

# Japanese Housing Market and the Roles of Condominiums in Local Cities: A Case Study of Mito City, Ibaraki Prefecture.

---

Tomoko KUBO

## Abstract

This research explored the decision-making processes related to residential choices by current residents of owner-occupant condominiums in the downtown area of a local city in Japan. In addition, this research discussed the roles of condominiums in local cities, considering the characteristics of the Japanese housing market. The research area of this study is Mito City in Ibaraki Prefecture, a typical local area in Japan. From this research, the reasons to move into the current residences could be summarized as follows. First, the preference for the residential form affects decision making process. Secondly, the attraction of the downtown area is an important reason for the determination of their searching area. It is a characteristic of condominium residents' decision-making process that "choice of residential form" is the key in the whole process. The condominium residents in local cities can be called "the first generation of condominium occupants." Their decision-making processes consisted of simple steps: limiting search areas and residential forms, purchasing impulsively, and having few future plans about residential consequences. Condominiums play important roles in accommodating diversified housing needs and household structures, and the preference for the residential form reflects the difficulties in maintaining patriarchal housing customs in Japan.

**Key words:** condominium residents, down-town area of local city, decision-making process, Japanese housing market

## 1. Introduction

### 1-1. Research objectives

Home ownership is an important event in an individual's residential experience. There is a close connection between home ownership and an individual's welfare and pleasure (Morrow-Jones, 1988). Some of the housing legislations, which are fundamental to Japanese housing policies in recent years, were approved after the Second World War (Japan Federation of Housing Organizations, 2002). These laws caused middle-class people to flock to suburban

home ownership. The migration from non-metropolitan areas to metropolitan areas led to the suburbanization of Japan (Tani, 1997). Detached houses were thought to be the ideal residential form in the suburbs (Kageyama, 2004).

However, the large supply of the apartment buildings by the Housing and Urban Development Corporation has promoted a lifestyle revolving around condominiums or apartment homes. In addition, condominium development has increased rapidly since the late 1990s. This rapid development has led to dramatic changes in urban land use and residential transformation in Japan. Therefore, the condominium plays an important role as an owner-occupied residential form in the Japanese housing market.

Preston (1986, 1991) reported that the form and price of condominiums in the downtown area are quite different from those in the suburbs. In addition, the residents of condominiums dictate the sizes and locations of the cities in which they are built. According to a case study in Canada, elderly and young household members prefer condominiums because of their affordability and security (Skaburskis, 1988).

The following points are unique to condominiums, compared to detached houses (Matsubara, 1985). The supply of condominiums is strongly affected by the economic fluctuation and the location of the densely populated areas. It should be noted that condominiums can be floated into the secondhand and rented housing market. Over the past few decades, a considerable number of studies have examined condominium supply in Japan. However, there seems to be dearth of studies on condominium demand. The surveys dealt mostly with residents who lived in the metropolitan areas, and with the households' residential careers.

As the condominium supply increased in downtown areas after the late 1990s, the landscape and land use changed dramatically in Japan. This phenomenon occurred in highly populated areas such as central Tokyo and most other local cities, including Mito City. It was triggered by redevelopment projects around the core stations and by the on-site development of factories, commercial areas, and leisure centers (Real Estate Economic Institute, 2002).

According to Yabe (2003), the late-1990s population recovery in inner Tokyo was affected by the economic crisis following the "bubble era" (i.e., the 1980s). Because

---

JSPS Research Fellow, Graduate student, University of Tsukuba

of the fall in land prices, landowners were forced to sell their land or to utilize it for housing. The land was used for condominium developments. The residents of the condominiums in inner Tokyo are largely single female households and double-income couples with no children.

There are some reports that have dealt with the population recovery and land use change in downtown Tokyo and some of the largest local cities, and the relationship between population recovery and condominium developments has provoked a great deal of controversy. However, little attention has been paid to smaller-size local cities. Although condominium supply is concentrated in the metropolitan and prefectural centers including small-sized local cities in Japan, the studies dealt with the residents of condominiums and their supply in small-sized local cities were therefore restrictive. Considering the suggestion of Preston (1986, 1991), case studies of local cities are still being examined. Most of the prefectural centers are classified into small-sized local cities in Japan. Hence, the case studies of these cities also contribute to clarify the intra-urban residential structure of a large part of the Japanese cities.

What seem to be lacking are substantive surveys on the residential choices of the condominium residents, including their individual backgrounds (such as family) and their motivation for selecting housing. These backgrounds play important roles in residential choices in Japan, and surveys dealing with these backgrounds would contribute to the establishment of theories explaining the Japanese housing market.

This research explores the decision-making processes related to residential choices by current residents of owner-occupant condominiums in the downtown area of a local city in Japan. In addition, this study will discuss the roles of condominiums in local cities, considering the characteristics of the Japanese housing market.

### *1-2. Methodology*

Scholars have made numerous attempts to demonstrate the decision-making process on home ownership based on the model of Brown and Moore (1970). There is an indication about the decision-making process' impact on migration (Short, 1978; Robson, 1975).

1) Decision to move: Households judge the current residences and neighborhood. They form the environmental needs, expectations, and aspirations about new residences by considering the size and economic status of the households. The housing prices and neighborhood are also emphasized. It should be added that the life stages of the households influence the housing adjustments (Clark and Onaka, 1983). To put it more precisely, as the households grow, they are faced

with the need to adjust their houses to their households' size. This stimulates their desire to move. The formation of the households, marital status, and transformation of the households' size are the most important factors when determining whether (and where) to move.

2) Search for new residences: The housing information that households can obtain could be an important factor, for example, knowledge about the houses and areas to which they will move. The households seek to strike a balance between affordable residences and their housing needs. At the time of choosing specific residences, practical aspects such as housing prices are considered. Ito (2001) refers to the fact that the bias of the housing information and the distribution of public housing limit the search areas of households. The accessibility of the areas or the time taken for commuting from that area to their workplaces also affect the search decisions of households.

When discussing the decision-making processes of condominium residents in terms of individual background, a biographical approach should be considered (Findlay and Graham, 1991; Halfacree and Boyle, 1993; Inagaki, 2003). The decision-making process is strongly influenced by practical consciousness, and this approach can help in evaluating individual subjectivities.

This research begins by summarizing the characteristics of the Japanese housing market that affect the residential choices of condominium residents in local cities. Then, I will show the results of the case study in Mito City, a local city close to metropolitan Tokyo. Questionnaires and interview surveys were conducted to collect data from condominium residents in the research area. The questionnaires were sent to 591 households. Responses were received from 139 households. Among these responses, 121 households who own their condominiums were used for this analysis. Thirty-nine households cooperated in answering additional interviews. The questionnaires primarily focused on the residential experience of both husbands and wives, the household structure, and the current residences of their parents or children. The details of their decision-making processes on the residential choices were answered in the additional interviews. The questionnaires were administered from August to September in 2005, and collected sequentially.

