A Study on Application of Ubiquitous Technology for Public Space in Silver

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Abstract: In the future world of high-speed and highly competitive society, the concept of ubiquitous technology is becoming more important. This study aims to analyze the common space of the silver town and to suggest a method for the design of common space.

Key Word: Silver Town, Ubiquitous Technology, Public Space

1. Introduction

1.1 The Objective of This Study

A new problem in 21C is a trend that the relative importance of over 60 years old people's population is increasing due to steady extension of human's lifespan and continuous reduction of birthrates. The time when an industry aimed for the aged became active started from the late 1970s in case of advanced welfare states, and the concern about this is increasing from the early 1990s in Korea. Old people with high economic power tend to have diverse desires for welfare service and want an intelligence type of residential environment and service facilities rather than a simple residence of old people. Aged people suffer difficulties first in physical activities pursuant to aging as they become old, architectural design, equipment, etc. considering convenience of aged people should be basically provided to maintain stability in the life of aged people. This paper suggests a town plan aimed for the aged to apply an intelligence type of technology to the residential space that provides safe environments and makes life of residing old people convenient using an intelligence type of technology for the features of the intellectualized residence space for old people based on composition of common.

1.2 The Research Method of This Study

This study makes definitions through the previous academic papers and related literature and analyzes an intelligence type of technology applicable to common space in order to analyze composition of common space. Application of an intelligence type of technology is presented so that old people may compose it conveniently while doing activities. As methods for this, first, characteristics of old people who attract social concern are understood; secondly, the concept of a town aimed for old residents is established; thirdly, the composition type of common space is understood through literature study and composition type of common space for a town aimed for the aged is reanalyzed. Fourthly, it is supposed to investigate composition type of analyzed common space, understand the kind of intelligence type of technology, compare and analyze the kinds of intelligence type of.

2. The Public Space of Silver Town

2.1 Silver Town

(1) Formation Backgrounds and Classification of The Town

A term 'a town aimed for the aged' is a new word. In the west, 'nursing home' is in common use for this. An independent residence type for old people was required due to increase of aged people with economic power because of in case of relative importance of over 60 years old people population due to continuous reduction of birth rate. The function of a town aimed for the aged is a composite residence complex composed as various service providing facilities and housing, it will be suitable to interpret this as an old people's residence complex.

(2) Features of the Town Aimed for The Aged by Location

The town aimed for the aged is a facility having strong character of land and building factors so that characteristics and functions of a facility is determined depending on location conditions of a facility. This is divided into urban type, suburban type, resort type, and rural type depending on location types. The town aimed for the aged can be classified with change of total types depending on type of common space. Such types are dependent on the allocation conditions of common space and the types differ depending on their arrangement.

2.2 Public Space

(1) The Definition of Common Space for Silver Town

As vigor becomes gradually weaker, outings, meeting friends, and making friends becomes difficult. It is a common space that makes relationships strong and social activities flexible among old people through a concept of sharing common use and action to the fields usable by old people and makes physical environments applicable to the living. This can be said to be an important field that stabilizes loneliness or mental uncomfortliness of old people.

(2) Analysis of Common Space for the Town Aimed for The Aged
The old people's residence facilities at the initial stage have settled down as a main facility while changing into a space of enjoying health, cultivation, culture and leisure as a concept of common space by adding several types of current town aimed for the aged differently from the type where residence space occupies the most. As shown in Table 2 which is a common space composition table of the town aimed for the aged, the legal facilities are prescribed simply, but the facilities included in the current town aimed for the aged were analyzed to provide most of the diverse services for dwellers.

3. Definition of Ubiquitous Technology Applicable to Common Space

3.1 Definition of Ubiquitous Technology

When the origin of the word 'ubiquitous', it has the meaning of 'anytime anywhere' in Latin. Using such an original meaning, the features of ubiquitous are summarized as 3A (Anytime, Anywhere, Anybody). Ubiquitous technology has computers at all places so as to have anyone use them freely. This is a technology to have computers exist internally and effectively within the environment so that computers may not show their external appearance as computers to the users although computers exist over various products and entire environments in the actual world.

3.2 Analysis of Ubiquitous Technology

1) This handles work automatically instead of human beings using the future office computer systems for management facilities and can make instructions via voice so as to be convenient. This is a system that can control the inside of a building using a cell phone. Inserting a cell phone into one side of media desk shows e-mails and messages having arrived that day on the glass screen of the wall. Personal information control, communication, information search, and location pursuit of tabs are performed.

2) Medical service facilities - YRP ubiquitous network research institute provides a sensor system with communication capability in all objects such as medicine bottles, clothes, etc. by applying T

3) Life service facilities - Memory aid is a memory aid system that is necessary for old people with dementia. Boards are a kind of blackboard which can be shared as one while seeing one another's faces among people apart. A pet robot is necessary for single and lonely people by having voice recognition. An air control system is a system to adjust temperature, humidity, or carbon dioxide concentration with proper consideration. A human detecting sensor is a system to inform you of where you are by detecting it with a sensor using the temperature of your body. An e-table is a system with an information button such as medical treatment, education, etc. through a screen on the table. This composes a convenient and stable life when using a town aimed for the aged as a result of analyzing advantages of the kinds of ubiquitous technology applicable to the common space.

4. Conclusion

The town aimed for the aged that old people are increasingly interested in due to aging problem in Korea can be classified with changing entire types depending on its composition types of common space. The composition types are dependent on arrangement status of common space and differs in its type depending on its arrangement so that the common space of the town aimed for the aged is important. Common space can be classified into administration facilities, medical service facilities, and life service facilities. The ubiquitous technology applied to the classified common space will be able to provide abundant life for old people.

5. Reference