



Concept Establishment of Territoriality of External Public Space of Housing Complex - Focusing on review of previous research -

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ABSTRACT

Purpose: Recently, Housing area plan has tried to reflect a public space of various forms. However, most of cases are indiscriminately developments, which don't reflect the diverse needs of residents. In addition, a subject of the public space is not clear and consistently stable of the management, so the residents don't have an interest enough to take advantage of it. **Method:** In order to make a plan of the public space of a residential complex, an architect designer needs to take a few things into consideration. One is a physical facility in needs. And other one is a management of keeping a social place stably and consistently, which allows residents to be able to interact with each other. It should be regarded for residents to form a sense of belonging, while minimizing the interface friction. When all these problems are fulfilled, an interaction will be made to improve the quality of the living environment. **Result:** Therefore, in this study, it is necessary to define the meaning of territoriality of the external public space of housing complex. This study makes it possible to improve the relationship of neighborhood and the quality of the life for the residents, depending on the time. This is the first step as 'the research for the territoriality of the external public space of housing complex', in order to define about the concept, function, characteristic of territory(the base of territoriality) and to establish the territoriality that can form the physical or psychological boundary in public space.

KEYWORD

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1. Preface

1.1. Background & Purpose of This Study

The housing buildings have been developed mainly centered on the development of large scale of housing complexes since 1960 in order to solve the housing shortage. Although many outcomes have been obtained from the aspect of quantitative supply of houses through such a policy, the standardized and prosaic housing environment has been produced. However, as the economic wealth of the residents gets bigger and bigger recently, it is in the situation that the demands for the life quality such as the enhancement of life convenience and the securing of the safe residence as well as the fulfillment of the minimum housing criteria are gradually increasing. In addition to such an aspect of life quality, the social functions such as the enhancement of the fellowship with neighbors which have been continuously discussed by many scholars and the exclusion of disharmony are also required for the contemporary housing complexes.

As a method for fulfilling such requirements, various types of common spaces are being applied to many housing complex plans. However, since such housing complexes have mostly been utilized as just a policy for differentiating such complexes from other ones, such housing complexes have been developed indiscreetly without reflecting various kinds of requirements of the residents. In addition, the main agent of the operation and management of common spaces is not clear and such common spaces are not maintained consistently, so it is in the situation that the interests and usage by the residents are incomplete.

This means that the operation and management matters for maintaining the social paces continuously must be considered together with the physical facilities which the residents require when planning the common space of a housing complex. It must be concerned that the residents' sense of belongs for such common spaces must be formed while reducing any conflicts between such spaces to the minimum.

Since some organic interactions occur when all of the requirements mentioned above are fulfilled, it is considered that the quality improvement of the housing environment can be realized.

Therefore, as well as the common spaces of housing complexes play as the passages for the residents' movements meeting the demand of the time, they can enhance the relationship between neighbors since those spaces can create various kinds of complicated demands such as allowing the social activities by way of obtaining some information through taking a rest or conversation, etc. And it was judged that it is necessary to study on how to establish the territoriality of the external public space of a housing complex in order to enhance the life quality of the residents.

In this study, as the first step of the study, it is intended to define the concepts, functions and characteristics, etc., of a territory which becomes the basic unit for the territoriality in order to establish the territoriality allowing the formation of the physical and psychological boundaries within the common spaces of a housing complex.

1.2. Scope of and Method for This Study

This study has the meaningful significance by establishing the basic concept of the territoriality and a territory through a new interpretation along with the arrangement of the existing concepts through the theoretical reviews on the previous studies which have been progressed until now.

When it comes to the procedure of this study, first, the characteristics of the territoriality are comprehended after the concept of the territoriality is examined. Second, the characteristics of the territoriality which appear in each territory are comprehended after classifying the territory into several stages after the concept of the territory forming the territoriality are examined. Third, how to territorialize in order to express a territory is comprehended and the functions of the territory whether territorialization is completed are analyzed. Based on the results, it must be comprehended what kinds of expected effects to be able to get in case that the territoriality of the external common spaces of a housing complex is formed.

