Building an ecological sense of place in metropolitan public footpaths through architectural enclosure

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Abstract

Taking the jam-packed buildings of the metropolitan space as a forest, we experience the in-between spaces or in other words public footpaths, and depending on the images produced from such experiences we come and go between the copiousness and penuriousness of life. But regrettably if we examine the properties of modern metropolitan space, indigenous placeness of the site are being divested in the course of commercial developments, and the sense of place that should be enjoyed are getting lost. This research aims to find the methodology of reverting back to the genuine sense of place through an ecocentric perspective of architectural enclosure.

For this regression to placeness, spatial organization in an enclosing shape that induces a movement known as 'stroll' was necessary. The logic that humans holistically desire an organic order of nature that essentially resembles themselves was placed as the clue to ecological sense of place, and this generated the connection between the expressive characteristics of the organically surrounding enclosure shapes of spacial organization and sense of place.

Keywords: sense of place, ecocentric thought, enclosure

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1. Introduction

1.1 Research background and objective

In urban city space, generally a space that is enjoyable by the subject within that space is given. But within the density of each given space, can we indeed appreciate fully the 'sensation of refreshment' that is enjoyable within nature's 'forest'?

This research takes off from this question.

Taking the jam-packed buildings of the metropolitan space as a forest, we experience the in-between spaces or in other words public footpaths, and depending on the images produced from such experiences we come and go between the copiousness and penuriousness of life. But regrettably if we examine the properties of modern metropolitan space, indigenous placeness of the site are being divested in the course of commercial developments, and the sense of place that should be enjoyed are getting lost.

This study attempts to show a indigenous sense of place being formed in a space of a metropolis, specifically a public foot path; to show the elements that can prevent the formation of such a sense of place; and to show how we can recover a primordial sense of place through some tectonic order by an order of space called 'enclosure,' starting from the phenomenological concept of placeness and the sense of place of Edward Relph.

The significance of 'enclosure' comes from the repeatability of space that aims for introversion through the appropriate placement of phenomenological mass that acts as a wall (a characteristic of interior space). This scenario of repetitive space possessed by enclosures is used to bring out the pre-condition of the possibility that indigenous sense of place can be triggered in people or strollers experiencing specific places, and to generate the resulting values.

Moreover, through the phenomenon of humans realizing the immediacies of life when experiencing a space, we expect this to be an important clue for rediscovering the values of sense of place in an ecocentric perspective.

2. General overview of architectural enclosures and ecological sense of place

2.1 Concept and features of the sense of place of metropolitan public footpaths

Kevin Lynch categorizes and describes the images of the city environment as 5 categories: paths, edges, districts, nodes, and landmarks, and among them he explains that paths consist of path stems moveable by observers, as well as elements that arrange or constitute relationships with other environmental components. (Hwang Yong-Seup,2010)

In this research, we aim to propose the significance of ecological sense of place presented at the eye-level of strollers based on the mobility of metropolitan footpaths that set off from the concept of paths. The city image of Kevin Lynch, in particular the public image and the interactive intimacy of humans experiencing it, is in contact with the restoration of placeness in the strollable in-between spaces of the city, or footpaths. About the metropolitan space, which overflows with sensate images, Georg Simmel warns that the subtle sensitivity of the city inhabitants are shrinking due to the distinctive and individual stimulations given by the fancy and artificial objects in the metropolitan city. As a result of the shrinking and senseless attitude of humans, the contents of experiencing a place such as a city cannot help but become more and more objective and depersonalized. Therefore, the public stroll space in which each individual stroller experiences must follow the ecocentric framework of thinking that resembles the substantive principle of nature, and facilitate the framework of cognition that restores indigenous sense of place.

Analyzing the lexical meaning of Jang-So(장소), Jang(장) means 'a place that comes into view due to energy', a state of naturally assigned environmental property. So(소) in the word Jang-So(장소) means 'a sectioned unit for abiding', a state of enculturation due to human involvement. (Lee Suk Hwan, Kim Young-Hwan, Theory of Place for overcoming the modernity of cities, 1996)

All organic and natural substances interact with the environment that it encounters in order to maintain their life cycle. Through this phenomenon, humans acquire appropriate senses of the place that each environment encounters, and on their own as one part of the place, in other words as a subject that experiences the place, will take on existential attitudes. With this, the place is perceived by the subject and becomes equipped with the form of an existential space.

