new ones so that we cannot find their consistency. Table shows an analysis of sign system established in Beppu city on the right hand side.

3. CONCLUSION

We have analyzed some problems in sign systems for heritage villages of Korea and Japan. Comparing 'Oeam Village' in Korea with 'Onsen Village' in Japan, we can conclude that principle of sign system have to be focused on residents and all the design concepts are to be centered on disaster prevention purposes. Although we cannot sure its objective views because of lack of examples, we have presented some apparent differences whether we are focused on the concepts of DPD or not when designing sign system of heritage villages. In the near future, we should expect to study on a total arrangement of sign systems for traditional heritage villages based on DPD principles.

4. References

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