### *1-3. Research area*

The research area for this study was Mito City in Ibaraki Prefecture, a typical locality in Japan (Figure 1). Mito City is the seat of the prefectural government with a population of 262,532 (Statistics Bureau, Population Census 2005). The downtown area of Mito City is located on the alluvial plateau, surrounded by two rivers and a lake, and it stretches to about two kilometers along Route

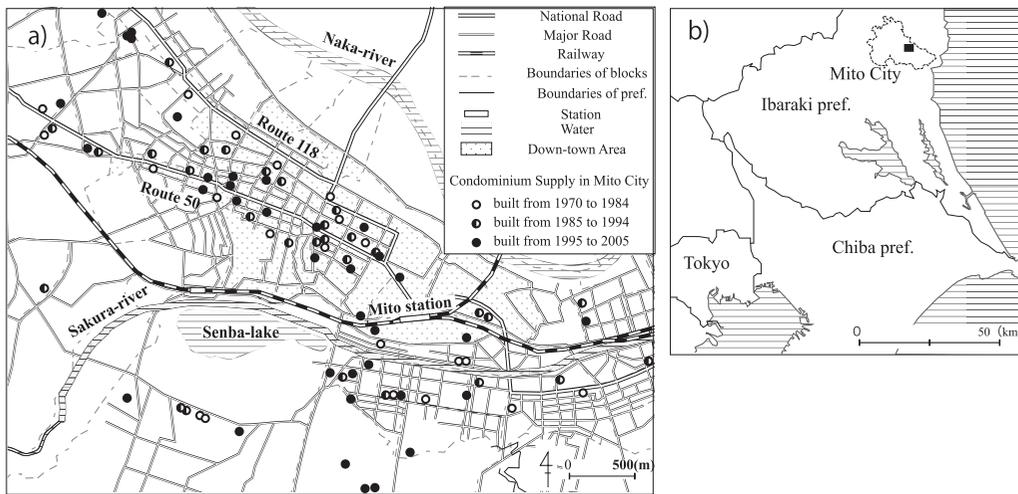


Fig. 1 (a) Distribution of high-rise condominiums in the down-town area of Mito City.(b) Location of Mito City.

50 (Picture 1).

Condominium supply in Mito City is shown in Figure 1, and this figure was drawn based on data obtained from the Real Estate Economic Institute (1970–2005). Most of the condominiums are built on the plateau front on Senba-lake. In the 1970s, people began buying condominiums on the plateau as a form of real estate investment. In the late 1990s, the condominium supply shifted toward a more residential purpose. There used to be a castle town in down-town area of Mito City in Edo era, and there are some luxury condominiums in the vestige of the castle (Picture 2). The southern area of Mito station, which was recovered from the lake, was not preferred as a residential area. After the late 1990s, however, the suburbanization of official functions led to a change in land use related to the housing, especially condominiums for parenting couples.



Picture 1 Main street of the down-town area of Mito City.

## 2. Characteristics of the Japanese housing market

### 2-1. History of the Japanese housing market

The Japanese civil law passed in the 1870s was based on “*ie-seido* (family institutions),” which categorized people by the unit of family or parentage, and allowed them to maintain real property such as houses and land. *Ie-seido* was a legal, economic, social, and cultural mechanism that provides the roots for the modern Japanese social structure (Iwakami, 2003). It was devised based on the housing custom of the samurai, the stem family system. The patriarchs succeed the real properties and transferred them to their eldest sons, and the other sons and daughters leave the head family and form collateral families. The younger sons (i.e., the collateral families) needed to find jobs in the other areas, and this led to the residential mobility from rural areas to densely populated areas. Based on the housing custom of the family institution, the ideology of home-ownership was intensified in Japan (Ronald, 2004).



Picture 2 Luxury condominium in the down-town area of Mito City.

Although this institution was abolished in 1947, in many rural areas, patriarchal housing customs remained until recent days. According to Kato's doctoral dissertation on the Japanese family system (2003), more than 30% of couples who have been married for more than 10 years moved to live together with their parents, meaning that the theory of the modified stem family system held true<sup>1</sup>.

In the 1950s, as dwellings became scarce owing to the lack of building materials after the Second World War, some of the housing legislations were made to improve the quality of housing. In 1950, the Japanese Housing Finance Agency began financing home ownership for high-income households. The Japan Housing Corporation (now the Urban Renaissance Agency) was established in 1955 to develop collective housing estates for middle-class households. Rented houses and public housing were provided for low-income households (Japan Federation of Housing Organizations, 2002; Kageyama, 2004).

The ideology of home-ownership has achieved increasingly greater currency (Hirayama and Ronald, 2007), with the rate of home-ownership reaching 60% at the beginning of the 1960s (Ronald, 2008). Detached houses in the suburbs welcomed the increasingly large middle-class, and the so-called "myth of real property" strengthened the preferences for detached houses, while condominiums were thought to be temporary residences before purchasing detached houses; this system is called the "housing ladder."

Condominiums were developed as a form of luxury residence in the late 1950s, and because of the various strategies adopted by condominium suppliers, condominium supplies were divided into two segments. The first segment comprises expensive condominium supply in metropolitan centers and prefectural centers developed by some major condominium suppliers. The latter segment comprises the affordable condominium supply in the suburbs developed by the private railroad enterprises (Matsubara, 1985). The characteristics of the condominium supply remained until recent days. The land price fell after the collapse of the "bubble economy" in Japan, the condominium supply increased in the metropolitan centers, most of the central areas of the local cities, and suburban cores such as Makuhari and Yokohama (Sato and Arai, 2003; Lee, 2002). In addition, a prolonged recession and a policy to promote housing construction have split urban residential areas into attractive urban developments' areas and unattractive urban developments' areas (Hirayama, 2005). The attractive residential areas were concentrated in the metropolitan centers, the central areas of the local cities, and the suburban cores. The locations of the attractive residential areas were closely related to the locations of

the condominium supply after the late 1990s.

As the household structures and lifestyles have diversified, however, the role of the condominiums has changed in Japan. Yui (2000) discussed the fact that single female households showed preferences for condominiums, and condominium developers have begun supplying for small-sized households.

## *2-2. Housing market of the Tokyo Metropolitan Area in recent years*

Table 1 shows the number of owner-occupations constructed from 1999 to 2003, and the table and figures in this section were based on the data obtained from the Statistic Bureau of Japan's "Housing and Land Survey (2003)." This table shows that more than 70% of the home owners obtained their residences by building new houses or purchasing newly built houses. It is often said that the Japanese housing stock was increased by scrapping old houses and building new ones. Therefore, the secondhand housing market is fragile in Japan as a whole, and this business is limited to highly populated areas such as Tokyo and Osaka.

As Figure 2 shows, the first peak of owning houses occurs between people in the age group of 30 to 40 years. This is the age at which most people get married and start parenting and are thereby prompted to purchase their own houses. The second peak is seen in people in the age group of 50 to 60 years. I should mention that these individuals' previous residences were owner-occupations, because this is the age at which they need to rebuild their houses in order to live together with their sons and daughters and their families. It should be noted that this includes people who obtained new houses to reflect the decrease in family size owing to the children's independence. These people are limited to the rich in the most of the cases<sup>2</sup>. The value of real property tends to decrease gradually in the Japanese housing market. Therefore, the introduction of reverse mortgage did not advance, and the mobility of middle-aged people and the elderly is not animated as compared to their counterparts in Western countries (Tahara et al., 2003).