Furthermore, the concept of place was founded by Edward Relph's phenomenological logic. He explained that 'true attitude towards a place can be understood as directly and purely experiencing the overall complexity of a place identity', and includes unconscious experiences in place identity and sense of place. The deeper the unconscious experience, the understanding of genuine placeness gets completed. Modern sense of place is surrounded by extravagant secular, uniform images, so the loss of place or placelessness in which genuine sense of place cannot be felt is being proceeded.

Edward Relph pointed out the directivity of not only consciousness but also the unconsciousness, and warned that sense of place could be authentic and pure, but if not so then it could degenerate into an a poor image that creates artificial or unnatural images that only stimulate human's peripheral nerves.

This means that the becoming of personal pure images through spontaneous imagination is not possible in a place called public footpaths experienced by strollers. With this, each individual place that transformed into a standardized landscape loses its indigenous placeness.

Accordingly, this paper tries to connect the ecological order of the enclosed space in order to recover the sense of place in an architectural type.



Figure1 relationship between foot path and a sense of place

2.2 Concept of architectural enclosure

In terms of the transforming role as the concept of place-making in general architectural spaces, the parts that make boundaries through a sense of mass, such as walls, are important. From human actions that are aroused within the places that are formed through boundaries, the values of the

place can be revealed. Edmund R. Leach said, "we are being created here and there through artificial boundaries at the heart of the continuum place at its natural state and without any cut offs" and mentioned the role of various relationships that are formed from boundaries. (Jin Mi-Hee,2008) Enclosure has an effect of raising the territorial consciousness of humans in that region, and enhancing the psychological feeling of defense, relief and privacy. But if enclosure is too strong, this gives pressure and anxiety, and if the element of enclosure is taken away, it gives emptiness. (Kim Chul-Soo, Site Planning, 2007)

The key point of enclosure structure is to constitute the existential space of life by surrounding it with some others. This simply does not signify the limitation of space, but connects to the relationship between interior and exterior space. Therefore mental stability related to the intimacy felt by humans within an enclosed space is the characteristic of enclosure.

As such, based on a feature in which the space type experienced and the human having the experience communicate with each other in a stable condition, a directivity is derived, in which the space of the foot path can also recover the sense of place through the enclosed type.

2.3 Concept of ecocentric thoughts

The definition of ecology by German biologist Ernst Haeckel is 'the study of the interrelationship of organisms with their environment and each other, and in a broader meaning, the study that includes not only the physical survival conditions but also the mental elements in the environment.'(Lee Ji-Yeon, 2002)

Thus, we can say that the key to ecological thinking is complying with nature's organic principles and generating a countermeasure that permanently circulates the responding relation. The awareness of this living organic aspect of nature, and human's interrelationship tendency also influences the architectural shape.

According to Rhee Yoon-hee (2006), the feature of ecocentric thinking in modern architectural expressions are divided into wholeness, circularity, and homeostasis. This signifies that ecofriendly architectural shapes continually focus on finding nature's fundamental immanence. Such ecological feature projects the already existent and manifesting phenomenal intrinsic value of the actual space



Figure2 Characteristics of ecocentric thought

3. Territorial relation analysis of enclosure and sense of place

The world of architecture by Luis Barragan, who carried out architectural actions through enclosure, has the feature of triggering indigenous sense of place within the role of walls and the formation of relationships with its surrounding elements.

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As claimed by Relph, the meaning of the recovery of the sense of place that is, examples of inspiring a person's internal view and unconscious sense of place - is as follows. It is done through a concept of the natural order being contained in the enclosed architectural type of Luis Barragán, the organic relationship with nature that is the goal of the architecture of Soswaewon, and an analysis for an ecocentric thought between nature and humans, which is completed by Thoreau in 'Walden'.

