

## **Comparison between Taiwan and Japan regarding Children's Consciousness with Respect to the Nature of Playgrounds**

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Children grow up by experiencing various kinds of play. Children's experiences with many types of play are integral parts of their life and development. Specifically, to touch and play with nature is essential to intellectual growth and stable emotion for children. However, due to changes in society, such as economic growth and urbanization after the war, trend towards nuclear family, and decrease in birthrate, the environment surrounding children's outdoor playgrounds is getting worse remarkably. Moreover, natural playgrounds such as open fields, barrens, rivers, mountains have decreased. This research aimed to clarify needed spaces and elements related to play in nature. We conducted a study on Taiwanese and Japanese university students and children. The results are follows:

1. For main outdoor playgrounds during the childhood of university students, school grounds were preferred in Taiwan, whereas in Japan park environment were preferred. As for playing styles, 'playing with balls' appeared to be characteristic in Japan, while in Taiwan 'playing with equipments' and 'taking a walk' were characteristic. Regarding the playground's image, 'pleasant' characterized the image of playgrounds in Taiwan and Japan.

2. From viewing of photographs, the natural places were the most impressive in the university students' evaluation, and the images were 'pleasant' and 'comfortableness' in Taiwan and Japan.

3. For the investigation on children's natural playgrounds, places with trees were preferred, and managed places were impressive to children in Taiwan and Japan. Also, children who had experiences playing in natural spaces, mentioned playing with animals and plants, and climbing trees as their playing style; and they also demonstrated positive perception to natural playgrounds in Taiwan and Japan.

## **Home-Based Telecommuting and Commuting Behavior**

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The existing spatial models for home-based telecommuting assume that all the jobs are located at the central business district. At the same time, they fail to incorporate the conflicting interests of the employer and the employee concerning the telecommuting. These considerations are important in both theory and practical policy design in the public sector. The first objective of the paper is to present a spatial equilibrium model overcoming some of these important modeling drawbacks. The second objective is substantive. First, when telecommuting is allowed the conventional commuting pattern may no longer arise: some people commute more over longer distance. Second, telecommuting cuts back the commute time. However, most of the commute time saved is put again for more work, and the time for leisure can be even decreased. Third, telecommuting makes the city expanded and people commute over longer distance for each given trip to workplace. At the same time, however, because people choose to work near their new residences and substitute telecommuting for on-site work, both transport time and cost and the vehicle distance traveled (VDT) tend to decrease under reasonable range of parameter values. In contrast, when workers put a sufficiently big value on on-site work, the substitution of telecommuting for on-site work is limited and the increasing distance between work and home may make the VDT increase.

## **The Constraints on Married Women's Everyday Lives in Time and Space in Taipei- from the Viewpoint of the Preparation of Meals**

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In many countries, married women are usually expected to take care of their families regardless the increase of women with occupation. Among the activities of taking care of families, meal preparation constrains married women in time and space more obviously than others. The purchasing of food items is derived from it. In this study, we focus on married women and discuss how their occupation and children influence them in meal preparing and purchasing of food items. We also discuss the purchase of household items together with food items to see whether married women buy these items together since these are all daily necessities. From these discussions, we find that: 1) career women tend to have different patterns in frequency (less frequent), time (purchasing on weekends) and means (taking out) due to the constraint of their occupation; 2) although married women with younger children seem busier than those without young children, they can only adjust by reducing the frequency of purchasing perishables rather than the frequency of preparing meals; 3) in purchasing perishables, married women show a strong preference for traditional retail markets; 4) the facilities on planned market lands still play a significant role in married women's everyday lives.

## **A Method to Quantify Accessibility in Urban Space Reflecting Space Function and Kind of Users - Focusing on Newly Developed Urban Space in Large Cities of Japan -**

Eiji SATOH & Tohru YOSHIKAWA/ Japan

The purpose of this research is to develop and propose a measure of "user-friendly urban space" by comparing the newly formed urban space to the existing one, using accessibility as its criterion. The comparisons were made with the following 3 steps.

1) A subject region of each urban space was selected with the same range for the total floor area, and the floors were classified into residential, office and service categories then each floor area was calculated. 2) The routes in the urban space, as well as the traveling by elevators and the distance to the destination floor were taken into consideration to calculate the moving distance from the central station to the destination floor. 3) The vertical movements were converted into horizontal distance using the horizontal movements as its criterion, thus the distance was evaluated one-dimensionally.

Shiodome district was selected as the subject region for the newly formed urban space and Shinbashi district which is adjacent to Shiodome was selected as the existing urban space. The result of this research indicated that the existing urban space has a better accessibility than the newly formed urban space.