

**The Reproduction of Kanazawa Castle Town by 3D CG**

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Almost all major Japanese cities have evolved from castle towns in the Edo Era but lost their original forms in the course of modernization. Kanazawa is one of a few cities that have escaped from war devastation and has therefore kept its townscapes of the old castle town. At the turn of the new millennium, we should be able to reflect our postwar policy of modern urban development and to reorganize our cities so as to revive the cities utilizing our rich historical and cultural assets. Kanazawa, therefore, can be a model city not only with its historical townscapes and cultural activities but also with all the necessary urban functions as the center of Hokuriku Region.

Although Kanazawa is a good place to visit to see the historical urban environment, its historical townscapes are bound to decrease despite the effort by the local government and community. Therefore, it is important to keep a record of what we see now and what we have learned from our past researches.

We decided to build a 3D computer graphic (CG) model for Kanazawa in the late Edo Era. Because, the city still maintains historic urban structure of the times and considerable research materials are at hand. Moreover, our research unit has been engaged in researches to identify remaining historic buildings, including Samurai residences, Ashigaru (foot soldier) residences and Machiya (buildings for tradesmen) and other important elements, such as mud walls, gates and canals.

In order to reproduce the old castle town, a GIS (geographical information system) map was utilized as a base map and a CAD surface model is created for each of approximately 23,000 buildings of the entire castle town. At this stage, as our effort is concentrated to construct an entire image of the castle town, a simple façade is added to each building by means of a rendering program. Through the research we are able to analyze the three-dimensional aspects of castle town such as building density, urban form, views and townscape.

**The Spatial Structure of the Local Cities, Walled town in Chosun Dynasty of Korea**

Sun-Beom KIM

The walled-towns are the built-structures possessing their boundaries and territories for military and administrative affairs. The Eup-sungs, the Korean local walled-town in 16c., are the spatial archetypes and have formulated the historical planned-cores which have the unique genius loci and historicity. This paper aims to discuss the spatial structure of Eup-sungs.

1. Eup-sungs were generally located in the archetypical sites based on the spatial principles, the Yin-Yang and Five-Elements, the Feng-Shui.

2. The scales were the spot-scale from the comparison between the present and the past. It is area-scale now, but spot-scale before.

3. The road networks were the grid-iron system having the four directions basically.

4. The residential district had the archetypical patterns which had their boundaries, territories, clusters and segregations according to the social status.

5. The public facilities were functionally arranged by the principles of facilities' dispositions and zoning.

6. The enclosure-forms were the geometric patterns applied to the circles and squares basically.

Therefore, the systematic and institutional frames are critical in the stage of the urban restructuring (renewal, rebuilding), which are the clear statements of obligation for the historic conservation and restoration within the related Acts.

## **A Challenge for the Conservation of Historical and Cultural Areas in CheonNam Province**

Byung-Tae OH

In Korea, preservative regulation and law of historical and cultural landscape is comparatively weak compared with western countries and neighboring countries. This paper will attempt to look at the problems of preservation in local government areas in Cheonnam province and to formulate a response to the challenge for conservation by examining an administration of the preservative policy and law for the heritage and historical areas.

## **The Economic Evaluation of Historic Area Preservation Based on the Consciousness of Tainan City Citizens**

Yung-Lung LEE & Kwang-Yih YEH

Today historic preservation movement emerged as a trend in the past decade. More interest in history and historic sites, buildings, and preservation has continued to increase tremendously. The value of this kind of preservation is controversial when considering the development of the city and property value of the owners. However, the citizens in Tainan City, where the earliest developed in Taiwan, have noticed the validity to the government policy and the land use regulations by the planning process. This study tries to estimate the economic value regarding the historic preservation and does some contributions to the policy implication in the citizen's viewpoints.

Based on the consciousness of Tainan City citizens, we measure the economic value of the planned preservation projects, which are promoted by the city government. Contingent valuation method (CYM) is mostly used for the economic valuation of environment and non-market goods. We introduce a questionnaire survey to 3 historic cultural districts, Red Hill Chamber, An-ping and Confucius Temple cultural area, and evaluate the benefits resulting from the planned preserved programs. The empirical estimation also shows the willingness to pay (WTP) for the preservation. The correspondents can also reveal their preferences for the preserved area from the descriptive results.

The historic heritages are meaningful to all citizens in Tainan City. In order to have a comprehensive plan of land use control and regulation in historic area, this study can offer some different ideas from the citizens and the preserved value in monetary term for the policy implementation reference to city government.

