

A Study on the Architectural Space Planning Based on the Concept of the Urban Landscape-Suncheon Art Platform

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Abstract: The purpose of this study is to propose architectural design plans to complete the urban landscape based on the identity of the city. For this purpose, this study investigates the characteristics of the urban landscape and the planning elements of the architectural space which could complete the urban landscape by integrating the historical, cultural background of the city and the city identity. This study proposes an architectural design proposal as a city landscape. The contents of the proposal of this study are summarized as follows. First, the reed forest which symbolizes the ecological identity of Suncheon was planned all over the site representing the historical, cultural and social background of suncheon and two walls and ramps were planned as the symbolic elements to reveal the internal order. Second, this study applied the concept of the semi-outside space as space which has different meanings according to the human perception. This is a space where the identity of the place is determined by the mutual relationship between the building and the people. This is also a fluid space which could be changed according to the human perception. The “Suncheon art platform” secures the ecological identity of sncheon and plays a role as a public ‘living room’ which represents Suncheon’s historical, cultural and ecological identity.

Key words: Landscape, scenery, ecological environment, semi-outdoor space, suncheon art platform, Suncheon art platform

INTRODUCTION

The building is not merely a physical element occupying a place but a being as an entity that determines the property of the place. The characteristics of the place are determined by the relative aspects of the existence and the non-existence and expressed by the buildings in physical forms. The characteristics of the place represented by the building are formed by the combination of the forms and the functions of the building and the human activities. Thus, the building is not only a physical element with forms and functions but a being which representing the human perception and activities.

The city is formed by a set of buildings. Therefore, the structure of a city should be understood as an organic system that constitutes a city space by the buildings. From this point of view, the planning of the building as a component of the city should take into consideration the historical and the cultural values of the place and the comprehensive aspects of the human perception. Buildings form an urban landscape together with the place where the buildings exist and various buildings enrich the landscape of the city. The urban landscape of the city is completed by the forms and the functions of the building

as well as the order of the land and the human activities. Therefore in order to enrich the urban landscape it should be able to accurately grasp the order of the land and to find out the architectural planning elements that can reveal and strengthen the order of the land.

This study proposes architectural design plans that can enrich the urban landscape. For this purpose, this study examines the planning elements that can form the organic relationship between the land and the building based on the understanding of the order of the land. The proposal of this study enables the land and the building to complement each other and to realize the completed the urban landscape based on the identity of the city.

Contents of the study: The contents and the process of this study are as follows. First, this study summarizes the concept of the urban landscape and examines the characteristics of the urban landscape created by the relationship between the buildings and the city. Second, the planning elements based on the historical and the cultural backgrounds of Suncheon are summarized. Third, this study proposes planning elements and programs based on the identity of Suncheon which set up the urban landscape. Finally, this study proposes architectural



Fig. 1: Pictures of the landscape involving cultural activities (3)

design plans which are applied as a concept of the urban landscape that can express the implied urban culture combined with the human perception.

Concept of the urban landscape: The landscape is a broad concept that collectively refers to everything that comes into view at a certain time. There is scenery similar to the landscape. The difference between the landscape and the scenery is that the cultural activities of the subject are involved in the landscape and there is not in the scenery. In other words, the landscape is formed by the intervention of the human cultural images. Thus, the landscape includes a combination of the visible boundaries that define the line of sight at a specific time and includes the cultural and cognitive behavior of the viewer as the subject of the viewpoint (Han and Shim, 2012; Lee and Dong, 2007). The landscape is a concept that includes an environment focused on physical elements, so it is composed of a combination of the visible elements such as buildings, facilities and etc., along with the natural elements (Fig. 1) (Lee and Dong, 2007).

City and landscape: The concept of nature can be classified into two categories. One is the nature that is the background of all beings including human beings and the other is nature that is defined by the human beings. If the meaning of the former is a nature as a source including men and all things, then the latter is a nature of the technical and real meaning. The view of nature of a subject is the background of the mechanistic view of nature of modern science and culture (Jeon and Chng 2004). The concept of the landscape, first introduced by dutch painting in the 17th century was also based on descarte's mechanistic view of the nature and clearly distinguished the subject of the creation and the object. However, according to the changes of the times, the concept of the modern landscape was regarded as an essential element for constructing the reality existing in the confrontation between the culture and nature (Jeon and Chng 2004).

