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THE CHILDBEARING YEARS, COMMON RESIDENCE WITH PARENTS,  
AND WOMAN'S WORK IN KOREA

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THE CHILDBEARING YEARS, COMMON RESIDENCE WITH PARENTS,  
AND WOMAN'S WORK IN KOREA

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## ABSTRACT

The correlations between reduced fertility, shortened years spent in bearing children, common residence with parents, and woman's work are studied employing the framework of the family life cycle. Since in Korea grandparents aid in raising grandchildren, common residence with the older generation, or even nearby residence, can be expected to relate to a woman's work and to her pattern of bearing children. To study these relations women who have ended childbearing are compared and contrasted with women who have not ended childbearing.

Data was obtained from a panel of 1223 women of Kyongnam and Cheju Provinces of Korea. There were two waves of interviews, October 1, 1975 and May 31, 1978. The interval allowed women to be distinguished as having ended their childbearing or not having ended it based on their expressed desire to have or not have children, and their subsequent performance.

It was found that for the majority of women childbearing ends between 7 and 16 years after marriage. Rapid acceptance of family planning by those married about 7 to 11 years indicates that younger cohorts are probably ending childbearing sooner and with fewer children than the immediately older cohorts did. Family planning is used to stop having children, rather than for spacing.

In the Kyongnam Province sample area the custom of common residence of parents with eldest son was found to be in force with few exceptions. The sample showed a decrease in occurrence of common residence from 1975 to 1978, corresponding to the national trend. The decrease is due

more to the outmigration of unmarried sons than to household division of stem family households already formed. In Cheju Province, on the other hand, where separate residence is the custom, common residence occurs based on the needs of the two generations, and showed no change in occurrence over the research interval. Patterns of separate residence in Kyongnam and Cheju do not fit well with an interpretation which would claim Koreans are adopting the Western conjugal family ideal type. The data rather indicate the adaptability of Korea's patrilineal family. The residence patterns in Cheju are a more likely picture of Korea's future common residence patterns than are residence patterns in the West. In Kyongnam the quicker end of childbearing could lead to fewer years spent in common residence with parents.

Most women do both housework and farming. Less than 10 percent do only housework, and 23 percent are further engaged in work for extra income. The total number of children borne or a recent child-birth did not relate strongly to women's extra income work overall. However, for women with no mother-in-law available a recent birth greatly decreased the likelihood of work for extra income, even though most of the work was compatible with raising a child on the job.

Among the women in the sample similarities in their childbearing patterns are more striking than differences. Thus, for Korea outside the large cities, at least, we may speak of a "typical" childbearing pattern within the family life cycle. This typical pattern is a partial explanation of the sharp peak in age specific fertility in

Korea in the 25-29 year age group. The tendency to bear children "in phase" with other women will heighten the effect of fertility changes on the future age composition of the population.

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## CHAPTER I

### INTRODUCTION

#### The Problem in General

One would be hard put to say just when the parent-child relationship begins. Even before birth there is already a "place in my heart," as family members might say, into which the child will be born. This illustrates the extension over time, the growing, the evolving, of relationships in the family.

Demographers have recognized the importance of families and households by collecting data using these as units. However, to incorporate recognition of the growing, evolving complex of relationships in the family into data collection is very difficult, and often passed over for lack of time, funds, space on the questionnaire, or many other reasons. As a result, households or families are often classified by type rather than by some measure or set of measures which express their developing nature.

As an illustration, consider that enough is known about the "ideal" or "typical" individual of our times that one measure, age, contains a tremendous amount of information about such an individual. By analogy it is very useful to build up information about the typical family life cycle in a culture to increase the richness of information which can be accessed by use of one or a few indicators of stage of family life cycle, such as duration of marriage.

This study purports to contribute to knowledge of the family life cycle in Korea by focusing on the childbearing years and some likely

correlates of bearing children and of ceasing to bear children. Specifically, this study seeks to measure the relationship between shortened years of childbearing, common residence with parents, and woman's work. These topics all involve the division of labor between mother-in-law and daughter-in-law, and thus express something of the relationship between them. This study asks in what ways families are likely to adjust the allocation of their time and goods over their life cycle as their years of bearing and raising children become shorter and more planned. Although the study deals with Korea alone, its applicability to other countries can be assessed.

The main aim of this study is the modest one of contributing to the descriptive accuracy of the family by describing it in terms of its life cycle. Yet, for a meaningful, realistic description, it must be put in the context of secular trends. The demographic transition, the residential mobility and the changing role of women which accompanies industrialization, and the spread of egalitarian ideas are some of these trends. No comprehensive explanation in terms of the family's functional relationship to society at large is attempted. The viewpoint is adopted that the Korean family traditions are adaptable enough to be maintained in the face of these secular trends, and that changes are not to be considered Westernization.

#### Overview of the Research

The research for this dissertation was actually conducted in two phases. The first phase was an analysis of 1975 data showing that in Korea common residence with parents follows a cyclical pattern over the life cycle, though not pronounced. It further presents distinct

typical family life cycles of eldest son and of younger sons, and finds that the pattern of common residence with parents does not vary in ways predicted by a Westernization hypothesis. This material will be presented in Chapter Two.

From this analysis came the research questions which formed the interview schedule and field research of 1978. These research questions were formulated before the research was undertaken, though not as clearly as they would later become. They are presented in Chapter Three.

Two brief chapters then given the reader an overview of the parent population, the sample, and the carrying out of the field research. Finally, in Chapters Six and Seven we present multivariate analysis along with other means of interpreting the data to gain answers to the research questions posed in Chapter Three.

The research reveals the following about the changing family life cycle in Korea. It helps confirm the expectation that younger cohorts are ending childbearing after fewer years of marriage and with fewer offspring. It indicates that in Kyongnam Province a minor life cycle pattern of common residence followed by household division in order to migrate to the city bears a relationship to childbearing and the ending of childbearing. The data also show that although in general women's involvement in work for extra income (employment, or small-scale entrepreneurship) does not relate negatively to childbearing, it does so for that subgroup of the sample whose mother-in-law is not available for help in raising the children.

Fertility and Family Size in Korea: A New Demographic Transition?

The author has chosen Korea for this study for personal reasons. In particular he has fluency in the language, familiarity with the country, and commitment to its future. However, Korea also happens to be a good location for studying effects of reduced years of child-bearing on the circumstances of family life. It is a developing country and has had a vigorous family planning program with an accompanying drop in fertility and family size.

The mortality transition in Korea began before 1925-1930, by which time the crude death rate had fallen to 26 per thousand (Lee, Hae Young, 1975). From that time the falling death rate led to a rapid population growth, with the peak in natural increase occurring around 1958 to 1962. The onset of fertility decline is hard to date, because of the disruption due to wars and international migration. There is evidence that the high fertility of 1955-1960 included a lot of making up for missed childbearing during the Korean conflict (Hong et al., 1978). However, from 1960 to the present there haven't been any such major disruptions, so that the fertility decline of that period may be viewed against Dudley Kirk's expectation of a rapid fertility transition in developing countries (Kirk, 1971), which he dubbed, with a question mark, a "new demographic transition."

From 1960 to 1975 the drop in fertility in Korea has been dramatic. Data from the Bureau of Statistics shows a drop from a total fertility rate of 6018 in 1960 to 4165 in 1970 and to 3480 in 1975 (Hong et al., 1978). Measures for 1959-1970 using the own children method agree closely with the above figures (Cho, 1974a). Thus in 15

years the total fertility rate dropped 42%. This decrease was due mainly to a decrease in marital fertility, and secondarily to a rise in the age at marriage (Cho and Retherford, 1973). Fitting the decrease of each age-specific fertility rate to an exponential curve projects a total fertility rate of 2400 in 1990 (United Nations, 1975). This would amount to a 31% decrease for the 15 years following 1975. A projection based on the fertility decline in Japan between 1950 and 1972 expects a total fertility rate only slightly higher than 2400 in 1990 in Korea (Cho, 1974b; see also United Nations, 1975:192). Some optimists predict even lower fertility based on the expectation that a strong family planning program in a country such as Korea can drive the fertility rate to near the optimum for that country. The optimists predict Korea's total fertility rate will drop to 1900 by the year 2000 (Bogue and Tsui, 1978). They in effect take the question mark away from Kirk's "new demographic transition" and see it as largely in effect by the year 2000 in Korea and many other countries. Berelson disagrees with this optimistic assessment (Berelson, 1978). He calculates that later data shows that the fertility transition from a crude birth rate (CBR) of 35 to CBR of 20 would take 21-22 years rather than the 14-15 years projected by Dudley Kirk. However, he still classifies Korea, along with Taiwan and Chile, as certain of decreasing to a CBR of 20 by the year 2000.

Many researchers warn that Korea's strong boy preference stands in the way of reducing fertility (Kong and Cha, 1974; see references given in Hong et al., 1978). It seems to me the researchers often intend their warning as a challenge to the goals of the family planning

program. They do not actually predict that fertility levels will not decline. (See the excellent account of interviews with many Korean scholars, educators, and family planning promoters in Williamson, 1976: 149-156.) The viewpoint taken in this study is that continued fertility decline is most likely. Whether this will lead to there being more families than there are at present without any son, and what effect this might have on Korean family traditions is an important matter for study.<sup>1</sup>

Given falling fertility rates in Korea, small families and reduced years of childbearing will surely be two of the results. Although steady decrease in the average number of births has occurred in all age groups, the rate of decline in age-specific fertility has been especially sharp in the 15-19 year age group and in women over 35. This change is chopping off childbearing years at both ends. With regard to family size, however, the fertility rate decline is of too recent origin to have as yet affected measurements of completed fertility. In 1974 the mean number of live births to women age 45-49 was 5.8, and the mean number of living children was 4.7 (Republic of Korea and KIFP, 1977:100). However, for the 35-39 year old group, the mean number of living children was 4.0. As noted above, fertility of women over 35 is very low. If we put the above cohort of women age 35-39 through the 1974 observed age-specific fertility rates they would complete their childbearing with a mean of about 4.3 living children.<sup>2</sup> Ideal family size as expressed by respondents on a survey averaged 2.8 in 1976 (Korean Institute for Family Planning, 1978). We may expect small families to become dominant in Korea, and families of more than four

children to become rare. We may also expect the years spent in bearing children to be reduced, but discussion of this topic is given in the next section.

### The Family Life Cycle

The idea of life cycle is easily understood, and has been employed in perhaps all the social sciences, not to mention philosophy, literature, and religion. As early as 1936 the idea was employed to organize data on the family (Loomis, 1936). Several demographers have incorporated data on age, sex, fertility, mortality, and marriage into a patterned family life cycle. Paul Glick's work on the family life cycle, for example, can be divided into two areas. First is the calculation of median ages at which the most important family milestones take place--marriage, birth of children, marriage of children, death of spouse (Glick, 1947). The second area of Glick's investigation has been the discovery of patterns in the social and economic characteristics of the family during the life cycle, patterns which are systematic over time and place. For the United States he has discovered systematic patterns in the participation of wife in the labor force, ownership of home, likelihood of moving, and family income (Glick and Parke, 1965). In this way one may form an idea of how the typical family copes with, or fails to cope with, the problem of meeting its material needs as the family develops. Students of the family have also incorporated important psychological events into the stages of the family life cycle along with economic and demographic ones (Hill and Rodgers, 1964).

In this research the term "family" is taken to indicate the complex of relationships (minimally, hus-wi, fa-child, mo-child) and commitments associated with the reproductive unit (Smith, 1963). By "family life cycle" is meant the inevitable sequence through which these relationships pass due to growing, aging, dying. The "inevitable" aspect of the sequence is measured by duration of marriage. Of course, there will be many correlates of the family life cycle which are far from inevitable.

As implied above, the family life cycle is defined by what may be called demographic events. Where the cycle refers to the nuclear family, or to the reproductive unit of any family, it is most simply defined in three stages, or phases: phase of expansion (from marriage through childbearing), phase of dispersion (from marriage of oldest child through marriage of youngest child), and phase of replacement (time up to the death of the parents) (Goody, 1962). It is clear that this terminology refers to the reproductive unit, and is not culturally bound to the conjugal family. The definition of the phases of the life cycle has been adapted by each researcher to his particular concern, and to the limitations of his data. A psychological interest in the changing relationships in the family, for instance, would be based especially on the maturing process. In this project the interest in fertility dictates distinguishing families on the basis of number of children, the duration of marriage, or the time of cessation of childbearing.

## Childbearing in the Family Life Cycle

### Childbearing and the Childbearing Years

As noted above the phase of expansion in the family life cycle was defined by Goody to include marriage and childbearing. This definition will be followed here, and be referred to as the "childbearing years" or as "family formation," both slightly more concrete and direct terms than "phase of expansion." Marriage is well taken as the starting point of family formation in Korea because there is very little (but an increasing amount of) marital pregnancy (Kim et al., 1974), and in recent years there has been a rather short mean interval between marriage and the birth of the first child. One survey found that for women who married at age 20 this interval was 22 months, and only 17 months for those who married at age 24 (Koh and Cha, 1970). Thus the childbearing years, or family formation, will be defined for this study as the period from marriage to the cessation of childbearing.

### Childbearing Years in Korea and Eurasia

The childbearing years are being considerably reduced in Korea. Age at marriage has risen for both men and women, so that by 1970 the singulate mean age at marriage had risen to 27.2 for men and 23.3 for women, and in 1975 this had held at 27.4 for men and 23.6 for women (Hong et al., 1978). Women almost all get married in their twenties: in 1975 women 15-19 years old were 97.6% never married, and women 30-34 years old were only 1.8% never married (Republic of Korea, Economic Planning Board, 1977). The age specific fertility rate for women age 35-39 in 1974 was as low as 74 births per year per 1000 women. This leads us to hypothesize that nearly all of the bearing of

children in Korea these days is during the first ten years of married life. Age at marriage and use of family planning are the two most important predictors of fertility in Korea (Kim et al., 1974).

The pattern of bearing children in a country is quickly perceptible in a graph of its age specific fertility rates. Several of these have been chosen to give a quick overview of variations and patterns in Eurasia around 1960-1970. Among those nations with low fertility we see two distinct patterns: (1) those with peak fertility at age 20-24, or with the peak shared between the 20-24 and 25-29 year age groups, and these usually have peak fertility less than 160 births per 1000 women; and (2) those with peak fertility in the 25-29 year age group, usually above 160 births per 1000 women, with a rather sharp decline in fertility after age 30. The former group are represented in the fourth row of Figure 1.1 and the latter group in the third row. Korea and Taiwan appear to be moving toward a pattern similar to the third row as fertility declines. Indonesia, on the other hand, shows a rather high level of fertility over all age groups, while Sri Lanka falls in between. Iran and Bangladesh have been included as examples of high fertility over all ages. In Korea the late age at marriage, the small variance in age at marriage, and the extensive use of contraception after age 35 explain the shape of the fertility silhouette.

The overall pattern of fertility for a country may, however, mask over important variations in childbearing patterns among the inhabitants of a given country. Matras has presented the concept of a "social strategy of family formation" in order to deal with this problem. He has defined this concept as the distribution of members of a birth

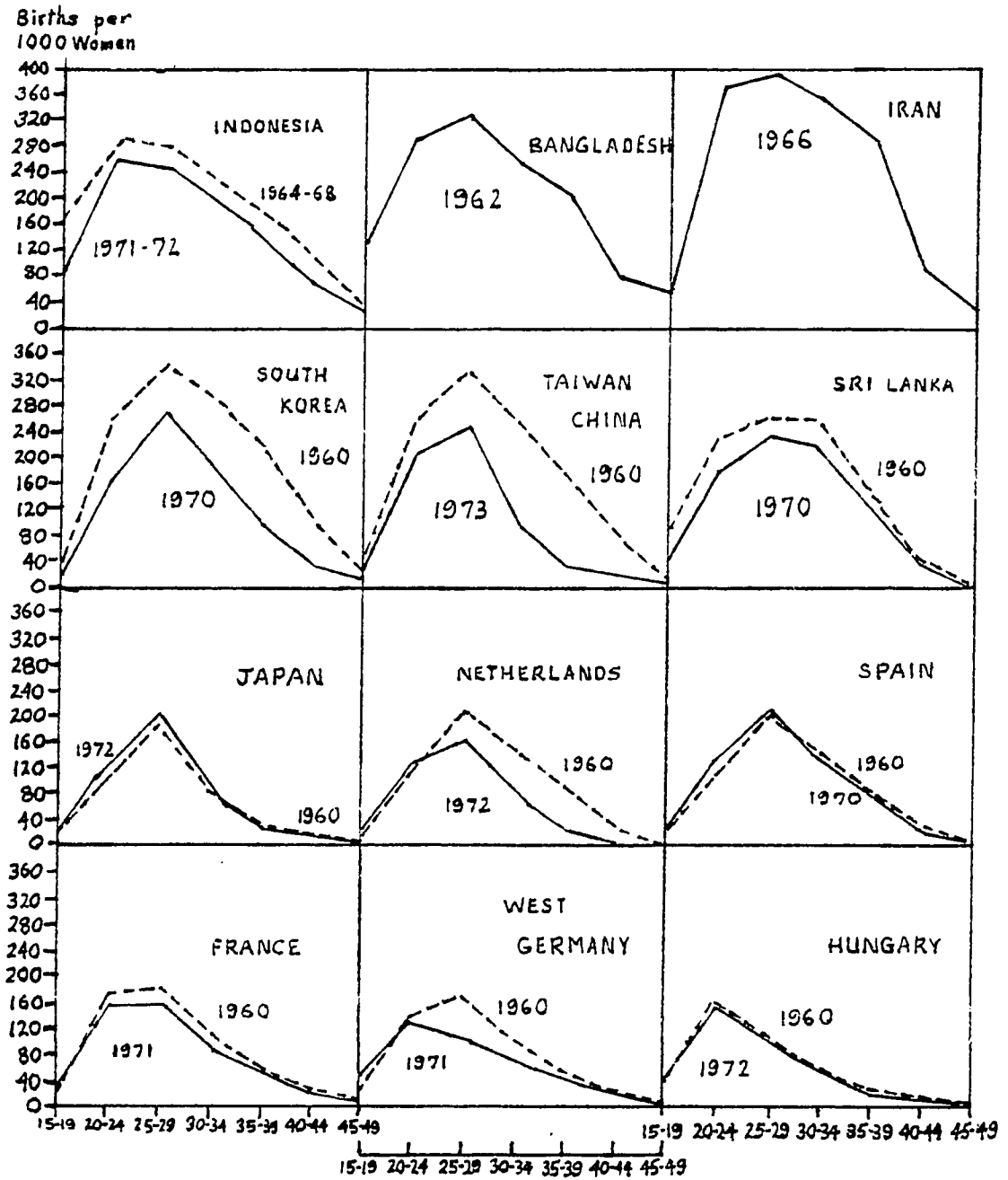


Figure 1.1 Fertility Silhouettes for Selected Eurasian Countries

Source: Ravenholt and Chao, 1975.

cohort over categories within the factors of family formation (Matras, 1965). His primary example is that of the distribution of a birth cohort of females over the four cells created by the cross-classification of age at marriage (early, late) and type of fertility (controlled, uncontrolled). In this study we will look at marriage cohorts, rather than birth cohorts. We will study their distribution over completion or non-completion of childbearing.

#### Socioeconomic Correlates of the Family Life Cycle

When the family life cycle is used as an independent variable, it is found that a number of family life circumstances vary according to the stage of the family life cycle. The basic idea is that as the size and composition of the family varies over its cycle, so does its consumption and production (United Nations, 1973).

There is a considerable literature on the pattern of residential moves and house ownership over the life cycle. For example, one recent summary notes studies which find a pattern of moving from small, rented quarters toward larger, self-owned homes when children are born; and notes that other studies add a spatial element--a move from the central city toward the suburbs (Doling, 1976). Few studies find a symmetrical move back to smaller housing after the families have dwindled again in size (Needleman, 1965:183). In a study of three generations in the St. Paul-Minneapolis area (interviewed over the course of a year) Hill found that the three generations had followed strikingly similar patterns of percent moving per year by year of marriage, and also strikingly similar median number of rooms per dwelling by year of marriage (Hill, 1970:105-107).

There have been common findings in the pattern of wife's participation in the labor force. In the U. S. women have a high rate of participation at the time of marriage and shortly after, a much lower rate during childbearing years, and then an increasing rate rising to a peak of participation in the mid forties before the rate declines to a low at old age (Lansing and Kish, 1957; Glick and Parke, 1965). Apparently no such study has yet been done for Korea. Cohen (1969) found that age and number of children are the most important variables for predicting labor force participation of women, thus indicating the importance of the family life cycle in this matter. Waite (circa 1977) showed that after cessation of childbearing the relative importance of wage potential and education as predictors of labor force participation increases significantly.

It is expected, then, that since common residence with parents, wife's participation in the labor force, housing, and fertility all can be forms of the allocation of time and goods over the life cycle, they will show patterns of relationship to each other. Fertility control can be expected to lead to changes in the family life cycle. According to the family life cycle viewpoint fertility control is the manipulation of the expansion phase of the cycle. When a couple decides to prevent the birth of a child they are well aware of the implications for their family's life cycle. The years of child raising are shortened, a lot more free time is gained, and costs are lessened. In another case, security for old age may be sought by having a child. Fertility decisions may well be considered to allocate time and goods over the life cycle (Ghez and Becker, 1975:35).

Changes in the Korean Family and Choice of Variables for Investigation

The major indicators of change in the Korean family have been a drastic rise in age at marriage, a considerable decrease in the proportion of marriages which are fully arranged by the parents, a greater emphasis on love between husband and wife, increasing acceptance of a small family size and use of contraceptives, and an increase in the proportion of nuclear type households (Lee, Hyo-Chai, 1971a).

At the same time the patrilineal family system, strengthened by the practice of ancestral rites and protected by law, remains intact, and is assumed in the thinking of both men and women (Lee, Hyo-Chai, 1971a). But this doesn't mean they are rigid in traditional thinking (Kim, Choo Soo, 1973). Boy preference is still strong (Chung, et al., 1974, p. 29), and the society is clearly male-dominant.

