

# CHANGING PATTERNS OF FAMILY-LIFE AND HOME DESIGN

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## **Background and Purposes**

Dual income families, already wide spreaded in Western countries, have been increased in Korea since the 1990s. As many women are getting the high level of academic career, and the number of premarital women who will keep their jobs after marriage are increasing, it is be supposed that the number of dual income families will be increased in the future.

On the other hand, since the 1960s, when the real history of Multi-family Housing in Korea started, multi-family housing have made up the splendid advancement, but their design and planning have drawn mainly for the full-time housewives. So it was told that Apartments are not suited for double income families with working wives who have to play dual roles; wage earning and housekeeping. Therefore, a new apartment planning taking their difficulties into consideration might be the facing problems for us.

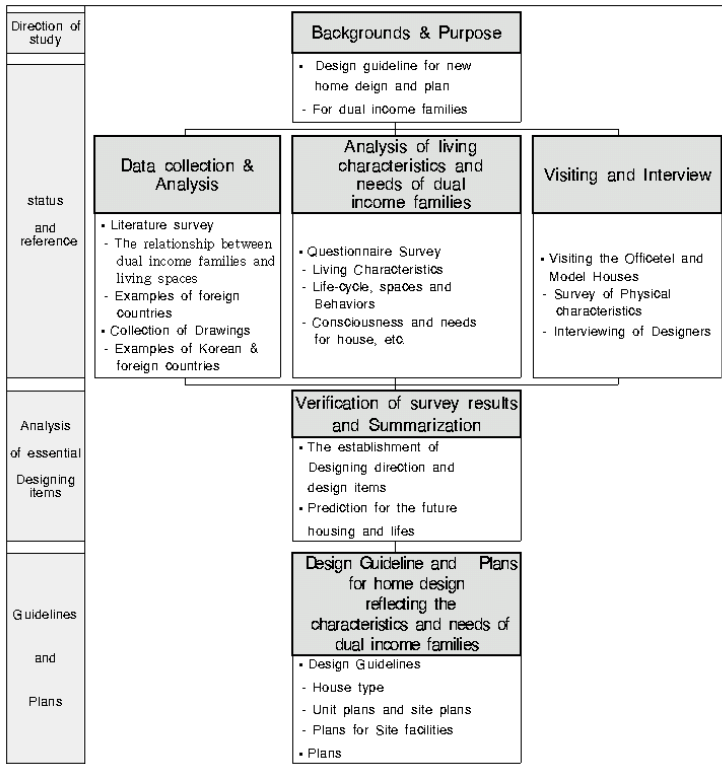
This study started from recognizing the living characteristics of dual income families' with the assumption that dual income families have the

remarkable different living patterns and life-styles from those of the families with the full-time housewives. To analyze the living patterns of dual income families, a questionnaire survey was performed as the main research method.

In brief, the main purpose of this study is to identify the requirements of the home design for wives having jobs, and then to propose new design guidelines and plans. And as the visible results, a few examples of unit plans reflecting the interior design guidelines will be proposed.

The process of this study is as follows;

**Figure 1. Study Process**



## Contents and Methods

Firstly, This study was performed through some literature investigation, a questionnaire survey and a field survey.

The contents of the first were the new trends in home design of other countries.

The questionnaire survey was answered by the 615 double income couples living in Seoul and around areas on the summarization of the other processes.

The contents for questionnaire were shown in Table 1. In the conclusion, we tried to show the design items for unit and site plans as a result of the survey. The survey results in Table 1 were the output through the statistic analysis of the questionnaire survey. The analysis of variances and the descriptive analysis were performed by Spss/ PC+.

**Table 1. Contents of Questionnaire Survey**

Category		Items	Usage for Survey Results
Living Con- ditions	Lives, Spaces & behaviors in the house	Time for each behaviors-spaces-frequency, concerned furniture	-Design of the size and location of living rooms
	Possessed items	Household goods. Articles for daily use	-Planning for the storage spaces
	Living Type	Assignment of houseworks. Stress from the houseworks. Usage of instant foods	-Interior spaces and public facilities -Necessary supporting services
Living Behavior s	Consciousness of lives	-Consciousness for daily lives -Consideration for house -Meaning of house/ each living spaces -Standards in selecting the house	-Characteristics & location of optimal living spaces
	Needs for house	-General appetites for design -uncomfortable & desirable points of the present house -Change of size & location for interior spaces -Needs for the public & convenient facilities -Responses for main planning items (storage spaces, working spaces, new facilities) -Consciousness & needs for new spaces -Supporting services desired	-Size & location of Living room, Master bedroom, Kitchen, Working spaces -Site & outdoor Planning -Planning of the Storage spaces, Bathroom, Utility spaces -Design guidelines for the new housing -Planning of new unit plan and public facilities
	Experiences and movement	-Status of past-present-future housing -Standard in selecting the house	
Demogr aphic Characte ristics	Personal notes	Age, Occupation, income, consumption	-Housing type -Planning of the housing size -Characteristics for site
	Household's characteristics	Composition and stage of Family	-Analysis of demographic characteristics of dual income families

