# Information ecology for community design

## The result of an analysis of the group interviews during the pre-design process or a sustainable community design in Kohoku New Town, Yokohama

Kazuo Iwamura

Fuculty of Environmental and Information studies

Musashi Institute of Technology

3-3-1 Ushikubo-Nishi, Tsuzuki-ku, Yokohama, Kanagawa 224-0015 JAPAN

iwamura@yc.musashi-tech.ac.jp

**Abstract**

The author, as a practicing architect in favor of implementing sustainable built environment, has been developing new cyclical design process of three phases: Pre-design, Design and Post-design. During the first Pre-design phase, designers are requested to make effort to investigate the project's circumstances including the natural and socio-cultural environment, in order to elaborate the concept to be shared by all the stakeholders. This paper refers to a part of investigation about the unconscious awareness of the residents in the Kohoku New Town, where drastic changes have been experienced during the last three decades of development of 1,300 ha. Major issue was the gaps of awareness among the residents with different background. The author applies group interview methods to reveal such residents' unconscious awareness, which helps designers to understand the social structure of the project. In this case, the resulting keywords have been categorized into three groups, such as Human Environment, Time Environment and Space Environment. These keywords and categories have also revealed their value and way of living, quite unknown to the planners and designers.

 Such an analytical fact-finding regarding the relationship between residents' awareness and their physical environment is a basic aspect of "Information Ecology" for the sake of community planning and design, allowing residents' participation into the above-stated design process.

**Keywords**

 Unconscious awareness, Sustainable development, Cyclical design process, Group interview method, Residents' participation

## 1. Cyclical design process for sustainable development

The author has developed the following design process for the sake of transparent and ever-cyclical improvement of the built environment for sustainable future.

### 1-1 PRE-DESIGN PROCESS

The proposed design process refers first to evaluation of the site from diverse view-points, determining and assessing the specific features of the project, according to **1)Natural Environment, 2)Socio-cultural Environment,** and **3)Project Circumstances,** in order to elaborate the **concept** and **objectives** to be shared by all the stakeholders of the project.

### 1-2 DESIGN PROCESS

The above Pre-design process is followed by the implementation process of interpreting the prior knowledge into space and program design, developing the best practice of the concept and objectives in both hardware and software at every life-stage of the project from **1)Ecological, 2)Technological,** **3)Regenerative, 4)Socio-cultural, 5)Aesthetic,** and **6)Economic view-points.**

### 1-3 POST-DESIGN PROCESS

Then, the design should be implemented on site, to be followed by **1)Construction Management and Inspection,** and **2)Post-occupancy Investigations and Evaluations** during the operation stage, for ever **Cyclical Design Improvement.**

This cyclical design process, as shown below, can be applied to any kind of projects, and at the same time reveals many specific aspects of the project to be respected and considered.

## 2. Pre-design phase

During the first Pre-design phase, designers are requested to make minute effort to investigate the project's circumstances including the natural and socio-cultural environment, in order to elaborate the concept to be shared by all the stakeholders of the project. This paper refers to a part of investigation to reveal the unconscious awareness of the residents in the Kohoku New Town (NT hereinafter), in northern part of
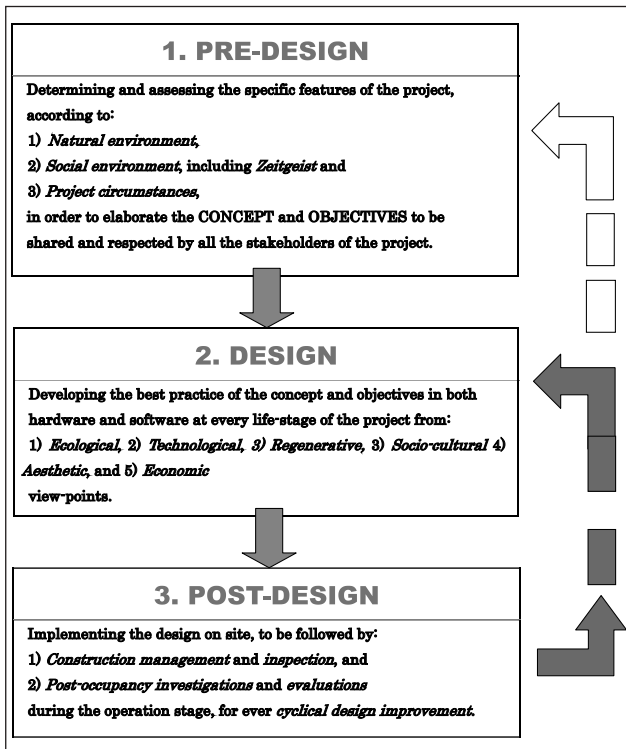
Figure 1. Cyclical Design Process (Iwamura,1998)