## **A Strategy of Urban Regeneration focused on Historic Preservation: Case study - Kangkyung Regeneration Movement, Korea**

Deog-Seong OH & Hyung-Joo LEE

By rapid increase of population following sudden economic growth in Korea, most cities have grown rapidly even though there are fine natural environment and a number of historic properties. To accommodate a number of people and their various activities following changed or changing needs and environments as social, political, and economic conditions, the cities grow rapidly and expand widely with constructions of new town project or entire urban renewal or redevelopment projects. From the growth of cities, the cities constructed as mainly concerned about function, economical efficiency, and conveniences under the modern urbanism. At last, they bring about causes and problems of declined cities with lacking identities, which do not contain their own characteristics in present. Based on these urban situation, the propose of this study is to review cause and problem of declined old town center and solution to regenerate the town as the urban regeneration focused on historic preservation through a case study of Kangkyung Regeneration Movement which is promoting at Kangkyung town currently. And it is to grasp suggested strategy based on the study. In other words, it is to suggest a strategy for regeneration of declined town through historic preservation, and also to find a strategy to harmonize among existing natural environment, historic contexts, and people with keeping

existing urban contexts, except disordered urban expansion and growth. To analyze a selected case; Kangkyung Regeneration Movement, this study approaches theoretical review and case analysis with three different aspects; physical, economic, and social aspect within two different dimensions; one is in district dimension, and the other is in architectural dimension. Through the theoretical review, the study exams various scholar's aspects for historic preservation, and summarize their ideas for the successful regeneration. Finally the study evaluates the case due to the comparative study with obtained strategies of successful regeneration for historic preservation) through the theoretical study, and suggests the value of urban regeneration focused on historic preservation.

## **The Value of Insa-dong and Daehak-Ro as a Modern Historic Environment in Korea**

Dong-Jin KANG, Seok-Hwan LEE, Sei-Yong KIM,  
Young-Hwan KIM & Jae-Jun LEE

The modern historic environment, which is the subject of this paper, can be defined as a region or landscape having organic physical and cultural characteristics, which reflects the historic context of a modern era (from the civilization period (the late 19C) to the liberation period (the late 1940s)) in Korea. And Insa-Dong and Daehak-Ro, the case areas of this paper can be defined as the representative region with unique modern cultural characteristics in Korea.

In terms of this notion, this paper tries to analyze and explore Insa-Dong and Daehak-Ro. And this paper aims to find the values of these modern historic environment, and we suggest new clues and instructive concepts in the light of recognition of diverse urban culture.

As a result of exploring of two cases, representative values as a modern historic environment, which are found, are as follows; First, Insa-Dong and Daehak-Ro are situated on the old urban area and periphery of urban center of old Seoul, have been maintained in close connection with the regional environment. And they have been worked as the medium of past (modern era) and present, and as the transitional area of Seoul's original settlement (Bukchon area) and original commercial area (Jongro area). Second, they have non-physical inner powers, and not concentrated solely on the physical values (modern architecture-oriented). Concretely, conscious values concerned with 3.1 independence movement are latent in Insa-Dong. And Daehak-Ro has conscious values as the birthplace of modern education and modern medicine of Korea and as the contact-detonation place of progressive and liberal thoughts. Third, they have been offering nostalgia about modern urban culture related to unique landscape, activities, land use, architecture color, etc.

In terms of looking into two cases' values minutely, this paper suggests enlargement of modern historic environment's concept reflecting diverse viewpoints. And this implies an alternative vision to the cultural properties and architecture-oriented approaches about modern historic environment in Korea. In order for this to be successful, modern historic environments have to be understood as not just fixed cultural properties but also as new contact-detonating objects of urban culture. Additionally, the deep survey, the diverse extraction of anonymous modern historic environments, and the practice of sustainable management systems with various flexibilities are required.

## **Establishing an Integrated Community in Makati City**

Akiko KISHIUE & Koichi AMANO

Up until the 1930s, Makati was just an agricultural suburb of Manila, the capital city of the Philippines. The development of the Ayala Planned Area (APA) was started after World War II, and the area quickly became an exclusive residential, commercial, and business area. Today Makati is clearly the hub of business in the Philippines. This research seeks to find out how and with what ideas and concepts the Ayalas developed the area, with particular reference to townscape and transportation planning.

The APA was planned as a multi-zone sub-city, and with a 25-year master plan, an integrated community was established. The APA was basically raw land when the project started. Col. McMicking, who became a member of the

Ayala-Zobel-Roxas family through his marriage to Mercedes Zobel de Ayala in 1931, was very influential in APA development. His ideas for developing Makati were inspired by what he saw in the more decorous Spanish-mission houses around Palo Alto, south of San Francisco, California, where his alternate home was located.

There were four recognizable stages in the development of the APA. The first stage was The Exclusive Residential Development Era, which established the very first exclusive residential subdivision in the Philippines. The second stage, The Commercial Center and Business Center Development Era, started in 1956 with the strict deed restriction. The third stage of The Wall-less Village Development Era was established through the application of efficient transportation planning schemes. The final development stage was the Ayala Triangle Development and Maturity Era, which designated Ayala's prime land and pursued the installation of high quality infrastructure.