And the contents of field survey were the new trends in home design and planning in the model houses around Seoul in 1999. The next example is very usual apartment unit plan sold in 1998 in Korea. We can find that every living space is very independent and is not so organized.

**Figure 2. Unit plan (84m<sup>2</sup>)**



This type can not support the working wives who would like to prepare the dinner with their own children and to share the conversation with their lovely children.

Therefore, we would like to show the new unit plan supporting the working mothers.

## **Characteristics of Dual Income Families: Output of statistic analysis**

### **Demographic Characteristics of Dual income families**

Purpose of survey: Analyzing of demographic & social status of dual income families



## Living Conditions

### Actual living conditions

- Houseworks

More than 86% of husbands have been dealing with houseworks. As getting younger, more husbands were engaged in it. The usual housework taken charge with by husbands includes cleaning, washing the dishes, repairing some parts of a house and so on.

Based on the needs for sharing of houseworks, the kitchen should be planned to promote the husbands to help their wives.

- Stress of the houseworks

As the social aspect, most dual income couples have the difficulty in taking care of their children.

They usually possessed many kinds of articles and appliances supporting the houseworks, so they felt stress from the narrow storage spaces. Especially, in planing a kitchen, those difficulties should be considered.

### Lives, Spaces & Behaviors in the House

Through analyzing the relationships between housing lives and their behaviors using the spaces, the basic data could be established.

Purpose of survey: Analyzing the relationships among behaviors, spaces and furniture
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- Behaviors concerning the houseworks

Totally, the wives of dual income families take the sleep for six hours and 46 minutes in average, spend 24 minutes and 54 minutes to prepare for the

make-up and to prepare for dinner, respectively. They deal with the laundries once every three or four days (for 65 minutes), iron once every one week (for 43 minutes), do needleworks once every one month (20 minutes), go to the grocery store once every one week (for 71 minutes). And the wives of dual income families deal with 2~5 houseworks together, so this kind of behavior should be reflected on the spatial composition.

- Spaces, furniture, facilities related to behaviors

According to the results of static analysis, the living room was found to accommodate various family members' behaviors. The master bedroom was promoted to be the private space, and dining room and kitchen had the social functions of living room partly. Above results could be the basic data in planning of size, shape and composition of every spaces, and could be the guidelines for planning of appliances and facilities.

### **Environmental behaviors**

#### Consciousness for housing

Through analyzing the residents' consciousness on housing, the relationship between housing and functions of spaces could be found, and the original design concept could be selected.

Purpose of survey: Relationship between housing and the function of spaces  
→ Design concept

- Consciousness for housing and the matters of concern

Dual income families responded positively or negatively to the following items. With the results their consciousness for housing could be summarized.

According to the consciousness for housing, the kitchen for the dual income families should be designed to facilitate the family members to help

the wives' houseworks.

The master bedroom should be wide enough to accommodate a bed and a built-in storage. And it should be independent space only for the couple.

The living room should be wide enough to accept the various daily lives of members, and the central space of housing.

According to the analysis of some items, it was found that they were very interested in more convenient lives and services, and they had the tendency to spending money to buy the electronic appliances and equipments to save the efforts of wives. They liked the built-in storage.

However, they were not interested in new interior design, and did not change the furniture layout for a long time, and preferred practicality and convenience to decoration.