Source: Tuduki ? Master Plan of Town Planning

Figure 2-1,2-2

Yokohama, where drastic changes of physical and social environment have been experienced during the past three decades of development in large scale as the regional policy drive of YOKOHAMA City.

Main interests of the research have been focused on the unconscious awareness of the residents, whose average age is only 35, according to their property characteristics that had been categorized by prior researches on the designated area. This research was executed, as both pre-design and post-design of NT, in September and October 1998, with the through support of Tsuzuki Ward, Yokohama, in preparation for elaborating Ward's Town Planning Master Plan.

### 3. Group interview method

The author has been applying a qualitative research method, called "group interview method", to the above-stated issues of pre-design and post-design phases of architectural and urban design projects since more than 20 years. The procedure of this method is as follows;
1) Analysis on the residents' property characteristics in and around NT.
2) Selection of a key or typical person representing a property, through local authority or other organizations.
3) Forming five to ten groups to be interviewed, with the help of the key person in selecting her (or his) close friends belonging to the same property. The size of a group should be max. 5 to 6 persons.
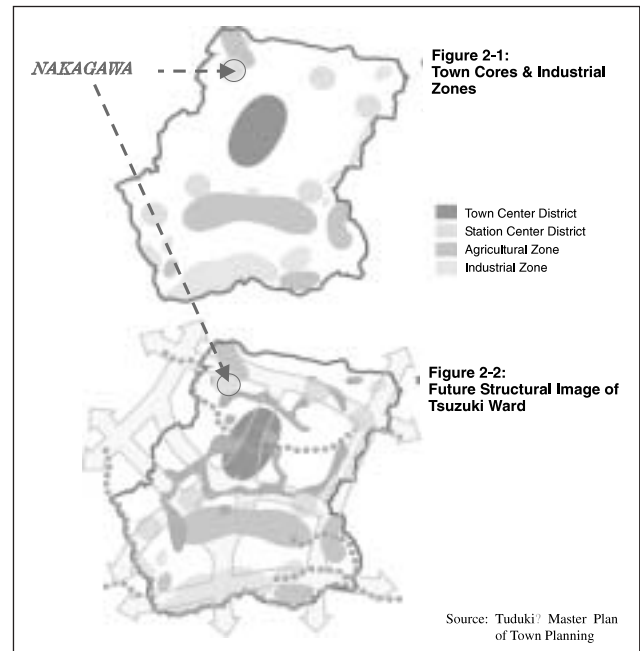4) The group member is preferably all women, who are well

aware of everyday life issues, including shopping, children's education, administration services, social welfares, local information etc. Men's groups are added complementally according to necessity.
5) The best venue of the interview is at home of a group member, or in members' favorite cafe or restaurant, in order to experience her own life-style and to avoid to create formal atmosphere.
6) The interview is not focused on some specific topics but on usual daily life of each member from morning till night, and recorded only by noting in stead of using any electronic devices. Creating a casual and friendly atmosphere is top priority.
7) The results of the group interview should be compiled and analyzed as soon as possible first group by group, and then according to issues discovered through crossing the each result. Keywords shall be mapped and grouped on the theme map, which illustrates the structure of issues regarding the residents' lifestyle.

### 4. The results: Themes that emerged from the group interviews

The relevant research has been executed to the following 7 groups, representing the major specific type of residents and the results have been compiled as follows;

### 4.1. Properties of the groups interviewed
### 1) Group 1: Morning Market Group
House wives community created through the acquaintance at a Morning Market, sharing the problems of taking care of handicapped children. Mixture of old and new residents is

characteristic.