This serves as an analysis framework for the possibility of space in which you can intimately communicate with the place.

3.1 Relationship between landscape and architectural structures through enclosed role of wall

The form of walls in Luis Barragan's architecture does not simply act as a boundary that divides a space, but signifies an architectural device that builds enclosure as an element that acts as a wall. This is inserted into the space as a tool that induces conscious, unconscious sense of place of the human experiencing that space.

Area division (natural dividing line /transferable)	Aims for a protective introvert space from the aggressive city (intimacy/privacy/relationship with surroundings)	Placeness /Formativeness
Intrusion of space (exterior/interior)	Mutual communication between exterior nature (primitive, organic) and interior artificial (geometric, artistic senses) form Focus on natural features	Mutual reality
Nondaily experience	Walls as a material embodying nature's mystique (existence of screens in movies) Provision of an entirely different experience that goes beyond real time (surrealistic expression) Connect romantic feelings/recollections, memories with modern times	Nondailiness Surreality

Figure3 Classification of the role of walls

Features of Luis Barragan's enclosure-like architectural actions are as follows.

First, from the continuous repetition of intimate spaces, he encourages the effect of an individual's secretive internal vistas, contemplations and imaginations. The role of walls then no longer acts as a functional shelter of architecture, but is considered as a device that fulfills more than that. Moreover, rather than just a simple architectural boundary, this allows a partnered presentation of architecture and nature through the natural human scale of the public.

Second, by assigning human and nature as a medium to the shape of walls, a landscaping element of the nature, he attempts to make harmony of the combination of natural elements such as sky, water, wood, ray, shadow that are related to lighting, ventilation, rather than just the mere view.

Therefore, he aims for emotional architecture through essential values that are given to humans by architectural spaces developed by humans.



Figure4 Architectural structure of Luis Barragan

3.2 Organic relationship between ecological landscape and architectural structures



Figure5 View of Soswaewon Garden

The space configuration of the nature friendly Soswaewon Garden comes in contact with the ecological sense of place that conforms to nature's organic principles. The architectural structure of Soswaewon Garden takes on a shape that abides to its surrounding natural environment. This shows the property of integrating with the organic nature, and together presents the formative connections. Thus, this supports the holism of the internal structure called Soswaewon within the overall structure called nature. The space of the exterior nature and the interior

Soswaewon is open, sharing the process of receiving feedback from one another, thereby possessing an ecological function. From this condition of dynamically giving and receiving, homeostasis is maintained by the organically sustainable circulation system.



Figure6 Placeness that conforms with ecocentric thought

3.3 Sympathetic relationship between humans and nature, through an ecocentric thought



Figure7 Thoreau's Hut at Walden

Henry David Thoreau suggests how humans can communicate with nature in modern times through a practical image of nature, which forests have. He warns that humans can't realize the value of space, which humans have had from time immemorial, if we own nature with an ambivalent attitude that originates only from human desire.

Generally, we have enough space. Our horizon isn't immediately in front of us. Thick trees or lakes aren't right in front of our doors. However, some spaces are always developed and approaching toward us intimately. These spaces are owned and enclosed by humans in some ways, with their natural elements tamed.

When people respect nature, forests, and seasons, and build a friendship with them, encountering those spaces leads to an unseparated familiarity. This familiarity leads to each individual's inner comfort. This feature is similar to the essence of the enclosed space type.

Thoreau shows a relationship between practical nature and humans, who must communicate with the nature in a haptic way. Thoreau plainly systemizes an essential value humans must finally enjoy through a directly experienced, perceived and acknowledged procedure.



Figure8 Sympathetic relationship through an ecocentric thought

3.4 Space-organizational association between architectural enclosure and ecological order

Through analyzing a feature of the architectural enclosure of Luis Barragán, a condition triggering an ecological environment relationship in Soswaewon, and the ecocentric thought of Thoreau through Walden lake, we found that the function of a wall bounding an inner space and an outer space - that is, a mass such as a wall for forming the enclosure - had a process of becoming borderless, which blurs its boundary.

