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Future Housing and Sustainable City; Concept and Perspective, Hiroyuki Takai: Proceeding of Multilateral Conference in Korea "Sustainable Future for Better Living Environment" (in Seoul), pp.89-104, 2003

The present paper deals with understanding for "sustainable" in the field of Architectural and Urban Planning in Japan, the previous studies for sustainable or long-life buildings in Japan, and the criteria for housing and city of the future. "Previous studies" mentioned in this paper refer to 3 studies in Japan. The 1st is on the secular change of infill of units by researches of 20 years old condominiums designed with Skeleton-Infill Housing System. The 2nd is on the secular change of common spaces and facilities for residents by researches of other 20 years old condominiums. The last is on the actual conditions of the conversion by a research of buildings changed building usage for the last 15 years

Japanese Efforts to Maintain Ecological Living in Modern Apartment [in Korean], Hiroyuki Takai: Proceeding of the 2003 International Symposium on Hard & Soft Shell for Ecological Living (in Seoul), pp.182-199, 2003

The present paper deals with the outline of Japanese efforts in planning and technologies in modern apartment house. Concretely, "Environmentally Harmonious Housing", high-rise apartment houses, and their common spaces and facilities.

Idea and Form Evoked Through Reality ; Existence of the Architectural Works of Hisao KOHYAMA [in Japanese], Yoshito TOMIOKA : Appeared in the book entitled "The Trail of Modernism 2" edited by Mitsuru SENDA, INAX Publishing Co.,Ltd., Apr. 2003

This book is the one which dealt with a grand trail of Japanese modern to contemporary architects and their works. The article, authored by Tomioka, dedicated to the works of Hisao Kohyama (1937-), which ranged from many university buildings to a weekend house in wooden structure. Quoting the famous discussion of "Verlust der Mitte" by Hans Sedlmayr, 1949, Kohyama's roles in retrieving humanity from / to the grand movement of Modernism was discussed. The article was an concluding one of the series.

Historic Cities and Villages in Mie, Satoshi Asano: "Japanese Historic Cities and Villages Volume 1 -Kinki, Tokai and Hokuriku Region"[in Japanese], Heibonsha Publishers Ltd., pp.104-117, 167, 2003

The purpose of these books of this series is to introduce the present conditions of historic cities and villages in all parts of Japan. The Volume 1 shows historic environments of Kinki, Tokai and Hokuriku region with many photographs. I explain the characteristics of a historic landscape of Seki Town, Ise City, Matsusaka City, Ueno City, Mikumo Town in Mie Prefecture.

Chapter 4 Machizukuri Secrets, Satoshi ASANO: "Machizukuri Secrets of Kuwana-Style"[in Japanese], Chunichi Publishing, pp.58-59, 65-75, 2003

The purpose of this book is to explain intelligibly the machizukuri of Kuwana City. This book shows the living culture, history of city formation, civic wisdom and power to build the city, and participation methods to city planning. In Chapter 4, I explain the building history of Kuwana City, and comment on the wisdom and power of people in each times to plan the city.

Review on Establishment of Design and Practical Method of Porous Concrete [in Japanese], Motoharu TAMAI*, Hiroyuki MIZUGUCHI*, Shigemitsu HATANAKA, Hiroshi KATAHIRA*, Minoru KUNIEDA*, Takao NAKAZAWA*, Kunio YANAGIBASHI: Proceedings of the Japan Concrete Institute, Vol.25, No.1, pp.13-22, 2003.7

Porous concrete (no-fines concrete) has been developed as an environmentally friendly material. In Japan, it has been widely used in various applications. Japan Concrete Institute established "Technical Committee on Establishment of Design and Practical Method of Porous Concrete". The present paper deals with the state of the art of the porous concrete and activities of the committee, spotlighting the material design concepts, fabrication process technology, construction methods of the porous concrete. Also, it is introduced that new type of applications are being in investigation for the reduction of environmental impacts and the bio-adoptability. Testing methods for durability of the porous concrete are also introduced.

Technical Notes "Optimization for Architectural Systems 2 --- Optimal Allocation" [in Japanese], Naoki KATO*, Toyofumi TAKADA: Journal of Architecture and Building Science, Vol.118, No.1510, pp.54-55, 2003

In architectural field, there are many allocation problems, such as allocation of public facilities or commercial buildings for city planning and allocation of earthquake resisting elements for structural design. This technical note introduces two typical allocation problems; a floor layout problem in architectural design and a shear wall allocation problem in structural design. Both the genetic algorithm and a concept of "sequence-pair" are applied in order to obtain the optimal floor layout. On the other hand, the branch-and-bound method is used to search for the optimal allocation of shear wall in a multi-storied RC building.