

**Visual Simulation for a Reasonable Building Height**

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It is natural that planners and designers are showing a deep interest not only in how people perceive the landscape but also in how they would impact and be in good harmony with the surrounding natural and man-made environments. Therefore, they have had to use perspective drawings, scale models and photo simulation as a tool of visual simulation of landscape. We use Computer Aided Design (CAD) for visual simulation since it is accurate, rapid, convertible and easy to handle. Our basic concept in adopting CAD as visual simulation tool is that not only tangible and visible elements related to landscape but also conception elements could be modeled in digital data in CAD. In this way, we can embody abstract elements, such as line of sight, view and skylines affecting landscape management and height regulation, in three-dimensional modeling. In this study, we want to show some possibilities to apply CAD as an useful planning and design tool through several landscape/townscape simulation method and their applied examples.

**A System Approach for Controlling and Guidance of Building Developments to Maintain Vista Zones around a Landmark**

Mitsuo MOROZUMI, Setsuko ISODA &amp; Kazuhisa IKI

Due to the recent development of high-rise buildings, landmarks, the major element of urban landscape, have rapidly been losing their viewing value. Introduction of new building restrictions to preserve attractive landmark views and vistas have become the important issue for city governments to maintain or enforce the attractiveness and identity of their urban landscape. This paper presents the three dimensional (3-D) urban landscape simulation system that the authors have developed to support such urban landscape planning studies as described above. The system has the following utilities: first, to analyze the negative influence of high-rise building developments on land mark views and vistas from its environs, second, to formulate area wide guidelines of building development, and thirdly to help planners guide and control the 3-D shapes of buildings on each development site. Reviewing the case study in the downtown area, Kumamoto city, that has the Kumamoto Castle as its landmark, this paper shows that planners can use the system as an effective tool of studies.

**Seoul's Urban Landscape Management System: Problemes and Opportunities**

Ja-Hoon Koo

Seoul, the capital city of Korea with a long history of 600 years, has achieved a rapid external growth over the last 30 years, with her population increasing from 2 million to 11 million. The city administration of Seoul during that period has concentrated its efforts on mass supply of houses, expansion of urban infra facilities and so on in order to support the external growth, which is based upon the economy-first and function-oriented way of thinking for the sake of national economic development. In this process, Seoul has been behind the developed countries in the quality of urban structure and living environment: and naturally, the citizens themselves have a negative image of Seoul as a city of gray color, traffic hell and pollutions. Now in the 1990's, as the aim of the urban administration of Seoul, changes to the adjustment and improvement of the urban environment that has been distorted during the expansion period, interests in urban landscape administration are growing. Such administrative trends of improving the qualitative level of the city are being implemented on the city level as a part of the occasional projects and cultural events related to the 600th birthday of Seoul as the capital city. In case of autonomous districts, if in small scales and occasionally, such trends can be seen in projects for creating streets of culture or events for raising localism of their residents. The trend of city

administration as such is expecting the best opportunity for change, which is the election of the local governments in 1995. It is anticipated that, after the election, the administrations of the Seoul city and her autonomous districts will have an increasing interest in urban landscape administration which is closely related to the living environment of their citizens. However, with little experience of the autonomous administration by local autonomies and of the administration based upon the participation of residents, the situation bears many problems with all the expectations for landscape administration requiring many changes. This paper analyses the present situation of and the relevant tasks for the urban landscape administration of the Seoul city that is increasingly necessary.

## **A Study on Search Methods for Viewpoints with Picturesque Views**

Takeru SAKAI, Koji OSHIMA, Atsushi DEGUCHI  
& Satoshi HAGISHIMA

Studies about urban landscapes have developed in various directions during the last few years. We need not only dealing with landscape resources as arrangement of a living environment, buildings and greenery, but also situating these elements in the whole urban area. Compositions of emotionalized urban spaces are desired. In local cities, realizing attractive localities by landscape arrangement is attempted. Landscape arrangement so far tended to be partial to zoning related to building design, townscape unification, signs, open space, trees and so on. However, beautiful landscape resources as hillsides, forests and rivers, which we can see but usually fail to notice, remain. Because of pending arrangement of viewpoints where we can appreciate these landscapes, the beauty of natural landscapes does not appear in our consciousness. We have 'picturesque views' of impressionists and UKIYO landscape paintings as cultural properties. Daily life landscapes are drawn in these paintings. We fail to notice these viewpoints of 'picturesque landscapes' even though we have them in our daily life. If we search these viewpoints and arrange them, our daily life will be in comfortable circumstances. In cities which have few materials for attractive localities, we can realize them by applying natural landscape resources.