The landscape in the city is determined by the material relationship between the background and the

object. In other words it is based on the conceptual relationship between the background and the building. It is difficult to realize the conceptual meaning of the landscape when the building is revealed as being overwhelmed by the background or when the building is buried in the background. Walter Benjamin expressed the relationship between the city and the architecture figuratively with the concept of the porosity. He explains the phenomenon of the porosity created by a building as removing the boundary between the physical spaces. Therefore, he explains that the urban porosity of the city disintegrates the clear physical and social boundaries of the uniformed city of modern architecture and creates various spaces of the creative chaos to enrich the physical and social structure of the city (Cho and Park, 2013). The concept of the porosity is based on the absence of boundaries and creates a new space through the process of eliminating boundaries. This serves as a conceptual element to create a new landscape based on the relationship between the background and the object. The process of reconfiguring the boundaries of the inside and outside of the building becomes a landscape of the city where the building and the land complement each other through the organic relation of the building and the identity of the land.

Urban landscape and the architecture: The city consists of a set of buildings. In the city, buildings are combined with the various events and this can be obtained through the spatial experience in the place (Yi, 2013). The building is not a place that is simply the background of the human activities but a place where the human life and the culture are positively embodied. The image of a building as a place is recognized through the process of symbolization and is the result of a cognitive act that is composed of various elements such as forms, structures and colors. By integrating the images and the functions by the effective symbols, the identity of the building is revealed and the city landscape is completed with the human activities.

Suncheon: Suncheon is a city located in the SouthEastern part of Jeolla Namdo. There are various ecological resources such as mountains, lakes and beaches around Suncheon bay and the various historical and cultural resources around Suncheon's old city walls. Suncheon has a city brand of ecological city with world-class Suncheon Bay Garden and the excellent natural environments related with the city.

The urban landscape forms the image of the city and establishes its identity. The image of the city is created by

the strategy for the urban identity and the various policies are implemented to become a city with symbolism (Choi, 2009). The symbol of the city is made by a place with a special urban landscape. The urban landscape is perceived by the human insight and it is a social phenomenon that is created by the autonomous flow of various phenomena.

Suncheon has an identity as a residential area where people lived for a long time and the Suncheon's old city walls are the main historical and cultural assets. In addition, also, the excellent natural environment of Suncheon Bay plays an important role in forming the identity of Suncheon. The historical cultural assets of Suncheon and the excellent natural environment of Suncheon should be considered as a major planning elements in the designing the building in the point that the architecture completes the place formality in physical form.

MATERIALS AND METHODS

Design concepts: The building is a part of a city and each building forms a whole city. The part and the whole have the possibility of expanding the meaning and being developed into the new organization through the interaction according to each other. In the literary works, the technique of letting the whole be known through the part is explained by the word 'aesthetics of compression'. The 'aesthetics of comprehension' means 'effectively revealing the meanings and the relationships that the whole means through a simple but highly effective symbol' (Choi *et al.*, 2003). This is emphasized by the pictorial techniques such as repetitions.

The restrained expressions such as 'aesthetics of compression' might not be applied only to the field of literature. The beauty of the blank space revealed through the compression and temperance is an expansive technique that can be applied in the field of the visual arts. The simple but effective imagination and the restrained morphological expression by the organic composition constitute one complete body and allow the users to feel the set of parts appearing in each segmented figure naturally. The use of the restrained forms is reflected in each architectural space and has the effect of maximizing the theme even more. The architectural space which provides a way to recognize the urban culture and which enable the experiences completes the landscape of the city based on the human perception.

This study proposes architectural design plans as a cityscape which can express the identity of the place through the restrained expression of the building that completes the cityscape and can be revealed by the relationship between the part and the whole (Fig. 2).