**Table 3. Consciousness on housing**

Response	Consciousness for housing	usage of results
Positive	1. Kitchen and Dining room should be the supportive space for the wives 2. Master bedroom should be independent space for the couple 3. To use the bed is preferable to not using in master bedroom 4. To making the convenient living is more important than to save the money 5. The housing with wide living room is preferable to the housing with a lot of small rooms	-Function of kitchen -Role of master bedroom -Bed in master bedroom -Usage of electronic appliances -Wide living room
Negative	1. Change the location of furniture and personal ornaments once in a while 2. Using the decorative storage is preferable to using the built-in storage 3. Design and color of furniture is more important than practicality	-Interior -Preference of built-in storage

- The spaces to be concerned by dual income couples

Of all spaces, dual income couples were most interested in the living room. Wives were also interested in the kitchen, and husbands were interested in master bedroom.



In case of dual income couples with a child under the elementary school were more interested in a living room, and couples with no kid or with a child over students of middle schools were more interested in the master bedroom. That's why couples had the different needs for sharing communication with their children according to their age.

- Functions and definition of interior spaces

According to the analysis, the most important function of housing was to keep fresh and convenient lives. A living room was regarded as the center of family lives, a master bedroom as the private space for the couple, a kitchen as the space for dinner, and a balcony was regarded as the dry area of the laundry.

Younger couples had the strong tendency to regard the master bedroom as the private area only for couples.

- Standards in selecting the house

The most important standards in selecting the house for dual income families was distance to their offices, and the traffic & the convenient facilities were regarded as one of the important factors. For wives, the distance to their offices, the traffic, and the convenient facilities were the important standards. For husbands, the distance to their work places, the natural environment around house, the convenient facilities were important standards.

The standards in selecting the house depended upon the children. For dual income families with kids, educational facilities were the very important factor in selecting their house.

#### Needs & preference for house

Through analyzing the needs and preference for house, the detail design items could be arranged.

Purpose of survey: Practical analysis of needs and preference for the detail design items

- The characteristics and planning of apartment buildings

Among the total responders, 66.5% of Dual income couples liked the apartment with the organic interior zoning, the convenient facilities, and the wide and efficient storage spaces.

They preferred strongly the building oriented to the south, but the younger couples didn't mind the orientation of building. They preferred the green and blue colors as the exterior view of apartment buildings.

- Interior spaces

They were most unsatisfied with a narrow storage space and kitchen. And they were also unsatisfied with a narrow living room, the narrow bathroom, an inconvenient composition of interior spaces, a narrow utility room.

They thought that a living room should be more getting nearer to the kitchen/ dining room.

They liked to modern and natural interior styles, and regarded the convenience as the most important interior concept.

They needed strongly wider storage space and systematic kitchen layout.

- Public and convenient facilities

The most unsatisfactory points for dual income families were narrow parking lots, convenient facilities in site. The desirable public spaces for them were a health center, a nursery school for their children, some public spaces for waste separating, a small library and some spaces for exchange of recycling.

According to the opinions of dual income families, desirable convenient facilities within estates were super markets, banks, and medical clinics.

- Attitude for the new public facilities

Dual income families were not interested in public kitchens and public dining rooms adopted in the Cohousing system. However, they really wanted to adopt a public nursery school and some public study rooms for their children.

- Supporting services

Dual income families having children under the elementary school really wanted to receive the services concerning a nursery school and the assistance of housekeeping.

## **Planing guideline for the new home satisfying Double income Families**

### **Main concepts for the new house**

#### Reduction of wives' stress from Houseworks

The reduction of houseworks should be reduced by an efficient spatial planning and designing. The efficient planning means that the spaces for the housework (such as a kitchen, a laundry space, and utility spaces) should be integrated, and that an interior pubic space (such as a living room) should be used for co-working of the housework.

#### Improvement of family harmonization

Living spaces should be integrated efficiently to improve the harmony among the family members and to share the housework. Example plan in (Figure 4) could be the sample to contain above needs.

### Interior and site plans helping children care

As double income families have the difficulties in taking care of their children, the interior & site design should be considered these needs. The public facilities for the children should be considered significantly.

### Convenient and comfortable housing

As dual income couples have not enough time to take a break during the daytime, house for dual income families should provide rest time especially. And their preferable colors and interior items should be considered for more convenient and comfortable lives. Based on above five concepts, the actual design guidelines might be established.

## **Unit Plans**

### Main Concept of interior Plans

The interior design concept should cover the various consideration such as houseworks reduction, enough storage spaces and family's harmony promotion through the co-working of the houseworks.

### Maximized storage space

The storage space should be maximized. The useful planning principles include hided-storage, proper-placed storage, additional storage, upper storage, sliding type of storage, storage using dividing section walls, and so on. The sample of useful storage are pantries, dress rooms, built-in dressers, storages in the living-room, the built-in storages in an entrance and in balcony.