Of the changes in the Korean family listed above it is the increase in the proportion of nuclear type households which has been chosen for study here, along with the increasing acceptance of a small family size and of contraceptives. The increasing proportion of nuclear type households has raised the question whether Korea's traditional stem family is breaking down, and whether the custom of common residence of the eldest son with his parents is being rejected by "modern" Koreans. The problem, important in itself, relates to fertility and family size in the following way: first, it is important, along with fertility, in determining the average household size, and thus important for housing planning; second, it is important in the household division of labor between mother-in-law and daughter-in-law in the allocation of their time between household tasks, child rearing,

and economic activity; third, since boy preference in order to assure an heir is one of the major obstacles to further limitation of fertility, those couples in common residence with the husband's parents may be expected to be less likely to practice family limitation. One study of this third point shows that in fact there is very little difference in fertility or family planning between those in extended family residence units and those in nuclear family residence units in Korea (Palmore, 1972). So the third point may not be of importance. The main dependent variables in this study are therefore common residence with parents and the economic activity of the respondent. In fact, these variables will be studied not merely as dependent variables, but as variants over the family life cycle, and as correlates of family size and fertility control.

#### Common Residence and Industrialization

Since common residence in one household is often used as the operational definition of an "extended family" the influence of industrialization on the custom of common residence has usually been discussed in the literature under some heading such as "industrialization and the extended family." Some years ago when William F. Goode reviewed this topic he asserted there were three major and separate issues involved: the theoretical fit between the nuclear family and industrial society, the empirical fit between industrialization and any actual system, and the effects upon the family of recent industrial organization and related factors (Goode, 1963). These categories make a good framework for the discussion.

Theoretical harmony?

Goode himself concluded after reviewing the literature that no clear case could be made for a theoretical harmony between the nuclear family (which he calls the conjugal family, an ideal type) and industrialized society. There are important exceptions to the supposed fit between the neolocal residence of the conjugal family and the requirement of industrializing society for a mobile population. And in any event, the relations of industrialization to the family are quite different for different social classes (Goode, 1963:10-18). Since that time Eugene Litwak has performed a functional analysis of the family and industrialized society and claims that a "modified extended family" shows a better theoretical fit with an industrialized society than does the isolated nuclear family. A modified extended family is one which shares functions with formal organizations (Litwak, 1965). However, anthropologists have perhaps pointed a better direction by abandoning the nuclear family/extended-family dichotomy as an oversimplification when applied to the family as a whole, as a so-called "family system." A dichotomy may be applied perhaps only to the family as residence unit.<sup>3</sup> Close identification of joint subsistence and child raising with common residence has a 19th Century Western bias (Polgar, 1973). For example, Jack Goody and others have found that the "nuclear" family in Africa may have separately defined reproductive units, productive units, consumptive units, distributive units, and dwelling groups (Goody, 1962). A similar complexity has been found by a researcher taking the phenomenological approach to a study of kinship in Taiwan. The residence group may be single hearth or many hearths,

the estate may be concentrated or dispersed, and the economy may be inclusive or separate, leaving eight theoretically possible different forms of the family (chia) (Cohen, 1970). Furthermore, to ignore the development cycle (life cycle) of the family or descent group leads to serious misinterpretations of the descriptive facts (Fortes, 1962; Polgar, 1973). In this work these warnings will be heeded. Changes in the custom of common residence will not be interpreted as necessarily indicating changes in the patrilineal system of Korea.

#### Empirical Generalization?

Turning next to the empirical correlation between industrialization and the nuclear (conjugal) family we find again a lack of clear agreement. There has been, indeed, a strong correlation between the two, strong enough so that Marion Levy (1966:417) has called it a "proper empirical generalization that every society, no matter what the previous family structure was, has changed in the direction of multi-lineal conjugal family units as it has reached relatively high levels of modernization." The same generalization is assumed by others (Blood, 1972:20; Goode, 1963:369; Sjoberg, 1965). Many authors give similar reasons for the finding: high mobility, universalistic criteria, broadened interdependency, lowered priority of family orientations, status conflict, decrease in patronage, all of which weaken the stem family or extended family.

Some authors who agree with the general assessment would stress ideological variables (egalitarianism, romantic love, individualism) as well. In fact, some would stress these factors to the point of disregarding or denying the connection between the rise of the nuclear

family and industrialization in the West (Shorter, 1965; Thomas, as presented by Janowitz, 1966:Chapter 5). There certainly is a need to distinguish the effects of industry by its employment patterns from the effects of ideas and ideologies which often may accompany industrialization.

By 1973 Levy's empirical generalization became modified to the extent that a group of social scientists could declare:

It is a scientific observation of some significance for many social issues that at present there is no strict one-to-one correspondence at any particular level of economic development with any one form of family organization or type (United Nations, 1973:Draft Report)

This statement is not as contradictory of Levy's generalization given above as it might seem. For one consideration, Levy was careful to state the generalization merely as a "direction," and to distinguish the traits "multilineal" and "conjugal." For another, some historical investigations have shown that the nuclear family took its form in the West previous to industrialization (Mogey, 1964; Stone, 1975; Zelditch, 1964), or for reasons not necessarily connected with industrialization, such as bilateral descent (Mogey, 1964) or a wage system of compensation (Zelditch, 1964). Finally, it was discovered that despite a wide variation in ideal forms of family residence, actual household size around the world and over time has not varied greatly (Burch, 1967; Levy, 1964). For this reason Ryder has speculated that the number of persons per household resulting from the world-wide reduction of mortality has led many extended family households to become unwieldy in size and to divide (Ryder, 1973).

Once common residence is looked at as only one aspect of the cohesion in extended family relationships, then even in the United States empirical evidence shows the continuing existence of modified extended family relationships among whites (Litwak, 1964), greater degrees of extended familism among ethnic groups (Winch, 1977:40), and among blacks (Stack, 1974). The relationships showing "extended familism" involve frequent visits and contact, monetary help, help in raising children, help in migrating to a new home or city, emotional support, etc. Such extended familism in the U. S. occurs under conditions of disadvantage, to share scarce resources or give mutual protection, or under conditions of advantage to protect abundant resources (Winch, 1977:50). (For a recent and thorough review and discussion, cf. Winch, 1977:11-52.)

#### Common Residence Trends in East Asia

Korea. Under the third major issue outlined by Goode we may discuss the effects of industrialization on the family in Korea and East Asia, concentrating on the custom of common residence. The basic empirical datum in Korea is that there has been a steady decrease in the occurrence of three-generation households in recent years (Kwon, et al., 1975:55). For example, between 1960 and 1970 three-generation households decreased from 27.6% of all ordinary households to 22.1%, and two-generation households increased from 65.4% to 70.1%. The decline has been mainly in urban areas but shows up in rural areas as well. Rural to urban migration has been one of the dominant population changes in Korea. Migrants are mainly those seeking educational and occupational opportunities (Institute of Population Problems, 1966:77;

Ro, 1974). As in other countries the migrants are mostly young. As a result there is left behind a substantial percentage of "nuclear old" type resident groups in the rural areas: 22.5% in rural areas compared with 12.8% in Seoul (Yoon, 1974). These are residence groups whose parent generation is old enough to have a married son with them but do not have one at present. But does this trend signal the demise of the extended family in Korea? The answer to this question certainly depends on the causes of the trend and what they imply for family relationships. Effects due to migration must be accounted differently from effects due to changing ideology. One researcher considers the increasing separation of residence of the parental family and married son's family to be a manifestation of the changing concept of marriage: rising acknowledgement of affection and equality of mates, and more freedom and decision-making to the young. It is also a response to the employment demands of industrialization (Lee, Hyo-Chai, 1971a). She goes on to show, however, that the geographical mobility instigated by the industrialization-urbanization process is often accomplished dependent on kinship relations. The same has been found by other researchers (Barringer, 1972; Institute of Population Problems, 1966: 77). Migrants also maintain financial and emotional ties to kin (Lee and Barringer, 1978; Lee, Hyo-Chai, 1971b; Sakihara and Barringer, 1977). In addition, the patrilineal system is being maintained by law and by ritual, and therefore, though the urban-industrialization process has brought about some separation of residence in the extended family, no real change toward the Western conjugal family ideal type is occurring (Lee, Hyo-Chai, 1971a). An opposing position had been given

earlier by Hae Young Lee who sees the rise of married love to be a death-blow to the filial system in which the family of orientation used to be dominant over the family of procreation (Lee, Hae Young, 1969). A position midway between these is also given. Based on a review of the history of the mother-in-law/daughter-in-law relationship, and responses to a 1974 questionnaire distributed to college seniors, high school teachers, and mothers of high school students, in all 307 female respondents in Pusan, a team of researchers has concluded that the trend toward separate residence is almost entirely the result of a conscious process, rather than constraining circumstances. The reason for decisions to reside separately are felt by respondents to be divided rather evenly between: clash of outlook on life between the generations, need to be near their place of work, and holding a small family, or nuclear family, ideal. These all represent a form of placing more emphasis on the independent needs of each nuclear unit. The majority of respondents also agreed to a proposition that the best arrangement is for the generations to live separately, but nearby. (Notice that this would often be not feasible if the needs of each unit were to be met.) The two most favored reasons for living together with parents were mutual help with work and concern for the loneliness of the older generation (Kim and Lee, 1977:92-110). According to these authors' historical research the most important development leading to the present changes in family customs is the greater status and importance of the daughter-in-law due to: democratic ideals of equality of the sexes, independent economic role for women, and the increased importance accorded the husband-wife relationship (Kim and

Lee, 1977:80). In short, they find ideological changes more important than economic ones, though the latter cannot be overlooked.

Summarizing this section on Korea, the trend away from common residence is clear, but how far it will proceed is not. In this study the proposition will be considered that Cheju Province in Korea provides a good picture of what the trend in the whole country may become.

Japan. Japan also followed a trend of fewer three-generation and more two-generation households. From 1955 to 1975 the proportion of relatives households which had parent(s) and a married child together fell from 24.8% to 15.3%, while the proportion which had nuclear family groups rose from 62.0% to 74.3% (Bureau of Statistics (Japan), 1977: 30). So the trend in separation of residence in Japan seems definite. At the same time, however, families in both rural and urban areas responded that for almost all the kinds of situations presented them they would expect help first of all from their relatives (Koyama, 1970). The same researcher found that visiting was also frequent, and that there is a tendency in urban areas toward less distinction between male and female lines. Another study found greater interaction with matrilineal kin and siblings than with patrilineal kin and parents among residents of a housing development in metropolitan Tokyo. Those who interacted with matrilineal kin to a greater extent also had more non-kin linkages as well (Nojiri, 1974). Family sociologists have been in disagreement whether the stem family remains Japan's typical family in some sense, or whether there is presently a transition to the conjugal family (Morioka, 1967).

Taiwan. The census does not provide data on family types in Taiwan, so we must rely on surveys. Cross-sectional data shows that common residence with parents was prevalent in the early 1960s. Solomon S. Chu has found in an urban (Taichung) sample taken in 1962-1963 that nearly all the respondents had experienced living in an extended kin household unit sometime or other during married life (Chu, 1971). Using a series of family planning surveys (1965, 1967, 1973) to seek a trend in extended family living, other researchers have found that this prevalence of extended family experience continued into 1973. The larger, joint-stem type household decreased somewhat over the period, and the stem-type and nuclear-type both increased. Younger marriage cohorts were less likely than older cohorts to have lived with the husband's parents at the beginning of their married life. However, compared with other changes, such as use of contraception, decrease in fertility, increase in income, increase in industrial production, etc., the 6% increase in couples found in nuclear units is small (Freedman, et al., 1976). Another study has found in an island-wide sample that social classes (upper, middle, lower) do not differ much in their actual family type (nuclear 56%, stem 27%, larger extended 16%) but that the lower class falls short of achieving its ideal of extended family living (Sociology Department, Fu-jen University, 1978). Taiwan provides a clear example of common residence and extended family living being maintained during industrialization.

West Malaysia. For West Malaysia cross-sectional data on common residence is available. Fifty-eight percent of the Chinese wives who were interviewed in a national sample lived with their husband's

parents or their own parents sometime in their married lives, and lesser percentages of the other races had done so. Younger women were more likely to have lived with parents than older women. Despite this and other indications the authors did not feel that they could demonstrate a trend toward more common residence. Their multivariate analysis did indicate, however, as the authors say, than an expectation of decreasing common residence as modernization progresses is unfounded for Malaysia, at least in the short run (Palmore, et al., 1970).

#### Summary

After this review of the data we can say that a simple generalized view of industrialization bringing about a change to a conjugal family ideal type is untenable. We have also learned to be careful to define what aspect of the cohesion of a kin network is being studied and what precisely is being considered as the independent variable or the causal force, by the researcher. Broad complexes of forces, such as "the industrialization process" or "modernization" should not be expected to have the same effects in each country. Furthermore, common residence need not follow the same trend as, for example, the arrangement of marriage, or the degree of economic integration among kin. We should not let the frequent use of the term "family system" delude us into thinking that such a coherent, integrated system actually exists. Common residence, despite its wide use as the indicator of "extended family" is still only one aspect of kin relations, albeit a very important one.

### The Cyclical Alteration of Nuclear and Extended Type Households

If we consider the custom of common residence with parents in ideal terms, we will see that there is a cyclical alteration of nuclear and extended type households in each family lineage. The traditional ideal family in Korea is the patrilineal stem family (D. H. Kim, 1968; K. K. Lee, 1975). One son, ideally the eldest, remains with the parents after he marries. The other sons begin their own families, "branch families," after spending some few days, months, or years with their parents. The continuity of the family lineage is maintained by ancestral ritual, by family authority, and by inheritance right protected by law, all of which put the eldest son in the most favorable position (K. K. Lee, 1975:266). A cycle of the family lineage could be defined by the transfer of headship from father to son, either by decision or death. Branch families would be related, derived family lineages. To one classifying the household residence group as nuclear or extended, there would be a cycle of nuclear (at the start of a branch family, or due to the death of both parents of the main stem family) and extended forms. Through the marriage and common residence of a second son there could even be a temporary form extended both horizontally and vertically. Besides this cycle of residence groups, transfer of headship also implies cyclical changes of roles and statuses in the family lineage. Distinguishable from the cycles applying to the whole lineage would be the family cycle of each reproductive unit.

### Korean Ideal and Practice

It must be emphasized that the above description is based in part on Korean ideals, and it is not known to what extent families in the

earlier part of this century conformed to the ideal. One might expect that in Korea, as was true in China (Levy, 1965), the poorer families could not afford to maintain an extended family household. An indication that such was true of Korea is that the average household size of households engaged in subsistence farming in the 1930s was only about 4.5, while that of farm property owners ranged from 5.93 in the North to 7.50 in the South, to 9.15 in the Central region (Kim, D. H., 1968: 364). On the other hand there is evidence that the middle and upper class families of that time really did live as extended families, to a great extent. In a survey which got the response of well over half of all intermediate school students in Korea in 1934, it was found that two-thirds of the students reported grandparents living in the same household as the students (Kim, D. H., 1968:331-374). "Household" was apparently left to be self-defined by the students.

#### Common Residence as an Adjustable Aspect of the Patrilineal System of Korea

Though the Confucian ideal of respect and obedience to one's father is presented as a static ideal, there is in fact a process of the father handing over authority to the son while the father is still living (Choi, 1975:117-120). Therefore, the important thing is not the father-son relationship per se, but the process called patrilineality (Lee, Hyo-Chai, 1971a). The rule of descent for Korea may be described as being from father to eldest son, rigid, without exception, as required by law. The critical sign of the descent is the role of the eldest son in the ancestor worship ritual (Lee, K. K., 1975:400). The

above characteristics are the invariant ones. The variable characteristics include the actual timing of handing over head of the household status to the oldest son, whether the property is continued by the oldest son or not (there do exist cases of the property being given to another son, but in such a case the eldest son still has the lead role in the ancestral ritual), the amount of independence, and the degree of economic solidarity (Lee, K. K., 1975:402). In short, the invariant element in the Korean family is patrilineal descent. The rules of inheritance, residence patterns, actual administration of the family property, the degree of economic solidarity, and the timing of the change in head of household from father to son may all be adapted to the particular circumstances of the family.

Especially where common residence is not tied to inheritance of the land there can be many exceptions to it. Taking care of aging parents is a stronger moral duty than residing lifelong with them. If the parents are in good health, then exceptions are more readily made. According to K. K. Lee ritual leadership is most important in maintaining the family lineage, as we saw above, followed by family authority, which implies common residence, as a sign of the hold on the land. For this reason he considers the greater independence of the son in Cheju Province, where separate residence is the rule, to be a variant of the same rule of descent as the rest of Korea. Cheju has the same rule as the mainland, that the eldest son should exercise ritual leadership; it has the same rule that headship of the family is passed on to the eldest son; it differs from many mainland regions in that the son gains independence, symbolized by separate residence and separate production,

right after marriage. Even when the son lives in the same compound as his parents their cooking arrangements are separate. But in case his mother should die, then the duties of filial piety dictate that the son and his wife should take care of the father's meals (Lee, K. K., 1975: 266-268).

If the above interpretation of family custom in Cheju Island is correct, then Cheju may provide a reasonable mode for family customs in all Korea. We saw that there is a trend away from common residence, and that this is related to an ideology of independence, as in Cheju. We saw also that the majority of respondents on a survey agreed that a situation of living separate from, but nearby, one's parents would be ideal. Apparently this mode, or variant, of the Korean patrilineal family is viable, as Cheju shows.

Where the family is not tied to any land, then the significance of common residence would be the duty of the eldest son to care for his parents when they age, and to maintain the family ritual tradition. The eldest son is given a larger share of the inheritance in view of this added burden (Lee, K. K., 1975:396-400). In cases where a son other than the eldest son remains with the parents and cares for them, then that son is given compensation in form of a greater share in the inheritance. It is important that these duties and customs are subject to a sense of fair exchange. This allows us to hypothesize that common residence of parents and married son, or sons, could also be allocated over the life cycle for mutual benefit. For example, the parents could well be found living temporarily with non-successor sons in order to help with the children in that family.

Westernization of the Korean Family, or Adjustment to Circumstances?

We saw above the importance of ideology in the trend toward separate residence in Korea. Democratic ideology in Korea stems from contact with the West. Yet this in itself does not imply the Westernization of Korean family customs. The case of Cheju shows that greater independence is compatible with Korea's patrilineal system. It is only direct imitation of the Western conjugal family ideal type which should be regarded as Westernization of the Korean family.

Lacking any information on the way of thinking of the respondents in the survey it is not possible to make of this study a test case to distinguish whether the trend in separate residence in Korea is to be interpreted as adoption of the Western conjugal family ideal type, or whether it is an aspect of adaptation of Korea's patrilineal system to present circumstances. We can, however, try to see whether the patterns of common residence and separate residence accord more with what one would expect from a process of imitation of the conjugal family ideal type or whether they accord more with what one would expect from a process of adapting to the demands of occupational migration and to the independent needs of the older and younger generations. If the Western model is being followed, then in general the more highly educated, the more urban, the young, and those in new industrial occupations will be more likely to follow the new conjugal family ideal, that is, those with greater contact with the model. On the other hand, if the patrilineal system is being adapted, then those who are better off and have adequate housing (who are also more likely to be well educated) will be more likely to follow the custom of

common residence, provided migration hasn't interfered. Those who are not well off and who are less educated will be less likely to follow the custom of common residence. Those in industrial, or non-traditional, occupations will probably be less likely to be in common residence; but if they are upper echelon, they will be more likely to be in common residence. Patterns of common residence and separate residence in cross-sectional data are examined in Chapter Two.

## FOOTNOTES TO CHAPTER ONE

1. Nathan Keyfitz has already worked out the probability of "extinction of a family line" under a patrilineal system given various levels of mortality and fertility (Keyfitz, 1972).
2. For a rough calculation, 1000 women were assumed to be age 37.5 with 4000 children. By the 1974 fertility schedule they would bear an added 345 children. Putting these children through six years of exposure to mortality by a 1970 life table for Korea (Republic of Korea, 1977:273) results in 302 surviving.
3. One study showed, however, that among Hawaiian-Americans a gradation of commitment to a household unit corresponded better to their subjective understanding of household than did a dichotomy (Howard, 1971).

## CHAPTER II

A CROSS-SECTIONAL STUDY OF FAMILY RESIDENCE PATTERNS  
OVER THE FAMILY LIFE CYCLE IN CHEJU AND KYONGNAM PROVINCES

In this chapter is presented the analysis of the custom of common residence which was performed using 1975 cross-sectional data from the two provinces of this study. The two main concerns are (1) to distinguish whether the proportion of those following or not following the custom of common residence is more consistent with the view that Koreans are adopting the Western conjugal family or with the view that Koreans are merely adapting the patrilineal system to present day circumstances; and (2) gain an understanding of patterns of common residence and separate residence over the family life cycle and some of the major economic correlates of the family life cycle.

Data Source

The data source chosen for this study is a special fertility survey connected with the 1975 Population and Housing Census of Korea. It is a benchmark survey for the Korean Population Policy and Program Evaluation Study (KPPES), a cooperative project of the East-West Population Institute and the Korean Institute for Family Planning. The reasons for the choice are: the plan for a follow-up study later, providing longitudinal data; the large size of the sample population; the experimental design of the project, providing a treatment group and a control group. Though the interview does not provide information on family relationships other than definition of household members and their relationship

to the head of the household, at least questions of common residence can be answered.

The target population of the survey was 25% of the households of Cheju Province, an island 80 miles south of the Korean peninsula (treatment area), and 25% of the households of Hapch'on County of Kyongnam Province on the Korean mainland (control area). The survey was conducted by specially trained interviewers in conjunction with the 1975 census, under aegis of KPPES cooperating with the Bureau of Statistics, Economic Planning Board, of the Republic of Korea. The interviews were conducted October 1, 1975.

The limitations of the data source are: no information on whether there are family members living in other places who have a unitary budget with the household; no way short of matching names on the original questionnaires of knowing whether contiguous households may be close relatives or not; too few categories of relationship to head of household (for example, a married daughter and a daughter-in-law could not be distinguished--but a married daughter living with her parents is very rare in Korea); lack of knowledge of the birth order of the household head; and lack of knowledge of whether the parents of a household head are living or not.

### Methods of Analysis

The unit of analysis is the household.