One of the strong motivations to move to NT was the planned wide road network, however, the present traffic jam is a cause of dissatisfaction.

Priority for choosing their residence is the traffic and shopping convenience. Little concern and awareness about the town-scaping have been stated.

The preserved greenery in NT is highly evaluated, and enjoyed.

They like the NT and their own life. A little knowledge about the drastic change of the old residents' life.

They observe the society and community through raising their handicapped children, and created mutual network to help each other.

They seek the relationship with the existing community, which, however, is often provided by the local administration.

Personnel contact with the old residents is requested, but in vain. They feel to be rejected by them.

## 2) Group 2: Welfare Commissioner Group

Typical aged house wives of old residents, living originally on farming, and now on the basis of new real estate business. They lead an active life, contributing to their community as welfare commissioner.

They quite enjoy their own life.

Their life with big family is appreciated. They had been taking care of their parents-in-law as a wife, and are now living with the wife of their sons.

They have their own indigenous community since long time, therefore, little requirement to NT.

While they received financial advantages from the NT development, their traditional life-style was lost. They feel somehow to be violated by the newcomers, therefore, their relationship became more tight.

They have their own extensive land and commodious house surrounded by rich green. Public parks are, therefore, no priority for them, and although they feel sad when green disappears, it is no serious problem for them.

Their old inconvenient life-style is now their sweet memory and they even proud of it.

They prefer rather to live with their family and to sustain it within the existing community around, than to challenge to begin with something new.

## 3) Group 3: Double Income Group

Very active working mothers of new double income families living in privately-owned flats of the Governmental Housing Corporation since 7-8years. Having high academic background, they are very conscious of the rights of residents, sharing a house for kids by themselves. They are absolutely short of time.

They happened to move in NT, just because they won the lottery for a condominium provided by the Housing Corporation.

No special interest in NT at the beginning.

They all have high academic background, and share the common sense that double-income is just normal.

Strong desire for further learning.

They have scarce gender gap, and share their household and kids' education with their husband.

Typical active life-style of "the busier, the more active".

Very little concern about the town-scaping, but very responsive to the information for kids.

Their behavior is formed by their own clear policies like a strong concern about the environmental problem including healthy foods.

Although sharing a house for kids by themselves costs a lot, they keep their job as profession.

What attracts them is not the town as a whole, but their private and community life within their condominium.

## 4) Group 4: House Wife Group

House wives of new residents living in privately-owned flats of the Governmental Housing Corporation. They have quite different consciousness from the Group 3, despite their similar residential circumstances.

House wives, almost fully engaged in their kids rearing.

They find their human networks through their kids' relations.

Although they have some dissatisfaction, no active opinion is addressed to the local administration and the community.

Being with their children as long as possible is their top priority for the time being.

They long to move in a detached house, however, it is not affordable in NT.

They find their condominium life very convenient and safe, where spending most of their time.

They have no contact with the old residents, but a closed network of friends of similar age.

Nuclear family is the center of their life.

## 5) Group 5: Farmer's Wife Group

House wives of old farmer residents with the age of 50's to 70's. They are the core members of the women division of Farmers' Cooperative Organization, actively and comfortably living on their husbands' income from farming and non-farming side business such as real estates operation.

They try to get accustomed to their present life, keeping good memories of old days.

They think that their men's life has been more drastically changed than their own. They tend to keep their favorite agriculture-centered life with earth, although the surrounding situation has been totally changed and urbanized.

Due to the NT development, their family structure has been distorted, causing fundamental changes.

During the early stage of the development, there were harsh struggles between the pros and the cons within their men's society that were observed by them.

They still live within their old community, and glance at NT from time to time as a foreign world.

There are some who really enjoy the new life, recognizing themselves as bad wives.

Although they were obliged to change their life-style during quite long time in their temporally house due to NT construction, their agriculture-centered life has been quickly recovered after they came back home.