### Improvement of the harmony among the family members

To improve the harmony among the family members, the interior spaces-

living room, dining room, kitchen-should be integrated efficiently. So the type of focusing on a living-room, a kitchen like semi-open type, and an open or semi-open type of living-room would be better.

## Design Guidelines for interior spaces

### Living Room

- Living room is where the various behaviors happens usually in house.
- The representative recreation in the living room is watching TV. For dual income families, this recreation was usually managed with other behaviors simultaneously.
- Therefore, it should be considered more as a public spaces than as a private spaces.
- A living-room is the space for the various living behaviors containing the co-working and enjoying of houseworks.
- When its role is considered as the center of house, it should be near to kitchen and dining room, and enough to hold the ironing and the arrangement of laundries.
- If storage spaces are planned in the front of a living room, favorite books and the photo album could be shares with other family members easily.

### Master Bedroom

- In Master bedrooms, the usage of a bed, a dress room or a built-in dresser should be considered.
- The division of a shower-room or space and a toilet with a washstand would be better for the rush hour in the morning than a combined bathroom.
- As master bedroom is not used by the dual income couple for the day time, and it was urged to be the private space, and the couple usually take the sleep until late at noon during the holidays, it is not necessary to orient to the south.

- It should be the private space for the couple, it is better to be located far from the entrance.

#### Kids' room

- Kids' room should be planned to promote to the interaction with their parents.
- Therefore it should be better to locate near to the living room and kitchen and dining room.
- Its function is to hold the sleeping and the studying of children, it should be wide enough to contain the desk and bed for the children.

#### Kitchen and Dining room

- The semi-open typed kitchen might be efficient for the secure of storage spaces, the usage of counter might be for the efficiency of spaces, and the system kitchen might be recommended for the reduction of the efforts to the houseworks.
- The system kitchen should be considered. The type of kitchen which will help to share the houseworks with other family members may be L-type and U-type kitchen.
- And above types could offer the wider storage spaces.
- The pantry may be better for more systematic and organic storage spaces
- As the refrigerator are getting more heavy, the size of kitchen should reflect this trend.
- For the dual income families, a kitchen and a dining room could be nursery spaces for their own kids.
- To be more convenient to use the various electronic appliances to save the wives' efforts, the numbers and location of plugs should be considered.

#### Bathroom and Restroom

- A bathroom and a restroom should be enough to confront the rush hours.

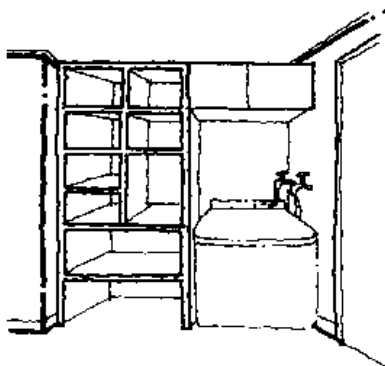
- A sanitary spaces such as the shower room, a restroom, and a make-up space should be integrated for more efficiency.
- The storage space to containing bath commodities, perfumes and cleaning instruments should be planned under the washstand.

#### Other spaces

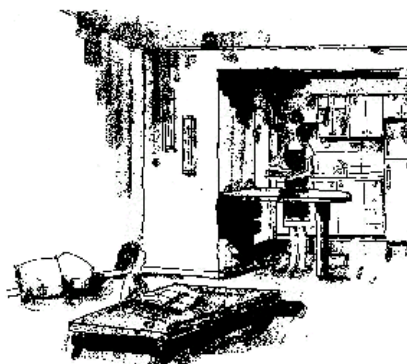
- Some new spaces such as the nook-typed make-up space, a laundry space, a combined space with laundry and pantry, the walk-in closet might be considered.

The following images are reflecting the concepts of design guidelines. And additional interior guideline could be summarized in Table 4.