The relationship between the population size of the areas and the housing supply is another point worthy of discussion. Figure 3 shows the means adopted to own houses, and Figure 4 shows the forms of owner-occupations by prefectures in Kanto area. Considering the recent housing development trends and the features obtained from these figures, the prefectures can be divided into three categories areas: Tokyo area, the commuter belt of Tokyo (Kanagawa, Saitama, and Chiba) about 30–50 km away from Tokyo, and the local areas (Gunma, Tochigi, and Ibaraki) about 50–100 km away from Tokyo.

Because of the high price of real estate in Tokyo, the

Table 1 Number of the owned houses constructed from 1999 to 2003 in Japan.

The way to own houses	Number of the owned houses	Percentage (%)
Newly built(excluding rebuilt)	1,255,600	38.4
Purchased newly built houses	1,130,200	34.6
Rebuilt	739,600	22.6
Purchased used-houses	74,500	2.3
Inheritance or grant	31,900	1.0
Others	36,300	1.1
Total	3,268,200	100

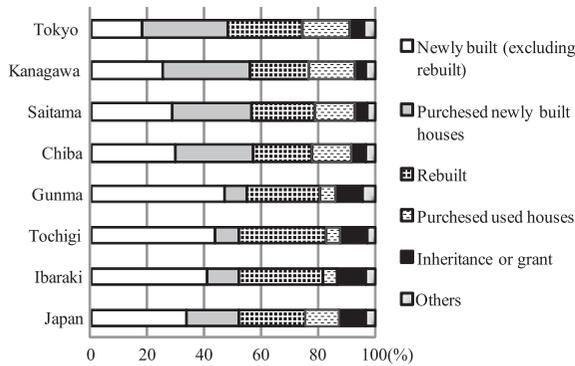


Fig. 3 The way to own houses constructed from 1999 to 2003 in Kanto Area.

proportion of rebuilt and used houses, apartments, and condominiums is higher than that in other areas. On the other hand, the proportion of newly built and detached houses is higher than the Japanese average in the local areas. The preference for newly built detached houses is remarkable in the local areas in Japan. Condominiums are thought to be a new form of home-ownership in local areas. Commuter belt of Tokyo showed the medium characteristics of Tokyo area and local areas. Commuter belt of Tokyo include attractive residential areas such as new urban developments in suburban cores and unattractive residential areas developed more than a few decades ago, and this aging phenomenon is becoming remarkable in recent years (Naganuma et al., 2006; Nakazawa et al., 2008).

Condominium supply is mostly limited to the central locations in the Tokyo areas, local areas, and suburban cores. The metropolitan centers and suburbs have experienced condominium supply for more than 50 years. On the other hand, the central areas of local cities are facing transformation of the urban residential structure

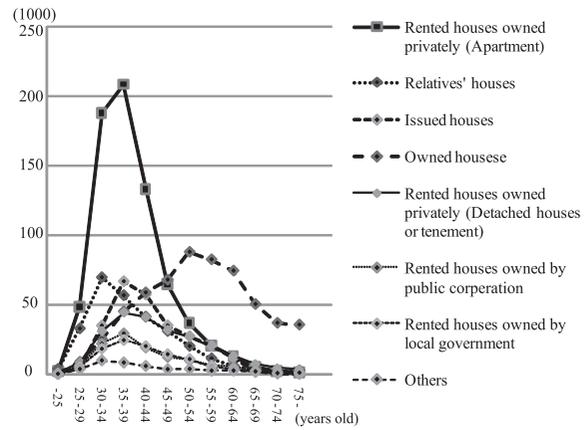


Fig. 2 Number of the owned houses constructed from 1999 to 2003 by age and types of previous residences of main earner.

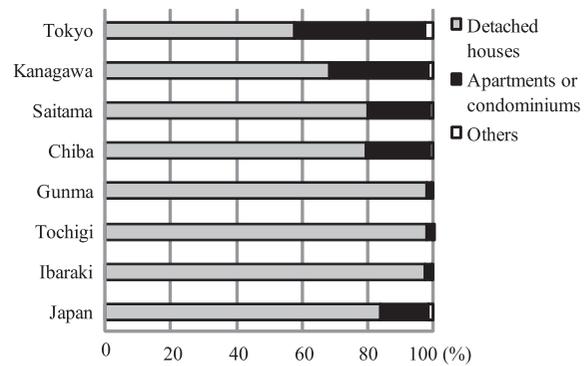


Fig. 4 Forms of the owned houses (used exclusively for living) constructed from 1999 to 2003 in Kanto Area.

because of the increasing condominium supply since the late 1990s. In the following sections, the details of the residential choices of the condominium residents in the central area of a local city are described.

### 3. Overview of the condominium residents in Mito City

Morrow-Jones (1988, 1989) reported that the advancement of the life stage led to the change of residences and that the most effective life events were marriages, the growth in the number of households, and retirements. He also observed that there is a close interrelation between the households' structure or the economic status of the households and the transferring residential forms. For example, the moves between owner occupations were made by the rich married couples to gain status symbols. In the last few years, several articles written by Japanese researchers have been devoted to the study of residential preferences by age, sex, and household structure. Single female households tend to prefer locations close to their relatives' residences. They also have a tendency to project their independence and

self-fulfillment through homeownership (Yui, 2000; Kageyama, 2004). The residential choices of the elderly are deeply influenced by the residences of their sons and daughters (Hirai, 1999). Considering the differences among residential preferences by life stages, the first question to be discussed is who lives in condominiums in the downtown area of Mito City.

### 3-1. Types of residents

The condominium residents who answered the questionnaires (121 households) were divided into three types: “family type,” “single type,” and “middle-age and elderly couple type” (Table 2). “Family type” includes married couples of working age and parenting couples (68 households). In the additional interviews, four households among seven who have no children take parenting in the future for granted, and they considered the environment for future parenting while making their residential decisions. Most households of this type have never purchased a house before; only six households of this type have purchased houses in the past.

“Single type” (20 households) includes those who have never been married (19 households) and a divorced widow. The former have never purchased houses before. There are three retired people in this type, and the age group is concentrated on the middle-aged group.

The last type is the “middle-age and elderly couple type” (33 households). This type includes couples whose sons and daughters have already left their home, and retired couples. Some widowers in this type moved to their present residences with their wives, but now live alone

because of the bereavement and separation. There are 20 households who have purchased houses before, which equates to 61% of this type. According to the answers in the additional interviews, those who have moved from owner-occupations transferred them to their sons and daughters or sold the old residences.

### 3-2. Residential experiences and residential intention of the residents

The residential experiences of the residents drive us to the question of how the residents moved to the neighboring areas of Mito City and whether they continue to live in Mito City. Numerous Japanese scholars have determined that once the Japanese purchase houses, they remain in the same houses, and this leads to the aging phenomenon after a few decades in the housing estates and the condominiums that were provided at the same time (Yui, 1999). The second question plays an important role in this context.

