this reflect town policies and initiatives? We examined these questions through a survey sent to 1,000 homeowners in the watershed-both homeowners chosen at random (control) and those who belong to a watershed association. Initial results suggest that homeowners are both aware of water shortages and of the potential for low-impact development strategies to conserve water. Furthermore, information and awareness of the benefits of ecological landscaping appear to positively influence acceptance of LID, yet they are still hesitant to implement these practices. This presentation will examine the trends in our results and will propose policies and recommendations that apply Kaplan and Kaplan's Reasonable Person Model (2009) to encourage residentialscale low-impact retrofits and incorporate low-impact development strategies into new housing developments.

# Attachment to Contemporary Planned Environments: Emotion, Meaning, Objects, and Processes

Yurika Yokoyama, yurika@idea.c.u-tokyo. ac.jp, (The University of Tokyo); Kaiho Nakamura, kaiho0325@gmail.com, (The University of Tokyo); Hiroko Mizumura, mizumura@toyo.jp, (Toyo University); Katsuki Yokoyama, yokoyama90019@venus.joshibi. jp, (Joshibi University of Arts and Design); Shunsuke Itoh, itoh\_shun@mail.dendai. ac.jp, (Tokyo Denki University); Toshie Koga, fropig@kanto-gakuin.ac.jp, (Kanto Gakuin University); Sanjoy Mazumdar, mazumdar@ uci.edu, (University of California); Natsuko Nagasawa, natsuko@aoni.waseda.jp, (Waseda University); Kuniko Hashimoto, hashimoto.kuniko@p.chibakoudai.jp, (Chiba Institute of Technology)

The experiences of places often evoke emotions in our brains, and we retrieve the memories of the places in our brains with these emotions. The term 'place attachment' was introduced to indicate the ties between places and emotions (Altman, I & Low, S., 1992), and there have been several studies on strong emotional ties to old, historical, and traditional environments. In contrast, this symposium deals with various aspects of place attachment related to contemporary and planned environments with relatively short histories. It may offer new modes of learning about attachment, and practitioners may utilize the findings in figuring out whether their planning is likely to lead to greater attachment in some aspects or not. We look forward to and anticipate good discussion from the presenters and participation and discussion from the audience. To facilitate these, we have Dr. Sanjoy Mazumdar as the discussant. Presenters will carefully collect and analyze residents' comments on their residences/ towns/communities spoken during structured interviews, and show where, and how, they are attached to the new places around contemporary Tokyo. First, we will have presentations of a widespread idea of housing planning in Japan and of a pediatric hospital, and examine children's attachment to the rooms where they live their daily lives at home and at a ward. The next presenters deal with two planned towns in a suburb of Tokyo; one is a new town developed in the period of post-war economic growth, and the other is a recently developed town with unique planning and design features. The last presentation will show an inner town of Tokyo with a long history and categorize residents' utterance on places. We expect this symposium to also provide glimpses of suburban culture in Japan and enable comparison with the American situation by way of contrast.

## Presentation #1: Which Part Do You Like in Your Home? Analysis of the Housing Planning From the Viewpoint of Place Attachment of Children and Ideal Space for Parenting

Recently, there has been discussion of whether parents should provide private rooms for children in Japan. Some researchers pointed out that the living room is effective for small children to make a habit of learning at home. Based on this knowledge, some parents pursue the multifunctional living room as a study room and play room for children and communication place, and some of them think that private rooms for children is not useful. From the viewpoint of psychological development, owning a private room, namely to own private territory, is effective for children to achieve adequate development. In this stage, place attachment also functions effectively for them. I would like to consider whether private rooms for children should be provided or not and what are the important factors for children to obtain the feeling of place attachment to their homes. Based on a questionnaire survey of both children and parents, I would like to discuss the theory of housing planning from the viewpoint of ideal parenting and



place attachment of children at home. In this survey, I asked approximately 20 children living in Asaka city, which is located within commuting distance of Tokyo, to draw their own houses (most of them live in either detached houses or multi-family dwellings), and to point out the places where they could feel some kind of attachment and so on. I also asked their parents to show the ideal housing situation and their real condition of parenting. Referring to the results of those surveys, I would like to analyze important aspects of housing planning for the environment of raising children.