2. Territoriality

2.1. Concept of Territoriality

As a concept expressing the psychological space for which some organic bodies set up the boundaries for their habitats and argue their sovereign territories within the boundaries and such organic bodies try to occupy and preserve exclusively from the other entities or groups, the concept, 'territoriality' was first suggested in a research paper written by an English Ornithologist, Eliot Howard in 1920 that recorded the territorial behaviors in the animal world.¹⁾ Territoriality is a behavioral concept related to a place or a

region possessed or occupied by an individual or a group. And it is a concept including the defences against an invasion into a privatized region.

That is, it can be said that it is a structure becoming the boundary between an organic body and the outside and is a kind of communication expressing that such space belongs to the organic body itself or a group.

2.2. Characteristics of Territoriality

According to Husein El-Sharkawy, (1979), he says that the environmental layout supporting the privacy is very important since it satisfies several kinds of basic desires of a human being.²⁾ Such basic desires mean a desire for identity, for security, for stimulation and for reference system.

A desire for identity is one for trying to know who we are and what kinds of roles we play within a social organization. A desire for security has many types such as becoming free from any criticizing, being protected from any external attacks and possessing the self-affirmation, etc. A desire for stimulation is related to self-fulfillment and self-actualization. A desire for reference system needs the maintenance of the correlation between we and others or the surrounding environment.³⁾

That is, for human beings, to make efforts for fulfilling their basic desires it to form their territoriality by providing with some methodological frames to be adopted to an organization as well as obtaining the identity, stimulation and security for an individual or a group.

In addition, it can be said that establishing a common space showing some characteristics, such as possession, control, defense, exclusive use and personalization can be a methodological frame for establishing the territoriality. And it can be helpful to fulfill various kinds of functions such as basic psychological desires and cognitive ones or aesthetic ones.

1) Possession

It can be said that the degree of possession that an individual or a group recognizes for a specific region is a very important characteristic of territoriality. If an entity or a group has a special relationship with a certain territory or uses the relevant territory for a long time, it makes others feel that such a territory is possessed by the entity or the group. The relevant entity or group shows its interest in the maintenance and management of the territory which is recognized by the entity or the group.

1) Yang, Ho-il, Behavioral Science on Environment Design, Yurim Printing Co., Ltd., 1990, p.63

2) Jon Lang, Creation of Architecture Theories, Translated by Cho, Chul-hee, Kukje Publications, 2003, p.230

3) Ibid. pp.230-231

2) Control

If an entity or a group possesses the control right for a specific territory, the events occurring in the relevant territory can be controlled and such events can be freer compared to the other territories. The territory owner can choose a behavior freely since he/she has a preferred access right for the territory and has an preemptive right for behaviors within the territory. Moreover, the controlling behaviors by others that occur within the territory can be prevented.

3) Defense

The territory owner tries to defend self from others or a group that don't share the same territory through some behaviors to occur within his/her territory. The degree of effect of some invasions by others or other groups and the degree of self-defense for defending his/her own territory increases gradually while the degree of sharing changes from a high stage to a low one.

4) Exclusive Use

An entity or a group possessing a territory tries to use or preserve the relevant territory exclusively. Such an entity or a group has a right or a jurisdiction for the possessed territory. And the behaviors such as inviting others or visiting the other's territory are allowed. It can be a characteristics combining the entity's or group's rights and the social interests.

5) Personalization

Personalization is a behavior within a territory which is done in order for the habitant to let others know its value, taste or activity areas, etc. Such a behavior for personalization helps the entity or group to improve its sense of belonging and sense of accomplishment while doing activities within its own territory and to accomplish the discrimination, proper stimulations and security as the solidarity with the surrounding environment becomes stronger.

An entity's and a group's formation of territoriality showing 5 characteristics such as possession, control, defense, exclusive use and personalization includes the concept aggressively supporting the social exchange and the communication between the members and it more strengthens the role as the medium for symbolic self-expression. It can be said that the setting of a territory where an entity or a group can get identity, stimulation and security is possible.