### Definitions

Cycle of the family lineage. This is studied as a two-dimensional matrix, composed of family (household) type and duration of marriage of household head (stage of family life cycle). The first dimension, family type, relates the household to the family lineage and controls for non-family households, while the second dimension, duration of

marriage of household head, relates the household to the family career of its head.

Household. Defined as on the 1975 Census, a group of persons living together and making common provision for food or other essentials for living. Operationally, those records which have the same household number as each other are taken as the records of the members of one household.

Family (household) types, household composition.

1. Non-relative households are either single-person households or institutional households with no relative of the household head present.

2. Fragmentary families are related persons in one household without even one nuclear unit present (Chung, 1977).

3. Nuclear families are households with one nuclear unit, defined as a household head and spouse with no children, a household head and spouse with unmarried children only, or a household head with children unmarried.

4. Stem family--son HH. A nuclear family plus one or both parents (or grandparents) of the household head. If the household head were female in such a case, it was classified as "other."

5. Stem family--father HH. A household in which the married son and either wife, or children, or both, are present. If the father of such a household head were also present, it was still classified as stem family--father HH.

6. Other. Residual category containing two types unclassified above (female household head and parent, or stem family lacking a nuclear unit in the younger generation) as well as an unmarried household head with parent. For some analyses the stem family categories were joined and called "extended."

The presence of other relatives, e.g. cousins, uncles, was not taken to change the category of those households defined above. Thus "nuclear" should not be interpreted in an exclusive sense. So-called "compound" families (less than 1% in occurrence) were included with stem families.

Stage of family life cycle (duration of marriage of household head). Stages of the family life cycle were distinguished on the basis of measurements from previous census data on age at marriage by cohort and on birth intervals by cohort from data of a fertility survey (Chung, et al., 1972).

(1) The time of the young couple living with the husband's parents to get acquainted, and the time of the first open birth interval 0-2 yrs.

(2) The time of infants but no older children, 3-8 yrs. (3) and (4) The time of raising and educating children, broken down into two equal periods, 9-17 yrs. of marriage and 18-27 yrs. (5) The time of children marrying, 28+ yrs.

Dependent child. A child of the household head or the son of the household head (or of his second wife) under 15 years of age or between 15 and 24 years of age provided he or she is an unmarried student.

Economically active. One who worked, was layed off, or unemployed during the reference period (the previous week), or who worked for pay or profit even though not in one of the above categories.

Occupation. The classes used were the major categories given on the census, but with a subdivision of farm workers, fishermen, and forestry workers from farm managers and farm owners.

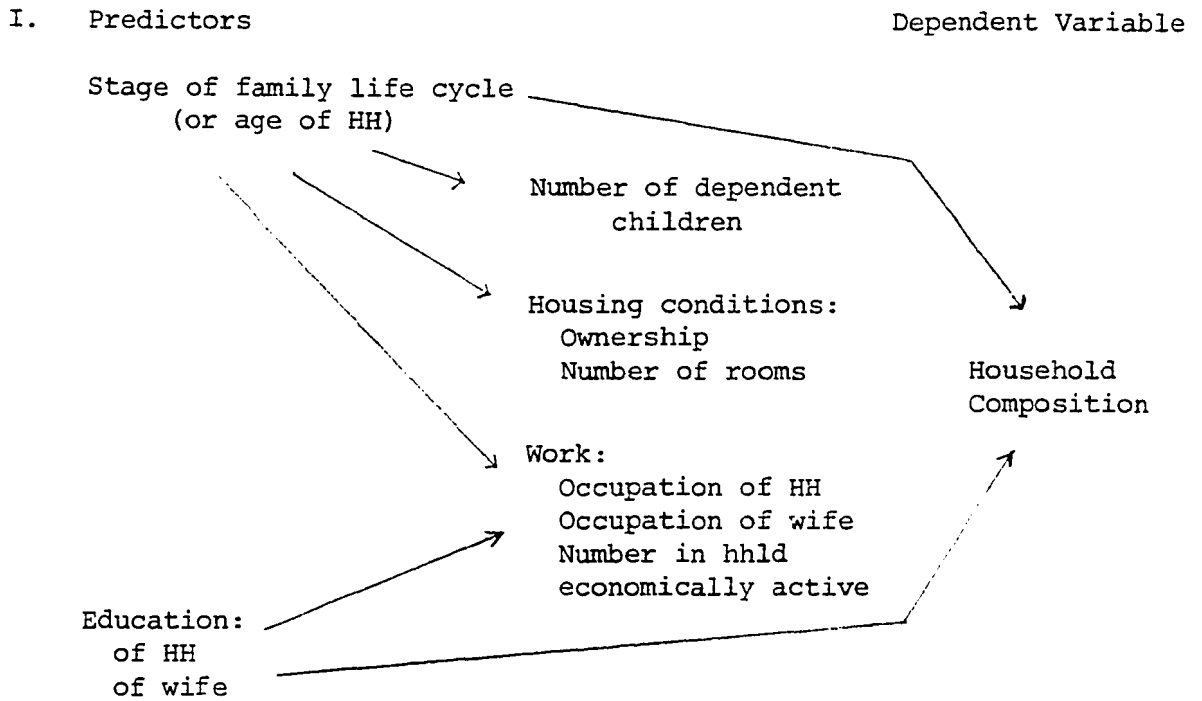
Education. The levels none, elementary, intermediate, high, or college and above were defined by the highest level attended, whether completed or not.

Data was selected in order to best indicate the situation of the whole household. Thus, where the household was a stem family with the father as household head, education and occupation of "wife" actually refer to those of the daughter-in-law.

#### Multiple Classification Analysis

The analysis is divided into two sections. In the first section the dichotomous variable "nuclear and extended" family types (both kinds of stem family are classified as "extended" in the dichotomy) is treated as the dependent variable. In the second section the stage of the family career and the household type were combined into one independent variable and was used as a predictor variable along with others. The dependent variables were aspects of family and household.

See diagrammatic scheme on following page.



II. Predictors	Dependent Variables
	No. of persons in hhld
Family Cycle	No. of dependent children
Sex of HH	Mean age of children
Education of HH	Ownership of home
Occupation of HH	No. of rooms
	Proportion in hhld economically active

Results

Stage of Family Life Cycle and Cycle of Family Lineage

If the family does have a regular pattern of changing household type (nuclear to extended), then it should show up even in cross-sectional data. A look at the percent distribution of household types over the stage of family life cycle of the household head gives an idea of the patterns (see Table 2.1).

Table 2.1.--Percent Distribution of Household Heads (HH) of a  
Given Stage of the Life Cycle over Household Types.

Place and Household Type	Life Cycle Stage (Duration of Marriage in Years)						Total
	Single	0-2	3-8	18-27	28+		
<b>HAPCH'ON</b>							
non-relative	4.0	5.0	3.3	4.7	4.1	4.6	4.4
fragmentary	3.5	-	0.2	-	0.1	1.6	0.8
nuclear	1.3	55.8	64.9	63.2	67.7	63.1	62.2
stem, son is HH	3.5	38.2	31.0	30.6	26.1	9.3	20.6
stem, parent is HH	-	0.5	-	0.1	0.6	19.7	7.7
other	87.7	0.5	0.6	1.4	1.4	1.8	4.4
Total %	100.0	100.0	100.0	100.0	100.0	100.1	100.1
Total households	227	199	542	1372	1815	2547	6702
<b>CHEJU, RURAL</b>							
non-relative	14.5	14.4	13.7	13.2	13.9	12.9	13.4
fragmentary	13.2	-	0.1	-	-	6.3	2.4
nuclear	0.6	69.8	68.9	70.1	70.8	65.3	67.3
stem, son is HH	1.3	14.6	16.4	14.7	11.2	4.5	10.4
stem, parent is HH	-	-	-	0.1	0.9	8.1	3.0
other	70.4	1.1	1.0	1.9	3.2	2.9	3.5
Total %	100.0	99.9	100.1	100.0	100.0	100.0	100.0
Total households	159	533	1308	2143	2147	3343	9633
<b>CHEJU, SMALL CITIES</b>							
non-relative	19.3	10.1	12.3	13.0	13.0	14.4	13.2
fragmentary	18.5	0.2	-	0.3	0.2	6.0	2.3
nuclear	0.8	80.1	77.9	75.5	76.1	67.3	72.4
stem, son is HH	-	9.6	9.3	9.9	7.9	3.3	7.2
stem, parent is HH	-	-	-	0.2	0.9	6.9	2.2
other	61.3	-	0.6	1.2	2.0	2.2	2.7
Total %	99.9	100.0	100.0	100.1	100.1	100.1	100.0
Total households	119	427	994	1288	1119	1627	5574
<b>CHEJU CITY</b>							
non-relative	22.8	16.6	15.6	16.3	14.0	14.4	15.5
fragmentary	58.5	0.8	-	0.1	0.2	5.8	3.8
nuclear	1.7	76.4	77.0	72.5	76.4	64.7	69.8
stem, son is HH	0.3	6.2	6.8	9.6	6.9	2.7	6.2
stem, parent is HH	-	-	0.1	-	0.9	9.9	2.6
other	16.6	-	0.6	1.5	1.7	2.5	2.1
Total %	99.9	100.0	100.1	100.0	100.1	100.0	100.0
Total households	289	500	1584	1872	1459	1870	7574

In all areas and at all stages of the family life cycle nuclear type households are the most common, and always more than half of all household types. Looking for patterns we see that in Hapch'on the percentage of nuclear family households in the middle stages of the family career is higher than in the early stages. This could be attributed to the increasing loss of parents through death, leaving formerly extended family households to be nuclear. This can be confirmed by 1965 data from Ichon, a small city near Seoul:

Family Types and Their Percent Distribution  
by Age of Respondent (married women, age 20-44)

Family Type	<u>Age</u>					Total
	40-44	35-39	30-34	25-29	20-24	
Conjugal:						
parents alive	7.4	11.9	15.4	23.6	22.8	16.7
parents dead	<u>74.3</u>	<u>62.4</u>	<u>51.3</u>	<u>37.8</u>	<u>26.7</u>	<u>49.8</u>
	81.7	74.3	66.7	61.4	49.5	66.5
Extended	18.2	25.7	33.2	38.5	50.6	33.5

Source: Lee and Kwon, 1968.

We note in passing the similarity of these results to those for Hapch'on in 1975.

A second pattern in the data is that for all areas there is a lower percentage of nuclear families at 28+ years of marriage (compared with 18-27 years). It may be attributed to the marriage of a son and the formation of an extended family with the father or the son as household head. These resultant extended family types (father, 28+ years married as head of stem family, and son, 0-2 years married as head of stem family) are relatively frequent types.

Let us consider this reduced percentage of nuclear families at 28+ years of marriage. It holds for each of the subsamples, despite the striking differences between them in other respects, thus indicating

the existence of a pattern of family types over the family career of the head. The magnitude of the reduction is smaller than one would expect were all nuclear families passing through a cycle from nuclear to extended. For example, if each family at this stage had at least one son age 25+, then well over half of these families would have a married son.

Looking at other household types we see that about 4-5% of household heads (Hapch'on) or 13-20% of household heads (Cheju) at any stage of their family life cycle are heads of non-relative households. Fragmentary households are found mainly in the more urban area. Their household heads are either single (urban area) or have been married 28+ years (all areas).

Focusing on household types only (the marginals) the most obvious datum is the great difference between Hapch'on and Cheju. Cheju has its own special history and traditions. In the 1920s and 1930s Cheju had the same fertility rate and divorce rate as Seoul (Kwon, 1977). And through the years several investigators have remarked that in Cheju the common residence of married children with their parents is not the custom (Lee, K. K., 1975; Seok, 1949).

#### Area Differences

The frequencies of some important characteristics of households and households heads (Table 2.2) will improve our idea of differences over the regions under study. The mainland county, Hapch'on, has fewer household heads in the 25-39 year old range than other places, and has more in the 40-54 year old range. It has the highest proportion of male household heads, of households that are the main or only household in the structure, and of family-owned houses. Pukcheju County, whether

Table 2.2.--Percent Distribution of Selected Characteristics of Households and Household Heads in Various Locations

CHARACTERISTIC	LOCATION*					
	1	2	3	4	5	6
<b>AGE OF HOUSEHOLD HEAD</b>						
1-14	0.1	0.0	0.1	0.0	0.0	0.0
15-24	3.0	2.0	1.8	2.9	3.2	4.6
25-29	5.8	8.5	8.1	11.5	13.2	12.4
30-34	10.3	13.3	13.4	15.2	17.5	18.2
35-39	14.7	15.6	14.5	16.5	16.9	17.2
40-44	16.1	14.6	13.2	14.2	14.6	14.6
45-49	13.6	10.4	9.1	10.5	9.5	8.8
50-54	11.9	10.0	10.0	9.4	8.4	8.0
55-59	10.3	7.4	9.5	6.3	5.9	5.4
60-64	7.0	6.8	7.9	4.9	4.7	4.5
65-69	4.3	5.3	6.0	3.9	3.0	3.2
70+	2.9	6.1	6.5	4.7	3.0	3.0
Total	100.0	100.0	100.0	100.0	99.9	99.9
<b>SEX OF HOUSEHOLD HEAD</b>						
Male	91.7	77.0	76.3	82.3	83.6	80.2
Female	8.3	23.0	23.7	17.7	16.4	19.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>MAIN OR SECONDARY HOUSEHOLD IN STRUCTURE</b>						
Main (only)	95.0	88.6	85.9	89.5	74.5	57.9
Secondary	5.0	11.4	14.1	10.5	25.5	42.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>TYPE OF TENURE</b>						
Own	91.3	85.2	81.8	84.1	64.3	53.6
Rent	5.9	12.0	15.3	11.6	28.0	43.0
Use without charge	2.8	2.8	3.0	4.2	7.6	3.4
Total	100.0	100.0	100.0	99.9	99.9	100.0

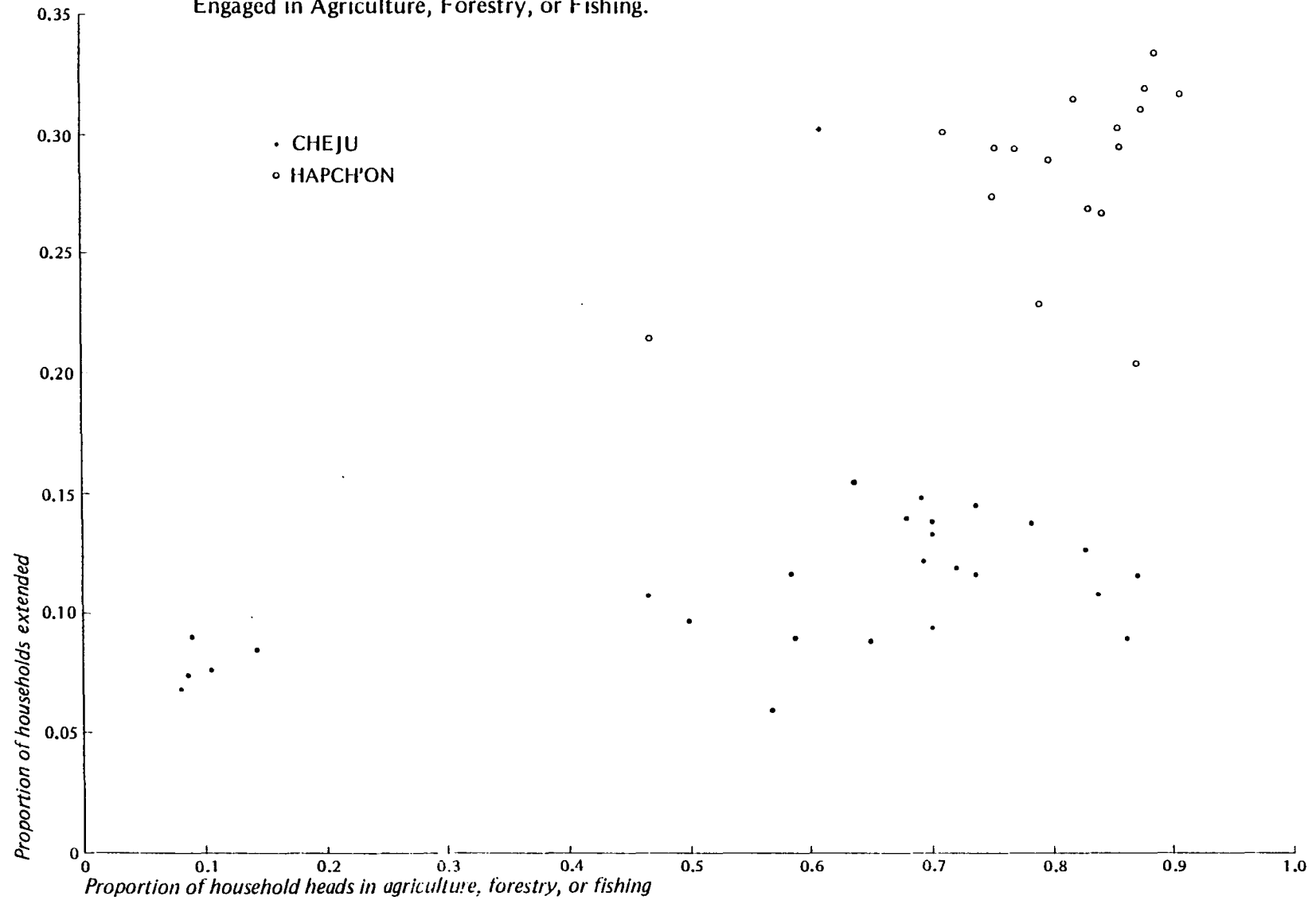
\* Locations are: 1 = Hapch'on gun  
 2 = Pukcheju gun, rural areas  
 3 = Pukcheju gun, small cities  
 4 = Namcheju gun, rural areas  
 5 = Namcheju gun, small cities  
 6 = Cheju City

rural or small city, stands out for its high proportion of household heads over 60 years old, for the highest proportion of female household heads, and for a quite high rate of house ownership. In Namcheju County the rural and the small city districts are quite distinct in characteristics, particularly household ownership. Cheju City has a concentration of household heads in the 25-44 year old range. It has a relatively high proportion of female household heads. But most noticeably, there are many households which are secondary households in the structure.

#### Variation Over Smaller Districts

Given the amount of variation in the distribution of household types seen thus far in the data, it is natural to wonder how much variation there might be among smaller, more homogeneous, districts. We focus our interest only on the proportion of all households in each district which are extended type households. In order to arrange the smaller districts (townships, small cities, or districts of Cheju City) along a rural-urban continuum, each is classified by the proportion of household heads engaged in agriculture, forestry, or fishing (Figure 2.1). It is readily seen that there is a considerable amount of variation in the proportion of households with extended families, even within the major divisions of Hapch'on and Cheju. Only five of the fourteen subdistricts of Cheju City are distinctly non-agricultural. The other subdistricts of the city are equivalent in agriculture--and in extended family rate--to other small city and rural districts of Cheju. One rural district of Cheju, which has a high proportion of household heads who are farm workers, fishermen, or foresters--they are

Figure 2.1 Proportion of Extended Type Households in a District by the Proportion of Household Heads in the District Engaged in Agriculture, Forestry, or Fishing.



probably mostly fishermen--has a rate of extended families comparable to Hapch'on. This district is actually a separate island near the Korean mainland. In Hapch'on, one district has less than half of its household heads engaged in agriculture or forestry, yet it does not have the lowest proportion of extended families. This picture would not change much if household heads who are merely farm workers were excluded, since they are very small in number. We may summarize this by saying that we cannot expect to explain much variation in the proportion of extended families merely on an agricultural criterion of the urban-rural dimension.

#### Variation in Extended vs. Nuclear Family Living

If there is a regular pattern of nuclear and extended family living over the family life cycle of an individual, then the family life cycle variable should be able to explain a significant portion of the variance in the proportion of family households which are extended. This would hold true provided we could control for availability of parents and birth order of the household head. Furthermore, if the nuclear family is being chosen as a style of life preferentially by those who are "modern," then greater amount of education and more modern occupations should correlate with nuclear family living, while more traditional occupations and less exposure to modern education should correlate with extended family living. These variables are thus looked at along with housing conditions and the dependency burden of the household.

In the first section of MCA we cannot expect a high total explanation of variance. Two of the most important data--birth order

of household head, and whether his parents are living or dead--are not known for this sample.

In order to get an overview of the relative importance of the variables under study, we look at the percent of variance explained by each of the variables alone, and by each set of variables net of all other variables. (The "net variance explained" by a single variable or set of variables is the difference between the total  $R^2$  with all variables included in the analysis and the total  $R^2$  of all variables except the one or the one set whose net variance explained is being measured.)

In Table 2.3 we see once again the different character of the Hapch'on and Cheju regions. First of all, the total variance explained by the whole group of variables is quite different for the two regions. Secondly, the net variance explained by each set of variables is different for the two regions, though their order of importance is quite similar. Looked at just by themselves housing conditions (number of rooms in house, ownership) and work-related variables (occupation of husband, occupation of wife, and number of household members economically active) express the greatest amount of variance in both regions.

One interesting aspect of the data is the stage-education interaction variable (the complex index made of stage of family life cycle and education of household head). This variable was created because cross-tabulation showed that stage of family life cycle and education of household head interact in relation to nuclear or extended family living. The interaction variable expresses very little variance when used as the only predictor of family type, but as explainer of variance

Table 2.3.--Percentage of Variance in Extended vs. Nuclear Type Households Explained by Stage in Family Life Cycle, Occupation and Economic Activity, Education Level, Housing Conditions, and Number of Dependent Children.

Variables	Percentage of Variance Explained	
	<u>Hapch'on</u>	<u>Cheju</u>
Variables alone:		
Stage of family life cycle only	2.3	0.2
Stage of family life cycle and number of dependent children only	4.6	1.8
Work-related variables only	10.1	5.5
Stage-education complex variable only	1.5	0.5
Housing conditions only	9.7	9.7
Net Results		
Number of dependent children net of all other variables	2.3	0.7
Education of hhld head and of wife, net of all other variables	2.1	2.2
Stage-education complex variable, net of all other variables	1.0	0.7
Stage-education complex and education of wife, net of all other variables	5.1	3.6
Work-related variables, net of all other variables (except no. of dep. children)	5.8	3.5
Housing conditions, net of all other variables	4.0	2.1
TOTAL VARIANCE EXPLAINED	23.3	12.3

(along with education of wife) net of the other variables in the analysis it assumes relative importance. This indicates, perhaps, even further interaction taking place between stage of family life cycle and other variables in the analysis. Indeed, if one imagines a situation where a family would be deciding which son (or even, infrequently, which daughter) the retired parents should live with, it is easy to imagine that stage of family life cycle, occupation, and housing conditions would be taken into account in an interactive way. Further development of the model employed here will require more explicit attention to interaction terms.