#### Presentation #2: Study of Children's Anchor Points in Health-Care Environment

The places to which children first become attached are dispersed anchor points, which are gradually knit together to form a broader spatial map of the environment. Anchor points provide individually significant key locations in the process of spatial cognition, enabling people to tie together the various parts of the environment and are especially significant in child development. It seems quite probable that a child's social development is closely integrated with this process of spatial expansion. In this study, we asked the children six questions to visualize specific places and compared the percentage of 1st graders vs. 2nd and 3rd graders who responded "don't know" to the questions, analyzed the anchor points of 1st to 3rd grade patients in a pediatric hospital setting and found no significant differences in anchor point formation compared to their 1st to 3rd grade peers in elementary school. Providing the young patients with an orientation leaflet of the hospital and retesting the children six months later, we found that they had developed significantly more anchor points. Finally, we discuss the importance of design consideration for promoting social development of children in health-care environments.

#### Presentation #3: Place Attachment in a Suburban Planned Community: First Generation, New Town Raised, and Newcomer Residents

The present study investigated place attachment of residents of a suburban planned community to understand how residents develop attachment to a place where they do not have roots and where the place itself had been newly developed. Residents in Chiba New Town, one of the largest planned communities in postwar Japan, were interviewed. They were categorized in three groups: First generation residents who moved to the New Town when it was originally developed in the 1980s, new town raised residents currently in their 20s who have been brought up in the New Town, and newcomers who moved to the New Town recently. All three groups displayed high levels of attachment, but newcomers had lower levels of place identity compared with the others. Interestingly, places outside the New Town in the rural community were frequently mentioned as being emotionally significant. In contrast, though the residential environment within the New Town was evaluated positively, places besides their houses were seldom considered emotionally important. Social interaction with neighbors was limited. Many intentionally shopped in neighborhood shops instead of large supermarkets and malls because they wanted neighborhood facilities maintained. When interpreted within the frame of existing theories, there were several indications of "ideological" rootedness, in Hummon's (1992) typologies, relating to place as a conscious choice rather than viewing place as taken-for-granted. Newcomers displayed ambivalent feelings that they liked the place but they "try not to become attached to" it, corresponding to "place relativity" in the typologies. Length of residence and personal experiences had contributed in the development of place attachment. In this sense, one does develop attachment in planned communities in a similar way with traditional places. However, the physical environment of the planned community had little connection to attachment, at least on a conscious level.

### Presentation #4: Place Attachment of Children Growing up in a Unique Designed Environment: A Study of What Children Want to Talk About Places in a Contemporary Planned Town in Japan

In the history of architectural and urban planning in Japan, Makuhari Bay-town is said to be a unique example of realizing perimeter blocks and the continuous residential buildings surrounding 'patios', the rear courts for the buildings. The architectural design for each building is novel to Japanese people as well, and the architects even include an American architect, Steven Holl. This study investigated place attachment of the children living in the newest area developed in the 2000s in this unusually designed town. A survey with questionnaires revealed that the patios and continuously designed commercial streets are not one of the most attached places, but their elementary school is the most and even slightly more than their own residences. We also conducted interviews leading them to spontaneously talk about the places they see on 25 photographs taken in the town. All 17 children enthusiastically talked about what they recalled from 25 scenes in the town and the text analysis was conducted on their pro-

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tocols. From the results, it is suggested that they tend to recall each open space as a playground with individual character in association with each other, making a profound recognition of the linear linkage of different open spaces in a town, which, originally, the town planners created as the result of leaving spaces for ventilation, 'the way of the wind'. Another linear organization designed by the planners, the commercial promenades, tends not to be mentioned much and not as such even when it is mentioned. Characteristic places on the far side of town are mentioned associated with memories of enjoyable school activities and here also it is suggested that the elementary school plays an important role in arousing emotional ties to the places.

### Presentation #5: 'Knowledge Addresses' and 'Reminiscence Talks' of Elderly People: Categorization of What They Want to Talk About Their Local Environments

In this study, the authors introduce the methods of reminiscence review in order to deal with the meaning for the elderly of talking about their own experiences in and knowledge of their familiar local environment. In typical reminiscence review sessions with photographs, photographs either from ethnological records or of typical life events in the past have been broadly used. On the other hand, it is said in the literature of reminiscence research that the places most appearing in the reminiscence talk in general tend to be those the subject uses in his/her everyday life (see Kovach, 1991b). In this paper, we actually show the elderly subjects the most recent photographs of places in their local environment where they have long been familiar with in their everyday lives, and analyze the amount and contents of their verbalization triggered by the photographs. As a consequence, we suggest: first, the photographs of places of their everyday local environment, even taken recently, could trigger much verbalization as well. Second, however, it is true only when the subject could identify the place shown in the photographs. Third, the verbalization in this case includes not only reminiscence talk but also address of his/her knowledge about the places. Fourth, the places chosen by the subjects for the reminiscence talk seem to be different from those for the knowledge address, and the difference could be shown in their geographical distribution.