Their children, grown up in the temporally houses, have no experience of the old farmer's houses, which is now recognized as a pity by the parents.

Living as farmer's wife, they understand their husband through cooperative works in the field.

They experienced the early days as wife, expressing no opinion in their family and community. Even now, they tend to speak after men's words.

Within the clear community they understand each other very well and share a fellowship feeling beyond their generation gap.

### 6) Group 6. Volunteer Housewife Group

House wives of new residents with the age of 50's, having already finished raising their kids and therefore much time for community activities. These people are the core member of residents' initiatives of the Kohoku New Town.

They have an ample situation both spiritually and financially.

Provided with the benefits of Bubble Economy, they could have moved to better residence for several times.

Their human network is based upon getting acquaintances with friends at events for children.

They are active core members of PTA, expressing vitally their own opinions.

Their children are grown up and their husbands are at business. Therefore they seek their own world    outside of their family, keeping the relationship with friends as a most precious resource for them.

As the place of children's education is not NT any more, they have no serious need for the contact with the local community. However, they worry about the local information gap between old residents and new residents.

They came from the other regions and created nuclear family here. Scarce contact with their relatives, except at yearly ritual events.

They belong to the generation, preparing for the forthcoming life with their own parents who live alone in their home town.

They have very firm concept and opinion.

### 7) Group 7. U21 Girl Group

Girls under 21 years old, mostly teenagers, who constitute a considerable proportion of the New Town, the average residents' age of which is 35 years old.

For them NT is only the base camp of their life, and their activity fields are in Tokyo and Yokohama.

Therefore, they have no clear need and favorable image for NT.

Enjoying diverse urban acquaintances and stimulations, they give efforts to make up themselves.

They are fond of NT. Its convenient location to both Tokyo and Yokohama is very much appreciated.

However, they find the district's public bus transportation terribly inconvenient.

They feel scared when walking at night alone.

They stay at home only at night and during the weekend. Their daily activities are based at their school or jobbing place.

They are all grown up in NT. Therefore, they have many friends of primary school and junior high school, to spend time together at the weekend.

Their information source of fashion is magazine, and they do not watch at TV so often.

They are more or less interested in volunteer activities to take care of children or the handicapped. Some of them are practicing such activities.
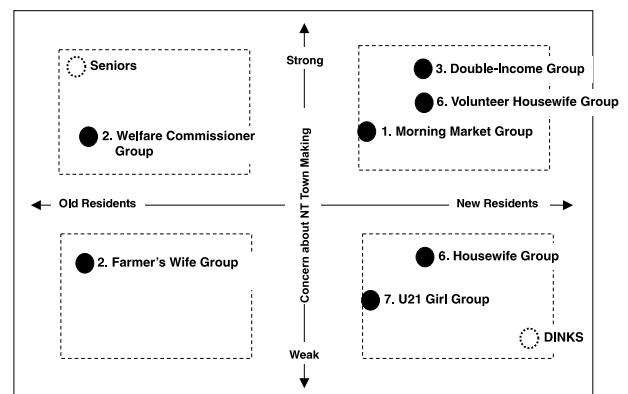


Figure 3. Group Mapping

### 4.2. Results of the group interviews

The results of these series of group interviews have been analyzed and compiled into the following 3 themes and 12 issues that revealed the unconscious awareness of residents of the designated area.

**A. Human Environmental Issues:**

**01) Psychological barriers between old and new residents, as well as among each of them**

Time lag in coping with their <life> and <change>, and the difference of financial background

Desire for the mutual touch and exchange    **Creation of spaces and opportunities for daily communication**

**02) Old inhabitants as bearers of the indigenous culture and the former farm village's life styles**

Witness of the indigenous and living culture of the place

**Town making with historical elements to be inherited**

**03) Strong needs for daily town information as well as intellectual one, in terms of contents, way of circulation**

**and its speed**

Gap between demand and supply of community information, during the maturing process of a new town **Needs for sustainable communication site**

**04) Itemized communities and citizen's activities, crystallized from and around their own personal problems**

Diversified problems to be addressed by the residents, including working conditions, child rearing, education, nursing etc, which initiated individual activities