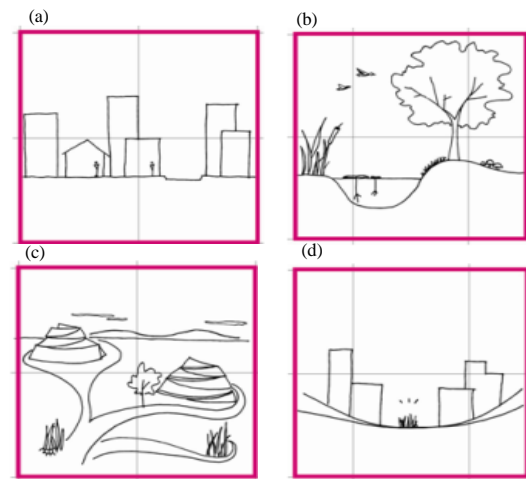


Fig. 2: a-d) The identity of Suncheon and the diagrams of the architectural space as an urban landscape. Suncheon has succeeded in promoting itself to be an 'eco-city' with the excellent natural environment associated with the city. Therefore, this proposes to strengthen the identity of Suncheon as an 'eco-city' and to create eco-friendly 'Suncheon Art Platform' that can act as a catalyst for urban regeneration. The proposal of this study serves as a center of ecological environment by excavating historical, cultural and ecological potential of nature and creating an ecological environment which ensuring the ecological identity of Suncheon

The relationship between the part and the whole is divided into three areas according to the nature of the boundary: inside, outside and semi-outside. The inside of the building is a space filled with the programs and the outside is the empty space that could be the background of the building. The semi-outside space is an external space at the physical point of view but has the characteristics of being able to be perceived as an internal space with programs according to their contents and forms. In general, the configuration of the internal space is determined by the relation of programs in each room and the external space is composed of the space excluding the internal space.

The space that is functionally, connected to the internal space or partially includes the components of the internal space in the external space is the semi-outside space. The factors determining the nature of the semi-outside space are the physical properties of the building envelope, the location, the size and the shape of the opening. In this space, the architectural planning elements such as pillars, walls, canopies, etc., which determining the characteristics of the space are the most important planning elements (Table 1).

Table 1: Planning elements of the architectural space

Space	Architectural planning element
Inside	Programs
	Overall planning scheme
Outside	Environment of the architecture
	Functional relationship with the indoor space
Semi-outside	Functional connection of the interior space and exterior spaces
	Physical entities of building envelope
	Position, size, shape of opening
	Pillars, walls, canopy

The perception of the boundary between the inside and the outside of the buildings is divided into the visual boundary and the perceptual boundary. The visual boundaries are determined by the physical architectural planning elements and the perceptual boundaries are determined by the non-physical architectural planning elements. The visual boundary can be clearly distinguished according to the nature of the architectural planning elements but the elements of the perceptual boundary are different according to the human consciousness. The elements of the perceptual boundary appear differently depending on the background of the place where the building exists and the relation of the building. Therefore, the boundaries between the outside and the inside are clearly blurred and the inside and the outside have continuity according to the recognition of the perceptual boundaries. This is a concept of the fluid space that is consistent with the human consciousness that is not fixed but constantly changing (Kim and Park, 2006). The space in which the boundary between the inside and the outside, the part and the whole is not clear is an important planning element in terms of the functional relationship that enables the user to utilize the creative space.

This study proposes architectural planning concepts which can integrate the interior space and the exterior space and integrate the parts and the whole through the creative space utilization of the semi-outside space which could have the different meaning according to the human perceptions. This place is a new conceptual space in which the identity of the place is determined by the organic interrelation between the architecture and the human perceptions.

Programs: Suncheon has an excellent natural environment connected with the city and it has a city brand so called ‘Ecological city’. This study proposes the ‘Suncheon Art Platform’ as an eco-friendly culture and arts complex that can strengthen the Suncheon’s city identity and act as a catalyst for the urban renewal on the site located in the city center of Suncheon. The proposal of this study



Fig. 3: Proposed site

proposes that the ecological environment of Suncheon should be established in order to secure the ecological identity of Suncheon and to explore the historical, cultural and ecological potential of the city of Suncheon. The ‘Suncheon Art Platform’ plays a role as a public ‘living room’ and the urban culture center of the ecological environment for the whole community.

Proposed site: The proposed site contains the identity of Suncheon downtown and various human environments. Surrounded by the ruins of the old city walls, old downtown of the city is the core area of the regeneration plan. It faces the main commercial district of the city center to the East and faces the Okcheon River to the South (Fig. 3).

