

The Concept of Urban Green Space

Kim, Soo-Bong* · Anne R. Beer* · Kim, Yong-Soo**

* Department of Landscape, Sheffield University, U.K.

** Department of Landscape Architecture, Kyongbuk National University

도시공원녹지의 개념에 대한 연구

김수봉* · 앤 비어* · 김용수**

*영국 셰필드대학교 조경학과

**경북대학교 조경학과

요 약

우리나라의 근대화 과정에 도입된 'open space'는 도시, 조경계획분야에서 흔히 취급되고 있는 중요한 소재이며 도시환경을 이야기할 때 가장 자주 언급되는 용어이다. 그럼에도 불구하고 'open space'는 연구 분야나 연구자의 접근방법에 따라 편리하게 정의되어 왔으며 전문가들조차 그 개념연구에는 소홀히 해 왔던 것이 사실이다.

본 연구는 기존의 문헌을 중심으로 오픈 스페이스가 어떻게 다양하게 정의되고 있는지를 그 성격, 기능 그리고 그 종류에 따라 규명하여 보았다. 아울러 본 리뷰는 오픈 스페이스를 '도시속의 자연'이라는 가정하에 도시공원 녹지와 인간과의 관계를 Cultural 그리고 evolutionary 관점에서 고찰하여 차후 공원녹지 분야의 연구와 그 정책수립의 기초자료로 제공하고자 하는데 역점을 두었다.

1. Introduction

Burgess et al.(1988) stated that urban green spaces are highly valued by urban and landscape designers for their contribution to the quality of life in cities(Burgess, Harrison and Limb, 1988). However, too frequently "open space" is idiosyncratically presented as an environmental cliché and it is a term that has been employed instead of "green space" and vice versa. It is probable that the different definition of open space

reflect the different ways professionals view and tackle the problem of open space. The definition of open space varies depending on the nature of the problem to be solved. Accordingly, the character, function, type and even role of open space, at least in the literature, largely depend upon how the authors define the open space.

In recent years, the growing demand for a high quality of life has coincided with a deep concern for the availability and quality of urban green space. For example, groups of

local people have recently demonstrated this concern and anxiety with direct action such as sitdown strikes, whenever a local authority, in the name of development, tries to destroy a preserved green space near their residential areas. The quality of the urban environment has now become a social issue in Korea, where it was not in earlier decades.

Since 1962, when the first Urban Planning Law Ordinances listed green space as an urban planning provision, there has been a requirement to provide open, green space (Park and Kim, 1991). This green space requirement has however, been largely neglected in the priorities of the urban planning decision-making process, on the grounds that it is unproductive space. In addition, the local authorities have no power to decide the development of urban parks due to the hierarchy of the Urban Park Law system in Korea and policy makers' bureaucratic attitudes toward urban park planning decision making processes in central government. Moreover, the methods which have been developed and used by the policy makers to supply Korea's urban green space have several problems: for example, they are largely based on a fixed size and standard of facility and recreational amenity provision etc. (Hwang, 1986). Furthermore, it seems that neither urban and landscape planners nor policy makers have made any attempt to identify the changing definition and concept of open space in Korea with respect to changing requirements of contemporary society.

At this point, the author assumed that the green space is more appropriate term than open space with regard to landscape planning in cities. Therefore, the understanding

of definition of green space is an important task not only to establish a theory of urban green space in Korea but also to suggest a basic open space planning guide-lines in Korean cities. Therefore, this study tries to tackle the definition of open space in terms of the landscape design field with respect to the concept of open space. In particular, this review is to assemble and review systematically the literature concerned with open and green space definition in relation to character, function and type, and people's relationship with green space in terms of environmental psychology.

2. The Concept of Open Space

The concept of open space in the landscape architectural field is widely accepted as outdoor space which is covered by green in the city. According to Nagel(1978), "(outdoor spaces) are more or less functionally related to buildings and their internal spaces to those green spaces available for general use, which have only secondary relationship to internal space. The two terms indoor and outdoor space have been justified through interdisciplinary work in the planning field, in that they express a clear spatial relationship. I will, therefore, use the term outdoor space as being synonymous with open space" (Nagel, 1978, p.670).

The author, as a landscape architect, agrees with Nagel's concept of open space, because the landscape architect deals mainly with landscape i.e., outdoor spaces to create setting for human beings.

The followings discuss the various functions, types and characters of open space as defined by professionals in order to articulate practical concepts of open space in relation

to landscape planning in cities.