One of the remarkable characteristics in the development of the APA was the installation of the infrastructure within the APA by the Ayalas, not by the Philippine government. It was done to attract people to the area in the first stage. Then it was in order to support the government as well as to avoid the obstacles of the development of the area in the following years.

The land value of the APA, especially along Ayala Avenue, increased to more than 3500% higher between 1987 to 1995. It now costs about three times higher than those in the leading adjacent CBD, Ortigas Center, which has also been developed by a other private sector. These facts are enough to tell us how the APA has been successfully developed.

Through my research, I have concluded the following: (1) The Ayalas worked to, and succeeded in, creating an integrated community; (2) The Ayalas established not only the very first exclusive residential subdivision in the Philippines but also made living in an exclusive village fashionable; (3) The Ayalas introduced and carried out zoning and deed restrictions for the area; (4) The Ayalas worked for the infrastructure in the area in order to attract people to the area, as well as provide the basic needs of the residents; (5) The Ayalas succeeded in establishing a wall-less village through effective transportation planning; and (6) The Ayalas established the management system of the area by entrusting overseeing to private associations whose sole purpose is to maintain the neighborhoods.

## **Characteristic of Leisure Behavior and Environmental Evaluation by the Elderly at Parks in Osaka, Japan**

Jae-Joon YANG & Sang-Hoon HAN

The purpose of this study is provide basic insight of the changing functions of urban parks using the results of the case study done for the city of Osaka, Japan. Various behavior analyses for elderly with the parks in Osaka, Japan were conducted in the case study. Finally, authors propose the chaining meaning of urban parks in the users perspective and summarize the results of the study. As the result, from the environmental evaluation of the park, the fresh air and the shade of trees are highly evaluated, while the noise and the stairways are done low. By the multidimensional quantitative III with questionnaire for the elderly about purposes of coming to the parks, they can be classified into 3 types, which are multiple using type, take a walking type and sightseeing using type.

## **Application the Evaluation Model of ESLP Environment Symbiotic Supportability to Study Sustainable Development Ability in Cited Environment**

Ching-Tzu CHEN

The environmental resources of cited environment include the natural ecological environmental resources system and the civilized environmental resources system. Under these two major environmental resources systems, the city can, in accordance with its developmental needs, establish an "E.S.L.P-Environmental System" consisting of an Ecological Environmental System (E), a Survival Environmental System (S), a Living Environmental System (L), and a Productive Environmental System (P). The ecological and survival environmental systems contribute vitality to cited development, while the living and productive environmental systems provide competitiveness. One of the crucial questions for

sustainable city development in the 21st century is how to promote development so that ESLP environmental systems under the two major systems of natural ecological environmental resources and civilized environmental resources can develop in accordance with the principles of Environment symbiotic supportability.

## **To Make Both Ends Meet: a Comparison of Two Paradigms of Public Participation**

Hung-Jen TAN

In the discussion of public participation, two paradigms pay particular attention to the elaboration of rationality. The first is Mancur Olson's rational choice theory and the second is what Judith Innes calls 'the emerging paradigm of planning', the communicative planning theory. Olson argues that people tend not to participate in the decision-making of public goods without external inducements and they choose not to do so probably for practical reasons, rather than because of normative considerations. Rational choice theory sees participation as a preference aggregation process, in which participant is regarded as utility maximiser who makes decision in accordance with a cost/benefit calculation. Olson's logic of collective action and the phenomenon of the 'free-rider' demonstrate that the summation of individual preferences may prove to be harmful for the individuals as a whole. As a result, rational choice theory is best described as the pathology of public participation and provides answers to the common phenomenon, indifference. On the other hand, communicative planning theorists regard participation as a process of communication, where participants deliberate via a social learning process. Compared with the aggregation of individual preferences, communicative planning stresses the importance of group dynamic and it argues that participation should be interactive and socially constructed. The result of communicative participation should therefore be a legitimate and optimal consensus.

The two theories make an interesting antithesis: the explanation of rational choice theory ends with when participation begins and provides no description of how participants interact with each other, while the rationale of communicative planning theory only begins with where rational choice theory ends and it cannot explain why people make such decision. As a result, the former may only present a pathology of participation and the latter may present a bounded rationality and circular argument. The two theories happen to be supplementary to each other. An infusion of the two will be very thought-provoking and is worth further elaboration. However, the paper will focus on the dialectical relationship of the two theories. Major attention will be paid to the discussion of the new paradigm of planning. The author points out that the reflection of publicness will play a significant part to improve the new paradigm for public participation in urban planning.