Site plan: The most representative identity of Suncheon is the ecological environment harmonized with nature. This study sets up the excellent natural environment of Suncheon as a major planning element in the planning of the building and offers to complete the urban landscape connected with the historical, cultural and social environment around the site (Fig. 4-6).

The plan is to set the entire site as a natural environment and to minimize the buildings on the ground so that the buildings do not occupy the land in a unilateral way. Instead of forming the image by the shape of the building exposed to the outside, this plan creates a comprehensive and organic urban landscape that can transcend the subordinate relationship of the city by applying the architectural planning elements with the effective symbolism.

The entire site of the ‘Suncheon Art Platform’ proposed in this study is planned as the field of reeds forest symbolizing the ecological identity of Suncheon. The most facilities with programs are planned on the underground level and the order of the entire site is defined by the East-West direction and the North-South direction walls with the ramps revealed on the ground.

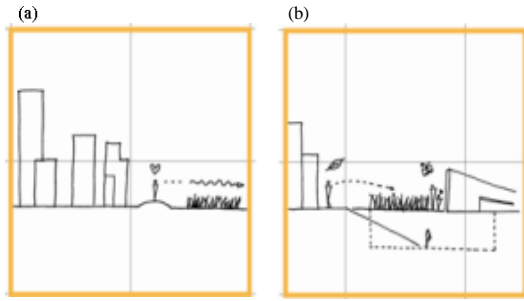


Fig. 4: a, b) Existing environments of the site the proposal of this study offers to complete the overall urban cultural network by accepting the order of the existing urban fabric

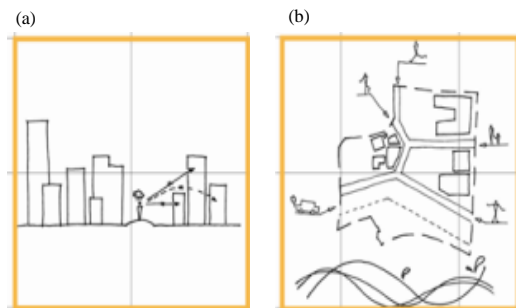


Fig. 5: a, b) City landscape by the relation between the site and surrounding environments. The 'Suncheon Art Platform' is composed by the order of the wall and the stairs of the East-West and the North-South direction and reeds field which symbolizing the ecological identity

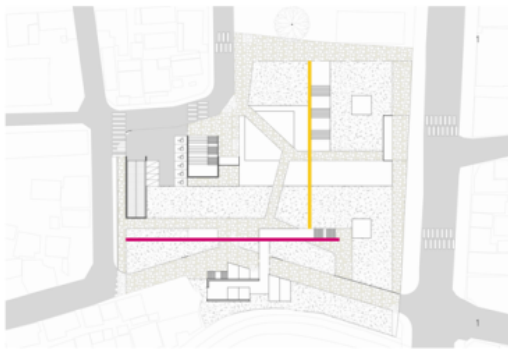


Fig. 6: Site plan

People gather in the field of reeds spread out on the site. The floating structure in the field of reeds is a metaphor that implies the ecological city of Suncheon as a symbol that could not be encountered on a daily basis. The reed field which is the background of the building acts as an element to establish the relationship between nature and the city.

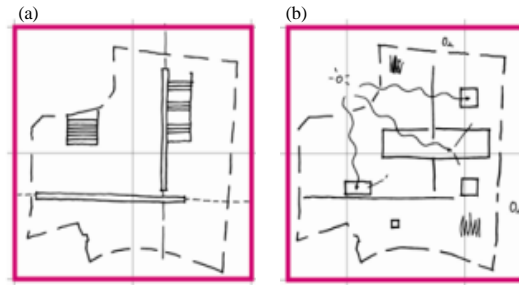


Fig. 7: a, b) Two walls defining the order of the site. The wall running through the ground to the East-West and the North-South direction symbolizing the city-culture networks. The sunken plaza which is accessed by long and symbolic stair provides the main entries to the each facility