The main reason MCA has been employed is as a controlled way of describing the characteristics which tend to be found among nuclear and extended type households at various stages of the family life cycle. MCA provides adjusted means for each class of each independent variable. These can be interpreted as what the mean for the class would be if it were independent of all other variables in the analysis. Our discussion of the variables in the analysis concentrates on the adjusted means.

Adjusted means of the stage-education complex variable (Table 2.7) show that the relationship between education and extended family living differs from young ages to old, and from Hapch'on to Cheju. In Hapch'on at young stages of the family life cycle there are more extended type households among the less educated, while at older stages there are more extended families among the more educated. In Cheju, however, there are fewer extended type households among the more educated, especially at earlier stages. The raw data, on the other hand, show more extended type households among the more educated in Cheju. Since the proportion

of variance explained ( $\eta^2$ ) is so small for this complex variable, however, no interpretation of these effects will be attempted. (Though  $\eta^2$  is small, it is significant at the 1% level, as are all  $\eta^2$  values in the entire analysis, because the sample size is so large.)

The strongest effect in the occupation category is that in both Hapch'on and Cheju retired persons are most likely to be found in extended families. Obviously extended family living helps support them. (Korea has no social security system.) As with education, the occupation "professional, technical, and kindred" has mixed results, differing for Hapch'on and Cheju. Service workers have a low proportion of extended families in both Hapch'on and Cheju, but other urban and modern occupations do not show this same expected relationship. For occupation of household head also, the  $\eta^2$  value is low.

When we turn to the education and occupation of the wife (or daughter-in-law, in the case of "stem--father HH" households) the  $\eta^2$  values are distinctly higher than for the same traits of the head of household. Part of this may be attributed to the effect of "wife not present" being included among the classes of these categories. For both Cheju and Hapch'on we see that the more educated wives are more likely to be found in extended type households than the less educated wives, though the major part of the difference is between those with some education and those with none. When the wife has no occupation, or when the wife is a farm worker or other laborer, the extended family rate is either high or near the mean. When the wife is a sales worker or service worker, the rate of extended family living is low.

The other variables in the analysis refer more clearly to the whole household. We notice that the more dependent children present, the more rooms in the house, or the more economically active persons present, the more likely it is that an extended family is dwelling there. Though this statement is partially tautological, the variables are included in the analysis as controls. More informative is the finding that if a family does not own its own home it is only one-third to one-fifth as likely to be an extended family than if they own their own home. This datum is relevant to the typical finding of fewer extended type households in urban areas.

Summarizing, we have found that extended type households are more likely to be found where the family owns its home, where the head of the household is retired, where the wife (or daughter-in-law) is not working outside the home, where the house has three rooms or more. Nuclear type households are more likely to be found where the head or his wife have service occupations, where they have none or one child, where they rent a small house, and where the wife is either not present or has no education.

An observation on the stage of family life cycle vs. age as a measurement in this MCA, is in order. The same analysis was performed four times: twice with "stage" and twice with age, employing the variables both independently and in a complex with education. The overall explanation of variance was compared between stage and age for each run. The total  $R^2$  did not differ by more than .006 for Hapch'on and .003 for Cheju in the independent case. As complex variables the two differed by only .001 in both areas. "Age" produced the higher figure for variance explained.

### Family Life Cycle and Household as Predictor Variables

One of the reasons this work was undertaken is that stage of family life cycle is thought to be an important independent variable, more important than age in some cases. It is also true that there is no logical reason to consider either housing conditions, economic activity, or number of persons in the household to be causes of extended family living, nor to be caused by extended family living. For these two reasons it is proper to take a look at how stage of family life cycle and household type operate as predictor variables, along with some other generally useful independent variables: occupation, sex, and education of household head; and location of house (three places: Hapch'on, Cheju City, and the rest of Cheju Province).

In Table 2.4 we find that this set of independent variables explains a reasonably high proportion of variance in all the dependent variables. For each case stage of family life cycle leads to a higher net explanation of variance than age, though the difference is not great.

For five of the six dependent variables in this analysis the stage of family life cycle and household type complex variable explains over half of the variance explained by the set of predictors chosen. This is not particularly surprising in the case of the number of persons in the household, the number of dependent children, and the mean age of children, which are part of the family cycle idea. When considered along with other indicators of economic activity and housing

Table 2.4.--Percentage of variance in household characteristics explained by household type and stage of family life cycle of household head vs. percentage explained by household type and age of household head.

Dependent Variable	Percent of Variance Explained
1. Number of Persons in Household	
By all variables	57.1
By hhld type & stage of family life cycle net of all other variables	46.2
By hhld type and age of hhld head, net of all other variables	45.1
2. Number of Dependent Children	
By all variables	52.4
By hhld type & stage, net of others	44.1
By hhld type & age, net of all others	40.0
3. Mean Age of Children	
By all variables	53.8
By hhld type and stage, net of all others	42.1
By hhld type & age, net of all others	38.0
4. Ownership of Home	
By all variables	26.6
By hhld type & stage, net of all others	5.9
By hhld type & age, net of all others	4.7
5. Number of Rooms in House	
By all variables	22.3
By hhld type & stage, net of all others	12.4
By hhld type & age, net of all others	11.7
6. Proportion Economically Active	
By all variables	25.7
By hhld type & stage, net of all others	13.3
By hhld type & age, net of all others	10.7

hhld type = type of household composition

other independent variables in the analysis are:

    occupation of household head,  
    sex of household head, and  
    education of household head.

conditions, however, a picture of the circumstances of families over the life cycle emerges.

Table 2.5 attempts to gather the data in such a way that changes over the family life cycle can be observed separately for those households which happen to be nuclear at that stage, and those households which happen to be extended. The table may be read across to compare families at different stages of the life cycle, or it may be read vertically to see the complex of characteristics of families at a given stage of the family cycle. For example, it is interesting to look down the column for those married 9-17 years. In these middle years the number of persons in the household has almost reached its maximum, the number of dependent children is at maximum level, the number of rooms in the house and household ownership have not yet reached maximum, and yet the proportion economically active is at the minimum level. Many of these families could be experiencing economic difficulties at this stage.

We might ask whether there are differences in the external living conditions of nuclear and extended type households. We see in Table 2.5 that with regard to the number of dependent children and the mean age of children there is very little difference. For obvious reasons there are more persons in the extended type households, and therefore more rooms per household. But the difference does not reach even two persons. We might infer that aside from the presence of the parents of the household head the two household types are perhaps quite similar in the number of other persons who would be dwelling in the household. Are extended type households more crowded? Dividing

Table 2.5.--Number of Persons in Household, Number of Dependent Children, Number of Rooms, Type of Tenure, and Proportion Economically Active by Stage of Family Life Cycle of Household Head and Household Type: Both Raw Means and Means Adjusted by MCA.

Variable	Stage of Life Cycle (Duration of Marriage of Household Head)									
	0-2 yrs		3-8 yrs		9-17 yrs		18-27 yrs		28+ yrs	
	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.
Number of Persons in Household										
Nuclear	2.9	2.7	4.3	4.1	5.6	5.5	5.8	5.8	4.0	4.2
Extended	4.7	4.4	5.9	5.7	7.2	6.9	7.6	7.3	6.1	5.9
Number of Dependent Children										
Nuclear	.8	.7	2.1	2.0	3.6	3.5	3.3	3.3	1.3	1.4
Extended	.7	.6	2.3	2.2	3.8	3.6	3.8	3.6	2.0	1.9
Mean Age of Childred										
Nuclear	.6	.9	2.4	2.7	6.5	6.6	11.0	10.9	13.5	13.5
Extended	.5	.9	2.6	2.9	6.3	6.7	10.5	11.0	13.4	13.9
Type of Tenure										
Nuclear	.37	.46	.51	.59	.72	.75	.83	.82	.88	.83
Extended	.90	.85	.89	.87	.93	.88	.96	.87	.95	.85
Number of Rooms In House										
Nuclear	1.8	1.8	2.1	2.1	2.6	2.5	2.8	2.8	2.8	2.9
Extended	3.0	2.8	3.1	3.0	3.2	3.1	3.5	3.4	3.6	3.5
Proportion Economically Active										
Nuclear	.54	.54	.38	.38	.31	.30	.39	.38	.57	.58
Extended	.59	.56	.39	.37	.32	.29	.35	.31	.46	.43

the adjusted mean number of persons per household by the adjusted mean number of rooms in the household produces the following table:

Table 2.6

Type of Household	<u>Average Persons per Room</u>				
	Duration of Marriage				
	0-2	3-8	9-17	18-27	28+
Nuclear	1.5	2.0	2.2	2.1	1.5
Extended	1.6	1.9	2.2	2.2	1.7

Here again we see very little difference between nuclear and extended type households.

At the older stages of the life cycle extended type households have more dependent children and a lower proportion economically active than have nuclear type households. But at the younger stages they have a much higher rate of home ownership. This is as expected: the advantage of patrimony in the early stages of the family life cycle is meant to offset the greater economic burden later on.

How do these data, and the data in the earlier sections, relate to some commonly held notions about nuclear family and extended family living? The data partially support and partially deny the idea that the more educated and those in the more urban kind of occupations would be found rather in nuclear type households than in extended type households. It fails to support clearly the idea that the more agricultural an area, the more extended type households would be found. Nor does it give much support to the expectation of higher fertility in extended families. It gives much more support to the idea that those in more

constrained economic and housing conditions cannot live in extended type households.

#### Summary and Conclusions

Household composition has been found to show a regular pattern of nuclear and extended forms over stages of the family life cycle of the household head in this cross-sectional data. However, the pattern is not pronounced. Lack of knowledge of whether the parents of the household head are living or not, and whether the household head is eldest son or not, prevents deeper probing of the pattern with this data set. The regular pattern of change of composition of the household has been called the cycle of the family lineage.

Prevalence of nuclear family households and extended family households has been studied controlling for the stage of family life cycle of the household head. This control has allowed a complex view of the influence of education and occupation on household composition. Contrary to common expectation, nuclear type households were not found to be more prevalent among those with more education. The relationship was found to be more complex than that. Similarly, households whose heads were in more modern occupations were not necessarily more likely to be nuclear than were farming households. Also, when districts were arranged along an urban-rural continuum, the percent of extended type households in the districts, though higher in rural areas, showed quite a scattered distribution. Rather, it was found that the variables most consistent in explaining higher prevalence of nuclear family living were those that indicated less favorable economic and housing conditions.

Stage of family life cycle used as a predictor has been found to perform equally well or slightly better than age of household head in predicting such housing and economic characteristics of the family as home ownership, proportion of household economically active, number of persons in the household, and number of rooms in the house.

Cross-sectional data showed apparent patterns over the family life cycle in Korea: an increase in the proportion who own their homes; an increase in the number of rooms in the home; an increase in the number of persons in the family, reaching a maximum at 18-27 years duration of marriage, followed by a decrease; an opposing curve for the proportion economically active, decreasing to a minimum at 9-17 years duration of marriage, and increasing again afterwards. Finally, differences were seen in the socioeconomic circumstances of nuclear and extended type households. If we could take these differences to represent differences expected in the life cycle of the eldest son, who is most likely to start and continue his family life cycle in common residence, we may describe the rough outlines of the differing circumstances of the life cycles of eldest sons and younger sons. The eldest son, besides being part of a larger household all through his family life cycle, would also start off the cycle owning his home, and having a larger home, but he would have a greater dependency burden (lower proportion economically active) at 28+ years of marriage.

Table 2.7--Proportion of Households Extended by Each Class of Each Variable in the Multiple Classification Analysis.  
Both Raw and Adjusted Proportions are Given

<u>Variable</u>	<u>Proportion Extended</u>					
	<u>Hapch'on</u>			<u>Cheju</u>		
	N	Raw	Adj.	N	Raw	Adj.
Stage of Family Life Cycle and Education						
0-2 years married						
elementary	98	.510	.597	301	.090	.179
intermediate	29	.345	.461	347	.141	.194
high (Hapch'on: & above)	46	.217	.464	429	.135	.162
college+ (Cheju only)				128	.125	.127
3-8 years married						
none	52	.327	.462	59	.051	.181
elementary	273	.363	.408	917	.111	.160
intermediate	72	.347	.398	923	.118	.138
high (Hapch'on: high+)	102	.206	.377	1033	.151	.149
college+ (Cheju)				296	.122	.076
9-17 years married						
none	272	.224	.340	257	.082	.190
elementary	718	.357	.339	1507	.130	.155
intermediate	139	.417	.353	1081	.150	.134
high (Hapch'on: high+)	147	.299	.305	1073	.160	.128
college+ (Cheju only)				386	.158	.091
18-27 years married						
none	663	.205	.250	659	.061	.108
elementary	774	.332	.275	1774	.125	.098
intermediate	124	.355	.252	677	.116	.065
high (Hapch'on: high+)	132	.341	.318	525	.170	.102
college+ (Cheju only)				220	.159	.051
28+ years married						
none	1685	.311	.308	2931	.145	.184
elementary	507	.337	.265	1584	.162	.129
intermediate	65	.354	.303	322	.171	.095
high (Hapch'on: high+)	37	.324	.331	169	.231	.145
college+ (Cheju only)				94	.181	.064
ETA <sup>2</sup>		.016			.006	
GRAND MEAN	5935	.314		17692	.137	

Table 2.7 (continued)

<u>Variable</u>	<u>Proportion Extended</u>					
	<u>Hapch'on</u>			<u>Cheju</u>		
	N	Raw	Adj.	N	Raw	Adj.
Occupation of Household Head						
None or retired	314	.452	.575	1303	.197	.267
Professional, technical	131	.130	.175	645	.174	.149
Cheju: administrative, managers				108	.176	.111
Clerical	146	.329	.293	938	.120	.105
Sales workers	192	.172	.291	1397	.068	.115
Service workers	106	.085	.184	675	.087	.102
Farm owners, managers	4593	.326	.306	8551	.161	.133
Farm workers, fishermen	243	.247	.301	1678	.110	.142
Laborers, except farm	210	.262	.295	2325	.088	.112
Cheju: Military				72	.097	.119
ETA <sup>2</sup>		.017			.012	
GRAND MEAN	5935	.314		17692	.137	
<u>Proportion of Households Extended</u>						
<u>Variable</u>	<u>Hapch'on</u>			<u>Cheju</u>		
	N	Raw	Adj.	N	Raw	Adj.
Education of wife (dau.-in-law)						
Wife not present	480	.125	.240	3103	.056	.051
None	2738	.239	.241	3639	.099	.057
Elementary	2383	.435	.397	7851	.169	.171
Intermediate	232	.375	.440	2006	.180	.227
High (Hapch'on: High+)	102	.245	.402	950	.185	.243
College+ (Cheju only)				143	.196	.206
ETA <sup>2</sup>		.054			.019	
Occupation of wife (dau.-in-law)						
None, or wife not present	1322	.203	.377	8459	.098	.166
Cheju: professional, technical				61	.311	.190
Sales workers	85	.176	.177	810	.094	.068
Service workers	42	.071	.010	206	.087	.043
Farm owners, managers	214	.318	.234	1246	.179	.108
Farm workers, fishermen	4104	.354	.304	6761	.184	.117
Laborers, not farm	168	.333	.309	149	.134	.111
ETA <sup>2</sup>		.021			.016	
Number of dependent children						
0	639	.160	.170	2639	.073	.068
1	915	.242	.228	2977	.123	.136
2	1192	.293	.276	3519	.138	.142
3	1319	.334	.338	3481	.151	.150
4	1173	.385	.393	2803	.166	.159
5	536	.410	.437	1575	.182	.172
6+	161	.484	.480	698	.149	.149

Table 2.7 (continued)

<u>Variable</u>	<u>Proportion of Households Extended</u>					
	<u>Hapch'on</u>			<u>Cheju</u>		
	N	Raw	Adj.	N	Raw	Adj.
Number of dependent children (continued)						
ETA <sup>2</sup>		.029			.009	
GRAND MEAN	5935	.314		17692	.137	
Household members economically active						
1	803	.134	.131	6151	.071	.050
2	2700	.247	.249	7690	.125	.131
3	1418	.362	.379	2542	.255	.266
4	687	.514	.500	909	.261	.270
5	238	.643	.604	290	.317	.327
6+	89	.787	.675	105	.400	.372
ETA <sup>2</sup>		.089			.045	
Number of rooms in house						
1	304	.056	.194	3364	.029	.086
2	2129	.171	.209	5168	.100	.110
3	2315	.374	.352	5017	.163	.146
4	854	.491	.438	2624	.222	.189
5	255	.596	.511	919	.237	.197
6+ (Cheju: 6)	78	.603	.497	401	.329	.277
7+ (Cheju)				199	.312	.244
ETA <sup>2</sup>		.098			.047	
Ownership of home						
Own	5464	.333	.320	12914	.170	.155
Rent	309	.061	.240	4060	.045	.093
Use without charge	162	.148	.247	718	.056	.070
ETA <sup>2</sup>		.020			.025	
GRAND MEAN	5935	.314		17692	.137	

## CHAPTER III

## CARRYING THE RESEARCH FURTHER: PLAN FOR A PANEL STUDY

The general viewpoint which inspired this study is that families in the Republic of Korea are maintaining the traditional family values to a great extent while adjusting to modern circumstances by allocating their time and goods over their life cycle. The census data used in Chapter Two suffered from a lack of crucial information on whether the parent generation is living or not, and whether the son is eldest son or younger son. A follow-up investigation could make up for this lack of information as well as gain some measures of changes over time.

Specific Advantage of This Panel Study

The research interval in this two-wave panel study is two years eight months. In the absence of family planning the mean birth interval in Korea has been about 31 months, and birth intervals lengthened by some use of family planning have a mean of about 38 months (Ko and Kim, 1973). This gives reason to expect a meaningful distinction between those women who had a child in the interval and those who did not. It also provides a good basis on which to define a group of women in the survey as having completed their childbearing years.

Variables in the Study

## 1. Background variables.

Type of community of residence

Education level of respondent (R)

Education level of R's husband

Occupation of R's husband, 1975

Number of rooms in house

Number of children living at home, 1975

2. Family Life Cycle Measures

Duration of marriage of R

R's parents-in-law living or not

R's husband eldest son or not

R's husband present or not

R gave birth in research interval or not

Completion of childbearing

R's mother-in-law available or not

3. Family Decisions and Behavior

Common residence with parents

R's usual work

Use of family planning method

Children moved away or not

The Sample Households

The sample households are the households of all eligible women<sup>1</sup> in the census enumeration districts (EDs) chosen by systematic random sampling from those sampled in 1975 by the Korean Population Policy and Program Evaluation Survey (KPPES). A census ED is composed of about 80 households which are homogeneous in socioeconomic characteristics. In this research the EDs in rural areas were composed of one or two natural villages or part of a natural village, and sometimes some outlying houses, or part of another natural village. In the small urban areas the EDs were a homogeneous section of the city.

Operational Definitions

Community of Residence: categories:

	rural -----	clan villages -----	4 EDs
Hapch'on		non-clan villages -----	4 EDs
	Urban -----		2 EDs
	rural -----	seaside villages -----	7 EDs
Cheju		mid-mountain villages -----	6 EDs
	urban -----		7 EDs

First, EDs are classified by province: Hapch'on-gun in Kyongnam Province, and Cheju Province. These are then subdivided into "rural," meaning no daily market present, and "urban," an area with a contiguous daily market. The rural communities are further subdivided on separate bases in Hapch'on and Cheju, but on bases which in both places are the natural, local, ways of distinguishing villages. In Cheju the rural communities are put in categories "seaside," meaning right on the sea, and "mid-mountain," located one to five miles from the sea. In Hapch'on the villages are put in categories "clan" and "non-clan." My operational definition of a clan village is one in which over 50 percent of heads of households in each of the natural villages of the ED are included in just two or three surnames.<sup>2</sup>

Education of R, Education of R's husband: the categories will be based on the highest level of schooling attended.

Occupation of R's husband, 1975: categories will follow the major divisions given on the 1975 Census of Housing and Population of Korea, which information is part of the data set of KPPES.

Number of rooms in house: following the definition of "room" given on the 1975 Census.

Number of children, 1975: only unmarried children actually living at home in 1975 will be included.

Duration of marriage: time elapsed in years since the respondent's first marriage.

Completion of childbearing: those who in 1975 said they didn't desire to have any more children, and who didn't bear any children in the research interval. (The research interval is two years eight months, from October 1, 1975 to May 31, 1978.)

Common residence with parents: R's husband's parents live in the same household and share food preparation and meals, following the census definition of "household."

Home improvement: those who responded positively to a question on whether they made any major improvements in their house since 1975. Those who moved to another house fall in a separate category under this same heading.

R's usual work (wife's extra work): whether R spends her work time engaged in (1) housekeeping and childrearing, (2) farming, (3) extra work, or a combination of the three. Extra work is work in addition to or instead of usual household duties or the family farm work, done for the purpose of gaining extra monetary income.

Use of family planning: current use of any family planning method in 1975, 1978, or both.

Children moved away or not: those families who reported unmarried children who were household members in October 1975 to be away and not household members in June 1978.

#### Specific Points of Research

1. The custom of common residence of eldest son with parents is being maintained in the provinces studied, but adapted to circumstances.
  - a. in Hapch'on the tradition is maintained as such;
  - b. in Cheju the eldest son lives near his parents, though not necessarily in the same household, following that province's custom;
  - c. migrants to the large cities maintain the value of common residence, but modify it to fit their circumstances (Cf. Point 5.).
2. Aging of parents increases the likelihood of common residence.

3. Death of one parent increases the likelihood of common residence.
4. Birth of a child to a woman who wants or needs extra-income work increases the likelihood of common residence.
5. Among migrants of greater economic means, common residence is found as frequently as among non-migrants of the same economic means. Migrants of lesser economic means maintain common residence as a value, but cannot put it into practice. Therefore, they adapt the value "common residence" by emphasizing the aspect of "caring for parents when they are in need."