Figure 5 shows the life-stages of the households of the “family type” among condominium residents in the downtown area of Mito City. When they were born, they lived in a variety of places, but more than half of the husbands were born in Ibaraki Prefecture. They moved to metropolitan Tokyo to enter universities, and most of the husbands lived in apartments and condominiums during this period. Numerous husbands moved into Ibaraki Prefecture for obtaining jobs. At the marriage stage, most of the husbands lived in Ibaraki Prefecture because many households moved into the present residences when they got married. There are some big companies and factories in Ibaraki Prefecture; these companies and factories employ people with higher academic backgrounds (many husbands entered graduate schools) from the Kanto area. The people moved into Ibaraki when they obtained jobs with such companies, and moved into Mito City when they purchased houses. The percentage of these households amounts to 40% of all condominium residents in downtown Mito.

Residential intention in current residences is revealed in Figure 6. Households choose all options that are applicable to them in the questionnaires. “Middle-age and elderly couple type” both have a strong wish for continued living in their present residences. Depending on the answers in the additional interviews, those in this type who possess the possibility to move in the future considered moving to children’s houses or to a care service institution if they have health problems. About half of the “family type” households do not say whether they wish to move in the future. What seems to be important, however, is the fact that 11 households of this type possess the possibility to move for the inheritance of real property. Fewer than 20 households express the wish to continue living in their

Table 2 Characteristics of the condominium residents in the down-town area of Mito City.

Types of the residents	Households' structure	Number of households
	Working couples	23
"Family type"	Working couples with children(<18 years old)	44
	Single with children	1
	Subtotal	68
"Single type"	Working single	17
	Retired single	3
Subtotal		20
"Middle age and elderly couple type"	Mover after independence of sons and daughters	31
	<i>Working couples</i>	18
	<i>Retired couples</i>	6
	<i>Retired widowers</i>	7
	Retired Couples (No sons and daughters)	2
Subtotal		33
Total		121

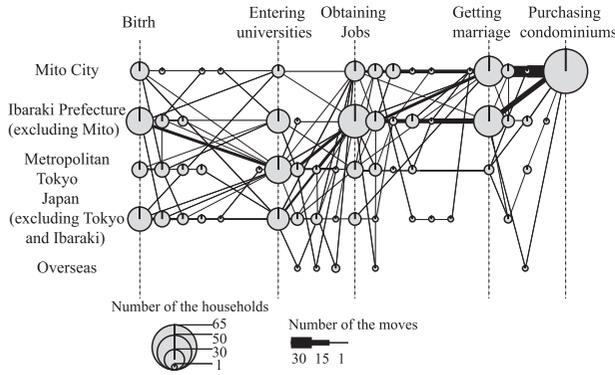


Fig. 5 Life-pass of the householders who belong to the ‘Family type’ among the condominium residents in the down-town area of Mito City.



Picture 3 Popular public elementary school in the down-town area of Mito City.

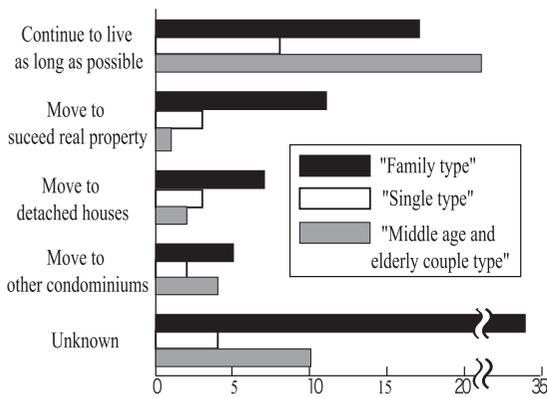


Fig. 6 Residential intention for their present residences of the residents surveyed.

present residences. The “single type” members have a strong wish to continue living in their present residences.

#### 4. Decision-making processes on the residential choices of the condominium residents in Mito City

Figure 7 shows the backgrounds related to the residential choices of the people who participated in the additional interviews. Considering the differences between the types of the residents, the following points were also added to the table. The possibilities of moving in the future and inheriting real property were added to the “family type.” The possibility of moving in the future was also added to the “single type.” Residential experience was added to the “middle-age and elderly couple type.” Having provided the basic traits of the condominium residents in downtown Mito City, we may now turn to the real subject. The residents’ special emphases on each stage of the residential-choice decision-making process are shown in the following parts. The cases of some typical households appear to explain residents’ decision-making processes on residential choices.

##### 4-1. Decision to move

The “family type” was prompted to move because of the growth of households due to life events such as marriage and the birth or growth of children. The 1-A households decided to move in order to seek a proper environment for the education of their children. As their children grew in their previous residence, this couple had complaints about the education systems, and about the education levels of the schools and the cram schools to which their children would go. There was a possibility to commute to Tokyo because of the transferring offices of the household, and this led the husband to prefer to live close to the center of the public transportation system rather than in the suburban residential areas. The search area of this household was limited to stations in Mito and neighboring cities. Limited to the residences around stations, they only looked at condominiums. Considering the concentration of the education systems and the transportation systems, they judged Mito City as the most appropriate place to live (Picture 3). They decided to purchase a condominium in Mito City and compared condominiums newly built or building at that time, noting the housing prices and the facilities for parking spaces. As a result, they moved to the present condominium.

There were some households who were prompted to move upon gaining information about condominium supply. 1-C households purchased a condominium as a temporary residence until they succeeded real property in the future. As their children grew up, the couple could afford to purchase a house. The wife obtained information about the condominium supply close to their previous residence, which strengthened her desire to purchase housing in Mito City. The wife was determined to move to the condominium and persuaded her husband to purchase a house to which they eventually shifted. The wife has been anxious about life in the rural area to which they

a)"Family type"						
ID	Households' structure	Prompts to move in current residence	Will and reasons for future move	Possibility to succeed real property	Previous residential area	Residential forms of the previous residences
1-A	h32,w33,3(m)	Growth of the children	Move by transfer	No	Ibaraki Pref.	Company housing
1-B	h42,w40,7(m),5(m)	Growth of the children	Unknown	Yes	Mito City	Rented apartment
1-C	h43,w43,19(m),17(m)	Growth of the children	wish to move	Yes	Mito City	Public housing
1-D	h51,w51,18(f),10(m)	Growth of the children	Unknown	No	Mito City	Owned house by parent
1-E	h38,w32,0(m)	Marriage	Unknown	No	Mito City	Rented apartment
1-F	h31,w27,0(m)	Marriage	Wish to move	Yes	Ibaraki Pref.	Rented apartment
1-G	h41,w40	Marriage	Wish to move	Yes	Mito City	Company housing
1-H	h40,w36	Marriage	Wish to move	Yes	Mito City	Rented apartment
1-I	h45,w32	Marriage	Unknown	No	Mito City	Rented apartment
1-J	h44,w38	Marriage	Wish to move	Yes	Mito City	Rented apartment
1-K	h48,w47	Wish for home-ownership	Unknown	No	Ibaraki Pref.	Rented apartment
1-L	h32,w32	Wish for home-ownership	Unknown	No	Mito City	Company housing
1-M	h36,w38	Restriction of company housing	Wish to move	Yes	Ibaraki Pref.	Company housing
1-N	h40,w39,11(m),6(m)	Restriction of company housing	Move by transfer	No	Ibaraki Pref.	Company housing
1-O	h46,w45,18(f),15(f)	Advice of bank	Unknown	No	Mito City	Public housing
1-P	h46,w46,14(m),11(m)	Compared with rent	Purchase another one	No	Mito City	Rented house
1-Q	h43,w37,4(m)	Complaints on previous residence	Purchase another one	No	Mito City	Condominium
1-R	h46,w38,8(m),6(f)	Entry to primary school of child	Purchase another one	No	Mito City	Owned house