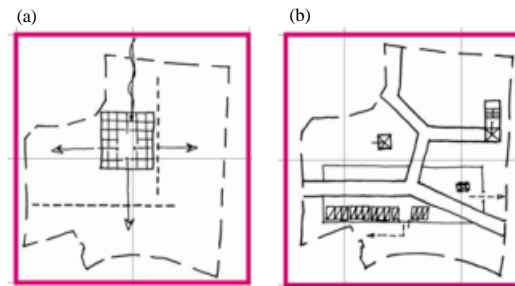


Fig. 8: a, b) Visitor center. Transparent visitor center serves as the starting point of the main access to the museum and the educational facilities. Alternative choices such as stairs, elevators, sunken for the connection between the underground and the ground space

Floor plans: The shape of the building is the basic planning element that determines the image of the building. However, this plan is based on the fact that most of the facilities are underground and the only structures exposed on the ground are two walls that penetrate the site in the East-West direction and the North-South direction. Two walls that penetrate the site symbolize the urban network around the 'Suncheon Art Platform' along with the existing environments integrating the various hierarchical urban structures with the buildings (Fig. 7 and 8).

The ramp that crosses the site to the North and the South is the main passage connecting to the main space at the underground level. The gradual change in level and gaze along this ramp serves to transform the landscape of the site into the landscape of the building.

Visitor center: The visitor center with the transparent appearance which is naturally linked by the ramp that runs North to South along the site serves as the center of the

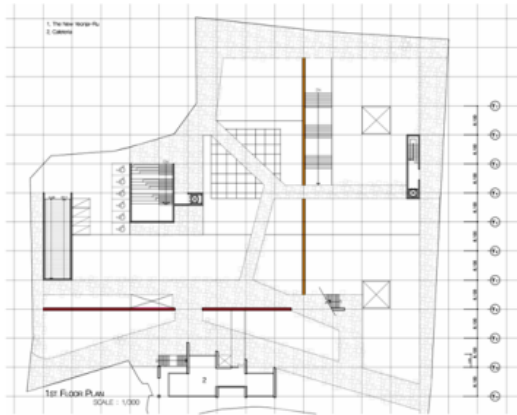


Fig. 9: Ground level plan



Fig. 10: Underground level plan

‘Suncheon Art Platform’ and also serves as the starting point for accessing the museum and the other facilities (Fig. 8).

The art museum and educational facilities are located on the left and right of the visitor center. The art museums and the educational facilities are independent buildings with the separate entrances but have a circulation system of the organic connection of the ‘Suncheon Art Platform’ centered on the visitor center. The connections between the underground space and the ground space can be selected in the various ways such as stairs, elevators, sunken, etc., thereby ensuring the convenience as a multi-use facility.

Art museum: The contemporary art museums should play a role not only of the authentic art museum of the neutral space, so called the ‘White Cube’ but also of its role as a container for the various types of contemporary arts and to highlight the new art form. The proposal of this study proposes a multi-layered neutral exhibition space which can display not only the traditional arts but also the

various sizes and types of art works and an exhibition space free of the morphological deformation (Fig. 9 and 10).

In order to compensate for the unfavorable light environment of the underground space it is planned to design an external exhibition space that is continuous in the underground space, so that, the various indoor/outdoor exhibitions can be made.

The sunken square which is used by the visitor center and the museum are organically linking the ground space and the underground space and providing a new venue for the people. The underground courtyard is open to the sky and connects to space with the programs in various ways at each location. This is not a place where the outside and the inside are clearly distinguished but it is a flexible space that continuously changes according to the human perception and provides the user with the possibility of utilizing the creative space.

The NorthWest side of the site is a service area for vehicles and the entrance to the underground parking lot is also planned here. The underground parking lots have direct access to the ‘Suncheon Art Platform’ and have the sunken courtyards for the natural light and ventilation. In the underground parking lot, a connection route to the underground shopping street on the East side of the site is planned, so that, the commercial network of the city can be supplemented.

Educational facilities: In modern times, the importance of educational functions of museums is gradually increasing. Especially it is emphasized the role of the educational facility as a place to share the various cultural contents of the art museum. The educational facilities of the ‘Suncheon Art Platform’ are accessible through the visitor center and the stairwell court which can be used for the outdoor performances and lectures. It plans lecture rooms, activity rooms, seminar rooms, workshop rooms and a multi-purpose auditorium for the various sizes and types of events.