3. Concept & Classification of Territories

A territory is formed by the boundaries which can symbolize or compartmentalize the spatial scope and it can be said that the territory is a complex system under which the attitude, sentiment and behaviors that some activities can occur in a certain space.⁴⁾ It can be said that territoriality can be formed when such a territory

gets to have general traits and the space having such a territoriality works as a place where the activities by a human being can be induced.

3.1. Concept of Territory

A territory which is used by an entity or a group who executes the actual or psychological ownership is a certain type of space which is distinguished from the outside.

Possessing a territory means to subdividing the space into several sections by using the ranks of the spaces and various kinds of markings and to structuralize them again. There are some methods for zoning a territory such as using the rules on the space design or markings and the physical or psychological boundaries are formed through such zoning. That is, a territory can exist as an intangible space as well as a physical space.

Such a territory is a space which is personalized or collectivized through the placement of objects and markings, etc. And such territories can be divided into a public zone, a shared one and a private one depending on the social ranks and stages. It can be said that a human being's territory plays a pivotal role while exerting the influence within a certain territory rather than having a direct relationship with survival like an animal's territory.

3.2. Classification of Territories

The boundary of a territory is determined when the territory is divided by the boundary having a certain shape. There are various kinds of methods for classifying territories such as directly blocking by erecting a wall and setting a boundary by using a small marking, etc. The elements composing the boundary of a territory represent the characteristics of the relevant territory. It can be guessed whether the relevant territory has a close relationship with the surrounding territory adjacent to the outside depending on the types of boundaries or whether the boundary of a territory is determined or not. Such boundary types can be distinguished clearly, but there are boundary types which are not clear and are hard to be distinguished.

Most of theorists suggest the systemized steps by classifying the types of territories when classifying the territories. Looking into the contents in the table above, the word and meaning expressing each territory can be different depending on each theorist mentioning about a territory⁵⁾, but the territories can be broadly divided into 3 kinds and in this study, they are defined as the public, shared and private territories.

The features of each territory can be arranged as follows.

4) Choi, Joo-young, A Study on the Correlation of the Multiplex Service Space and Territoriality, Journal of Academic Conference for the Association of Branches of the Architectural Institute of Korea, Vol.2008 No.1, 2008, p.56

5) 박정은, 주거지 보행공간의 공유영역체계에 관한 연구, 전남대학교 박사학위논문, 2009 p.25

Table 1. Classification of theorists

Division Theorist	Private territory	Shared territory			Public territory
Altman	primary territory	secondary territory			public territory
Ross	home	core area	territory		range
Stea	personal space	territorial unit	territorial cluster		territorial complex
Husein El-Sharkawy	attached territory	central territory	supporting territory		peripheral territory
Newman	private space	semi-private space	semi-public space		public space
Shon Sei-Kwan	private space	front domain	intimate domain	transactional domain	public space

Table 2. Characteristics of territory

Character	Public territory	Shared territory	Private territory
Possession Consistency	fragile	fragile, ordinary use	durable
Control	feeble	normal	strong
Defense	feeble	normal	strong
Exclusiveness of use	feeble	normal	strong
Personalization	feeble	normal	strong

1) Public Territory

A public territory is a life structure specific to the contemporary society which appears while pursuing the cooperative relationship with other individuals in order to overcome some important problems faced by the limited behaviors of an individual in a civil society where individuals whose behaviors are based on the pursuance of private interests are gathered.

Paradoxically, a society faces the needs to continuously develop the state of “Universal Communication Community” which creates the behavioral methods and opinions considering even the interests of other individuals within a civil society in addition to the private interests in order to maximize the private interests. The collection that such a state is formally or informally materialized into a system or an organization usually forms the public territory.⁶⁾

A public territory is open to most people and is the territory which is occupied by the people using such a public territory, so is a space that is not important to the occupants. In addition, a public territory is a space which is used by an individual or a group from time to time for some special purposes and activities, so it cannot be possessed by the individual and the group and the usage frequency or time is not regular.