2.1 The character of open space

The physical features, such as land or water, openness, publicness, and naturalness are the most common matters of concerns whenever professionals discuss the character of open space.

In terms of physical features, traditional urban designers define open space as all the areas of land or water which is not occupied by buildings. Tankel has suggested that the term open space encompasses not only all land and water in land and around urban areas which is not covered by buildings, but the space and light above (Tankel, 1963, p.57). According to recreational planners, such as Gold, open space is land and water in an urban area which is not covered by cars or buildings; or any undeveloped land in an urban area (Gold, 1980, p.305). He also, like other urban and landscape designers, emphasised the 'unbuilt-on' character of open space whether it is land or water. In addition, Morris has examined planning definitions of open space in Britain and America in her *An Anglo-American Comparative Glossary*. In Britain, open space is understood as any land, whether enclosed or not, which has no more than a small part of its area covered by buildings, and the remainder of which is laid out as a garden. Open space in Britain is usually sub-divided into two categories; public and a private open space. In America, open space is a land or water area with its surface open to the sky. However it is not closed space and should never be synonymous with "va-

cant" or "unused" land (Morris, 1984, pp. 17-18).

Landscape architects have often emphasised the democratic character of open space with respect to the atmosphere of openness and publicness.

Eckbo (1969), the well-known landscape architect, stated that open space consists of air and land which is not covered by cars or buildings or any undeveloped land. Therefore, anybody will have access with freedom. According to him, "Space is air, the atmosphere in which we live like fish in water. Land is its bottom. It is only tangible and comprehensible when defined by physical elements—buildings, trees, topography, traffic elements, water. "Open" means freedom of movement, physical or visual, with no obstacles, either fixed or moving—or no continuous obstacles. This is a matter of proportion. Freedom is neither complete vacuum nor complete license" (Eckbo, 1969, p.120). Cranz (1982) argued, in her book *The Politics of Park Design*, that "First, open spaces were wide open areas with the connotation that this was where "anything goes", ...Second, they were not built up but left open...Third, open spaces were fluid. There was a fluidity at their perimeters, so that park flowed into city and city into park" (Cranz, 1982, p.138). She seems to support Eckbo's (1969) open space character regarding the democratic and public features of open space. Both American planners are more or less interested in the words 'open' and 'space' in that they emphasise the character and understand the meaning of open space clearly.

Another group of professionals, such as

environmental psychologists and ecologists have defined the character of open space in terms of naturalness. Little(1968) is one of the pioneers who stresses open space as the 'natural environment in the city'. According to him, open space is the present whole of natural environment in cities.

"Nature in the city" evolved out of the ideas proposed by McHarg's(1964) book (now a classic) *Design with Nature*. This idea has been developed by Laurie(1979), Hough(1984), and Spirn(1984). Accordingly, 'green space' is a term more often used when open space is seen as part of the natural environment in the city. Up to now in the English language the phrase has been more commonly used in the field of environmental psychology and aesthetics. For instance, Wohlwill (1983, p.7) considered it dealt with the landscape rather than with the built environment, including the world of rocks and sand of shoreline, desert, woods, mountains, etc., and the diverse manifestations of plant and animal life that are encountered there. In addition, the Kaplans believe that mankind has a strong desire for contact with a natural environment and again that it is this which makes them try to make sense of it and to be involved with it. To the Kaplans, nature includes official city parks and open spaces, meadows and abandoned fields, street trees and backyard gardens: "We are referring to places near and far, common and unusual, managed and unkempt, big, small, and in-between, where plants grow by human design or even despite it"(Kaplan & Kaplan, 1989, p.2)

Gilbert(1989, pp.1-8), as an ecologist, presented green space in cities as a place for plants and animals. He argued that the roles of urban wildlife in people's everyday lives are contact with nature and the sensuous pleasures of touch, sight, smell and sound. He described nature in cities as the best provider of incident, variety and local character.

Recently, site planners, such as Beer (1990, pp. 164-165), argued that the word 'green space' has come to mean the natural environment as opposed to the man-made urban landscape. She emphasised the importance of preservation and introduction of nature at every possible and appropriate place in the city in order to make places satisfactory settings for human life.

It seems that urban and landscape designers emphasise the character of 'openness' for its undeveloped land, whereas recent environmentalists strongly support the characteristics of 'naturalness' for its water, plants and wildlife. Therefore, open space is developable land in cities due to its openness and it has been preserved as 'green space' due to its naturalness. It is certain that open space is undeveloped land(or water areas) in cities its predominantly permeable surfaces with plants and wildlife open to the sky.