The next set of points relate to fertility.

6. The birth of a child to R is expected to decrease her work for extra income, provided that her mother-in-law or mother is not available for help.<sup>3</sup> However, if the family is not well off, the wife's work for extra income may be necessitated by the birth of another child.
7. The use of family planning relates positively with wife's extra work.
8. Family planning is used to bring an end to the childbearing period rather than to space children.

The final set of points relates to the family life cycle.

9. The bearing of children is taking place almost entirely within the first ten years of married life.
10. Women bearing children after the first 10 years of their married life differ significantly from those who prevent

the birth of children at that stage, in amount of work for extra income.

11. Woman's work for extra income, common residence with parents, use of family planning, all bear a relationship to the life cycle, even when controlling for socioeconomic background and village (community) of residence.
12. "Completion of childbearing" bears a relationship to wife's extra work, common residence, even when controlling for other life cycle and background variables.
13. Having had children move away during the research interval bears a relationship to wife's extra work and common residence, even when controlling for family life cycle and background variables.

## FOOTNOTES TO CHAPTER III

1. Eligible women were designated in the 1975 KPPES as ever-married women between the ages of 20 and 49.
2. Although it is sometimes true that a surname, "Kim" for example, designates several different clans, I know from talking with the village chief that the villages which qualify as clan villages by the operational definition were in fact composed of families closely related to each other. Furthermore, villages failing to qualify as clan villages contrast sharply with clan villages in that they have a remarkable variety of surnames.
3. Availability of mother or mother-in-law is defined as: mother or mother-in-law lives in the same house, or mother-in-law lives in the same neighborhood or village.

## CHAPTER IV

## THE SAMPLE

Here it is simply asked, "What population does the sample represent?" and "How well does it represent that population?"

The Sampling Procedure

The sampling procedure was not exactly the same for Cheju Province and for Hapch'on Gun (County). In Cheju the two large cities, Cheju City and Sogui'p'o Up, could not be included in the sample of this survey, since the basis of sampling desired by KPPES for the 1978 contraceptive prevalence survey was different from that used in the 1975 census. Thus members of the panel could not have been located in those two areas. In general in the sampling, first administrative districts were sampled, then, at the lowest level of sampling, census enumeration districts were sampled. In Korea, below the province level, administrative districts are of two kinds, cities, or shi, and counties, or gun. Counties are further divided into two kinds of administrative districts, small cities, or up, and country districts, or myon. Shi, Up, and Myon are distinguished primarily on the basis of their population, though other factors enter in as well. Cities are almost all over 70,000 in population, up usually range from 20,000 to 50,000, and myon range from a few thousand up to 30,000. A brief description can summarize how the higher administrative levels in this sample relate to the whole country. At the province level two out of ten provinces are represented, Kyongnam and Cheju. At the shi and gun level, in Kyongnam

only Hapch'on gun is represented; in Cheju the only two gun, North Cheju and South Cheju, are represented, and Cheju City was excluded from the sampling frame. At the level of myon and up, in Hapch'on (where there are no up) out of the two major population centers, Samga was chosen, and of the remaining 15 myon three were chosen randomly. In Cheju, because each of the four quadrants of the island were said by an experienced researcher, a native of Cheju, to have different characteristics, one up was chosen randomly (Hallim) and, since it was in the northwest quadrant, three out of the remaining nine myon were chosen systematically starting clockwise from the northeast quadrant, so that all four quadrants were represented. At the level below myon and up, census enumeration districts formed the sampling frame. In both Cheju and Hapch'on these were chosen by systematic random sampling, except that in Hapch'on a few ED which were more than 5 km. from the nearest transportation were excluded before the systematic sampling began. It should be noted that at the level of ED the frame for the sampling was not all ED, of course, but only the EDs which were part of the 1975 sample. In Hapch'on one-half of all the EDs in the 1975 sample were chosen; in Cheju, two-fifths of all the EDs were chosen.

#### Completion Rate

In Hapch'on out of 616 respondents 523 interviews were completed, for a rate of 85 percent. In Cheju out of 971 respondents 700, or 72 percent were completed. Due to incompleteness some categories of respondents are underrepresented by the completed interviews. A chi square value with probability of less than .05 was used as a criterion to distinguish significantly different distributions of a characteristic

for the completed portion of the sample and the uncompleted portion. Obviously, this could be done only for characteristics available in the 1975 data. It was found that in Hapch'on those married 0-9 years, those with two or fewer children, and those with greater than elementary level education are underrepresented. In Cheju those married 0-9 years, those with three or fewer children, those with higher than intermediate level education, those whose husbands had professional, technical, service, or laboring jobs, and those who dwelt alone in 1975 were all underrepresented. The most severe underrepresentation is women with high school education in Cheju, of whom only 46.7 percent were interviewed, compared with the overall rate of 72 percent.

#### Sample Characteristics

The resulting sample is compared with relevant populations on important variables: rural-urban, sex, age, contraceptive use, and household types. These comparisons are shown in Table 4.1 through Table 4.4, respectively. The differences between the completed interviews and other populations can be understood by the nature of the sample and its completion rate. We see that the whole sample has a more rural characteristic than Korea as a whole. It has even a more rural makeup (though slightly more) than Cheju Province outside of Cheju City. It has fewer younger married women and more women over 35 than do the parent populations. For this reason the rate of contraceptive use is higher. Since households without eligible women could not be included, the sample underrepresents households other than nuclear and stem-type households.

Table 4.1

Distribution of Relevant Populations by Shi, Up, and Myon, and by Sex

	Population (Unit: 1000)				Households of Completed Interviews (Unit: 1 person)		Total
	All Korea	Kyongnam Province	Cheju Province	Hapch'on <u>Gun</u>	Cheju Province	Hapch'on <u>Gun</u>	
<u>Shi</u>							
N	16,770	1,008.6	134.9	-	-	-	-
%	48.4	30.8	32.8				
<u>Up</u>							
N	3,720	373.9	102.3	-	1,252	-	1,252
	10.7	11.4	24.9		32.5		18.6
<u>Myon</u>							
N	14,185	1,896.0	174.2	156.8	2,599	2,891	5,490
	40.9	57.8	42.3	100.0	67.5	100.0	81.4
Total							
N	34,678	3,278.7	411.5	156.8	3,851	2,891	6,642
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male							
N	17,445	1,642	199.3	78.7	1,854	1,417	3,271
%	50.3	50.1	48.4	50.2	48.1	49.0	48.5
Female							
N	17,234	1,637	212.2	78.1	1,997	1,474	3,471
%	49.7	49.9	51.6	49.8	51.9	51.0	51.5

Table 4.2

Age Distribution of Survey Respondents and of Ever-Married Women of Survey Areas

Population	Number of Persons	Mean Age	Variance	Percent Distribution by Age						Total
				20-24	25-29	30-34	35-39	40-44	45-49	
Completed Interviews, Napch'on	495	36.687	47.863	4.8	13.9	16.2	28.1	22.2	14.7	100.0
Ever-married Women, age 20-49, Kyongnam Province, all <u>myon</u>	281,312	36.468	62.184	9.6	15.0	17.2	20.4	20.1	17.7	100.0
Completed Interviews, Cheju	678	36.460	52.689	5.3	14.9	18.9	23.6	21.2	16.1	100.0
Ever-married Women, age 20-49, All Cheju	63,398	35.328	59.890	10.1	19.3	19.5	19.6	17.9	13.6	100.0

Table 4.3--Current Use of Contraception, 1978  
KPPES, and Change in Family Life Survey

Place	KPPES			Family Life Survey		
	N	CU**	%	N	CU**	%
Cheju City	978	398	40.7	--	--	--
North Cheju <u>Gun</u>	1157	411	35.5	439	201	45.8
South Cheju <u>Gun</u>	1476	460	31.2	261	89	34.1
All Cheju <u>Gun</u>	2633	871	33.1	700	290	41.4
Hapch'on	1672	539	32.2	523	174	33.3

\*\* Current Use

Source of KPPES data: 1978 Contraceptive Prevalence Survey.  
Data supplied through the kindness of  
Dr. Chai Bin Park.

Table 4.4--Household Types in 1975 Census, 25% Sample, and in  
Subsample Used as Panel in 1978 Survey

Household Type	Percent Distribution			
	1975 Census 25% Sample		Panel, 1975 Situation	
	Hapch'on	Cheju (Not Cheju City)	Hapch'on	Cheju
Stem	28.3	11.9	34.3	17.0
Nuclear	62.2	69.2	62.0	78.5
Other	9.6	18.9	3.7	4.5
Total	100.0	100.0	100.0	100.0
N =	6702	15207	515	699

Source: Table 2.1 and Table 7.3.

## CHAPTER V

## THE RESEARCH EXPERIENCE

Overview of the Research Experience

The field research was carried out in 1978. The date of reference of the research is May 31, 1978. The effort in the field took six months in all. In general, April was spent preparing the Hapch'on part of the research. May was spent in Hapch'on in immediate preparation, training of interviewers, and in carrying out of the interviews. June was spent following up this research and searching out families which had moved from Hapch'on to Pusan or Seoul. July was spent in Seoul preparing the Cheju Island part of the research in cooperation with the Korean Institute for Family Planning, which handled the field data gathering part of the KPES contraceptive prevalence survey. August was spent carrying out the interviews in Cheju, and following up families which had moved. September was spent editing and coding the data.

The research entailed a great deal of travel. Travel between the major cities in Korea is for the most part quick, convenient, and cheap. Travel in the countryside between rural villages, however, can be very inconvenient, particularly in Hapch'on. There was no car rental service. Taxis were available only in some instances. In Cheju, travel is convenient to all places along the paved, perimeter highway. Getting to some of the mountain villages can be difficult, however.

The Hapch'on part of the research was organized by the researcher himself. I enjoyed much good advice and help in making government contacts from Dr. Jae Young Park of Dong-A University in Pusan, Korea.

In carrying out the interviews I worked as a team with four trained interviewers, married women of the locality. We could cover one enumeration district each day. While the interviewers carried out the interviews I usually found time to talk with the men of the village, and I also sought addresses of those who had moved. An account of completion of interviews would be made before we left the district.

The Cheju part of the research was carried out in cooperation with a contraceptive prevalence survey. This cooperation entailed both advantages and disadvantages for the research. The principal advantages were the network of communication, the help and trust received from government personnel, the provision of interviewers, the overlap in training of interviewers, making my own job of training easier, and the ability to get a larger sample than I could have on my own. The disadvantages arose from the differing requirements of this research project and the contraceptive prevalence survey. Since this is a panel study, the respondents were to be found by name, while the contraceptive prevalence survey had only to try to get complete coverage of the enumeration districts chosen. This difference proved to be somewhat confusing to the interviewers. Also, the contraceptive prevalence survey was organized in such a way that the interviewers were spread over the whole island at one time, making it very difficult to keep in close touch with them. Because in most cases it wasn't possible to get an accounting from the interviewers on their rate of completion while they were still in the village being researched, there were many more respondents overlooked in the Cheju Island research than in the Hapch'on research.

Evaluation of the Data Collected: Learning from the Experience

The greatest limitation of the data may be an insufficient number of respondents for meaningful statistics in subcategories. For example, the respondents had to be grouped into 10-year groups of duration of marriage, and in many analyses only three levels, and sometimes two levels, of education of the respondent could be distinguished. I thought that since the Hapch'on research was my first experience at directing or participating in field research I should limit the number of interviewers to four. This, plus the time limit imposed by the barley harvest allowed only 523 completed interviews. In Cheju Island I had twelve interviewers assigned to my research. Since they had two questionnaires to administer they could only cover twenty enumeration districts in the days allotted. Cheju in general has fewer married women between the ages of 20-49 in each enumeration district than does Hapch'on. Furthermore, the amount of moving from house to house of respondents, and the subsequent inability to interview most of these, since they were outside the chosen enumeration districts, kept the number of completed interviews to 700.

For the most part the quality of the data collected is good. In Hapch'on in particular I was always on location with the interviewers. In a few cases I was actually present during interviews; in some other cases I could hear part of the interview from outside the house. In all cases I could look over the completed questionnaires and ask the interviewers about incomplete or unclear answers while the answers were still fresh in their minds. In Cheju I could not be on location with most interviewing teams, though I would meet with them every day or

every other day. But in Cheju the ability of the interviewers was greater since they were college women; while in Hapch'on two women had only elementary school education and two had intermediate school education. In Hapch'on the interviewers were very conscientious (and closely watched). In Cheju ten out of the twelve interviewers were conscientious. Two of them would record an inconsistent account of household members as though it were a consistent one, a fact which became clear when editing. Consequently they probably hadn't probed for forgotten demographic events to try to gain a consistent account. These interviewers did one-third of Choch'on Myon and one-fourth of Andok Myon, both of which have a slightly lower percent of consistent accounts than the other two myon of Cheju.

In order to complete interviews with those who moved away we tried to get addresses from their relatives and from local administrative officials. Very few relatives knew addresses of those who had moved away. The myon administrative office provided more, yet even these together did not make up half of the addresses sought. Those who had moved were sought out only if they had moved to Pusan, Seoul, Chinju, Cheju City, or were residents of the market towns of Cheju. Of those sought by addresses the majority could not be found. They had moved again, or else the registered address was not that of a place where they had ever lived. Only 19 of those who moved to large cities were located and interviewed. Of those who moved within the market towns of Cheju 24 were located and interviewed.

Table 5.1.--Occurrence of Consistent and Inconsistent Accounts of Number and Sex of Household Members and Their Vital Events, by myon

<u>Myon</u>	Account											
	Consistent		Number, Con. Sex, Incon.		Number Incon.		Unknown		Incomplete Interview		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Pongsan							98	84.5	18	15.5	116	100.0
Taeyang	98	56.6	15	8.7	32	18.5			28	16.2	173	100.0
Samga	116	61.1	11	5.8	41	21.6			22	11.6	190	100.0
Yongju	84	61.3	10	7.3	18	13.1			25	18.2	137	100.0
Hallim	207	63.9	6	1.9	28	8.6			83	25.6	324	100.0
Choch'on	133	46.3	13	4.5	52	18.1			89	31.0	287	100.0
Andok	93	50.8	9	4.9	41	22.4			40	21.9	183	100.0
P'yoson	92	52.0	2	1.1	24	13.6			59	33.3	177	100.0
Total	823	51.9	66	4.2	236	14.9	98	6.2	364	22.9	1587	100.0

CHAPTER VI  
CHILDBEARING AND FAMILY PLANNING

As we saw in Chapter One, childbearing in Korea appears to occur rather intensely, concentrated in and around ages 25-29. It is thought that this reflects the late age at marriage, the tendency to have children quickly after marriage, and then to stop having children when the family is content with its size and composition. Furthermore, the intense peak which shows up in age-specific fertility charts could well indicate that a great majority of the families follow relatively similar fertility behavior. In other words, with late marriage and nationwide acceptance of family planning, that part of a woman's life cycle which can be called the childbearing years is becoming more clearly defined. If that is so, we can expect it to have important consequences in Korean society. It is the purpose of this chapter to describe what leads married women to decide to end their childbearing years, to effectively carry out their decision, when in their married life this occurs, and whether women fall into distinct patterns of childbearing. Subsequent chapters will consider the implications of childbearing patterns.

We have defined the childbearing years as the period from marriage to the end of childbearing. Now let us define the end of childbearing to be the decision to have no more children and the effective carrying out of this decision. Operationally, it will be recalled, those women who in October of 1975 said they desired no more children, and who had not borne any child by May 31, 1978, have been classified as having

ended their childbearing years. Since in the case of fecund women this performance would usually require the use of contraception, explaining the end of childbearing requires an understanding of the desire to have no more children and of the use of contraceptives or some family planning method. An approach from the opposite direction would be to try to explain those women who gave birth to a child during the 1975-1978 interval.

#### The Pattern of Bearing Children

The concept of a pattern of bearing children applies most properly to a cohort of women passing through their childbearing years at the same time. From the data in this study, however, we get only a three-year view of the childbearing of four cohorts of women. Although we deal with marriage cohorts, results would not be much different had we used age cohorts. Table 6.1 shows the age distribution for marriage cohorts. The estimated variance is almost the same over all five-year marriage cohorts. It differs for the extremes, since these are not five-year groups. Skewness and kurtosis is also slight for all five-year groups. These also increase in the extreme groups because of truncation: eligible women could not be less than 20 or greater than 49 years old. Note that with a standard deviation of 2.8 years, a five-year spread of ages 2.5 years to either side of the mean age, would cover 62 percent of all of the members of a given five-year marriage cohort. Table 6.1 also includes an F-test which cannot reject the hypothesis at the .05 level that the greatest variance (8.22) is greater than the smallest variance (7.31) for the five-year groups. Let us first take a look at the proportions of women in each

Table 6.1. Distribution of Age of Respondent by Duration of Marriage, and Test for Difference of Variances

Duration of Marriage		Age Distribution (1975)								
1975	(1978)	N	Mean	Variance	Std. Dev.	Std. Error	Min.	Max.	Skew	Kurt.
0-6	(3-9)	156	25.72	10.48	3.24	0.259	20	39	1.114	2.992
7-11	(10-14)	177	30.51	8.22	2.87	0.215	25	42	0.716	1.111
12-16	(15-19)	210	34.61	7.75	2.78	0.192	27	44	0.087	0.624
17-21	(20-24)	238	38.36	7.877	2.81	0.182	29	47	0.214	0.324
22-26	(25-29)	196	42.30	7.31	2.70	0.193	36	49	0.23	-0.144
27+	30+	177	45.92	6.80	2.61	0.196	31	49	-1.701	6.05
TOTAL		1154	36.55	50.62	7.12	0.208	20	49	-0.188	-0.824

$$H_0 : \sigma_{10-14}^2 = \sigma_{25-29}^2 ; H_1 : \sigma_{10-14}^2 > \sigma_{25-29}^2$$

Upper .05 of F distribution for 172/195 degrees of freedom

is bounded by  $F = 1.3$

$$\frac{S_{10-14}^2}{S_{25-29}^2} = 1.12$$

cohort who have ended childbearing and the proportions who have given birth during the interval (Table 6.2).

Table 6.2.-- Proportions of Respondents in Childbearing Categories by Their Duration of Marriage in 1978.

	Duration of Marriage (Years)				Total
	0-9	10-19	20-29	30+	
Ended Childbearing	.16	.58	.88	.92	.67
Gave Birth '75-'78	.66	.30	.08	.04	.24
Others	.18	.12	.04	.04	.09
Total	1.00	1.00	1.00	1.00	1.00
N =	149	346	355	127	977*

\* Excludes those whose husbands were absent in 1975.

"Others" are those who in 1975 said they desired more children or were uncertain, but had no child by May 31, 1978. Fortunately this group is a small proportion, though not negligible, overall. But in the youngest cohort they outnumber those who could be measured as having ended childbearing. The cohort married 10-19 years is obviously in transition between having children and ending childbearing. Based on their age distribution (see Table 6.1) we may put them in historical context. They got married between 1959 and 1968. They would have spent their married lives in times of prosperity relative to the cohort preceding them. They would have had their school years ranging from after World War II, during the Korean War (1950-1951) and its aftermath, up to the fall of the Syngman Rhee government in 1960.<sup>1</sup> They are young enough to be modern, yet old enough so that over half of them have

ended childbearing. Therefore, this cohort will receive special attention in the analysis to follow.

### The Degree of Fertility Control

#### Use of Fertility Control Methods

The item used in this study for "current use" of family planning in 1975 excluded abortion. The 1978 interview asked the same respondents whether they used a birth prevention method during the interval between the surveys or not. This way of asking the question does not exclude abortion; however, in Hapch'on there was no probing whether there were any abortions, whereas in Cheju Province abortion was asked about directly on a companion survey, and the interviewer later filled in this survey's question about birth prevention methods, including abortion, according to the respondent's previous answers. In fact, though, the total difference measured is very slight: only nine respondents stated that in the 1975-1978 interval they used abortion but no other means of fertility control.

Contraception is widely used among the respondents in this survey. Forty-eight percent of the respondents of 0-29 years of marriage said they used a birth prevention method during the research interval. If we look at each cohort we get a better idea of fertility control (see Table 6.3). In the 0-9 year cohort 71 percent said in 1975 they desired to have another child, 66 percent gave birth to a child, and 40 percent used a birth prevention method. In the 10-19 year cohort 24 percent desired another child in 1975, 30 percent bore a child in the interval, and 56 percent used a birth prevention method. For these cohorts as a whole, then, there is a fairly good fit between fertility

Table 6.3.-- Raw Proportions Desiring No More Children, Giving Birth,  
and Using Birth Control, by Marriage Cohort  
(Only those whose husbands were present in 1975)

Duration of Marriage 1978 (years)	Desire for no Children 1975		Gave Birth 1975-1978		Used Birth Control 1975-1978	
	Proportion	N	Prop.	N	Prop.	N
0-9	.28	155	.63	155	.40	154
10-19	.76	353	.29	353	.56	346
20-29	.94	374	.08	374	.41	371
30+	.98	140	.05	140		
TOTAL	.78	1022	.23	1022	.47	871

desires and performance. Cohort figures, however, could be consistent with a considerable amount of individual lack of fit.

Another way to get an idea of the degree of fertility control is to look at those who have not used any fertility control method during the period of the two interviews and to find out why. The questions on the surveys allow classification of the respondents into those who didn't use any method either time, those who were current users in 1975 only, those who were current users during the interval only, and those who used fertility control both times. We see from Table 6.4 that out of the 625 respondents who did not use a method either time, 355, or 55 percent have completed childbearing and have been married twenty years or more. Subfecundity may be a factor in explaining this group. Another 154, or 25 percent have been married less than twenty years and have not yet completed childbearing.

Table 6.4.--Women Who did not Use Contraception Classified by Completion of Childbearing or Noncompletion, and by Duration of Marriage.

	Duration of Marriage (years)		
	0-19	20+	Total
Completed childbearing	93	344	437
Didn't complete	154	34	188
Total	247	378	625

Thus we may say that the great bulk of those who have not used any fertility control method during the two interview periods are in part of their life cycle where it doesn't seem to them to be necessary to do so. This fact would also help explain why the desire to have no more

children is not a strong predictor of subsequent use of contraception in this data set.