2) Shared Territory

A shared territory as the space having an intermediate characteristics between a public territory and a private one is a

boundary between a public territory and a private one. And it plays a role for filtering some external approaches from a public territory and is a superordinate concept including the semi-public and semi-private territories. Since this kind of territory is hard to control some external approaches or invasions, the natures of a space must be clearly determined by preparing for some plans for using various kinds of markings and environmental installations in order to control by reducing the behavioral ranges of outsiders. The ranges of shared territories are varied depending on each individual or group. And since there is a feature that the territory is not clear due to some semi-territorial characteristics, the territory can be easily damaged by outside users.

① Semi-public Territory

In case of a semi-public territory, even though it cannot be possessed by a certain individual in most cases, it is a territory which can make a small group feel a strong sense of unity and a sense of belonging thanks to its ranking structure and the clear compartmentation between territories. This territory is not connected directly to a private one, but since it is located near a private territory, it is considered as a territory for a group. It is not possessed by a certain individual, but some implicit sense of possession or exclusivity exist among the members of the relevant group and it is a territory which can make a group feel a strong sense of unity and a sense of belonging thanks to its ranking structure and clear compartmentation.⁷⁾

② Semi-Private Territory

It can be said that a semi-private territory is a private territory for a group which is jointly used by a group consisting of individuals while the physical space which is shared by individuals is used habitually. Therefore, semi-private territory is a physical territory which receives the social contacts and becomes a socio-spatial territory. A semi-private territory is a space which directly connects each private territory and it has the restrictive and exclusive characteristics as a place for social contacts of a group as well as being used often by each individual. Especially, a symbolic sense of possession for such a space is very strong and is a space where high sense of possession, control, individuation and defense are completed even though it is weaker than a private territory due to the relationship between the frequent frequency and the residents' lives.

The users of a semi-private territory can contribute to the social security by helping the solidarity of a group and by making the social exchange with neighbors easy since they conduct the individuation in various physical and symbolic ways.⁸⁾

7) Kong, Mi-na, A Study on How to Establish the Territoriality and Privacy which are shown in the Space Design for Domestic Town houses, Thesis for Master's Degree at Konkuk University, 2012, pp.14-18

8) Byun, Hee-hyup, A Study on Planning Semi-Private Territories for Enhancement of Sense of Neighborhood, Journal of Academic Conference of the Architectural Institute of Korea, Vol.8 No.1, 1988, p.200

6) Korea Literature Critics Association, Dictionary of Literary and Critical Terms, Kukhak Charyowon, 2006

3) Private Territory

A private territory is a concept corresponding to a public territory and it means the territory for the individualistic, secret and unique experiences among the territories which are experienced by human beings. Georges Duby explains “A private territory is a precious one belonging only to a self, one which is not related with other people, one which the things which must not be seen to others since they are quite different from the appearances to be shown to the public for honor are concentrated”.⁹⁾

It can be said that a private territory is a space where an individual or a group possesses and uses. A private territory has a clear identity through the individuation and plays a pivotal role during daily life.

The owner of a territory has the attitudes for defending and controlling by defining the rules on the access or use by the visitors in order to protect the private territory.

The housing environment can be usually divided into two types such as a public space where the social life is made and a private one where a private life is made. Especially, such a division can be clearly made from the aspects of securing the privacy and the classification of territories. However, since it is restrictive to divide the public and private spaces as the dichotomous division in case of an apartment building where many families live together unlike detached houses, a shared territory as a mediation territory (semi-public and semi-private territory) is established.

4. Expression and Function of A Territory

4.1. Expression of A Territory

An animal marks its own territory by sprinkling its internal secretion or excretion on the path which it often uses or by leaving its scratches on trees or by crying as an effort to secure its territory. Such markings have been used as a defense method against a stimulation or an attack from the outside as well as securing the possession by detaching the boundary of the scope of influence by expressing the existence of itself in a certain space. Even in case of a human being, he/she tries to establish the boundary for restricting by securing the territory while leaving the markings through some kinds of activities.