2.2 Functions of Open Space

The function of open space plays a special role for the cities in contributing to enhancing the relationship between people in cities. Almost all professionals propose at least four functions of open space, such as aesthetic relief, recreation-

al, structuring urban form and nature reserves. Although the authors have overlapped, the most frequently mentioned open space functions are recreation (Tunnard, 1963; Tankel, 1963; Little, 1968; Eckbo, 1969; Morris, 1979; Gold, 1980; Balmer, 1972) and nature reserves(Laurie, 1979;Hough, 1984; Spirn, 1984; Michert, 1984).

Compared with other functions, the structuring urban form and recreational function of open space is largely supported by town and recreation planners, such as Tankel(1963), Eckbo(1969), Balmer (1972), and Gold(1980). Tankel(1963) has interpreted open space in two ways with respect to personal awareness and also as an urban structural element. In the case of personal awareness "open space is used—for the wide range of active and passive recreation activities as well as for circulation; it is viewed—from the home, the road, or other vantage points; and it is felt—it gives privacy, insulation, a sense of spaciousness and scale". On the other hand, as an urban element, "open space which does urban work—protects water supply and prevents floods by soaking up runoff, acts as a safety zone in the path of aircraft takeoffs and landings; and open space which helps the path of aircraft takeoffs and landings; and open space which helps shape the development pattern—as space between buildings or communities, as space which channels development, as a land reserve for the future"(Tankel, 1963, p.58)

In addition, Eckbo(1969) argued the importance of understanding the function and the potential of open space in the physical and social structure of the com-

munity in order to address community concerns regarding preservation, development and control of open space. He suggested various functions of open space stating that "open space has a positive function for relaxation, recreation, conservation of wildlife, natural and agricultural resources, and scenery(the total landscape) and the shaping and control of urbanization"(Eckbo, 1969, p.119)

Moreover, Balmer(1972, pp.2-3) stated that open space is used for the purpose of providing opportunity for outdoor recreation for the general public. This definition, which was also one frequently used by British local authorities in planning statements, excluded private space, such as gardens and grounds attached to a house, while open space serves the specific urban uses of providing park and recreation opportunities, conserving valuable natural resources and structuring urban development and form in terms of American planning definitions(Morris, 1984, pp.17-18)

Furthermore, Gold(1980, p.305), as a recreation planner, suggested four main functions of open space, such as recreation purposes, conservation of natural resources, or historic or scenic purposes. He stressed the importance of historic and scenic functions of open space more than other.

On the other hand, the function of open space as nature reserves as a basis for urban natural processes is highly valued by environmentalists which include landscape planners, environmental psychologists and landscape ecologists(Laurie, 1979; Michert, 1983; Hough, 1984; Spirn, 1984).

In terms of environmental psychology, Michert argued that public open space in cities has various functions, "not only for reasons of urban ecology, leisure sociology, visual aesthetics, urban design and a healthy climate, but also because of the desire for an associated, fundamental and mysterious relationship between man and nature"(Michert, 1983, p.771).

Environmentalists, such as Laurie(1979), Hough(1984) and Spirn(1984) argued open space solely in terms of its ecological functions.

According to Laurie(1979), allowing nature to thrive in cities can provide aesthetic stimulus by reducing the inhumane scale of urban space, and by creating the micro-habitats which enable man to relate to his environment. Hough (1984, pp.5-27) also strongly proposed that planners should consider the ecological function of open space in cities as a basis for design. He stressed the importance of fortuitous open spaces as a basis for natural processes in cities such as derelict sites of old industrial buildings, disused mill ponds and abandoned railway lines for the ecological functions they served. Moreover, Spirn(1984, pp.9-11) stressed that the deep consideration of the ecological processes of open space is to contribute a distinctive, memorable, and symbolic urban form. She warns that many cities in the world suffer from a failure to consider nature, such as poor air quality, subsidence, landslides and floods.

Meanwhile, other landscape professionals, such as Fairbrother(1970) and Fraser (1984) have suggested rather different functions for open space compared with

other environmentalists and planners mentioned above. Fairbrother, in her book *New Lives, New Landscapes*, suggested four types of urban-green space function in terms of land-use; farming, amenity, industrial and dereliction. She emphasised, amongst them, two important functions of open space in relation to land-use planning, such as farming and amenity. According to her, '...(Farming and amenity) are both desirable uses but both need deliberate provision, and both are also necessarily limited-farming by conditions, amenity by cost. The other two uses are dependent on planning; neither is considered desirable and which occurs in any area is determined by policy. One is industrial land-use and other is dereliction by default"(Fairbrother, 1970, p. 217).