Sections: The underground space of this plan is open to the sky and its form is not exposed to the outside. In general, the underground space has various adverse conditions compared to the ground space. In particular, the architectural planning element to be considered more important is the solution for the light and the ventilation (Fig. 11).

The sunken plaza which is planned in the underground level is a semi-outdoor space with a gallery shared by the visitor center, the art galleries and the educational facilities. This space can be integrated into the interior space and the exterior space and also has

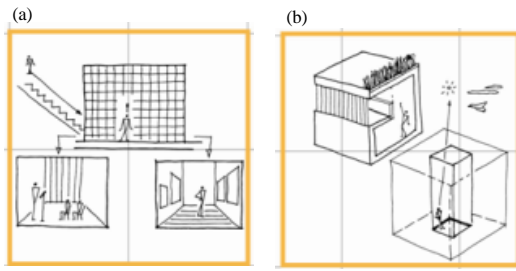


Fig. 11: a, b) Conceptual diagrams of sections. Visitor center is the starting point of the main circulation of the 'Suncheon Art Platform'. The exhibition space has a neutral space of multi-layer format which accommodates the varieties of exhibitions

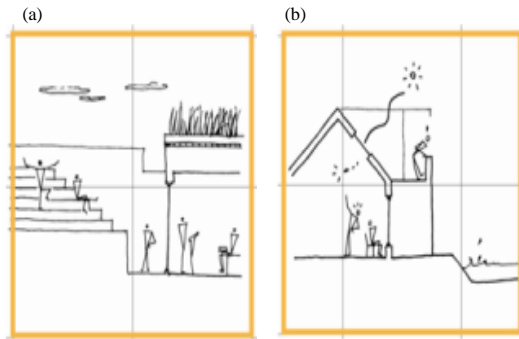


Fig. 12: a, b) Conceptual diagrams of sections. The educational facilities have the stepped courtyard that can be used for the outdoor performances and lectures. This study proposes a symbolic place to reveal the internal orders rather than to have its own morphological differentiation

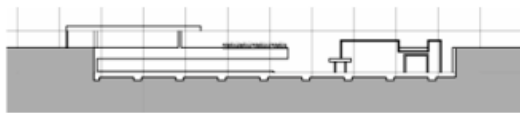


Fig. 13: Cross section

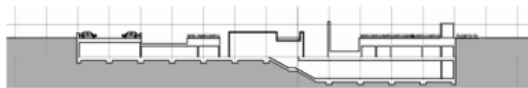


Fig. 14: Longitudinal section



Fig. 15: Elevation

characteristics of a blurred space in which the concept of the space changes according to the human perceptions. Therefore, this is a new conceptual space where the

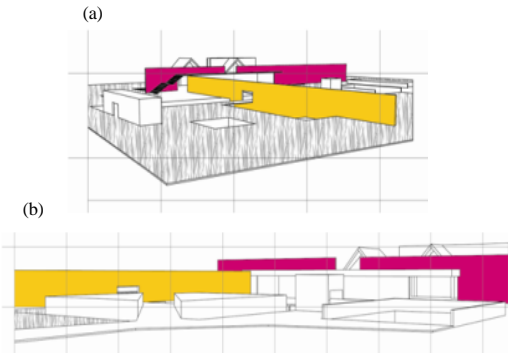


Fig. 16: a, b) Two walls defining the order of the site and completing the urban landscape

identity of the place is determined by the mutual relationship between the architecture and the people (Fig. 12-14).

This is not a space that has only one function but a place where the use of the space can be changed according to the human activities. Therefore, it has diversified the form of the envelope facing the square, so that, it can be integrated with the interior space if necessary and carefully considered the physical architectural planning elements such as pillars, walls, canopies.

Elevations: The characteristic elements of the façade of this plan are the two walls that cross the site from the North to the South and the East to the West. These two walls are the result of the restrained expression of completing the urban landscape together with the planned reed forests throughout the site as a symbolic planning element that reveals the internal order consistently applied to the 'Suncheon Art Platform'. In other words, two walls with the planned reed forests express the identity of the ecological city Suncheon and implement the architectural space as a cityscape which can be expressed by the relation between the part and the whole.

