

Conceptual Model of Sustainable Urban Form

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The academic and practical concern about sustainable urban development has been growing for the past several years and some meaningful studies have been made on sustainable urban form, but there are very few morphological approaches on that so far. The purpose of this paper is to investigate the sustainable urban form and its conceptual model through literature study.

We reviewed urban form in relation to sustainable development, first. Compact city as a sustainable urban form is discussed, and 'decentralized concentration' and New Urbanism as new sustainable urban form are examined.

We examined some conceptual model of sustainable urban form such as Ton, TND, DV, SUM etc. and executed brief case study in different spatial scale: city/region level; neighborhood/district level; and building/block level, later on. Based on the above study, we summarized some characteristics of sustainable urban form under the category of size, shape, land use, access, and layout.

Constructing sustainable Townscapes: A Dual Macro-and Micro-perspective Approach

Yung Jaan LEE

Since the 1990s, central and local governments in Taiwan have developed numerous townscape policies under various names. Simultaneously, the townscape improvement and community empowerment movements have evolved rapidly. However, these movements remain relatively misunderstood. Moreover, since the 1960s and 1970s, economic and function-oriented urban planning theories have transformed post-industrialized cities into faceless and monotonous places. Rural areas have also not escaped this destructive trend. Furthermore, although the population growth rates of medium-to small-sized cities have exceeded those of the large cities in Taiwan since 1971, neglect in the development of these medium-and small-scale cities has rendered a situation where urban areas are no longer truly urban and rural areas are no longer truly rural. In response to the above problems, the Taiwanese Ministry of Interior proposed the "Plan for Improving Townscapes" in 1998. This scheme aims not only to amend engineering-oriented policies, but also to establish the defining features of local towns and counties.

Community empowerment, townscape improvement, and sustainable development remain poorly defined. This study thus proposes a dual macro-and micro-perspective approach to effectively address the above issues and create a sustainable townscape. The macro perspective focuses on environmental justice, while the micro perspective focuses on environmental behavior theory.

This work begins by exploring and clarifying the existing discourses on globalization, sustainable development, environmental behavior, and paradigm shift. The second section then examines community empowerment and townscape improvement. Subsequently, the third section provides a historical review of sustainable development, and also designs a 3EI (Environment-Economy-Equity-Institution) framework. Based on these discussions, we recommend that a paradigm shift must be made from "Dominant Social Paradigm" to "New Paradigm" to achieve a sustainable future. Based on this knowledge, a sustainable townscape is proposed, which must consider the duality of the macro and micro perspectives of environmental justice and environmental behavior, respectively.

A study on commuting trip energy consumption reduction by job-housing reallocation in Tokyo Metropolitan Area

Recently in mega-cities, to reduce environmental impacts and energy consumption caused by increasing auto-use is pointed out as one of the crucial issues to maintain urban mobility sustainability. This study aims: (1) to propose a model system to analyze urban activity distribution and commuting trip energy, (2) to estimate the proposed model system by using person trip survey conducted in Tokyo metropolitan area and (3) to make trial calculations on commuting trip energy reduction impacts under several scenarios. First of all, a model system is developed which is consist of a job-housing reallocation model to minimize commuting trip energy consumption and a residential location choice model. In the job-housing reallocation model, zonal commuting trip energy consumption ratios by modes are calculated and then an optimization model is formulated to minimize total commuting trip energy subject to given combinations of urban activity distributions. Secondly, parameters of the proposed model system are estimated by using 1998 Tokyo person trip survey data, land price data and related land use data. Because it is considered that residential choice utilities are assumed to be different by household types, both residential location model and commuting mode choice model are estimated by four household types; single family, couple family, couple plus children family and other families. Finally, several scenarios are tested. It is shown by the scenario analysis that reallocating total movable working households in order to minimize commuting trip energy after centralizing urban activity could reduce energy consumption by about 10%, instead decentralization scenario could increase energy consumption by about 10%. It can be said, therefore, that forming a centralized and job-house neighbored compact city would be effective in order to reduce commuting trip energy consumption.

Economic Development and Growth Management : Two Incompatble Values?

Shi Chul LEE

This paper explores the issue of linkage between economic development (ED) and growth management (GM) in local governments. During the past several decades, a large number of local authorities in Korea and in the United States have experimented with a variety of growth management programs. Implementation of various ED programs at the local level is not new, either. However, the issue of how ED will fit into the domain of GM remains to be a difficult task to tackle. Little, if any, scholarly literature has paid much attention to ED directly in relation to GM.

No matter how GM varies in form, it regulates the rate, time and location of growth, while ED basically attempts to create growth and wealth by mobilizing human, natural, and capital resources. These two seemingly contradictory values have been intended to be, and still are, the major interests of contemporary urban planning. A concept reasonably combining the two values is needed; that may be interchangeably called balanced growth or sustainable development.

The objectives of this paper are: i) to review both government materials and academic literature concerning this topic; ii) to identify potential relationship between ED and GM, and; iii) to develop a hypothesis concerning ED and GM, based on preliminary evidence and observation. My observation in this paper suggests that some goals of GM are likely to be closely and positively associated with goals or outcomes of ED. Specific ED programs in combination with positive GM impacts of infrastructure, amenity, and permit efficiency are likely to increase ED outcome.

Professional Education for the Changing Demands of Praxeutic Planning

Barrie MELOTTE

The question addressed in this paper is -do the understanding, explanation and interpretation of praxis and herrneneutics assist the integration of equity, efficiency, and environment and governance variables as a paradigm for professional planning education? This question is investigated through the frame of understanding, explanation and interpretation of praxis and herrneneutics for professional planning education, research and practice. An attempt to understand, explain and interpret the foundations of planning theory and their application for professional planning

practice is also presented. Thus, this paper is based on the investigation of the requirements of professional planning education to address the interrelationship between praxis, which is understood as combining theory and practice; and hermeneutics, which is explained as the relationship between empirical and normative variables. The integration of praxis and hermeneutics in a holistic approach to professional planning education is interpreted and posited as being suitable for praxeutic planning.