It is Fraser(1984) who stressed the changing functions of open space with regard to new methods of its provision and design. He proposed that there were three different functions of open space which could either be combined with each other through the way the space is designed, or could be dealt with individually. These functions were learning, working and outdoor recreation.

In this context, various authors pointed out that recreation, structuring urban form and nature reserves for urban ecology are three major common functions of open space. The recreational function is strongly supported by planning authorities in the UK and the United States, whilst ecological function of open space is largely supported by the environmentalists.

2.3 Types of Open Space

Writers from different professions have inevitably produced different types of definition of open space. However, the elements which constitute open space are common from formal urban parks to informal riversides.

It is Abercrombie(1944, p.103) who provided one of the earliest proposals of the types of open space for the Greater London park system.

- 1) Children's playgrounds
- 2) A town square or amenity space
- 3) School playgrounds and fields
- 4) Landscaped town parks
- 5) Large playing fields for adults and senior children
- 6) Recreation and sports centres
- 7) Connecting and radiating parkways
- 8) Wedges of open space
- 9) Small green belts and strips of open space for defining the boundaries of communities
- 10) Common and heath land
- 11) River embankments
- 12) Green Belt reservations
- 13) Areas of high scenic value
- 14) Normal farm land

According to Walker and Duffield(1983a), Abercrombie tried to link together all the elements of open space from the centre of urban areas to rural areas to provide a continuous matrix of parkland. He considered open space not only official open space such as landscaped town parks but also informal open space, such as large playing fields for adults and senior children.

In addition, Dower(1984, p.12) stated that parks, open spaces, walkways, allotments, riversides, street trees, and urban fringe con-

stitute the urban green space. This idea is based not so much on considerations of nature conservation as on the role of certain types of open space in providing for various human needs.

Furthermore, the famous site planner Lynch(1982, pp.442-447) classified open space into several different types, including regional parks, urban parks, squares and plazas, linear parks, playgrounds and playing fields, waste lands and adventure playgrounds.

Meanwhile, Morris(1979, Chapter 8, pp.3-5) suggests several different types of open space ranging from cemeteries to adventure playgrounds. According to her, open space composed of 'soft material' landscape, such as grass and trees, and that made up of 'hard materials' landscape, such as concrete, tarmac and other man-made surfaces.

It is Francis(1987a, pp. 78-79) who has categorised urban open spaces into two types the traditional and the innovative. The former includes neighbourhood parks, public parks, playgrounds, pedestrian malls, and plazas. The latter includes community open spaces, neighbourhood open spaces, schoolyards, streets, transit malls, farmer's markets, town trails, vacant/undeveloped open spaces, waterfronts, and found spaces (informal open spaces of cities where social life takes place).

More recent authors, for instance, Burgess, Harrison and Limb(1988) have suggested two types of open space based on local people's values, the formal and the informal. The formal type includes parks and gardens, whilst informal green space includes local greens, riverside, sports pitches, derelict land, fields, golf courses, bowling greens, allotments and city farms etc.

Generally speaking, when we talk of open space, it includes official city parks and gardens as well as unofficial types, such as playgrounds, local greens, ponds, golf courses and wastelands etc in relation to professional planner's categorization.

2.4 An Operational Definition of Open Space

Each of the above definitions is based on a particular professionals' view point and each was engendered to solve a specific problem. The variations are, to an extent, due to the complexity and dynamics of open space concepts. According to the various definitions, the term 'green space' seems to be a wider, more appropriate and concrete concept than open space in relation to landscape planning in cities.

For the purposes of this study, green space is defined as "nature in the city" i.e. all parks and all green areas. It includes plants and various forms of vegetation; it also includes settings or landscapes or places with plants, soil, water, air, and predominantly permeable surfaces regardless of ownership.

The function of green space is taken as multifunctional, its main function being as a place for outdoor recreation, but also as a place connected with the protection and enhancement of urban ecological resources, a structural element of urban form, a factor in human aesthetic experiences, a psychic-symbol, and a place connected with mental and physical health etc.

3. People's Relationship to Green Space

Why do people need nature in cities and what does nature provide? It has not been understood by many city planners and de-

signers that green space in towns and cities is essential for an associated, fundamental and even mysterious, relationship between man and nature. Alexander et al.(1977) emphasised this mysterious relationship between man and nature in cities: "People need contact with trees and plants and water. In some way, which is hard to express, people are able to be more whole in the presence of nature, are able to go deeper into themselves, and are somehow able to draw sustaining energy from the life of plants and trees and water"(Alexander, Ishikawa, & Silverstein 1977, p.806).