Little choice of services provided by both public and private sectors, during the maturing process
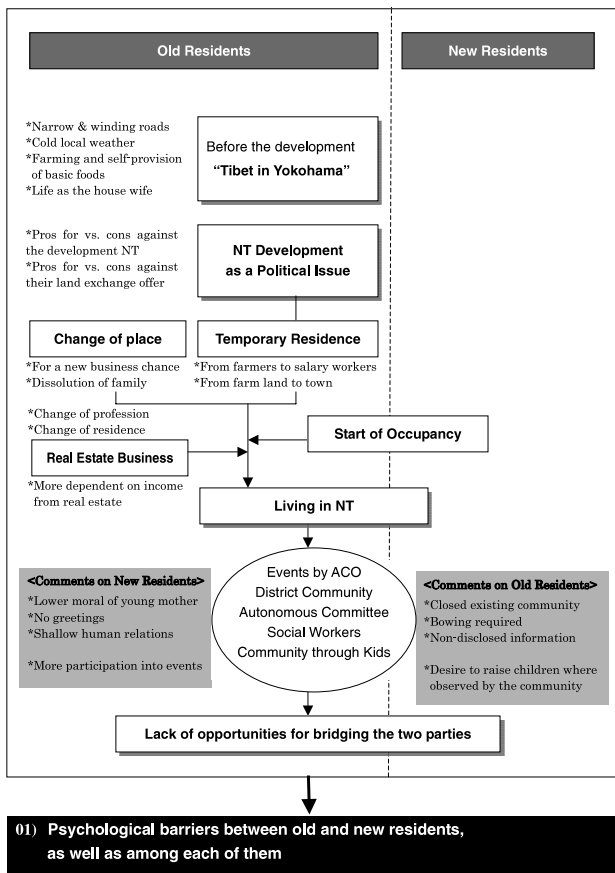




**(01) Psychological barriers between old and new residents, as well as among each of them**

Figure 4. A chart example, representing the relationship between old and new residents

**05) Desire for self-accomplishment and socialization, beyond the difference of generation and property**

Little information and scarce access for participation, to be provided for the residents **Improvement of the community information services is required**

Gap between demand and supply of volunteer activities **Networking the potential residents' activities is needed**

**B. Time Environmental Issues:**
**06) Diversification and acceleration of the time environment**

Available time is recognized as the most precious resource by the residents.

Awareness of time shortage dominates our contemporary urban life **To be reflected in the provision of space, information and services**

The quality and quantity of <Time Environment>, definitely different according to generation and property of the resident **To be considered as the basis of lifestyle**

**C. Space Environmental Issues:**
**07) Planning concept, not shared nor understood by the inhabitants**

Bird's eye, human's eye and insect's eye level **Eye level gap in observing the town**

Stereotype image of a good town, and fabricated image of consumers

**08) Spatial gap between residents' area and the administrative area**

**09) Little interest in townscape in residents' mind**

**10) Satisfaction grade of the present home and town is evaluated on the basis of prior experiences of their residential environment**

**11) The present home forever?**

**12) New residents tend to live away from their parent(s)**

**5 Conclusion**

Although this research through the qualitative group interview method was quantitatively limited due to time and finance, we could overview very vividly the existing private and social issues shared by the residents in the Kohoku New Town, on both generic and specific levels. The most unexpected result was the residents' little concern to the tangible urban design aspects, including public space organization and town-scaping of aesthetic quality, which are always major concern of urban designers. After the growing stage of 30 years, however, the New Town will experience the forthcoming maturing process, where the existing diverse cultural and social activities of the residents seem to contribute to the collaborations towards sustainable Old Town.

Such an analytical fact-finding regarding the relationship between residents' awareness and their physical environment is a basic aspect of "Information Ecology" for the sake of community planning and design.

**References:**
1) Iwamura, "Residents and Town-scaping" 1999, Housing Industry Foundation
2) Iwamura et al., "Towards the Architecture for a Global Environment" 2002, Shokokusha
3) "Tsuzuki Master Plan of Town Planning" 2002, Tsuzuki Ward, Yokohama City