#### Success in Preventing Births

Another measure of the degree of fertility control being exercised by the respondents is their success in preventing a birth when they don't want one. Of the 764 respondents (Table 6.5) who said in 1975 that they desired no more children only 14.3 percent (109) had a child. This table does not include women whose husbands were not present in 1975. The table shows that the desire to have or not have a child is the strongest predictor of having a child in the subsequent interval. In the crucial cohort in its second decade of marriage, however, we find that of those who did not desire any more children, 25 percent had a child in the subsequent interval. This shows either instability in their desire for children, a change of mind due to some other circumstance, or inadequate use of fertility control.

For the cohort in its second decade of marriage, some kind of fertility control would be necessary to bring their childbearing to an end. Among those in this cohort with husbands present in 1975 those who reported using contraception both in 1975 and in the 1975-1978 interval were 85 percent in the category "completed childbearing" in 1978. Those who reported themselves as not using contraceptives either in 1975 or in the interval were only 41 percent in the "completed childbearing" category (see Table 6.6). While indicating the importance of contraception in the ending of childbearing these figures also show that the range of variation able to be explained by the concepts as operationally defined and as actually measured in this data set is limited. In some hypothetical data set the level of fecundity might be

Table 6.5.--Multiple Classification Analysis: Raw and Adjusted Scores in the Categories of Five Predictor Variables, Comparing Predictions for Proportion Desiring No More Children, Proportion Who Gave Birth During the Research Interval, and Proportion Who Have Ended Childbearing.

Predictor Variables

Dur.Mar.& No. Children 1975 (years) (# of children)	Desire No More Children			Gave Birth in Interval				Ended Childbearing			
	N	Raw	Adj.	N	Raw	Adj.	l-Adj.	N	Raw	Adj.	
0-6 0-1	65	.11	.98	75	.75	.78	.22	75	.04	.01	
0-6 2-3	74	.46	.44	74	.55	.58	.42	74	.28	.25	
7-16 0-3	147	.58	.58	147	.37	.37	.63	147	.41	.42	
7-16 4	105	.86	.85	105	.30	.30	.70	104	.63	.62	
7-16 5+	95	.94	.94	95	.16	.15	.85	95	.79	.80	
17-26 0-4	101	.86	.86	101	.10	.09	.91	101	.82	.83	
17-26 5	100	.96	.97	100	.08	.07	.93	100	.89	.90	
17-26 6+	155	.97	.98	155	.08	.07	.93	154	.90	.91	
27+	127	.98	.99	127	.06	.06	.94	127	.92	.93	
Place of Residence 1975											
Hapch'on, urban	83	.84	.86	83	.18	.16	.84	83	.77	.80	
" rural, non-clan	157	.83	.79	157	.22	.26	.74	157	.72	.69	
" rural, clan	192	.79	.75	192	.23	.27	.73	191	.66	.61	
Cheju, urban	198	.74	.78	198	.20	.17	.83	198	.69	.72	
" rural, seaside	185	.75	.78	185	.26	.24	.76	185	.62	.65	
" rural, mountain	164	.78	.77	164	.32	.32	.68	163	.61	.61	
Education of Respondent											
none	260	.90	.79	260	.13	.23	.77	260	.81	.69	
elementary	627	.76	.78	627	.27	.25	.75	625	.64	.66	
intermediate +	92	.58	.78	92	.36	.19	.81	92	.48	.69	

Table 6.5.-- (Continued)

Predictor Variables	Desire No More Children			Raw and Adjusted Proportions Gave Birth in Interval				Ended Childbearing		
	N	Raw	Adj.	N	Raw	Adj.	1-Adj.	N	Raw	Adj.
Education of R's Husband										
none	147	.86	.74	147	.14	.23	.77	147	.78	.64
elementary	478	.80	.77	478	.25	.27	.73	477	.66	.64
intermediate	186	.74	.79	186	.24	.21	.79	185	.66	.72
high +	168	.71	.84	168	.30	.21	.79	168	.60	.73
No. of Rooms in House										
1-2	312	.74	.79	312	.31	.28	.72	311	.58	.62
3	410	.78	.78	410	.22	.22	.78	410	.69	.70
4+	257	.82	.77	257	.19	.24	.76	256	.75	.68
Desire for More Children 1975										
yes				181	.61	.41				
no				764	.14	.19				
uncertain				34	.47	.39				
Total (Grand Mean)	979	.78		979	.24			977	.67	
Multiple R <sup>2</sup> Adjusted			.386			.286				.363

Table 6.6.--Use of fertility control and end of childbearing as Predicted by background variables and life cycle Variables. 10-19 Year Cohort Only.

Predictor Variable		Raw and Adjusted Scores				
No. children 1975 & March 1978 (#child)	(years)	#times was "current user" of birth control		Proportion ended Childbearing		N
		Raw	Adj.	Raw	Adj.	
0-2	10-19	.48	.68	.19	.27	42
3	10-14	.86	.92	.45	.42	69
3	15-19	.69	.67	.61	.63	36
4	10-14	1.00	.98	.51	.47	47
4	15-19	.88	.83	.72	.74	58
5+	10-19	1.03	.94	.79	.78	95
Residence 1975						
	Hapch'on urban	1.04	.92	.88	.89	26
	Hapch'on rural non-clan	.76	.82	.48	.54	46
	Hapch'on rural clan	.72	.79	.42	.47	50
	Cheju urban	1.03	.94	.73	.68	70
	Cheju rural seaside	.76	.76	.58	.59	78
	Cheju rural mountain	.92	.96	.52	.48	77
Education of Respondent						
	none	.87	.96	.60	.59	55
	elementary	.84	.84	.55	.57	259
	intermediate+	1.06	.87	.79	.69	33
Education of R's Husband						
	none .63	.63	.65	.47	.56	32
	elementary	.85	.88	.52	.53	173
	intermediate	.83	.79	.67	.65	81
	secondary+	1.08	1.02	.70	.65	61
No. of Rooms in House						
	1-2 .90	.90	.92	.54	.57	116
	3 .	.78	.79	.58	.60	153
	4+	.97	.94	.65	.58	78
Ended Childbearing						
	yes	1.06	1.03			202
	no	.59	.64			145
Use of Contraception						
	neither time			.41	.47	118
	1975 only			.59	.55	34
	1975-1978 interval			.60	.58	124
	both times			.85	.78	71
Grand mean (Total)		.865		.582		347
Total R <sup>2</sup> Adjusted			.121		.264	

statistically controlled, measures of all forms of fertility control might be available and accurate, no respondent might change their minds with regard to fertility decisions, and contraception might be used with 100 percent effectiveness to stop having children, and not just to put off pregnancy for a time. Under such unreal conditions one could expect a 100 percent range in the variation of completion of child-bearing under categories of degree of fertility control.

#### Trend in Fertility Control

Since the two interviews allow two measures of current use of a fertility control method we may measure the change in respondents' report of current use between the two surveys. Let us exclude abortion from the analysis and assume that the reliability of the responses with regard to other means is quite high. Table 6.7 then shows an impressive overall increase in the use of fertility control over the research interval.

Table 6.7.-- Current Users of Family Planning in 1975 and Over the 1975-1978 Research Interval.

1975	1975-1978 Interval			
	Users	Non-Users	Total	Percent
Users	141	108	249	21.0
Non-users	301	633	934	79.0
Total	442	741	1183	
Percent	37.4	62.6		100.0

The question on current use for the 1975-1978 interval in one sense is more lenient in gaining a "current use" response, since it refers to a whole interval, allowing even those to answer "yes" who used a method

but quit. On the other hand, it could be construed as more stringent, because it asks "During the interval did you use a method to prevent birth?" This may be interpreted by the respondent as ruling out a fleeting trial of some method. In any event, we see that of the 249 current users of 1975, 141 of them, or 57 percent, were current users in the following interval, and 43 percent became non-users. Those who quit using a method were more than offset by the 301 who became newly classified as current users during the research interval, and thus the 21 percent current users rate in 1975 became 37 percent for the 1975-1978 interval.

Use of Fertility Control: Spacing vs. Stopping

Lacking a direct question to the respondent of her intent in the use of contraception, whether to put off pregnancy temporarily or whether to stop having children, it is difficult to assess clearly the use being made of contraception. We may get an indication, however.

Table 6.8.-- Current Users of Fertility Control in the 1975-1978 Research Interval by Their Expressed Desire for a Child in 1975 and by Subsequent Giving Birth or Not.

Use of Birth Control	Desire for a Child 1975				
	Yes--Desired		No or Uncertain		
	<u>Bore Child</u>	<u>Didn't</u>	<u>Bore Child</u>	<u>Didn't</u>	<u>Total</u>
Both 1975 & '75-'78 Interval	3	6	13	123	145
Interval Only	39	24	45	198	306
Total	42	30	48	321	451

Looking at Table 6.8, if we use the broadest definition of "spacing" it would include all 72 cases where the respondent desired more children but used

birth control subsequently or concurrently. However, some of the 39 who bore a child and used contraception during the interval would certainly have begun to use contraception after the birth in order to end childbearing. Therefore the maximum number of current users who are merely spacing children would be somewhat less than 72, or less than 16 percent. Use of contraception in this sample is predominantly to stop having children.

By way of summary, it has been found in this section on the degree of fertility control that fertility control is considerable if one looks at how it is employed in the life cycle, or if one looks at the overall fit between the desire to have no more children and the subsequent not having children. However, for the cohort in its second decade of marriage this fit is not as good. Although the trend in use of birth control is sharply upward, there is also evidence of a good deal of starting and stopping its use. Birth control is used predominantly to end childbearing, rather than for spacing.

### Explaining the Completion of Childbearing

#### Validating the Operational Definition

Since completion of childbearing is a composite variable it is necessary to first consider whether its elements might perhaps be improperly put together. For example, if fertility were not adequately controlled the decision to have no more children would not correlate well with the completion of childbearing.

Table 6.5 helps substantiate the use of the variable "completion of childbearing" in that:

(1) The same variables important in explaining end of childbearing (as judged by the range of values in the adjusted proportions) are important in explaining the "desire to have no more children" and "gave birth."

(2) The direction of influence of each predictor is the same for all three dependent variables, except for the predictor variable "education of respondent" having small but opposing directions of influence on "desire" and on "gave birth."

On the other hand we have to keep in mind that in the crucial cohort in their second decade of marriage 12 percent could not be classified either in the category "end of childbearing" or "gave birth." (See Table 6.2.)

#### Multivariate Analysis of Completion of Childbearing

Our analysis cannot directly measure the process of ending childbearing. We must be satisfied with making inferences about the process from differentials in the proportion of women who have completed childbearing. We will examine the differentials within a variable composed of duration of marriage and number of children ever born alive (called the life cycle variable), within the variables of a set of background characteristics, and between categories of the use of birth control. Then, in order to gain some control over subfecundity, which is not explicitly measured in this analysis, we will limit analysis to women in their second decade of married life while including use of birth control as a variable.

Analysis Excluding Use of Birth Control. Table 6.5 allows us to see differentials in the proportion of women who have ended childbearing.

"Adjusted means" are means which are calculated while controlling statistically for that category's values for other variables in the analysis. Differentials by education level of the respondent provide a clear example of this adjustment. There are great differentials in the raw proportion of those who have ended childbearing according to their education: 81 percent of those with no education have completed childbearing while only 48 percent of those with an intermediate or higher level of education have completed childbearing. When one controls statistically for the fact that women with less education are mostly older women with more children, and women with more education are mostly young women with fewer children, we find that the differential due to the independent effect of level of education nearly disappears. In the case of education of husband, the differentials reverse their pattern.

Continuing discussion of the effects of background variables we note that the largest differentials in ending childbearing by background characteristics occur between the "urban" (actually, a town of about 7,000 people, market area to an administrative district of about 12,000) area of Hapch'on and the clan villages. In general we note that higher proportions of ending childbearing are found among the urban, those with more education, and with more rooms in the house. However, the range of these differentials is not great.

The life cycle measure composed of duration of marriage and number of children ever born (live births only) shows nearly the whole range of possible variation in the proportion who have ended childbearing. It is tempting to think of this range as representing the likelihood

of ending childbearing as years go by and more children are born; that is, as a life cycle variable, as it is named. But the data also represent cohort differences among the four marriage cohorts represented, differences due not to their life cycle but to the varying number of children wanted, and differential access to fertility control. It is not possible with this data to separate completely the effects of life cycle and cohort. However, there is an indication that the figures are more revealing of life cycle tendencies than of differences between cohorts in their desired number of children. If we compare rows two and three of Table 6.5 we see that women with three or fewer children, married 7-16 years, are much more likely to have ended their childbearing than women with two or three children, married 0-6 years. Since the ideal number of children has been decreasing over time in Korea the effect noted should be taken as a life cycle effect rather than a cohort difference. We note the same effect comparing row four with row six and row five with row seven. This is some justification for calling this composite variable a life cycle variable. Yet it cannot be said that this result indicates that a woman's desired number of children decreases over her married life. Since this is aggregate data, it could equally well indicate that women who desire more children have a faster tempo in bearing children, and that therefore women with two or three children who have been married 0-6 years desire more children than women with two to three children who have been married 7-16 years.

Next we look at the relative importance of duration of marriage, number of children, and background variables in predicting completion

of childbearing. Taken alone as a predictor the life cycle variable explains 34 percent of the variance in completion of childbearing, while the background variables together explain only 7 percent. When the effect of each of these variables is measured as a net value (the loss of total explained variance when that variable or set of variables is removed from the analysis) the life cycle variable explained 29 percent of the variance, while the background variables explain only 2 percent. This provides a striking measure of the dominance of duration of marriage and number of children in predicting the end of childbearing.

We may wonder which of the two, number of children or duration of marriage, is more important in predicting completion of childbearing, and what sort of interaction takes place between them. That there is interaction shows up in analysis of variance. Three-way analysis of variance in proportion completed childbearing by duration of marriage (youngest cohort dropped to avoid problem of empty cells in the matrix), number of children, and place of residence shows all three main effects significant at the .01 level, with their F-statistic values 43.4, 7.3, and 4.9 respectively; and the duration of marriage/number of children interaction effect also significant with an F-statistic value of 3.5. This indicates that the interaction effect is significant, but its mean sum of squares is somewhat less than that of the variable "place of residence," and much less than that of the main effects of duration of marriage and number of children. The strength of association of each independent variable with the dependent variable

was calculated.<sup>2</sup> The results were: duration of marriage, .0686; number of children, .0256; the interaction, .0199.

We may also use multiple classification analysis (MCA) to compare these two variables. However, since MCA does not allow a measure of interaction effect we must use an indirect technique. This is to measure the net effect (latent effect) of duration of marriage, number of children, of the two jointly, and of the composite interaction variable. From the analysis presented in Table 6.9 we find that the duration of marriage/number of children interaction decreases the proportion of variance explained by a very small amount. This justifies using MCA to compare effects of duration of marriage and number of children. The strength of association measure given above and the net explanation of variance measure given here are both estimates of the proportion of variance explained by the pure effect of that variable. Yet one analysis attributes greater effect to duration of marriage and the other to number of children. In both analyses, however, the sum of the two effects is close to .09. The joint effect of the two is much greater than this. Our proper conclusion is that the effect of duration of marriage on the completion of childbearing depends on the number of children one has borne, and the effect of number of children on completion of childbearing depends on how long one has been married. To be more accurate the preceding sentence should be expressed in aggregate terms.

#### Analysis of Childbearing Including Fertility Control

Now limiting our analysis to the cohort in the second decade of marriage in 1978 we include use of birth control in the analysis. The

Table 6.9.--Proportion of Variance in Completion of Childbearing  
Explained by Background, Duration of Marriage and  
Number of children, both alone and net of the other  
Variables.

Predictor Variables	% Variance Explained
Background variables alone	.070
Duration of marriage alone	.295
Number of children alone	.311
Background	
Net of duration of marriage	.017
Net of number of children	.017
Duration of marriage	
Net of background	.242
Net of number of children	.036
Number of children	
Net of background	.257
Net of duration of marriage	.051
Background	
Net of duration of marriage & number of children	.011
Duration of marriage	
net of background & number of children	.035
Number of children	
Net of background & duration of marriage	.052
Duration of marriage & No. of children jointly	.347
Duration of marriage & No. of children interaction var.	.343
Total $R^2$ adjusted	.363
Total $R^2$ adjusted using duration of marriage & no. of children interaction variable	.363

analysis is directed by a model in which completion of childbearing and use of birth control affect each other mutually, while each of them are predicted by background variables and the composite life cycle measure. (In this case the duration of marriage component consists of two five-year cohorts.) The model is diagrammed in Figure 6.1. In fact it is just a standard Davis-Black "intermediate variables" type of model (Davis & Blake, 1956). Completion of childbearing is a complex result of decision and behavior. Social structure, represented by background variables and life cycle patterns, influences fertility by means of the intermediate variables, represented here by birth control methods. It is the "desire for children" aspect of "completion of childbearing" which makes this variable at once determined by and a determinant of fertility control.

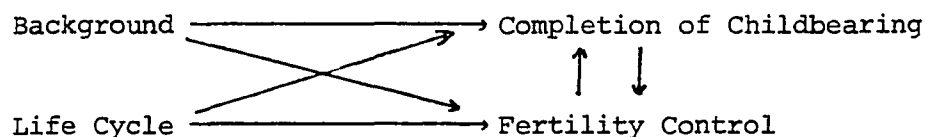


Figure 6.1. Model for Analysis of Completion of Childbearing

First we look at the extent of explanation of variance afforded each step in the model and then at differentials in the use of birth control and completion of childbearing. Table 6.10 shows that the explanation of variance achieved within this one cohort is less than that achieved for all four cohorts together. In particular, explanation of the variation in use of birth control is not high--total  $R^2$  is only .12. The strongest predictor of use of birth control is completion of childbearing, but its latent effect (net effect) is only .05. The life cycle composite variable is again by far the strongest

Table 6.10.--Proportion of Variance in completion of childbearing and use of birth control explained by selected variables, both alone and net of all other variables. Only those women in their second decade of marriage included.

Predictor Variables	% Variance Explained In:	
	Completion of Childbearing	Birth Control
Background variables alone	.070	.036
Life cycle variable alone	.144	.046
Use of birth control alone	.094	xxx
Completion of childbearing	xxx	.098
Background		
Net of life cycle	.079	.023
Net of birth control	.045	xxx
Net of completion of childbearing	xxx	.013
Life Cycle		
Net of background	.152	.033
Net of birth control	.108	xxx
Net of completion of childbearing	xxx	.016
Birth Control		
Net of background	.069	xxx
Net of life cycle	.058	xxx
Completion of Childbearing		
Net of background	xxx	.074
Net of life cycle	xxx	.068
Background		
Net of life cycle & completion	xxx	.007
Net of life cycle & birth control	.062	xxx
Life Cycle		
Net of background & completion	xxx	.010
Net of background & birth control	.125	xxx
Birth Control		
Net of background & life cycle	.042	xxx
Completion of Childbearing		
Net of background & life cycle	xxx	.052
Total R <sup>2</sup> adjusted	.264	.121

predictor of the completion of childbearing. The weak link in the model is the small power of life cycle and background variables in explaining use of birth control. Very likely variation in use of contraceptives depends on involvement in family planning as a program, discussion of it, contact with professional family planning workers, and such factors.

The cohort in its second decade of marriage, having the most variation in completion of childbearing, can be expected to exhibit the most meaningful differences in the proportion having ended childbearing. It is in this decade of marriage that women can be distinguished on the basis of whether their childbearing years are short or long. We see in Table 6.6 that the differential in ending childbearing by place of residence in 1975 is quite substantial, especially for Hapch'on. There 88 percent (89% adjusted) of urban women have ended childbearing but only 42 percent (48% adjusted) of rural women in clan villages have done so. Differentials by education, while following the expected directions, are not large.

As expected, the greatest range in adjusted proportions having completed childbearing is found by duration of marriage and number of children. Only 27 percent of those with 0-2 children have completed childbearing, whereas 78 percent of those with five or more children have done so. The raw percentages are 19 percent and 79 percent respectively.

For those with three or four children the sample size permits a separate view of two five-year marriage cohorts. First we consider the history of these cohorts' schooling and marriage. From Table 6.1

we find that the older group (married 15-19 years in 1978) was age 34.6 on the average in 1975, when they had been married 12-16 years. The standard deviation of 2.78 (assuming normal distribution of ages) means that 68 percent of them were in the age range  $34.6 \pm 2.78$ , or roughly age 32 to 37.5. The average members of the cohort were married at age 20 in 1960-1961, years which twice saw a coup d'etat. They would have been in elementary school in 1950-1951 during the Korean War. The younger cohort averaged age 30.5 in 1975 and would have married on the average 9.5 years earlier, in 1965-1966, during Korea's economic boom, at an average age of 21. They would have been in elementary school after the Korean War. This contrasting history makes comparison of the childbearing pattern of these two cohorts more salient.

The older cohort has completed childbearing to a higher percentage than the younger, as expected: for those with three children the difference is 63 percent to 42 percent, while for those with four children it is 74 percent to 47 percent (see Table 6.11). This difference is due somewhat to a lesser desire for children on the part of the older cohort, but more importantly to less giving birth. And yet the younger cohort has been using fertility control at a distinctly higher rate than those of the older cohort, as Table 6.8 shows. They used fertility control more both in 1975 and 1978, and whether they had three children or four. The difference ranges around 5 percent. The majority of those controlling fertility did so in 1978 but not in 1975. Many may have begun after having a child. Line 3 of Table 6.11 attempts to bring out the gap between desire to not have children and the carrying out of the desire. This gap is larger for the younger

Table 6.11 --The End of Childbearing and Fertility Control  
in Two Five-Year Cohorts

	Number of Children and Years Married, 1975			
	3 children		4 children	
	7-11	12-16	7-11	12-16
(1) Adjusted % Desiring No More Children	65	63	78	91
(2) Adj. % Not Giving Birth	59	71	56	78
(3) Desire-Performance Gap ((1) - (2))	6	2	22	13
(4) Adj. % Completed Childbearing	42	63	47	74
(5) Adj. % Mean Number of Reports to be "current user"	0.92	0.67	0.98	0.83
(6) % Not "current user" in 1975 nor 1978	33.3	44.4	21.3	31.0
(7) % "current user" in 1975	33.4	27.8	29.8	25.9
(8) % "current user" in 1978	52.2	41.7	70.2	62.1
(9) Number of Respondents	69	36	47	58

Source: Tables 6.6 and 6.12 and associated cross-tabulation  
of predictor variables.

cohort, and it is larger for those with four children than for those with three. It is not known whether this is due to change of mind, to contraceptive failure, or to failure to persevere in fertility control. At any rate, use of fertility control to end childbearing is a complex process balancing pluses and minuses. Despite the gap between desire and performance, the higher rate of fertility control by the younger cohort should be taken as an indication that they will end their childbearing sooner and with fewer children than the cohort preceding them.