Therefore, urban residents prefer to live near attractive landscape or green space in cities. The residents would like to choose a dwelling place with a good view of the cityscape or alongside the water areas. It was Parry-Jones who argued that nature gave a range of benefits and well-being. According to him, "There is a deeply founded notion in western society that contact with nature affords humans a range of personal, social and health-giving benefits, and reference is frequently made to the restorative qualities of natural settings"(Parry-Jones, 1990, p.7). The aim of this section, therefore, is to review the literature concerned with people's relationship with nature and natural settings in order to identify the factors which govern how people experience the natural environment.

3.1 The relationship between people and nature

The most important contributions concerned with the inter-relationship between behaviours and both the built and natural environments are emerging from the disci-

pline of environmental psychology which began to be established in the 1960s. Levy-Leboyer suggested five new features of environmental psychology as an applied psychology. She emphasised the five main concerns of environmental psychology, in particular, the relationship between man and the natural environment. According to her, "The first and most fundamental point is that environmental psychology studies the relationship between man and the environment dynamically...Second, environmental psychology is concerned, above all, with the physical environment; either the natural environment untouched by the hand of man, or built environment, particularly that of the city...Third, ...people's reactions to their environment and their behaviour within it can be investigated realistically only if the environment is a whole, and not made up of atomistic segments simply because the researcher is interested in an individual aspect of the environment...In the fourth collection of objectives, good and bad...the behaviour of man in his life-space cannot be understood without reference to the field of forces which represent the set of values attached to each aspect of environment...Finally, environmental psychology is above all an applied science since it came into existence because of actual problems. It therefore has to be multidisciplinary in word and deed"(Levy-Leboyer, 1982, pp.14-16). In her book, *Psychology and Environment*, she not only introduces theories, concepts, and methodological thinking in this field, but also examines current research and activity relating to perception and evaluation of the environment, environmental stress, and the social dimension of space. Recently, Stokols and Altman (1987), amongst other, have comprehensively

reviewed literature covering recent developments in this field in the *Handbook of Environmental Psychology*. The Kaplans' recent book, *The Experience of Nature*(1989), summarised a basic understanding of the experience of nature from the window box to wilderness, which is based on their empirical studies of environmental psychology over nearly twenty years.

There is increasing evidence that green spaces are seen as a desirable natural setting in cities, to be used and enjoyed, either actively or passively. In particular, substantial research attention has been given to environmental preferences in order to explore the inter-relationship between people and nature. For example, the Kaplans(1989) looked at people's preference for the natural environment: "People's preferences are not guided by special training, nor do they have knowledge about the appropriate standards. For such reasons, preferences—as opposed to appraisals—are thought to be discrepant and subjective"(Kaplan and Kaplan, 1989, p.14).

3.2 Cultural perspectives of landscape preferences

In this context, there is a broad divide of opinion between two different groups of researchers who have studied landscape preferences. One group adopts a cultural perspective which regards preference as a learned response to natural stimuli, influenced by previous personal experience and by cultural effects. Lyons, amongst others, examined the effects of age, gender, and residential variables on landscape preference.

According to Lyons(1983), "preferences changed through the life cycle, diverged in adolescence for females and males and for

urban and rural residents, and were heightened for the most familiar biome. These results support the conclusion that variation in landscape preference is a function, in part, of differences between individuals assessing the landscapes...the development of landscape preference is a cumulative process that reflects the action, through the life cycle, of socially differentiating attributes such as age, gender, place of residence, and environmental experience”(Lyons, 1983, p. 505). In addition, Zube et al.(1974) found that childhood, occupation and place of residence can also influence landscape preferences. Several other studies have also pointed out the relationship between recreation behaviour and socio-demographic factors: outdoor recreation, typified by a more active interaction with landscape, shows clear patterns of different behaviours by specific age and gender groups(Belvins and Wilcox, 1980), and by occupation(Bureau of Outdoor Recreation, 1962), education(Cheek, 1972; Bureau of Outdoor Recreation, 1972), race(Peterson, 1977), and social class(Cheek, 1972; Bruch, 1977).

Meanwhile, Foresta(1980) suggested that people of different social groups, levels of educational attainment, economic strata, and residential area, value different green spaces for different reasons. He showed some direct evidence of open space value pluralism with regard to people's social variables, such as residential area, income, level of education, and race. Burgess, Harrison and Limb's(1988) study explored people's different attitudes to, and values of natural environment, with respect to different life stage, gender and different cultural background.