The proposal of this study constitutes a complete urban landscape with an organic composition made up of the simple but effective symbols. The use of this restrained form is reflected in the each architectural space, allowing the user to feel the whole as a set of parts naturally (Fig. 15 and 16).

The completion of the urban landscape is not expressed only by the physical form of the building but by the human cognitive system. In this plan, the changes in level and gaze that can be felt while moving along two walls and ramps serve to transform the landscape of the land into the landscape of the building. It provides the basis for reading the implied urban culture and has the

effect of maximizing the identity of the city as a cityscape. This is the result of the reinterpretation of the urban landscape based on the human perception.

RESULTS AND DISCUSSION

The urban landscape is completed by the forms and the functions of the buildings together with the order of the land and the human activities. Therefore, in order to enrich the urban landscape of the city it is necessary to accurately identify the order of the land and to find and implement the architectural planning elements that can reveal and strengthen the order. The proposal of this study is not just a building which is subordinate to the land or free from the land but the physical entities which make the land and the building act complementary to each other, so that, the identity of the land can be emphasized and the urban landscape can be realized.

The ‘Suncheon Art Platform’ secures the ecological identity of Suncheon and plays a role as the center of Suncheon’s history, the urban culture, the ecological environment and the public ‘living room’ for the whole community. The completion of the urban landscape is not expressed only by the physical form of the building but by the human cognitive system. The changes in level and gaze that can be felt by moving along the two walls and ramps of the ‘Suncheon Art Platform’ will transform the landscape of the land into the landscape of the building and maximize the identity of the city. This is the result of the reinterpretation of the urban landscape based on the human perception.

CONCLUSION

The purpose of this study is to propose architectural design plans which can enrich the urban landscape. For this purpose, this study summarized the concept of the landscape and examined the characteristics of the urban landscape created by the relationship between the city and the architecture. Based on this, this study proposed a plan of the ‘Suncheon Art Platform’ as an implied the urban landscape combined with the human behavior based on the historical, cultural background and the urban identity of Suncheon.

The contents of the proposal of this study are as follows. First, the excellent natural environment of Suncheon is set as a major planning element in the planning of the buildings as the historical, cultural and

social background of the land which completes the urban landscape. The reeds forest symbolizing the ecological identity of Suncheon was formed throughout the site and two walls and ramps in the East-West direction and the North-South direction were used as the symbolic planning elements that reveal the internal order consistently applied to the ‘Suncheon Art Platform’. Second, this study applied the concept of the semi-outside space as space which has different meanings according to the human perception. This is not a place where the outside and the inside are clearly distinguished but it is a flexible space that continuously changes according to the human perception and provides the user with the possibility of the utilizing creative space. This is a new conceptual space where the identity of the place is determined by the mutual relationship between the architecture and the people.

REFERENCES

- Cho, Y. and G. Park, 2013. Porosity of walter benjamin and landscape of urban architecture. *J. Archit. Inst. Korea Plann. Des.*, 29: 211-220.
- Choi, I., 2009. A study on the factors in historical aspects of urban culture design. *J. Integr. Des. Res.*, 8: 143-156.
- Choi, W., K. Kim and Y. Lee, 2003. A study on the expression of reality in cyberspace. *J. Archit. Inst. Korea Plann. Des.*, 23: 203-206.
- Han, J. and W.G. Shim, 2012. A comparative study on the sense of scenery in traditional residence in Korea, China and Japan-based on the visual and perceptual function of Semi-void space. *J. Archit. Inst. Korea Plann. Des.*, 28: 169-180.
- Jeon, S.K. and J.Y. Chng, 2004. A study on the expression of the landscape architecture with the relation to the nature. *J. Archit. Inst. Korea Plann. Des.*, 24: 539-542.
- Kim, D. and H. Park, 2006. A study on a gallery design using blurred zone in digital architecture. *J. Archit. Inst. Korea Plann. Des.*, 26: 441-446.
- Lee, J.H. and J.K. Dong, 2007. A study on the cultural landscape formation through landscape elements application of industrial heritage. *Proc. J. Archit. Inst. Korea Plann. Des.*, 27: 229-232.
- Yi, Y., 2013. Aesthetic omission in anderson’s wineburg, Ohio and hemingway’s in our time. *Stud. Humanities*, 36: 93-116.