**Figure 2. Semi-Open Kitchen**



**Figure 3. Combined space with laundry and Pantry**

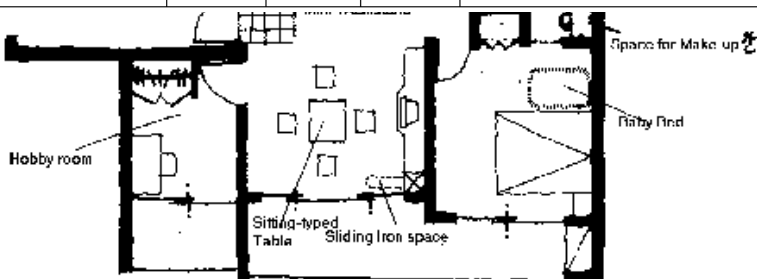


#### Representative Example

Based on the design guidelines, three apartment plans were designed. Next is one of them. The following is for the dual income family with a child younger than 8 years old.

**Table 4. Relation between design items and design concept**

Space	Design items	Reduction of housework	Maximizing of the storage	Improving of the harmony of family	Others
Living room	The type focusing the living-room	●		●	Co-working of house works, Housework+Harmony of family
	Open type between living and kitchen	●		●	Contact within family, Improvement of co-working of homeworks
	Sitting type sofa	○		○	Practical use of spaces, Guarantee of space for houseworks
Master Bedroom	Reduction of Anbang			○	Practical use of spaces, Consideration of bed
Kitchen / Dining Room	Facing-type kitchen	●		●	Contact within family, Addition of working count and table
	Semi-open type kitchen	●	●	●	Contact within family, Addition of working count and table
	System kitchen	●	○	●	Improvement of family members' participation in the houseworks
	Counter for Dinner	●		○	Practical use of spaces
	Pantry	●	●		Storage with the sliding or rotary type
	Built-in Kitchen	●			Cooking+laundrying
Bath room	Divided Shower-room				Shower room instead of bathtub for the peak time in the morning
	Toilet				Mini-washstand for the peak time in the morning
Other	Laundry space	●			Adiacency to the kitchen
	Laundry space +Pantry	●	●		Adiacency to the kitchen
	Space for Make-up	○			Efficiency of spaces, the reduction of interior circulation
Storage	Various storage space	●	●		Dress room, Built-in dresser, closet in living room

**Fig**



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re 4. Example Floor Plan for Dual Income Family

Figure 5. Image of Living Room

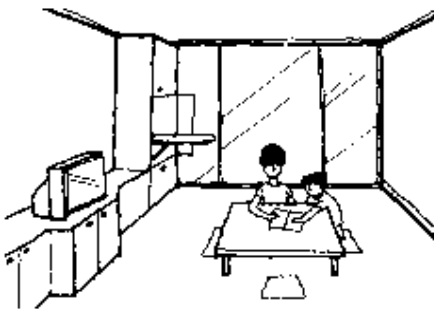
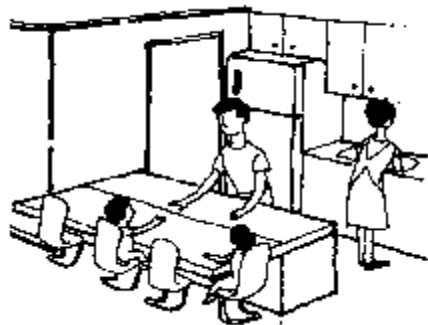


Figure 6. Image of Working Together



·Merits of above plan:

- Semi-open typed Kitchen: For sharing the houseworks with family members  
To urge the mothers to communicate with children
- Enough storage spaces: Walk-in Closet, Space for make-up, Pantry, Enough built-in storage
- The integration of interior spaces

·Demerits of above plan:

- Only 2 bedroom in 84m<sup>2</sup> (3 bedrooms in 84m<sup>2</sup> generally)

### **Site Plans: site selection, supporting public services, etc.,**

#### General points

- When the site for the houses is selected, the adjacent place to the wife's work place should be considered. And the convenient facilities, natural environment and educational circumstance should be considered.
- As the housing type for double income families, the high-rise apartment might be proper.

#### Public Facilities for the residential satisfaction

- The variety and management of the convenient and public facilities should be considered in respect of double income couple's characteristics that they usually work at home after coming home.
- Desirable public facilities should contain the health center, a baby-care center, some places for waste and dust, a library, an interchange center for reusable things. And parking lot and outdoor places for the residents' rest should be considered.
- If a baby-care center and an educational center might be supported in the apartment estate, the residents' satisfaction will improve.
- As the support system for the upbringing of infants, the three kinds of centers such as a baby-care center, a children studying room, a nursing center should be planned.

- As convenient facilities, a supermarkets, a bank, and a medical clinic should be considered. And as the total management system, day-care service, assistant service for housework and nursing service should be made up.