b)"Single type"						
ID	Age and sex	Prompts to move in current residence	Will and reasons for future move	Occupations	Previous residential area	Residential forms of the previous residences
2-A	52(f)	Wish for home-ownership	No	High school teacher	Ibaraki Pref.	Rented house
2-B	64(f)	Wish for independence	No	Instructor of Kimono	Mito City	Owned house by parent
2-C	62(f)	Wish for independence	No	Officer(school clerk)	Mito City	Owned house by parent
2-D	57(f)	Divorce	No	Independent clothing shop	Ibaraki Pref.	Owned building
2-E	63(f)	Wish for independence	Unknown	Company employee(Hitachi)	Mito City	Public housing
2-F	46(m)	Restriction of company housing	Succeed real property	Company employee(Hitachi)	Mito City	Company housing
2-G	54(m)	Restriction of company housing	Move by transfer	Company employee(in Tokyo)	Ibaraki Pref.	Company housing
2-H	71(f)	Forced retirement	No	Retired(company in Tokyo)	Tokyo	Rented apartment
2-I	79(f)	Forced retirement	No	Free-lance writer	Tokyo	Owned house

c)"Middle age and elderly couple type"						
ID	Households' structure	Prompts to move in current residence	Will and reasons for future move	Residential Experience	Previous residential area	Residential forms of the previous residences
3-A	h 70,w(bereavement)	Forced retirement Purchasing house of son	Brought over by son (Unknown)	Hail from Ibaraki	Mito City	Owned house(sold)
3-B	h 70,w(bereavement)	Forced retirement	No	Hail from other area (daughter lived in Mito)	Mito City	Owned house(sold)
3-C	h 64,w63	Forced retirement	Unknown	Hail from other area (sister lived in Mito)	Tokyo	Rented apartment
3-D	h 64,w60	Forced retirement	Unknown	Hail from Ibaraki	Hokkaido	Condominium(sold)
3-E	h 84, w(hospitalization)	Brought over by son	No	Hail from other area (son lived in Ibaraki)	Ibaraki Pref.	Rented apartment
3-F	h 74,w72	Forced retirement	No	Hail from Ibaraki	Tokyo	Rented apartment
3-G	h 77,w73	Forced retirement	No	Hail from Ibaraki and Tokyo	Ibaraki Pref.	Owned house (sold and contributed)
3-H	h 65,w62	Independent of daughters	Unknown	Hail from Ibaraki	Mito City	Company housing
3-I	h 70,w60	Independent of son	No	Hail from Ibaraki	Mito City	Owned building(possess)
3-J	h 58,w57	Independent of daughter	Unknown	Hail from Ibaraki	Mito City	Public housing
3-K	h 54,w48	Independent of children	Unknown	Hail from Ibaraki	Ibaraki Pref.	Company housing
3-L	h 59,w59	Independent of children	Unknown	Hail from other area (Work in Ibaraki)	Kanagawa Pref.	Owned house(sold)

Fig. 7 Classifications and the characteristics of the residents surveyed.

will move to succeed real property, and she also has long been anxious to play an important role as a wife of the householder. On the other hand, the husband has never imagined homeownership. He took it for granted because he was aware of the house and land he would inherit.

The households who are expected to be bequeathed real property by their parents amounted to 7 out of 18 households (Figure 7). The purchase of detached houses is believed to express their will to not inherit real property or not live together with their parents; therefore, they searched only condominiums as owner-occupations. Condominiums in Japan are considered as residences in which people stay only for a few years, whereas detached houses are residences in which people stay longer and transfer them to the next generation. However, it is getting difficult to transfer real property to the next generation; therefore, the image of condominiums as a temporary residential form is working efficiently to maintain a good relationship between generations.

Adding to the growth of the households, the households moving from company housing had to consider the restrictions on living in company housing and the policies of the company that promote homeownership.

The “single type” was prompted to move by a desire for independence from their parents. Three single women lived close to the residences of their parents or lived together before they moved, and they all had the idea that homeownership means independence. The 2-B household (single woman) commutes to the downtown area of Mito City. All her brothers and sisters have purchased detached houses in Mito City, and she lived together with her parents. She has felt that marriage and homeownership are symbols of independence; therefore, she purchased a house. Considering security and difficulties in maintaining housing, she limited her search to condominiums in Mito City.

The “middle-age and elderly couple type” was prompted to move by retirement and by the independence of their sons and daughters. The 3-A household was prompted to move after their son purchased a house. The husband was confident that his son would not take over the real property and live together with them in Mito City; therefore, he sold the previous residence. After the retirement of the husband, the couple started to plan their independent life. Anxiety about their health and the difficulties in maintaining a detached house supported their decision to move to a condominium.

Brown and Moore (1970) emphasized that the formulation of needs in a new residence is influenced by the previous residence. In addition to this, the condominium residents in downtown Mito were prompted to move by the transformation of housing needs because of the growth of their families. The reaction for the

succession and transfer of real property was also an important point in determining to move.

#### 4-2. Choice of residential area

Search areas of the condominium residents are shown in Table 3. Households choose all the options applicable to them in the interviews. Search areas concentrate on Mito City, especially downtown Mito, and this reflects the previous residences of the condominium residents. Wives and woman-headed households make much of proximity to previous residences, because their daily activities are concentrated in the neighboring area of their residences.

The “single type” places importance upon proximity to their working places and to their relatives. Single women who retired from their jobs in Tokyo considered proximity to their friends in Tokyo and relatives in Ibaraki prefecture (2-H, 2-I). Mito station is a center of the public transportation system in Ibaraki Prefecture, and allows users some choices and conveniences.

Proximity to Mito station was also preferred by the “middle-age and elderly couple type.” Among the surveyed condominiums with residents of this type, more than 40% locate around Mito station (less than one kilometer from the station). Households moved from the areas except Mito City have relatives living in Mito City. They moved close to their relatives after they retired.

Respect for the down-town area of Mito City influenced the moves of some households whose members grew up in Ibaraki Prefecture. The husband of 3-A household grew up in a neighboring town in Ibaraki Prefecture. He respects Mito’s long history as a castle town from the Edo era, along with its landscape, which remains a vestige of the time (Picture 4). The husband decided to purchase a luxury condominium in the downtown area when he received information about condominium supply. A luxury condominium built in the downtown Mito area was a status symbol for him<sup>3</sup>.