#### Differentials in the Completion of Childbearing

Do different segments of the population follow distinctly different childbearing patterns? Perhaps the homogeneity of the sample across background variables is more striking than the differences found. For all cohorts the adjusted proportions having completed childbearing differ by only 3 percent for categories of respondent's education, by 8 percent across categories of husband's education, by 8 percent across categories of number of rooms in the house, and by 18 percent by urban-rural contrast. However, within the 10-19 year cohort the urban-rural contrast is considerable, a difference of 42 percent for Hapch'on and 20 percent for Cheju. The great difference in Hapch'on should be taken with caution because there are only 26 cases in the urban sample. It is important to notice, however, that the difference is not due to differences in the expressed desire for children (Table 6.12), which is comparatively small, but rather due to differences in giving birth to a child during the 1975-1978 interval (a difference of 31 percent in Hapch'on and of 28 percent in Cheju). Paradoxically, however, the difference in reported use of fertility control is not

Table 6.12.--Proportion Desiring No More Children in 1975 and Proportion Who Gave Birth to a Child in the 1975-1978 Interval, Both Raw Scores and Adjusted Scores, by Selected Predictor Variables. 10-19 Year Marriage Cohort Only.

Predictor Variable In 1975:		Prop.Desiring No More Children		Prop.Gave Birth		
# Children	Duration of Marriage	Raw	Adj.	Raw	Adj.	N
0-2	7-16	.31	.34	.43	.34	42
3	7-11	.67	.65	.38	.41	69
3	12-16	.72	.73	.31	.29	36
4	7-11	.81	.78	.40	.44	47
4	12-16	.90	.91	.22	.22	58
5+	7-16	.94	.94	.16	.16	95
Residence 1975						
Hapch'on, urban		.88	.87	.04	.01	26
"	rural, non-clan	.65	.68	.39	.32	46
"	rural, clan	.68	.69	.38	.32	50
Cheju, urban		.80	.77	.13	.17	70
"	rural, seaside	.78	.81	.29	.30	78
"	rural, mountain	.78	.76	.41	.45	77
Education of Respondent						
none		.73	.73	.27	.27	55
elementary		.75	.76	.32	.31	259
intermediate +		.88	.82	.09	.17	33
Education of Husband						
none		.59	.71	.31	.27	32
elementary		.73	.73	.36	.35	173
intermediate		.79	.79	.22	.24	81
secondary +		.88	.83	.20	.23	61
#Rooms in House						
1-2		.77	.82	.35	.36	116
3		.75	.76	.29	.27	153
4+		.77	.69	.22	.26	78
Use of Contraception						
Not at all		.63	.70	.42	.40	118
1975 only		.79	.77	.26	.30	34
1975-1978 Interval only		.79	.76	.29	.28	124
Both times		.92	.86	.10	.14	71
Total (Grand Mean		.76		.29		347
Total R <sup>2</sup> Adjusted			.231	.167		

great; in Hapch'on only .13 on a scale from 0 to 2, or 6.5 percent. In Cheju, the mountain villages have even a slightly higher rate of use of contraceptives than the market, or urban, areas. In this "paradox" we see once again the lack of clarity of the role of reported use of fertility control in this survey.

### Conclusions

Fertility control in the research area is effective enough so that desire for children is the strongest predictor of subsequently bearing a child, and desire not to have a child is effectively carried out in 86 percent of the cases. The effectiveness is less than this for the cohort in their second decade of marriage.

Completion of childbearing takes place mostly in the second decade of marriage. There are indications that among the younger cohorts the cessation of childbearing will occur sooner.

The population studied is rather homogeneous in its cessation of childbearing, in the sense that differences due to place of residence, education level of husband and wife, and size of the home are small compared with differences due to duration of marriage and number of children. In the cohort in its second decade of marriage the urban-rural contrast in completion of childbearing is strong.

Use of contraception is not as well explained by the background variables and life cycle variables used here as is desire for children, actual giving birth, or the completion of childbearing. Its use is predominantly to stop having children rather than for spacing them.

Table 6.13.--Age-specific marital fertility. Whole sample, for 1976 and 1977, for all cases, and for cases consistent in account of household member.

Age	1976			
	All Cases		Consistent Cases	
	<u>N</u>	<u>Fertility</u>	<u>N</u>	<u>Fertility</u>
25-29	158	.19620	100	.19000
30-34	197	.11675	147	.10884
35-39	223	.080717	208	.05289
40-44	259	.019305	157	.01911
45-49	203	.0098522	127	.01575
Total	1040	2.114*	739	1.933*

Age	1977			
	All Cases		Consistent Cases	
	<u>N</u>	<u>Fertility</u>	<u>N</u>	<u>Fertility</u>
25-29	126	.30952	83	.31325
30-34	196	.14286	141	.12766
35-39	284	.05986	211	.03792
40-44	263	.01901	155	.01936
45-49	216	.01389	133	.00752
Total	1085	2.726*	723	2.529*

\* Calculated by  $5 \sum_i F_i$ , where

i = age groups, 25-29, 30-34, etc.

and F - fertility.

## FOOTNOTES TO CHAPTER VI

1. More details for these calculations are given on page 101.
2. The formula followed for calculation of strength of association (Hays, 1973:513) is:

$$w^2 = \frac{SS_Y - df_Y (MS_E)}{MS_E + SS_T} \quad \text{where,}$$

$w^2$  is the strength of association of variable Y,  
 $df_Y$  is the degree of freedom of variable Y,  
 $MS_E$  is the error mean square, and  
 $SS_T$  is the total sum of squares.

## CHAPTER VII

COMMON RESIDENCE WITH PARENTS  
AND WOMAN'S WORK RELATED TO CHILDBEARING

We have chosen to study common residence with parents and woman's work, two circumstances of family life which relate to the division of labor between mother-in-law and daughter-in-law. For common residence we have comparable data from 1975 and 1978, and so can measure the change during the research interval. For woman's work the 1975 census and the 1978 interview questions are not comparable, so a rate of change cannot be measured. For the question of common residence we will first seek to confirm the findings of Chapter Two, but with added information available on whether the parents are alive or not and on the birth order of the respondent's husband. Secondly we will observe the direction of change in common residence, and thirdly we will try to relate change in childbearing to the custom and its trend. For woman's work we will not observe the trend but will relate it to childbearing, common residence, and other measures of the division of labor in the household.

Analysis of the Custom of Common Residence with ParentsComparison to the 1975 Analysis

There are two questions of interest here. The first is the comparison and contrast of the custom of common residence in Cheju Province, which has its own tradition of independence and separate residence, with Kyongnam Province and its more typical Korean tradition of common residence of the eldest son with his parents. The second is

whether cases of separate residence are to be considered due to Western ideas, or to be considered an adaptation of the traditions to present day circumstances. We recall briefly that the 1975 data was inconclusive on this point, but gave stronger support to the view that those in poorer economic circumstances were less likely to be found in stem families.

The results of cross-sectional multivariate analysis of the 1978 data are given in Table 7.1. The sample is small because only those respondents with at least one parent-in-law living and whose husbands were present in 1975 are included. In Hapch'on the eldest son lives in common with his parents in 85 percent of the cases, showing the strength of the custom. But the custom is not exclusively applied to the eldest son only. We see 24 percent of the younger sons dwelling in common with parents. This may indicate an adaptation to circumstances. None of these cases were brothers dwelling in the same household. In the few cases of two married brothers in one household in the sample, one brother had married after October 1, 1975, so that his wife was not a respondent in the survey. There is a small adjustment of the rates of stem family among eldest and younger sons for traits on other variables. The first generalization of our data might be that the custom of common residence is being followed quite strongly by the sons who are living in Hapch'on.<sup>1</sup> This is supported by a cross-tabulation of birth order of husband by his parents' place of residence (Table 7.2). Where the husband is eldest son 90.4 percent have the father-in-law in the same household. There are only five exceptions. With the mother-in-law there are more exceptions (24),

Table 7.1.--Proportion of Respondents with at Least One Parent-in-Law  
Living who are Living in Common Residence with Them.  
Both Raw and Adjusted Proportions are Given

Predictor Variable	Hapch'on			Cheju		
	Raw	Adj.	N	Raw	Adj.	N
Duration of Marriage 1978						
0-9	.655	.623	29	.212	.283	85
10-19	.618	.644	76	.195	.199	169
20-29	.541	.526	74	.235	.169	102
Childbearing						
ended	.532	.555	111	.228	.217	206
didn't end	.691	.653	68	.187	.202	150
Occupation of Husband 1975						
non-agricultural	.217	.460	23	.167	.144	96
agricultural	.647	.612	156	.227	.235	260
Education of Husband						
none or elementary	.593	.586	135	.192	.186	151
intermediate	.750	.697	20	.200	.190	105
secondary or more	.458	.538	24	.250	.270	100
Education of Respondent						
none	.512	.570	41	.222	.249	45
elementary or more	.616	.599	138	.209	.205	311
Place of Residence 1975						
urban	.350	.517	40	.220	.229	123
non-clan rural (seaside)	.655	.674	55	.262	.276	107
clan, rural (mountain)	.667	.574	84	.159	.137	126
Number of Rooms in House						
1 or 2	.348	.480	69	.091	.086	88
3	.718	.659	85	.206	.201	141
4 or more	.840	.673	25	.299	.308	127
Birth Order of Husband						
first son	.846	.813	104	.242	.232	219
second or younger	.240	.286	75	.161	.177	137
Parents-in-law						
both living	.653	.624	49	.126	.101	127
only one living	.569	.580	130	.258	.272	229
Total (Mean)	.592		179	.211		356
Total R <sup>2</sup> Adjusted		.446			.071	

Table 7.2.--Residence of Parents by Birth Order of Son

Residence of Father	Number (%) of Parents										
	Hapch'on					Cheju					Total
	First Son		Younger Son		Unk.	First Son		Younger Son		Unk.	
N	%	N	%	N	N	%	N	%	N		
Same household	47	90.4	9	29.0	-	18	14.9	13	17.8	1	
Same village	1	1.9	13	41.9	-	67	55.4	39	53.4	2	
Same <u>myon</u>	1	1.9	3	9.7	-	13	10.7	6	8.2	-	
Further away	3	5.8	6	19.4	-	23	19.0	15	20.5	1	
Subtotal	52	100.0	31	100.0	-	121	100.0	73	100.0	4	
Deceased	228		199		12	262		238		-	
Status unknown	1		-		-	1		1		-	
Total	281		230			384		312		4	1223
Residence of Mother											
Same household	108	81.8	20	23.3	-	70	25.5	38	21.7	1	
Same village	5	3.8	36	41.9	-	153	55.8	96	54.9	2	
Same <u>myon</u>	2	1.5	6	7.0	-	23	8.4	12	6.9	-	
Further away	17	12.9	24	27.9	-	28	10.2	29	16.6	1	
Subtotal	132	100.0	86	100.0	-	274	100.0	175	100.0	4	
Deceased	148		144		12	108		137			
Status unknown	1		-		-	2		-		-	
Total	281		230		12	384		312		4	1223

and in most of these cases (17) the mother-in-law is living outside the township (myon). These may well be with another son in an urban area.

Considering other variations, all of which have the adjusted proportion of stem families lying between .46 and .70, we see that the high proportions (near .70) are found among those with three or more rooms in the house, those in non-clan rural villages, and those whose husbands have intermediate level education. The lower proportions (adjusted proportion near .50) are found among those with only one or two rooms in the house, those whose husbands have high school education or more, those in the market town of Sangja, and those with non-agricultural occupations. We see smaller variations due to duration of marriage (.64 vs. .53), and to ending childbearing. Looking at raw proportions only, the non-agricultural occupations stand out with only 22 percent being stem family households. Having only 23 cases in this category warns us not to overemphasize this finding. For Hapch'on the total  $R^2$  is .45, which is good for this type of data.

Cheju Province has a different custom, in that separate residence is expected. I had a long conversation with one young wife who was from the Korean mainland, married a Cheju native, and the couple was living with his parents. She complained that many Cheju women would criticize the young couple, asking "Can't you take care of yourselves?" This attitude of independence in Cheju was mentioned in Chapter One. It was encountered there and mentioned by earlier researchers as well: in 1935-1937 (Izumi, 1966), after World War II (Seok, 1949), and more recently (K. K. Lee, 1975). Therefore it is not surprising that the

variable "birth order" does not yield much variation in common residence. The adjusted proportion of eldest sons in common residence with their parents is .23, and that of younger sons is .18. Rather, the need of the parents seems to be a factor in common residence. Where only one parent is surviving there is 2.7 times the rate of occurrence of common residence compared with cases where both are still living. As in Hapch'on, the number of rooms in the house is a limiting factor. In households with one or two rooms only 8.6 percent are stem-type households, whereas if the household has four or more rooms 31 percent are stem-type. Finally, those in their first decade of marriage are more likely (28%) to be in common residence with parents.

To interpret these findings we must consider that the definition of common residence is living and eating together. Often in Cheju Island the two generations live in the same compound but do not eat together. A simple criterion of distinguishing "living in a compound" from "proximity" was not evident, so the criterion of "same village"<sup>2</sup> (maul) was chosen as a further indication of relationship between the generations. The distribution (Table 7.2) shows that there is no significant difference between the eldest son and younger son in the rate of living in the same village, or the same household, as his father (Chi square = .628; p = .89).

Common residence, while not occurring at a high rate for any category in Cheju, occurs at a proportion greater than .27 for those in the first decade of marriage, those with a high school education or more, those with only one parent surviving, those with four or more rooms in the house, and those living in the seaside rural areas. It

occurs at a proportion less than .14 for those with only one or two rooms in the house, those with both parents living, those in the mountain villages, and those whose husbands are in occupations other than agriculture or fishing.

How do these results for 1978 compare with those for 1975? We must compare them by the general direction of influence of each variable. Vastly different sample size led to use of different categories in the variables. First, in Hapch'on we find that education measures are curvilinear for husbands, negligible for wives, just as in the 1975 analysis, although for different reasons. Occupation, comparing agricultural with all others, has the same result as in 1975: agricultural households are more likely to be stem. The urban-rural distinction was not included in multivariate analysis in 1975. However, the myon in which the market town of Samga is located did have a lower-than-average rate of stem-type households in the 1975 data as well. The positive association of education of wife with proportion stem found in the 1975 data disappears in the 1978, most likely due to the control over mortality of parents-in-law. The pattern of common residence by duration of marriage is maintained even with control over mortality. Finally, the new variable "end of childbearing" has an effect independently of duration of marriage. In summary, education, which may be taken as a source of new and sometimes Western ideas, has an inconclusive relationship, while occupation, residence in small urban centers, and smallness of dwelling place have a negative effect on the proportion of households which are stem. These three could all possibly be related to a history of moving or of changing jobs.

In Cheju, as we have already seen, controlling for birth order could make little difference in the results. We can attribute the observed differences between 1975 and 1978 data to control for mortality, or to small sample size in 1978. The number of rooms in the house retains its importance and direction of influence in the 1978 data. Occupation retains the same relationship as in 1975, although some explanation is called for. In the 1975 sample non-agricultural occupations had lower proportions stem except for professional and technical workers, who are few in number. (There were only 21 out of the 700 households, or 3.0 percent in the 1978 sample, and 645 out of 17,692, or 3.6 percent in the 1975 sample.) Therefore, this subcategory has little impact on the more general category "non-agricultural." Education level of wife, which showed a positive association with stem households in the 1975 data, shows little relationship in the 1978 subsample. Education of husband, which showed an inconsistent, though generally negative relationship in the 1975 data, shows a weak, but positive relationship in the 1978 subsample. However, effects due to occupation, education, and place of residence are all negligible--their combined net explanation of variance in Cheju is less than .01. Almost all of the total  $R^2$  of .07 for the Cheju sample is explained by the number of parents surviving, the number of rooms in the house, and the birth order of the husband, particularly by the first two of these variables. End of childbearing has no effect in the Cheju sample. We may summarize the Cheju findings by saying that common residence occurs based on the need of the parents, especially when widowed, yet this too is rare if the available housing is too small. Perhaps data

on the health of parents would have increased the explanation of variance. In Hapch'on, by contrast, the force of custom is much more important. In both places there is a slight but consistent pattern of common residence being more likely in the earlier years of the younger generation's marriage. In Hapch'on this also bears relationship to end of childbearing, but does not in Cheju.

This cross-sectional analysis offers little support for the view that those living in nuclear-type households are doing so in response to Western ideas encountered in higher levels of education. The direction indicated is rather that separate occupation of father and son and the associated migration, especially in Hapch'on, is a strong factor in separate residence. We may expect the decrease in proportion engaged in agriculture to result in increasing separation of residence in Hapch'on and in other areas like it on the Korean mainland. Small family size and a quicker end of childbearing can be expected to decrease the years during which the younger generation lives with the older generation. In Cheju, however, where separate residence is already the custom, no expectations for change can be held on the basis of this analysis.

#### Trend in Common Residence, 1975-1978

We now look at the rates of changes from common residence to separate residence, and vice versa, among the respondents in the survey. A believable measure of the rate of change in household type requires careful consideration of the accuracy of the data. The 1978 interview schedule first asked the respondents to give an account of household membership by relation to head of household, then asked for

recall of births, deaths, moving in, or moving out of household members, and finally probed deeper by comparing the reported numbers of persons, of males, and of females reported for 1978 with the numbers recorded for 1975 and seeing whether the recalled demographic events gave a consistent account of changes. If the account were inconsistent the respondents were probed according to the census definition of household membership, particularly regarding students, boat and airplane and military personnel, and regarding the dates of the reported vital events. In 19.3 percent of all completed interviews a consistent account could not be achieved. This advises a cautious analysis.

A good starting point for analysis of change is to make use of the two possible measures of the changes in household type allowed by the data: that based on reported membership in 1975 and 1978, and that based on the events reported for the 1975-1978 interval. Table 7.3 presents the changes in household type between 1975 and 1978 as calculated separately from these two types of data. There are fewer households in 1975 because in some cases two respondents had been together in one household in 1975 but were in separate households in 1978. The procedure for reconstructing what the situation must have been in 1975 had to be done very carefully, considering each case separately. The rules followed in the reconstruction are presented in Table 7.4. The principles in the reconstruction are very simple, but the application is complicated in that (1) data is available only on households where the interview could be completed, complicating the cases where there were two respondents in one household in 1975, and (2) stem-type households can have more than the minimal members

Table 7.3.--Distribution of Household Types in 1975 and 1978,  
Completed Interviews Only, as Given by Classification  
Based on Reported Membership and by Reconstruction  
from Recorded Events.

Household Type	By Classification Based on Reported Membership							
	Hapch'on				Cheju			
	1975		1978		1975		1978	
	N	%	N	%	N	%	N	%
Stem	175	34.3	164	31.9	118	17.0	114	16.4
Nuclear	316	62.0	337	65.6	545	78.5	557	80.1
Other	19	3.7	13	2.5	31	4.5	24	3.5
Subtotal	510	100.0	514	100.0	694	100.0	695	100.0
Unknown 1975	5		5		5		5	
Total	515		519		699		700	

Reconstructed by Recorded Events:

	Hapch'on				Cheju			
	1975		1978		1975		1978	
	N	%	N	%	N	%	N	%
Stem	178	34.9	164	31.9	116	16.7	114	16.4
Nuclear	319	62.5	337	65.6	556	80.1	557	80.1
Other	13	2.6	13	2.5	22	3.2	24	3.5
Total	510	100.0	514	100.0	694	100.0	695	100.0

Table 7.4.--Reconstructing Household Type in 1975 from Recorded Events in the Research Interval.

No. Respondents Interviewed 1978	Event Recorded in Research Interval	Household Type		*Increment (+) or Decrement (-) to			No. of Cases**	
		1978	as Recorded in 1978	Household Type			Hapch'on	Cheju
				Stem	Nuclear	Other		
Two	Household Divn.	stem	2 nuclear	-1	+2	0	2	0
Two	"	stem	1 stem 1 nuc	0	+1	0	2	1
One	"	stem	stem	0	0	0	1	0
One	"	stem	nuclear	-1	+1	0	4	2
One	"	stem	other	-1	0	+1	1	1
One	"	nuclear	nuclear	-1	+1	0	1	0
One	Parental death	stem	stem	0	0	0	10	2
One	"	stem	nuclear	-1	+1	0	12	2
One	"	nuclear	nuclear	0	0	0	3	2
One	"	stem	other	-1	0	+1	0	1
One	Parental move out	stem	stem	0	0	0	1	0
One	"	stem	nuclear	-1	+1	0	6	3
One	"	stem	other	-1	0	+1	0	1
One	Parental move in	nuclear	stem	+1	-1	0	1	3
One	Son's family in	nuclear	stem	+1	-1	0	1	0
One	Patrilocal marriage	stem	stem	0	0	0	2	2
One	"	nuclear	stem	+1	-1	0	9	4
One	"	other	stem	+1	0	-1	1	0
One	"	nuclear	nuclear	+1	-1	0	0	1

\* Increments and decrements are given with signs representing the result of the event which occurred. For example, parental death reduces a stem family to a nuclear, so it is given a "-1" for stem and a "+1" for nuclear. When reconstructing the 1975 situation, all signs would be reversed.

\*\* Source of number of cases: Table 7.5.

necessary to be defined as stem, allowing a stem-type household to divide into one nuclear and one stem-type household in some cases, but into two nuclear-type households in other cases. There is close agreement in the number of households of each type as found by the two methods, particularly of numbers of stem households. The changes between "nuclear" and "other" were not attempted to be reconstructed. We may say that the net changes between stem-type and nuclear-type households are nearly accounted for by the recorded events.