. Through such open and unclosed space features, architectural forms that

bring about enclosures have a characteristic of stirring up and circulating the natural interpenetrate phenomenon of nature.



Figure9 Ecological sense of place through architectural enclosure

4. Building factors of the sense of place in Metropolitan public footpaths

The building of the sense of place in public footpaths is done within the scope of ecological thinking. This is the clue that the scope of a stroller's awareness of a place goes through some kind of relationship formation. The standards regarding how much sense of place can be restored from the image of metropolitan public footpaths, in which strong aesthetic experiences of humans in substantive natural environments are developed artificially, and the variance in its accompanying elements, are as follows.

As a result of analyzing the case study of Luis Barragan's architectural enclosure features and Soswaewon's sense of place through ecological placeness, in common the circulatory continuity between the interior and exterior was generated from the place practicing architecture. This meant that the inner intimacy within a person's house living in the metropolitan city must be manifested in the space between outside buildings, between nature, and thus, in-between space through at least the minimal framework.

The formation of a sense of place for public foot paths being experienced through eyes of strollers engaged in the activity of walking within the foot paths, as an external space of a residential or non-residential architecture type, must focus on deriving a continuous order with an ecological enclosure through an open but minimum sense of mass of natural type.

. Despite the fact that this order is something that is being newly assigned to architectural actions, it signified that this must aim towards the direction of a concentrated holistic environment development from the organic equality with nature.

5. Conclusion and proposal

This research started from the question whether strollers that must experience placeness within the locational density of metropolitan public footpaths can enjoy the sensation of refreshment in the substantive nature's 'forest'. To establish architectural enclosures that aim for the building of ecocentric



placeness and the set-up of boundaries in footpaths, we had to focus on the relationship between nature and the buildings located in surrounding areas of the footpaths.

Since the formation of foot paths in public regions of a metropolis in this study was set as a concept suitable for human walking, they could refer to in-between spaces of already completed architectural structures, or in-between spaces of landscapes.

The characteristics of such public footpaths were derived as follows.

First, public footpaths as a concept of the in-between space amid buildings required the buildup of enclosure through the blurring of interior and exterior architectural boundaries, in other words, through a sense of mass such as a conceptual wall that focuses on going borderless. In this case, the introvert constitution of exterior space through a connection with the already formulated privacy oriented enclosure in the architectural interior was necessary.

A focus of the enclosed type is to recover the 'placeness' of a certain place through the role of walls for forming foot paths and new ties with strollers to make them feel a sense of place therein. Since such an organic interrelation was just an ecological feature of nature, it led in a direction of harmonizing with nature, resulting in each boundary between territories getting blurred.

Walls became not physical walls but a subject that formed a place within which memories and associated time were contained, and preparations and experiences occurred.

. In this manner, act of creating a volume of a place was being constitued by each stroller in relative and multi-directional ways. Secondly, foot paths among landscapes meant organizations through minimal architectural frames.

The sense of mass of landscape walls, which are of a practical natural type that grows and changes together, among the natural environments being already formed in the foot paths, could help fulfill an environment-centered value of the ecology.

Also, by actively adopting the sustainable construction theory of Soswaewon Garden and the form of Luis Barragan's vertical gardening, strollers were enabled to experience the cross section of the vigorous organic system of architectures.

Such constructing types of minimizing artificiality to achieve a balance that is based on nature's essentiality was fulfilled by the allocation of natural features that resembles the natural form.

In addition, through the continuous and circulatory landscape characteristics of accepting the substantial nature as a place for footpaths, the sustainability of space was also supported. This was because the shape of landscape walls, which could present not only nature's figurative imitations but also the application of properties as well, was essential. In other words, it must resemble the landscaping shape that is appropriate in terms of the topography, climate etc., which is naturally given to each footpath, and must form visual uniformity.

Therefore through the morphological characteristics of architectural enclosures for the metropolitan public footpath's ecocentric sense of place, we expect this research to be a vital key to the formative values for building the sense of place of public footpaths, which must be designed in metropolitan spaces.

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