In addition to this, the households who searched only for condominiums were influenced by the locations of

Table 3 Searching areas to move of the residents surveyed.

Searching areas to move	"Family type" (n=18)	"Single type" (n=9)	"Middle age and elderly couple type" (n=12)
Down-town Mito	18	9	12
Suburban Mito	6	2	2
Ibaraki Prefecture (excluding Mito City)	7	2	0
Tokyo	1	2	2
Kanto area (excluding Ibaraki and Tokyo)	0	0	2



Picture 4 Historical landscape in the down-town area of Mito City.

condominiums. The supply areas of condominiums are limited to highly populated areas; therefore, Mito City, which allows people many choices of condominiums, is preferred by these people.

#### 4.3. Choice of residential form

Condominiums are valued for the following reasons when compared with detached houses. The first point is the ease of moving in the future; that is, condominiums are easy to sell or rent. The second point is simple maintenance of the houses, and the security of the building.

A case of a 1-B household is a typical case of the “family type” that evaluates condominiums by comparing them with detached houses. This household searched both condominiums and detached houses at the beginning of the decision-making process. The wife considered the husband’s inheritance of real property in the future. The husband evaluated the simple maintenance of housing because both husband and wife had jobs. Therefore, they decided to search among condominiums.

Single women answered that they were anxious about purchasing and maintaining detached houses, while single men searched both residential forms.

Because most of the “middle-age and elderly couple type” have purchased houses before, they mainly evaluated the second point. In addition, their required housing space decreased because of the children’s independence and their changed housing needs.

Residential experiences with condominiums in the past also affect the choosing of residential forms. The 3-D household has purchased a condominium before and have rented their condominium when they moved by transferring offices of the householder. As they evaluated the life in a condominium as comfortable, they searched only condominiums.

There is an opinion gained from the interviews. When

evaluating the downtown location, households need to consider affordability and ventilation, and the residential forms are limited to condominiums and apartments.

#### 4.4. Decision-making patterns of the condominium residents

Figure 8 shows the decision-making patterns of the residents who participated in the interviews. The decision-making patterns were shown as the stage numbered from 1 to 7. The patterns of the decision-making processes were divided into three types by the stages of “decision to move” and “choice of residential form.” The first type compares condominiums and other residential forms during their searching processes ( ① in figure 8). Many households who belong to “family type” showed this pattern. Detached houses or rented apartments were compared with condominiums. Although this type compared some residential forms, the data collected on specific house-types were limited to condominiums.

The second type searched only condominiums from the beginning of the searching processes ( ② in Figure 8). Most of the “single type” and “middle-age and elderly couple type” showed this pattern.

The last type decided to move when they obtained information about specific condominium supply ( ③ in Figure 8). All the households’ types showed this pattern. When those who have uttered vague complaints and expressed desire for new housing received information about condominium supply (by advertisements and mails from the developers), their searching processes started. Most of them decided to purchase specific condominiums, about which they have obtained information, and chose the specific housing units into which they would move.

## 5. Subjective meanings of purchasing condominiums in Mito City

### 5-1. Inheritance of real property

There are two households’ cases about home-ownership and succession of patrimony. The householder of 1-A household was anxious about purchasing detached houses, considering the difficulties in maintaining the house of his parents. He denied the possibility to succeed patrimony, because the parental house was located in an area with a poor transportation system; they cannot enjoy proximity to the offices of the householder and to the educational facilities of their child.

Inheriting real property and living together with parents are decreasing the importance in terms of ideology, due to the opportunities of occupations and the differences in lifestyles between two generations. Many of the households shared the thought that the sons and daughters would purchase their own houses in the future, not

a)"Family type"

ID	Patterns of the decision making processes on residential choices							Type of patterns	Residential forms of the searched housings
	Stage 1	2	3	4	5	6	7		
1-A	a	b,R	c	d	e	e'	f	①	● ○
1-B	a	b	c,R	d	e	e'	f	①	● ○
1-C	a,d,e,R	e'	f					③	
1-D	a,d,e,R	e'	f					③	
1-E	a	b	c,R	d	e	e'	f	①	● ○ △
1-F	a	b	c,R	d,e	e'	f		①	■ △ ●
1-G	a	b,R	c	d	e	e'	f	①	△ ○
1-H	a	b,R	c	d	e	e'	f	①	□ ●
1-I	a,d,e,R	e'	f					③	
1-J	a	b	c,R	d	e	e'	f	①	□
1-K	a,R	b	c	d	e	e'	f	②	● ○
1-L	a	b	c,R	d	e	e'	f	①	●
1-M	a	b	c,R	d	e	e'	f	①	● ○
1-N	a,R	b	c	d	e	e'	f	②	● ○
1-O	a,d,e,R	e'	f					③	●
1-P	a	b	c,R	d	e	e'	f	①	● ○
1-Q	a,R	b	c	d	e	e'	f	②	●
1-R	a,d,e,R	e'	f					③	

b)"Single type"

ID	Patterns of the decision making processes on residential choices							Type of patterns	Residential forms of the searched housings
	Stage 1	2	3	4	5	6	7		
2-A	a,R	b	c	d	e	e'	f	②	●
2-B	a,R	b	c	d	e	e'	f	②	●
2-C	a,R	b	c	d	e	e'	f	②	●
2-D	a	b	c,R	d	e	e'	f	①	● ■
2-E	a,R	b	c	d	e	e'	f	②	●
2-F	a,R	b	c	d,e	e'	f		②	●
2-G	a	b	c,R	d,e	e'	f		①	●
2-H	a,R	b	c	d	e	e'	f	②	●
2-I	a	b	c,R	d	e	e'	f	①	● ■

c)"Middle age and elderly couple type"

ID	Patterns of the decision making processes on residential choices							Type of patterns	Residential forms of the searched housings
	Stage 1	2	3	4	5	6	7		
3-A	a,d,e,R	e'	f					③	
3-B	a,R	b	c	d	e	e'	f	②	
3-C	a,R	b	c	d	e	e'	f	②	●
3-D	a,R	b	c	d	e	e'	f	②	●
3-E	a,R	b	c	d	e	e'	f	②	
3-F	a,R	b	c	d	e	e'	f	②	
3-G	a,R	b	c	d	e	e'	f	②	
3-H	a,R	b	c	d	e	e'	f	②	
3-I	a,R	b	c	d	e	e'	f	②	□
3-J	a,d,e,R	e'	f					③	
3-K	a,R	b	c	d	e	e'	f	②	■ ●
3-L	a,R	b	c	d	e	e'	f	②	● ○

Note: a:decision to move, b:define aspiration region, c:search for vacancies, d:match vacancies to aspirations, e:select specific condominium, e':select specific housing, f:move to new home, R:select specific residential form.  
 ● :condominiums in down-town Mito, ■ :owned house in down-town Mito, ○ :condominiums in suburban Mito. □ :owned house in suburban Mito, △ :condominiums in other areas, ■ :owned house in other areas, △ :rented apartment.

Fig.8 Decision-making patterns and searched housings of the residents surveyed.

succeed their real property.