3.3 Evolutionary perspectives of landscape preferences

The opposing evolutionary perspective is based on the view that preference for nature is innate, and therefore, it consists of biologically inheritable responses. The Kaplans, particularly, believe that human preference for settings originated in the evolutionary past of our species and in the adaptive value offered by a particular setting. R. Kaplan explains the preference for urban nature in terms of 'content and process'. In this context: "Content refers to the things, the substantive categories, that seem to be important to people...Trees would seem to be an example of such a specific content; water, too, often plays a special role in the landscape"(R. Kaplan, 1983, p.132). Parry-Jones states that "the content of natural scenes may appear to be highly significant in shaping preference, more fundamental perceptual differences between natural and man-made environments may be in operation"(Parry-Jones, 1990, p.8). Moreover, Ulrich(1984) demonstrated that the content of views is important in hospital patients' recovery from surgery, with natural content contributing to faster recovery.

Research findings also asserted that the tree is the most dominant natural element in the urban landscape because trees have a very deep and crucial meaning to human beings(Alexander et al, 1977; Gold, 1977). Recently, Yang's(1988) cross-cultural study reports that water is the most preferred landscape element regardless of people's cultural background, whereas rock is the least preferred landscape element. Therefore, the Kaplans stated that "Water provides an excellent example of an aspect of the natural environment that is highly preferred. Though water seems to be an attractive ele-

ment, it is also the relationship of the water to its surroundings that is important in the preference"(Kaplan and Kaplan, 1989, p.9).

On the other hand, process refers to "patterns that are content-free or applicable across different content domains. Thus, the natural environment might entail particular configurations that people find satisfying but that are not necessarily unique to the nature content"(R.Kaplan, 1983, p.132). Therefore, in terms of process they postulate that humans have a strong desire to make sense of the environment and to be involved with it. Consequently, the Kaplans(1989) suggested four essential elements for the preference of place in which people choose to live: complexity, coherence, legibility, and mystery.

1) Complexity(being involved immediately) is defined in terms of "the number of different visual elements in a scene; how intricate the scene is; its richness".

2) Coherence(making sense immediately) "involves relatively little inference, relying on the two-dimensional aspect of the setting".

3) Legibility(the promise of making sense in the future) means "one that is easy to understand and to remember".

4) For Mystery(the promise of future involvement)"to be present, there must be a promise of further information if one could walk deeper into the scene"(Kaplan and Kaplan, 1989, pp.52-57).

Accordingly, it is for the Kaplans, probable that preference can be predicted from coherence, complexity, legibility and mystery. According to Gifford, however, "preference should increase as each of these qualities increases, but there are limits. Too much legibility in a setting might necessarily reduce mystery; the setting would be clear but it

would lack interest. Also, finding scenes with high levels of both coherence and complexity might be difficult. As complexity increases, the odds that the scene is well-organised would seem to drop quickly"(Gifford, 1987, pp.56-57). Therefore, planners should bear in mind that the deep consideration of appropriate combination between legibility and mystery is necessary to create settings for human comfort.

4. Conclusions

This review tries to identify the definition of open space and the relationship between people and nature in terms of the cultural and evolutionary perspective, although the concept of green space is extremely complex and there has been a lack of systematic and comprehensive reviews of research in urban and landscape planning field and of its implications.

Open space is defined in relation to its conception, types and functions. It seems that 'green space' is a more appropriate and concrete term than open space for the purpose of this research, because this study mainly deals with 'nature in the city' i.e. all parks and all green areas which include settings or landscapes or outdoor places regardless of ownership.

More specifically, it is the outdoor spaces with plants, soil, water, air, and predominantly permeable surfaces. Therefore, urban plazas or malls are not the matter of discussion for the study.

People's relationship to green space is discussed in terms of their cultural perspective and evolutionary perspective. Age, gender, education attainment and residential area were the major variables which impact on

the people-nature relationship. In addition, the evolutionary perspective of the man-nature relationship was investigated with respect to preferences. Water was the most highly preferred natural element in relation to content, while there are four essential elements for preference of place in which people choose to live in relation to process. They are complexity, coherence, legibility and mystery.

It is suggested, therefore, that a new standard of green space provision for Korean cities should be developed in response to the prevailing concept of urban green space, 'Nature in Cities', in contemporary urban and landscape planning fields particularly with respect to the relationship between man and urban green spaces.

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