## **Landscape Impact Assessment System in Cheju Province - Conservation of Visual Resources**

Seung-Bin Im

The Landscape Impact Assessment system recently introduced to the Cheju Province is discussed in this paper. The impact assessment focuses on the visual environment even though it also considers the ecological and the socio-cultural environment. The system includes a process to integrate not only the public opinion but also the professional judgement in reviewing the impact assessment report. The complementary measures to make the system efficient and successful are discussed and the extension of the system to other parts of Korea is suggested.

## **The Emerging Trends and Problems in Urban Conservation in Taiwan**

Chin Pai

In recent years, due to the rapid growth of economic development and the increasing speed of urbanization, Taiwan's cities have undergone a great transformation. In an effort to upgrade the quality of the urban environment in the process of urbanization, urban redevelopment and rejuvenation in old cities have been carried out by the government. These activities are often in conflict with those of historic preservation and urban conservation. In many cases, in many cities there are endless battles between the government, the landowners and the preservationist groups due to their different concepts of cultural, social and economic values. Changing socio-economic values and demands

for a better living environment, with an consequent increase in land price, have made the problems between urban development and urban conservation more apparent. With out-dated city regulations, insufficient building codes, inadequate planning and inadequate compension to landowners, the problems of urban development and urban conservation are increasing. This paper is intended to investigate the trends and problems in urban conservation and historic preservation in the context of urban development in Taiwan. Special emphasis will be placed on the political and socio-economic influence on these problems within the context of cultural traditions. Case studies such as Lukang, Sanhsia, Erh Kan in Penghu and Kinmen Island will be used to make analysis and comparison. Questions such as cultural and social values, historic and architectural characteristics, participatory planning process, as well as tools for better planning and implementation, will be addressed.

## **A Study on the Cognitive Structures of Townscape Using Computer Graphics Animation: the Case of a Snowy City: Sapporo**

Naohiko HAYATA, Satoru INO, Fujio ADACHI  
& Mitsuru MORISHITA

The image of a townscape is formed by vague cognition of the whole street environment and the details of only a few impressive objects perceived as stimuli that disturb the sequential sight. In view of this fact, we should be able to evaluate sequential townscape in simplified simulation using computer graphics animation. This research compares the results of the image experiments using videos and computer graphics animation. It gives evidence that to evaluate the dynamic townscape simulation using computer graphics animation is as effective as the dynamic simulation using video. After that we study and analyze the monotonous and over-scaled townscape of a snowy city with a grid pattern structure such as Sapporo.

## **Consciousness of People on Amenity and Water Familiarity to Marine Recreation Facilities**

Satoru SUGIO, Chikashi DEGUCHI, Hiroshi YOKOTA & Masaru KIYOTA

This paper aims to evaluate the consciousness of people on the amenities of marine recreation facilities, that is, on what factors do people require amenities. For this purpose, different questionnaires were prepared for 82 and 633 people. They answered to the intensities of the relationships between the terms, "water familiarity", "relaxation", "amusement", "learning", "safety" and "novelty" and the marine recreation facilities, based on maximum and minimum score of five and zero, respectively. The consciousnesses on these terms are analyzed by the Principal Component Analysis from the answers. Regarding the water familiarity, it is seen that people evaluate it by the function of "see", "approach" and "play" in their intense order. These occupy 70% of the functions of the water familiarity.

## **A Study on the "Beautification Districts" in the Zoning Ordinance of Seoul**

Heonseok Yoo, Satoshi HAGISHIMA & Atushi DEGUCHI

Zoning is the division of a community into zones or districts according to present and potential use of properties for the purpose of controlling and directing the use and development of those properties. It is accepted as a fundamental urban control system in Korea, and for more concrete control, detail zoning system is proposed and put in practice. The detail zoning system includes many detail zoning elements, what are to be designated in the districts which need special restrictions. Among those of all, the beautification district takes charge of the restriction of the urban landscape, and can

be thought as one of the most important districts in the detail zoning system in Korea.

## **Evaluating the Current Levels of Conservation and Utilization of the Existing Coastline in Kyushu**

Hiroyuki KANEKIYO, Masami SUGIMOTO,  
Shintaro MATSUNAGA & Jonathan V. Hammond

The object of this study is to analyze the existing condition of the coastline of Kyushu in order to recognize the existing state of conservation and utilization as a basis for planning. The locations of coastlines with existing conditions of natural, semi-artificial or artificial were measured, and the possibilities of their future utilization were studied. The study undertook the following course:

1. The coastline was categorized into the three classifications: natural, semi-artificial, and artificial.
2. The treatment of the coastal edge and adjacent land use was recorded.
3. Accessibility potential for the population of that region to the coastline was evaluated.
4. Planning conditions for coastal conservation and utilization in the Kyushu area were considered.

As a result of this study, coastal conditions have been established as a basis for developing a planning approach to achieve optimum levels of conservation, utilization and development for each section of the Kyushu coastline.