On the other hand, the householder of 1-C household

took succeeding patrimony for granted, and showed an expectation for his son to succeed his condominium or the real property in rural area, which is to be owned by the householder, in the future. To purchase the condominium was an unexpected thing for the householder; however, he accepted purchasing condominium for the future alternatives of their son.

5-2. Self-realization of single female households

The purchase of a condominium is sometimes synonymous with self-realization, especially among single-female households. Householder of 2-A household moved into a luxurious condominium after her divorce. She owned a business and had high socio-economic status when she was married; therefore, she did not lower her status after divorce. In addition, she sells expensive clothes for women in her business, and thought that the office and residence should be luxurious. She showed the opinion that the residence should improve the life of the resident, and that one should be proud of the present life. For her new start of life, purchasing a luxurious condominium had significant meaning. In the additional interviews, most of the single female households claimed to have achieved their self-realization by purchasing housing.

6. Residential choices and the roles of the condominiums in local cities

In this chapter, I will discuss the following two points. First, the features of the residential choices of the condominium residents in local city are worthy of discussion. Second, the most important theme in this paper is the discussion of the roles of the condominiums in the local city.

6-1. Features of the residential choices of the condominium residents

6-1.1. Preference for the residential form

Housing supply in Japan has a long history of providing housings for families. Non-nuclear households were marginalized in the owner-occupation market in Japan<sup>4</sup>. Condominiums are the residential form in which non-nuclear households are accepted more easily. Modern life diversified the individual's life-course and the household structure. Condominiums play an important role in this modern life as owner-occupation. The following points are evaluated while comparing condominiums with detached houses. Households can partly entrust agents with housing maintenance, security system, and housing design and planning. The excellent location enables households to live conveniently, commute in a short time, and enjoy cultural and educational environments.

The fragile rented-housing market in Mito City also

strengthens the move toward purchasing condominiums. Expensive rent and weak equipment push households to homeownership. Condominiums play an alternative role from detached houses and rented housings.

#### *6-1.2. Evaluation for the downtown location of local city*

The downtown area of Mito City has a long history as a castle town, and the education system, public transportation and commercial buildings are concentrated. Location on the plateau avoids expensive damages caused by earthquakes, landslips, and floods. These characteristics are reevaluated as excellent residential areas.

The city's proximity to Tokyo prompts the moves to Tokyo when people enter universities. When these people who once lived in Tokyo return to the local area, it is natural that they look for proximity to the Metropolitan area, convenient lifestyle, and cultural environment<sup>5</sup>.

There are some big factories and companies in Ibaraki Prefecture. Many people moved to Ibaraki when getting jobs, and they purchased housing in Mito City, because they evaluated its urban functions and proximity to Tokyo.

Disagreements of the households' structures with some case studies made in bigger local cities are explained by the reasons of the residential experiences and relationship between generations of the residents. In the case of Mito City, the proportions of the residents who have no family in neighboring areas were less than those of bigger local cities. People who grew up in neighboring areas of Mito City are influenced by the old housing custom. They have to consider inheritance of real property, because of the expectations from their parents.

#### *6-2. Roles of condominiums in local city*

Condominium supply started as a real estate investment in the "bubble economy" era, and there was little preference for condominiums as owner-occupation in local cities; therefore, for a long time, condominiums were regarded as temporary residential forms. Condominium residents as owner-occupants increased after the late 1990s, which was the time the condominium supply increased dramatically in central Tokyo and in the downtown areas of local cities, due to falling land price after the bubble economy era. The condominium residents in local cities can be called "the first generation of condominium occupants." Their decision-making processes consisted of simple steps; limiting search areas and residential forms, purchasing impulsively, and having few future plans about residential consequences.

There were some families who are expected to inherit real property from their parents, but it is difficult to follow the expectations. Reflecting upon the long history as temporary residential forms, these families

selected condominiums to keep alternative selections of residences in the future. In addition, their parents also agreed to purchase condominiums, because they believe that purchasing a condominium precedes succeeding real property.

For the elderly couples, condominiums are the last step of the "housing ladder" in their residential experiences. The downtown location allows independent lives, proximity to entertainment centers, and access to their sons and daughters.

Condominiums are the only possible owner-occupation for most of the single headed households. Newly built housings for nuclear families were the main targets under the long history of housing markets in Japan; therefore, little attention was paid to the non-nuclear households after the 1950s. Condominiums can accommodate the diversified residential needs of the households and have thus become an important owner-occupation in local cities.

## **7. Conclusions**

Condominium residents were classified into three types by their household size and life stage. The first type is the "family type." The married couples and the parenting couples are included in this type. Most of the husbands are working in neighboring areas. The second type is the "single type." The single-headed households are included in this type. The third type is the "middle-age and elderly couple type." The married couples whose children have already left their home and retired people are included in this type.

The reasons for moving are different among the three types of families. The family type evaluates their family members' preference for their housing and places to live, access to husbands' working places, convenience of the downtown area, and the image of their residential areas. They pay attention to the education system for their children, too. The single type has a strong desire for homeownership. They also evaluate the convenience of the residential areas, because of their accessibility to shopping areas and an efficient transportation system. Most of the middle-age and elderly couple type were owner-occupants in the past, and had experienced the difficulties of maintaining detached houses. Therefore, they evaluate ease of maintenance in addition to the security and conveniences of the condominiums. They are anxious about their independent life because of their aging. Therefore, they tend to live in condominiums close to hospitals and shopping centers. For them, access to the public transportation system is also important.

From this research, the dominant reasons to move into the current residences could be summarized as follows.

First, the preference for the residential form affects decision making process. Condominiums satisfy their residents because of excellent location, affordability, security, and flexibility compared to other housing submarkets in Mito City. As a result, condominiums accept various kinds of households.

Second, the attraction of the downtown area is an important reason for the determination of their searching area. Preference for condominiums is closely related to the evaluation of the attractions of the downtown area. Mito City attracts many people working in various industries in neighboring areas. They judge Mito City as the most attractive and convenient city in Ibaraki Prefecture. Further, the people who grew up in Ibaraki consider Mito as an enchanting place. Therefore, the downtown area of Mito City is selected as a residential area. The downtown area of Mito City possesses convenience, attractive urban functions, and a high cultural value. The most important parts of their residential choice were the values of condominiums as a residential form, and the attractions of the downtown area.

It is a characteristic of condominium residents' decision-making process that "choice of residential form" is the key in the whole process. If households start searching for a condominium as a new residence, the location of the condominiums limits the searching areas. The reasons to determine the residential form also reflect each household's the economic status, household structure, and relationship with their families.

The condominium residents in local cities can be called "the first generation of condominium occupants." Their decision-making processes consisted of simple steps: limiting search areas and residential forms, purchasing impulsively, and having few future plans about residential consequences. Condominiums play an important role in accommodating diversified housing needs and household structures, and the preference for the residential form reflects the difficulties in maintaining patriarchal housing custom in Japan.

#### Acknowledgements

This paper was revised and modified on *Geographical Review of Japan* No. 81: 45-59.2008. A part of this paper was presented at "the Conference on Family, Migration and Housing" in Amsterdam in April 2009. I greatly appreciate the cooperation of condominium residents in Mito City during this survey. This study was financially supported by the Research Fellow of the Japan Society for the Promotion of Science (21 • 338).