It can be said that such a behavior leaving such markings is a kind of communication that the territory is possessed by an individual or a group. In addition, the owners of a territory can be adopted to an organization by adjusting their social contacts by making them have identities, sense of security and a certain level of stimulation.¹⁰⁾

Edney (1975) argued that such a behavior marking a territory must be expressed as a concept including the mutual responses and thoughts and the passive behaviors rather than the dominance. When it comes to the expression methods that Edney applied for establishing the territories, there are two methods as follows. The first method is to express their territories for the purpose of defending against the attacks by outsiders by establishing a wall or some piles. And the second method is to extend the occupancy time and to secure a superior occupancy right by allocating some private possessions in a public territory.¹¹⁾

It can be said that such markings for expressing their territories are to deliver some messages to strengthen a sense of possession or the right occupancy as a tacit mutual communication method.

The methods for expressing the territoriality in order to defend themselves from others' invasions as well as expressing their ownership by marking the territories can be divided into the physical and symbolical expressions.

1) Physical Expression

In order to establish the boundary of a territory, there is used a method for adjusting the number of pedestrians as well as restricting the access by outsiders by establishing some physical wall which divides the boundary between the spaces in a way that a wall is usually established at the outside boundary of a housing complex.

Newman (1978) suggested some physical defense methods, such as a high wall, a fence, a locked gate and door and an U-shaped building, etc. And such methods allow only restricted number of people pass by.¹²⁾

2) Symbolic Expression

The symbolic expression methods for territories can be divided into one method for maintaining the sense of belonging of the residents and the closeness of a space by endowing symbolic images such as xxx saure and 000 yard, etc., in the compartmentalized external space and the other method for making outsiders cognize the usability and the use types symbolically as well as making the monitoring for the territory easy by placing the facilities for managing and maintaining the spaces.

Except for such methods, as Newman (1978) suggested, there is a method for establishing the boundaries by ways of changing the texture of the path, changing the level (short staircase), establishing the street lights, open gateways, hedges and planting, etc.

10) Seo, Hae-young, A Study on Expression of Territoriality and Improvement Methods of External Spaces of High-rising Apartment Complexes, Thesis for Master's Degree at Chungnam National University, 2007, p.24

11) Ibid. p.25

12) Seo, Hae-young, A Study on Expression of Territoriality and Improvement Methods of External Spaces of High-rising Apartment Complexes, Journal of Academic Conference of the Architectural Institute of Korea, Vol.9 No.2, 2007, p.49

9) Georges Duby, History of Private Life 1, Translated by Joo, Myeong-chul, New Wave, 2002

4.2. Functions of Territories

All of human beings have some basic desires such as a desire for identity, a desire for security, a desire for stimulation and a desire for reference system. A territory has some functions for providing with a methodological frame for being adopted to an organization as well as giving the senses of identity, stimulation and security to an individual and a group by using the basic features such as possession, control, defense, exclusive use and individuation in order to fulfill such functions. Such functions can be divided into 3 functions as follows. First, endowing the placeness. Second, obtaining the security. And third, enhancing the privacy and community.¹³⁾

1) Endowing the Placeness

Placeness exerts some important functions related to the spatial justice, affection to the space and sense of belonging, etc. Based on such functions, Schulz (1985) set 3 constructs such as a place, a passage and a territory and Lynch(1960) set 5 constructs such as a passage, a corner, a section, a node and a landmark. A theme about the territoriality related to the placeness is mentioned commonly in the works of both authors. If the zoning methods are classified, it can be divided into two methods, that is, 'Zoning by Physical Boundary Objects' and 'Zoning by Symbolic Body of Meaning'.¹⁴⁾

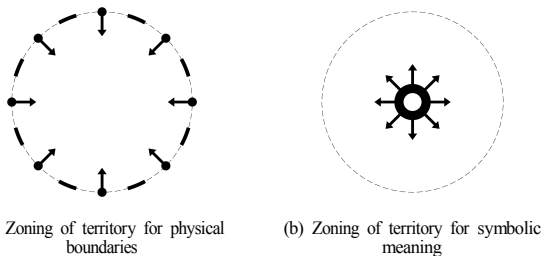


Fig 1. The type of zoning territory

Regarding to territories, Schulz thought that closure is the first trial that human beings possess the environment and depicts 'the important feature that a place is that the boundary for securing the physical protection as well as the psychological protection is exactly established'. In addition, Lynch depicts the role of boundary saying 'edge which is visually clear, whose shape has continuity and which is hard to be crossed'.¹⁵⁾

Considered those facts mentioned above, it can be said that a territory is a factor for changing a certain space into a specific place or territory by creating some characteristics and atmosphere while representing the space. It can be said that setting the scope of a

territory by establishing some markings forming the boundary is the zoning by the physical boundary objects.