## **Human Behavior and Building Strategy in the Islamic Perspective**

Safwan ALMASRI

The present study deals with several fundamental issues related to the Islamic City. The general approach examines various definitions of the Islamic City, with reference to some theories and viewpoints held by early Muslim scholars on the evolution of the Islamic City. This approach has the merit of offering the possibility of estimating the extent to which definitions, theories and viewpoints correlate with the modern conceptions of the Islamic City. More specifically, the study reviews the theories of some archaeologists on the various evolution patterns of the Islamic City. In conclusion, the study attempts to find out the Islamic architectural ideology, the essential rules and factors that govern the establishment of Islamic cities. This may be achieved through a rational interpretation of written references and the remains of Islamic cities.

## **The Urban Planning Support System in a Densely Residential Area against Street Blockades**

In recent years, some great earthquakes took place in Asian countries. Densely residential areas suffered serious damage particularly; Houses, fences and utility poles collapsed and street networks were closed, so that emergency traffic could not arrive at their destinations from outside of the areas. The urban planning for disaster prevention in a densely residential area is an important issue in oriental region.

This paper presents a prototype of an urban planning support system in a densely residential area considering street blockades. This system supports a planning process to make a consensus and a policy through a heuristic process from the viewpoint of an arrival at each building. People participate in the planning process to design a safe city based on information technology.

## **The Effects of the Recreational Spaces on the Residential Satisfaction**

Suk-Kyu KANG

The purpose of this study is to analyze the apartment residents' satisfaction with respect to the recreational spaces such as community parks and waterfront. A survey was conducted on the residents who reside at the four large residential complexes within 500m from Yangjae stream and several community parks. The survey includes overall residential satisfaction with recreational space in one's community, residential satisfaction levels by recreational space types, the frequency of visit to recreational spaces, and the social characteristics of the residents.

The analysis shows that (1) It was discovered that while community parks were used for walks, waterfront were used mainly for the purpose of exercise. In the section examining satisfaction according to category, residents were more satisfied with waterfront than with community parks. Although there was not a strong correlation between the level of satisfaction in each category, it was found that the satisfaction regarding community parks and size of the park were high, while the satisfaction regarding waterfront and obstacles disturbing access were also high. Within a 5% significant level, families of 4 were more satisfied with waterfront than families of 3.

(2) It was analyzed that in the case of community parks, the size, accessibility, usage and convenience features affected the overall satisfaction. The environmental features, size, and facilities affected the overall satisfaction of waterfront. Also, the overall residential satisfaction regarding recreational spaces including community parks and waterfront showed that the level of satisfaction regarding community parks was 47.1 %, and waterfront 52.9%. Therefore, when planning recreational spaces, waterfront should be considered, or an aquatic area should be implemented into community parks.

(3) An analysis of the features which affect overall satisfaction regarding recreational spaces showed that the environmental features such as distance and obstacles to the accessibility of waterfront, and information facilities had the largest affect on resident satisfaction, showing that in order to enhance the overall satisfaction regarding recreational spaces, these features need to be carefully considered. In both the community parks and waterfront, it was analyzed that accessibility and size factors such as distance, obstacles to accessibility, size and promenade had a large effect of the overall satisfaction, showing that these features need to be carefully considered when planning recreational spaces

## **The Rising Center of Fashion: The DongDaeMun Market**

Yun-Jae HWANG, Jung-Min YOON & Hong-Kyu KIM

Today, most consumers prefer shopping at big department stores where they can make choices among variety of goods rather than at small stores. It is believed that this has happened due to the desire of customers willing to build their own identity by selecting their own product among others. Many department stores run several marketing strategies in order to attract customers and to prevent them from shopping at discount or small stores. Thus, those too late to meet the customers' needs have been isolated from the market. However, the strong image of department stores

as a seller of luxurious items has given a heavy burden to the people. The DongDaeMun market, under these circumstances, has developed as a provider of high quality products with low prices. As a result, DongDaeMun, the rising center of fashion not only in the Republic of Korea but also in Southeast Asia, attracts natives as well as foreigners.

In order to be the best market in fashion industry, DongDaeMun has pursued a unique marketing system that is incomparable with any other markets. Some important findings are, firstly, the easy access from anywhere in the country, and its 24hour, everyday, year-round marketing strategy that gives customers from all around the world convenience and freshness. Secondly, the incomparable size of the market along with various selections of low-price and high-quality goods has worked as a motive power for such development. Thirdly, DongDaeMun established its own unique system that integrates the distribution process from designing to final sales. Finally, DongDaeMun market provides various kinds of enjoyment through fashion shows, movies, Internet services and leisure sports.

The purpose of this study is to analyze and to evaluate the unique characteristics of the DongDaeMun market approaching from its location and from its cultural point of view thus observing the future of the market as the international center for fashion.