#### References

Brown, L. A., and Moore, E. A. 1970. The intra-urban

migration process: A perspective. *Geografiska Annaler* **52B**, 1-13.

Clark, W. A. V., and Onaka, J. L. 1983. Life cycle and housing adjustment as explanations of residential mobility. *Urban Studies* **20**, 47-57.

Clark, W. A. V., and White, K. 1990. Modeling elderly mobility. *Environment and Planning A* **22**, 909-924.

Findlay, A., and Graham, E. 1991. The challenge facing population geography. *Progress in Human Geography* **15**, 149-162.

Halfacree, K. H., and Boyle, P.J. 1993. The challenge facing migration research: The case for biographical approach. *Progress in Human Geography* **17**, 333-348.

Hirai, M. 1999. Characteristics of in-migration of the elderly in a suburb of Tokyo: a case study of Tokorozawa City, Saitama Prefecture. *Geographical Review of Japan* **72**, 289-309. (in Japanese with English abstract)

Hirayama, Y. 2005. Running hot and cold in the urban home-ownership market: the experience of Japan's major cities. *Journal of Housing and the Built Environment* **20**, 1-20.

Hirayama, Y., and Ronald, R. 2007. *Housing and Social Transition in Japan*. Routledge, London and New York.

Inagaki, R. 2003. Migration behavior of the suburban second generation: a case study of Kozoji New Town. *Geographical Review of Japan* **76**, 575-598. (in Japanese with English abstract)

Iwakami, M. 2003. *The Sociology of the Family: Gender and Life-course Perspectives*. Yuhikaku. (in Japanese)

Ito, S. 2001. Residential choice process of households living in Chiba New Town: The roles of husbands and wives in the residential choice process. *Geographical Review of Japan* **74**, 585-598. (in Japanese with English abstract)

Japan Federation of Housing Organizations. (2002): *Seikatsusya to tomoni tsukuru asu no zyuutaku heno bizonn (Future Vision of Japanese Housing Creating with Residents)*. Japan Federation of Housing Organizations. (in Japanese)

Kageyama, H. 2004. *Urban Space and Gender*. Kokonshoin. (in Japanese)

Kato, A. 2003. *Has the Japanese Family Changed from the Stem Family System to the Conjugal Family System during the Past Half Century?* Doctoral Dissertation of Meiji Univ.

Lee, J. 2002. Factors and costs associated with office relations from central to suburban Tokyo. *Japanese Journal of Human Geography* **54**, 452-470. (in Japanese with English abstract)

- Matsubara, H. 1985. Location characteristics of multistory apartment house by private developers in Japan. *Annals of the Japan Association of Economic Geographers* **31**, 81-97. (in Japanese with English abstract).
- Morrow-Jones, H. A. 1988. The housing life-cycle and the transition from renting to owning a home in the United States: a multistate analysis. *Environment and Planning A* **20**, 1165-1184.
- Morrow-Jones, H. A. 1989. Housing tenure change in American suburbs. *Urban Geography*. **10**, 316-335.
- Naganuma, S., Arai, Y., and Esaki, Y. 2006. The aging population in the suburbs of Metropolitan Tokyo. *Japanese Journal of Human Geography* **58**, 399-412 (in Japanese with English abstract).
- Nakazawa, T., Sato, H., and Kawaguchi, T. 2008. First generation aging, second generation on the move: the process of generation transition in two suburban neighborhoods in the Tokyo metropolitan area. *Japanese Journal of Human Geography* **60**, 144-162 (in Japanese with English abstract).
- Preston, V. 1986. The affordability of condominiums and cooperatives in the Northeast 1980-1983. *Proceedings of the Middle State Division of the Association of American Geographers*, New York, October, 1985: 12-18.
- Preston, V. 1991. Who lives in condominiums and cooperatives? : an empirical investigation of housing tenure. *Tijdschrift voor Economische en Sociale Geografie* **82**, 2-14.
- Real Estate Economic Institute. 2002. *Condominium Market Trend Search 2002*. Real Estate Economic Institute. (in Japanese)
- Robson, B. T. 1975. *Urban Social Areas*. Clarendon Press, Oxford.
- Ronald, R. 2004. Home ownership, ideology and diversity: re-evaluating concepts of housing ideology in the case of Japan. *Housing, Theory and Society* **21**, 49-64.
- Ronald, R. 2008. *The Ideology of Home Ownership: Homeowner Societies and the Role of Housing*. Palgrave Macmillan, New York.
- Sato, H., and Arai, Y. 2003. The suburbanization of the official location due to progress in information and communication technologies: case study of Makuhari Shintoshin. *Japanese Journal of Human Geography* **55**, 367-382. (in Japanese with English abstract)
- Short, J. R. 1978. Residential mobility. *Progress in Human Geography* **2**, 419-447.
- Skaburskis, A. 1988. The nature of Canadian condominium submarkets and the effect on the evolving urban spatial structure. *Urban Studies* **25**, 109-123.
- Tani, K. 1997. An analysis of residential careers of Metropolitan suburbanities: a case study of Kozoji New Town in the Nagoya Metropolitan suburbs. *Geographical Review of Japan* **70A**, 263-286. (in Japanese with English abstract)
- Tahara, Y., Hirai, M., Inada, N., Iwadare, M., Naganuma, S., Nishi, R., and Wada, Y. 2003. Towards a gerontological geography : contributions and perspectives. *Japanese Journal of Human Geography* **55**, 451-473. (in Japanese with English abstract)
- Yabe, N. 2003. Population recovery in inner Tokyo in the late 1990s: a questionnaire survey in Minato Ward. *Japanese Journal of Human Geography* **55**, 277-292. (in Japanese with English abstract)
- Yui, Y. 1991. Differentiation of residents according to housing supply type: a case study of Fukuoka City. *Geographical Sciences* **46**, 242-256. (in Japanese)
- Yui, Y. 1999. *Housing Studies in Geography: Changing Characteristics of Residents*. Taimeido. (in Japanese)
- Yui, Y. 2000. Housing purchase by single women in Tokyo Metropolitan region. *Bulletin of the Graduate School of Education, Hiroshima Univ. Part. II, Arts and science education* **48**, 37-46. (in Japanese)

#### Notes

1. There are two sociological streams with regard to family system in Japan. The former insist on 'the conjugal family system transformation hypothesis,' and the latter insist on "the modified stem family system hypothesis" (Kato, 2003).
2. Clark and White (1990) also confirmed this point.
3. Morrow-Jones (1988, 1989) pointed out that the shifts between owner-occupations are the status symbols of honor made by high-income couples to improve the quality of their houses.
4. There were some implications that the movements of single households and the elderly were more inactive than that of their counterparts in Western countries (Kageyama, 2004; Tahara et al., 2003).
5. As most of their wives grew up in Tokyo or neighboring prefectures, they prefer residing in the locations that make it easy for their wives to keep in touch with their parents and adapt to a new environment.

Received 31 August 2009

Accepted 23 October 2009