On the other hand, referring to the definition of a landmark which Lynch argues regarding to the objects of meaning, he says 'the landmark refers to a dot which exists away from the observer and consists of some physical elements in various sizes' and he pointed out the peculiarity as the feature which is outstanding and easy to be remembered as one of the important physical features of a landmark.¹⁶⁾ Together with that, Schulz said that proximity creates an aggregate consisting of various kinds of elements. Taking a look at the history of architecture, it is mentioned that the tendency characterizing the place by using some large sculptures is also originated from that principle.

Considered the contents mentioned above, it can be thought that an object of meaning is recognized as an outstanding and easy-to-remember singularity which exists in a space, so has a function of sign helpful for understanding by diagramming the space and plays a symbolic role showing the characteristics of the place. It can be said that setting the scope of a territory by establishing the sculptures showing such meanings is the zoning by a symbolic object of meaning.

2) Obtaining the Security

Newman(1978) suggested a concept of the defensive space through the formation of a territory as a method for securing the security. It can be said that a defensive space is one of the living environments for enhancing their lives as well as providing the owner of each territory with the security for their family members, neighbors and friends. Newman suggested the characteristics of the environmental layout which creates the defensive space through the establishment of a territory having the clear rankings from a public territory, semi-public, semi-private to private territories.¹⁷⁾

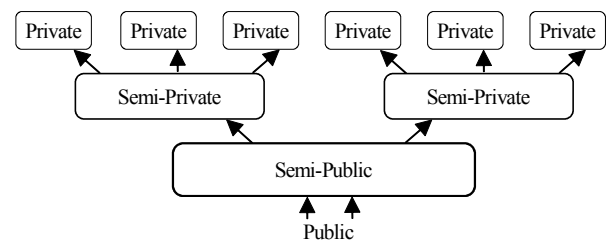


Fig 2. Newman's concept of a defensive space rank

Like this, the controlling functions that an individual or a group can exert for its territory by establishing the rankings of the defensive spaces can be strengthened.

On the other hand, the establishment of territoriality through

13) Kwak, Dong-wha, The Characteristics of Territorial Expressions in case of Contemporary Housing Construction in Netherlands, Journal of the Architectural Institute of Korea : Planning & Design, Vol.23 No.7, 2007, pp.162-163

14) Ibid. p.162

15) Ibid.

16) Kevin Lynch, Image of the city, The MIT Press, 1960, p.62

17) Oscar Newman, Defensible space, Macmillan publishing, 1978, pp.9-20

zoning allows to correctly execute the functions of the ego-alter ego boundary adjustment mechanism¹⁸⁾ which was explained by Sommer (1969), etc.

If it is assumed that the territoriality as the ego-alter ego boundary adjustment mechanism can adjust the behavioral patterns of human beings within a specific space through the functions, such as possession & controlling, personalization, marking, social exchanges and the formation of closeness, a territory like the Fig. 3¹⁹⁾과 같이 can deliver the involved territorial meanings through a certain visual/cognitive system.²⁰⁾

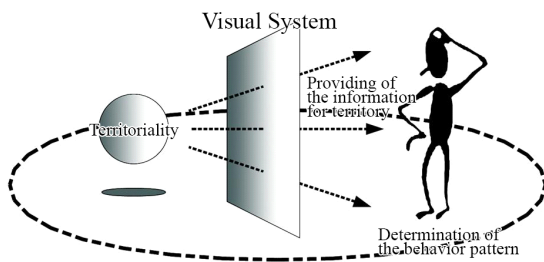


Fig 3. Mechanism of border adjustment

The controlling of a territory can be executed strongly by making a person determine his/her own behavioral patterns as he/she can obtain the territorial information by using the visual/cognitive system regarding to an external invasion.

The security can be guaranteed since some unexpected social invasions can be prevented by executing the controlling right for the possessed territory while using the ego-alter ego boundary adjustment mechanism as the same time as establishing the rankings of territories. In addition, the effect which can prevent some invasions into a territory can be exerted by confirming and maintaining the boundary for the owner.

3) Enhancement of Privacy and Community

The individuation within a territory can be various depending on the social and cultural backgrounds of an individual or a group. Therefore, the tastes and values of people can be expressed since such tastes and values can be symbolized in order for their emotions to be reflected within a specific region through individualization.²¹⁾

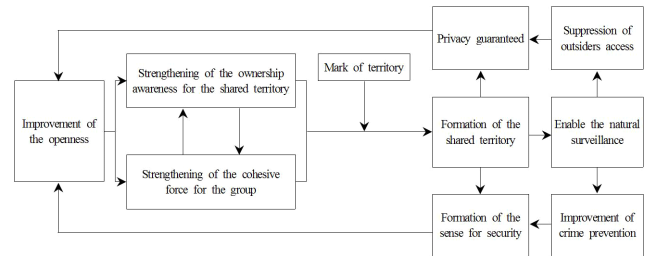


Fig 4. The function of shared territory and mark of territory

Kobayashi(小林秀樹, 1992) said that expressing the individualization by using the boundary marking objects has the causal relationship with the formation of a shared territory and he defined the fact relating it to privacy and openness.²²⁾

Figure 4 diagrams the theory of Kobayashi and it shows the idealistic circulation with which a shared territory is formed as the result that the privacy of each territory is protected and the openness gets higher, so the prohibition of access by outsiders and the relieving of the sense of invasion are acted resulting that the privacy is protected naturally.²³⁾ It can be considered that there is a circulation loop that the enlargement of the action radius of the individual and group possessing a territory and the active relationship between them can be the causes and results.

The functions of a territory include the complex factors such as attitudes, emotions and behaviors, etc., regarding to who can approach some specific spaces and which activities can occur. It can be said that whether some controls are done in a specific space or not, the responsibilities for the matters to occur and the cognition and perception about the closeness with many people who are met at that place, etc., belong to the functions of a territory. In addition, the features of territoriality play the functions, such as maintaining a specific space, the endowment of placeness by expressing the securing, defending and controlling of ownership, the acquirement of security and the enhancement of privacy and community.

5. Conclusion

A shared external space which is formed in a large scale of housing complex is a mediated space which exists between a region and a housing complex and it consists of the semi-public and semi-private territories for smoothly converting between the public and private territories.

Such a shared space forms the physical and symbolic boundaries and such a space is materialized as a territory showing the characteristics of a territory such as possession, control, defense, exclusive use and individuation of the relevant housing

18) An ego-alter ego boundary adjustment mechanism is a behavior distinguishing the inside and the outside of a territory by controlling as one territorial unit by combining the inside of a territory. Jon Lang, op. cit, p.230

19) Kang, Ji-myung, A Study on the designing methods and the process of a shared territory of the apartment buildings in a city for strengthening the supportability of the residential behaviors, Thesis for Master's Degree at Ewha Womans University, 1999, pp.13-14

20) Park, Jung-eun, op. cit, pp.18-19

21) Ibid. p.30

22) 小林秀樹, 集住のなわばり学, 彰国社, 1992, pp.99-137

23) Kwak, Dong-wha, op. cit, p.163

complex. The functions of a housing complex such as the endowment of placeness, the acquirement of security and the enhancement of privacy & community can be exerted through such a procedure. That is, it can exert the functions as a shared space where the relationship with neighbors can be enhanced and the life quality of residents can be enhanced. However, it is thought that it is necessary to conduct some additional follow-up studies in order to play some more complete roles. So, it is necessary to plan in order for enough spatial design to be implemented with a clear role under the specific intention in order that the correlation between the residents, a shared space and the region can be made as well as it exists as a spare space which is located between buildings.

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