On the other hand there are many households which have changed in classification between 1975 and 1978 for which no event is recorded to account for the change. Table 7.5 shows, for instance, that 40 households changed from stem to nuclear in Hapch'on, and 26 changed from nuclear to stem. There are events to account for just 23 changes from stem to nuclear, and to account for just 11 changes from nuclear to stem. This leaves 17 and 15 changes, respectively, with no corresponding events. The number lacking correspondence in Cheju is even greater.

Such a lack of correspondence could be due, obviously, to events which occurred but were unreported, to errant reports of household membership during the interviews in 1975 and 1978, or possibly to misclassification of households during analysis. The third error is easiest to avoid, since it requires merely noting the presence in one household of parent and married son or daughter-in-law. The other two types of error are more likely. Of the two, errant reports of household membership is thought to be the more frequent cause for three reasons. First, during the interview the interviewer could probe for

Table 7.5.--Occurrence of Selected Demographic Events by Change in Classification of Household 1975-1978.

Number of Events (Number of Households)

Classification		N	<u>Hapch'on</u>										
1975	1978		Parental Death	Parental Move Out	Household Division	Patrilocal Marriage	Parental Move In	Son's Family Move In					
stem	stem	134	10 (10)	1 (1)	6 (3)	2 (2)	-	4 (1)					
stem	nuclear	40*	13 (12)	6 (6)	23 (6)	-	-	-					
nuclear	stem	26	1 (1)	-	-	9 (9)	1 (1)	4 (1)					
nuclear	nuclear	282	3 (3)	-	3 (1)	-	-	-					
other change		33	-	-	6 (1)	2 (1)	-	-					
new nuclear		4											
Total		519	27 (26)	7 (7)	38 (11)	13 (12)	1 (1)	8 (2)					

		<u>Cheju</u>										
stem	stem	69*	2 (2)	-	2 (1)	2 (2)	-	-				
stem	nuclear	42	2 (2)	3 (3)	5 (2)	1 (1)	-	-				
nuclear	stem	31	1 (1)	-	-	4 (4)	5 (3)	-				
nuclear	nuclear	505	3 (2)	2 (1)	-	1 (1)	-	-				
other change		52	1 (1)	1 (1)	3 (1)	-	-	-				
new nuclear		1										
Total		700	9 (8)	6 (5)	10 (4)	8 (8)	5 (3)	-				

\* These numbers do not include new nuclear households which branched off during the 1975-1978 interval.

recall of additional events to account for changes in number of members in the household, but could not probe for an account of changes in household type. Second, as Table 7.6 shows, inconsistency in the account of numbers of members takes place more frequently in those households which are recorded to have changed in type between 1975 and 1978. Third, the census definition of household membership--living and eating together--does not necessarily fit the respondents' subjective notions of household membership. Or, in other words, there is difficulty in getting respondents to list household members according to the census definition of de jure membership. I think that it is because of this difficulty that there are more inconsistent accounts of number of members in those households which are recorded to have changed type.<sup>3</sup>

If the inconsistency represents mainly errant reports of household membership then we are justified, by the successful reconstruction of 1975 household types using recorded events, in assuming that these errors tend to occur equally through including persons who should be excluded and through excluding persons who should be included. This means that the percent distribution of household types in 1975 and 1978 would be good estimates of the true state of affairs, and that the recorded events would be a good estimate of the rate of change in household type. Thus we may take the decrease in percent stem household in Hapch'on from 34.3 percent in 1975 to 31.9 percent in 1978 to be a reasonably good measure of the decrease in that household type. It is not a completely unbiased measure, however, since it doesn't include the households where interviews could not be completed. Also,

Table 7.6.--Household Type in 1975 and 1978 by Consistent or Inconsistent Account of Changes in Number of Household Members

Household Type		Total	Consistent Account		Con. in Number Incon. in Sex		Inconsistent Number		Unknown (Pongsan Myon)		Total %
1975	1978		N	%	N	%	N	%	N	%	
Stem	Stem	134	75	(56.0)	13	( 9.7)	18	(13.4)	28	(20.9)	100
Stem	Nuclear	44*	20	(45.5)	5	(11.4)	10	(22.7)	9	(20.4)	100
Nuc.	Stem	26	9	(34.6)	2	( 7.7)	10	(38.5)	5	(19.2)	100
Nuc.	Nuc.	282	172	(61.0)	14	( 5.0)	44	(15.6)	52	(18.4)	100
Other Change		33	21	(63.6)	2	( 6.1)	6	(18.2)	4	(12.1)	100
Total		519	297	(57.2)	36	( 6.9)	88	(17.0)	98	(18.9)	100

Household Type		Total	Consistent Account		Con. in Number Incon. in Sex		Inconsistent Number		Missing Data		Total %
1975	1978		N	%	N	%	N	%	N	%	
Stem	Stem	70*	51	(72.9)	2	( 2.9)	17	(24.3)	-	-	100
Stem	Nuclear	42	20	(47.6)	8	(19.0)	14	(33.3)	-	-	100
Nuc.	Stem	31	11	(35.5)	1	( 3.2)	19	(61.3)	-	-	100
Nuc.	Nuc.	505	405	(80.2)	19	( 3.8)	81	(16.0)	-	-	100
Other Change		52	37	(71.2)	-	-	14	(26.9)	1	( 1.9)	100
Total		700	524	(74.9)	30	( 4.3)	145	(20.7)	1	( 0.1)	100

\* These numbers include the new nuclear households which branched off during the 1975-1978 interval.

both the 1975 and 1978 percent stem-type household would be higher than the actual percentage in the region because only households with an eligible woman present would be included. Very few stem-type households would be without an eligible woman. Households without an eligible woman would be either nuclear or other.

To make the measure of the rate of household division and of patrilocal marriage more complete, account was taken of households where the interview could not be completed. If, in a stem household the interview could not be completed because the daughter-in-law moved out of the household, then household division was implied. These known cases have been added to the events recorded in completed interviews. Then the observed rates of household division were applied to the cases of incompleting interview where the whole household had moved away together. Thus, an estimate of the number of events of household division and of patrilocal marriage was obtained. The calculation is shown in Table 7.7. When a census enumeration district (ED) is taken as a unit, the events of household division and of patrilocal marriage fulfill the assumptions of a Poisson process. On these assumptions an annual rate per ED was calculated. This may be a useful comparative measure.

#### Interpretation of the Rate of Change in Household Type

What does the number and rate of these events tell about the custom of common residence? First, the low rate of household division shows that those residing with parents are not moving out in great numbers. Secondly, the low rate of patrilocal marriage indicates that there must be many marriages taking place with a neolocal pattern, or

Table 7.7.--Computation of Annual Rate (Per Enumeration District)  
of Household Division and of Formation of Stem-Type  
Household by Patrilocal Marriage

	<u>Hapch'on</u>		<u>Cheju</u>	
	Hhld Division	Patrilcl Mrriage	Hhld Division	Patrilcl Mrriage
(1) Recorded Events	11	12	4	8
(2) Number of Households		519		700
(3) Events per Household	.0212	.0231	.0056	.0114
(4) Hhhld Division Implied in Cases of Incomplete Interview	3		4	
(5) Number of Hhlds Moved Away, Not Interviewed		71		149
(6) Expected Number of Events in These Households	1.6	1.6	.85	1.7
(7) Total Number of Events: (1) + (4) + (6)	15.6	13.6	8.85	9.7
(8) Number of Enumeration Districts (ED)		10		20
(9) Events per ED, for Whole Research Interval	1.56	1.36	.44	.49
(10) Annual Rate per ED	.59	.51	.17	.18

with the patrilocal residence period too short to be glimpsed by either interview reported in this survey. Thirdly, we see that patrilocal marriages are too few in number in Hapch'on to balance the decrease in common residence due to parental death and household division.

The low frequency of patrilocal marriage is easily understood as a result of the abandonment of the countryside by the young generation. This is particularly true of Hapch'on, less true of Cheju. The composition of the survey's respondents by duration of marriage was one indication of this phenomenon. A measure of the rate of the phenomenon is presented in Table 7.8. Here again we assume that the leaving of home or returning is a Poisson process, but in this case each home may be considered a unit, since the moving out or in of unmarried descendants does not happen in bunches, and can happen many times per household in one interval. These figures show dramatically the rate of loss of young people from Hapch'on Gun. We may conclude that the process of the diminishing occurrence of common residence in Hapch'on is due to a small extent to household division, but to a much larger extent to young people leaving the area and not returning.

#### The Special Case of Migrant Households

The very small sample of migrants to large cities shows that the relationship between the generations is quite strong among them, although this is not evident on the basis of present common residence. Only three of the 19 (16%) are in common residence. Of eldest sons with at least one parent alive, three are in common residence with them and four not. In each case where neither parent was in common

Table 7.8.--Distribution and Annual Mean per Household of Number of Unmarried Descendants Moving Out or Into Households, by Duration of Marriage of Respondent.

Hapch'on															
Duration of Marriage 1975 (years)	Number Moved Out							Annual Mean $\bar{x}$	Number Moved In					Annual Mean $\bar{x}$	
	N	0	1	2	3	4	5		0	1	2	3	4		
0-4	39	36	1	2				.0481	38	1					.00960
5-9	48	42	3	2	1			.0781	48						-
10-14	78	65	12	1				.0673	77	1					.00480
15-19	97	42	35	16	3	1		.3093	92	4			1		.03094
20-24	113	34	41	30	7	1		.4181	102	8	2	1			.04976
25-29	89	37	29	16	6	0	1	.3539	82	2	3	1	1		.06319
30+	55	26	19	7	2	1		.2708	51	3	0	1			.04091
Total	519	282	140	74	19	3	1	.2592	490	19	5	3	2		.03322

Cheju															
Duration of Marriage 1975 (years)	Number Moved Out							Annual Mean $\bar{x}$	Number Moved In					Annual Mean $\bar{x}$	
	N	0	1	2	3	4	5		0	1	2	3	4		
0-4	78	76	2					.00960	78						-
5-9	100	97	3					.0112	100						-
10-14	136	128	8					.0220	134	2					.00551
15-19	129	100	23	6				.1017	125	4					.01163
20-24	126	71	38	14	3			.2232	114	11	1				.03869
25-29	80	48	23	8	1			.1969	76	3	1				.02344
30+	41	38	11	1	1			.1176	46	4	1				.04412
Total	700	558	108	29	5			.0970	673	24	3				.01607

residence with an eldest son the respondent said that they intended to have the parent come live with them in the future. This response means at least that the respondents have internalized the norm of caring for retired parents. Two of the respondents said they would have the parents come "when they are old."

Some characteristics of the household, the housing, and place of woman's work for these migrants are summarized in Table 7.9. It is very informative that over half of the nuclear family units involved had moved to the city gradually: in seven cases some unmarried sons or daughters had gone to the city ahead, for study or work; in another three cases the family was maintaining households in the rural area and in the city, with members staying at either place according to convenience or need. In the other nine cases the unit had moved all at once, but this figure includes four cases of household division, where the intention was expressed to have parents come in the future.

What we see in this small sample are examples of results of research referred to in Chapter One. Much migration in Korea is accomplished with the aid of kin. Emotional ties, financial aid, visiting back and forth, etc. are frequent. In three cases among the migrants in this sample this led to a reference to "our country house" as the place where parents or children were staying. This may be taken as an indication that perhaps many other nuclear-type households in the survey may also subjectively consider themselves part of a stem-type household which maintains two separate residence units. If this is true it fits well with our supposition that the respondents'

Table 7.9.--Summary of Selected Characteristics of 19 Respondents  
Who Migrated to Large Cities

Characteristic	Distribution	
City	Pusan	11
	Chinju	4
	Seoul	2
	Cheju City	2
Duration of Marriage	0 - 9 years	6
	10 - 19 years	9
	20+ years	4
Children Living at Home	Average	3.2
Household Members	Average	5.2
Persons per Room	Average	2.8
Bearing of Child, 1975-1978	Yes	4
	No	14
Housing Quality	Good	4
	Average	7
	Poor	6
	Unknown	2
Neighborhood Quality	Good	3
	Average	8
	Poor	6
	Unknown	2
Type of Tenure	Own Home	4
	Rent	14
	Company Dormitory	1
History of Move	Gradual	10
	All at Once	9
Household Type	Stem	3
	Nuclear	16
Birth Order of Husband	Eldest	13
	Younger	6
Parents Living	At Least One	10
	None	9
Wife's Work Activity	Only at Home	10
	Market Work	2
	Factory, Construction	7

subjective concept of their household membership does not correspond with the census definition of household membership.

### Respondent's Work

We have already found evidence that the interrelationship between childbearing and common residence with parents is weak, but statistically significant in Hapch'on, and that there is no evidence of such a relationship in Cheju Province. Now we consider the principal types of work the respondents are engaged in, to see in what way this work may relate to childbearing and to availability of mother-in-law.

The data on types of work activity was gathered from a question about the respondent's main work: whether it was only around the house, whether it included agriculture, or whether she also did extra work. The interviewers were told that the definition of "extra work" was "anything done to bring in extra income." The three-in-one question format was arrived at during the pretest by trial and error. It was the format found to be most effective in communicating quickly to the respondent what type of information was sought.

### The Types of Work in Which Respondents are Engaged

The houses in the "urban" or town areas of the sample tend to be huddled close to the main road or roads of the town, with fields within close walking distance. They are at once commercial and agricultural settlements. Only sixteen of the respondents who were interviewed had moved to cities where agriculture would not be a part of their lives. Even the casual observer of the Korean countryside of the late 1970s would notice that both men and women work the fields. The observer would also notice, though, that informal conversational

groups would usually be of one sex. The division of labor between men and women was formerly quite distinct. During the days of this research, however, I saw women doing almost all types of agricultural work. Twice when I presented this observation to the men of some village they replied that women do not do the heavy work that requires great muscle power, such as plowing behind an ox or use of the stand-up tractors which have become common. The interviewers agreed with this account. (This was also the men's explanation of why men took more and longer work breaks than women!) The background against which to view the work of women is that the division of labor between the sexes is changing. The change is in response to the decreasing numbers of adult workers in the rural areas.

In Table 7.10 it is evident that the great majority of respondents, both in Hapch'on and Cheju, are engaged mainly in a combination of housework and agriculture. Less than 10 percent of the respondents work only in the house, and about 23 percent of the respondents have some sort of work for extra income. The types of the "extra work" are shown in Table 7.11. Since the categories used in the census fit an urban sample better than the mainly rural one in this study, the census categories of industry and occupation could not be followed. The categories given here were constructed from the answers given by the respondents to the same two questions which are used in the census to ask about industry and occupation: "Specifically, with what kind of work group, or in what field do you work?" and "What kind of work is it?" We see a concentration in just a few categories: (1) labor in one's own field, which usually consists of raising cash crops such

Table 7.10.--Places of Respondent's Main Work Activities  
During the Research Interval.

Place of Work Activity	Activity During Research Interval					
	Hapch'on		Cheju		Total	
	N	%	N	%	N	%
House only	52	10.1	55	7.9	107	8.8
House and field	362	70.0	472	67.7	834	68.7
House and extra	38	7.4	38	5.5	76	6.3
House, field, extra	65	12.6	132	18.9	197	16.2
Missing information	6	--	3	--	9	--
Total	523	100.0	700	100.0	1223	100.0

Table 7.11.--Types of Work for Extra Income During Research Interval or Previously.

Industry of Work Group	Type of Work				Total
	Labor	Selling, Hawking, work as agt.	Running a Shop	Trained Skill or Spec.Talent	
Own home, field or boat or a neighbor's	122	0	0	17	139
Common subsidiary production groups or cooperatives	10	0	0	13	23
Small commercial shops	0	8	37	2	47
Five-day market, hawking	5	30	0	0	35
Larger commercial firms	0	1	0	0	1
Small service estabs.	2	1	9	1	13
Larger service or gov't. agencies	0	2	1	3	6
Home industry	31	0	0	0	31
Manufacturing companies	9	0	0	0	9
Total	179	42	47	36	304

as tobacco, silkworms, or vegetables; (2) marketing, hawking goods; (3) running a small commercial shop; or (4) home industry. The "trained skill or special talent" category in common subsidiary production groups or cooperatives contains almost solely women divers of Cheju Island.

These types of extra income work have been further categorized as compatible with rearing children or incompatible. By industry or work group, larger commercial firms, larger service establishments, and manufacturing companies would be incompatible with child rearing on the job. By type of work, only work requiring training or special talent is judged incompatible. Since these are nearly all divers, the judgment of incompatibility is very clear. Small commercial or service shops are usually attached to one's home, so are compatible with raising children on the job, as is marketing or hawking. It is common to see women engaged in these tasks with a child on their back, or nearby. Fishing would not be compatible, but none of the respondents were engaged in fishing. All told there are only 52 respondents engaged in extra income work. For this reason our expectation of a negative relationship between extra income work and childbearing is not strong. Analysis of 1970 census data showed the lack of relationship between women's employment and fertility to be generally true in Korea, particularly in rural areas (Lee and Cho, 1977).

Work for Extra Income, Childbearing, and Residence of Mother-in-Law

Multiple classification analysis has been used to "predict" the categories of respondents engaged in work for extra income. The ability to predict such work on the basis of variables measured in

this study is slight. Although many combinations of variables were tried, no multiple  $R^2$  greater than .06 could be achieved for the whole sample. Nevertheless there are interesting significant differences between categories of several predictor variables.

In Table 7.12 we see some effects on extra work of background variables, and of the predictor "giving birth to a child in the research interval," while controlling for availability of mother-in-law. The mother-in-law was considered available (for help in raising a child) if she were living in the same household or in the same neighborhood. In the analysis controlling for residence of mother-in-law statistically (Table 7.13), only a slight difference appears in the adjusted mean between those who have ended childbearing (.23) and those who have not (.19). This gap widens somewhat when control is achieved by performing the analysis only on those whose mother-in-law is not available (.24 compared with .12). (See "Gave Birth," Table 7.12.) This effect, though slight when considered as an explanation of who is likely to engage in extra work, is important enough that we may say that of women whose mother-in-law is not available those who did not bear a child during the research interval are twice as likely to be engaged in extra work as those who bore a child.

This finding, shown to hold while controlling for background variables, may be looked at in more detail by a cross-tabulation which can preserve all the nominal categories of the variable "location of respondent's main work." The cross tabulations are shown in Table 7.14. It shows that not only are those who bore a child more likely to be engaged in extra work if their mother-in-law is available, but they

Table 7.12.--Proportion Engaged in Work for Extra Income  
by Selected Predictor Variables, Controlling  
for Availability of Mother-in-law.

Market Access	R's Educ.	Use of Contra.	Mother-in-law						
			Available			Unavailable			
			N	Raw	Adj.	N	Raw	Adj.	
hard	none	no	35	.17	.17	114	.11	.14	
		yes	21	.24	.25	31	.06	.09	
hard	some	no	97	.14	.15	121	.07	.08	
		yes	88	.22	.22	67	.25	.26	
easy	none	no	25	.12	.14	68	.18	.20	
easy	some	no	104	.29	.29	122	.25	.23	
easy	none	yes	125	.31	.30	108	.37	.33	
	or some								
	Eta <sup>2</sup>			.026			.070		
	F			2.20*			7.82**		
Education of Husband									
	none		36	.17	.21	112	.12	.15	
	elementary		210	.20	.20	269	.18	.19	
	intermediate		105	.22	.22	80	.33	.28	
	high+		96	.32	.31	73	.32	.25	
	husband not present		48	.27	.28	97	.13	.14	
	Eta <sup>2</sup>			.014			.036		
	F			1.72			5.80**		
No. Rooms in House									
	1 or 2		113	.31	.31	254	.19	.21	
	3		219	.19	.20	257	.17	.16	
	4+		163	.24	.22	120	.28	.24	
	Eta <sup>2</sup>			.012			.010		
	F			2.92			3.17*		
Gave Birth 1975-1978									
	no		359	.23	.23	517	.21	.21	
	yes		136	.24	.24	114	.13	.11	
	Eta <sup>2</sup>			<.001			.006		
	F			.001			3.57		
	Total (Mean)		495	(.234)			631	(.195)	
	Total R <sup>2</sup> Adj.							.020	
								.073	

\* One-way analysis of variance F-test significant at <.05 level

\*\* One-way analysis of variance F-test significant at <.01 level

Table 7.13.--Proportion of Women Engaged in Work for Extra Income  
by Selected Predictor Variables

Predictor Variable	N	Raw	Proportion Adj.	Eta <sup>2</sup>	F
Place of Residence 1975					
Hapch'on, market	95	.38	.37		
rural, non-clan	175	.15	.18		
rural, clan	205	.11	.13		
Cheju, market	230	.24	.21		
seaside	222	.29	.30		
mountain	204	.20	.19	.036	8.30**
Education of Respondent					
none	326	.17	.20		
elementary	705	.22	.22		
intermediate +	100	.36	.30	.015	8.35**
Education of R's Husband					
none	148	.14	.18		
elementary	481	.19	.21		
intermediate	186	.27	.25		
high +	169	.33	.27		
husband not present'75	147	.18	.19	.020	5.74**
Dur. of Marriage & No. of Children					
0-9 years	0-1	83	.20	.19	
0-9 years	2-3	77	.26	.22	
10-19 years	0-3	163	.22	.21	
10-19 years	4	117	.26	.24	
	5+	101	.27	.24	
20-29 years	0-4	136	.23	.25	
	5	110	.21	.22	
	6+	181	.19	.19	
30+		163	.17	.21	.006 .90
End of Childbearing					
ended		791	.23	.23	
not ended		340	.19	.19	.001 1.68
Use of Contraception					
not at all		591	.17	.18	
1975 only		101	.22	.21	
1978 only		296	.27	.26	
both times		143	.30	.27	.017 6.34**
Total (mean)		1131	.218		
Total R <sup>2</sup> Adjusted				.046	

Table 7.14.--Location of Main Work of Respondent, by Residence of Mother-in-law, Controlling for Respondent Having Given Birth in the Research Interval or Not.

R's Place of Main Work	Respondent Bore No Child in Research Interval										DK
	Residence of Mother-in-law										
	Same House		Same Village		Further Away		Deceased		Total		
	N	%	N	%	N	%	N	%	N	%	
House only	10	6.2	9	4.1	18	17.8	43	9.2	80	8.5	
House & agric.	119	73.9	152	69.4	56	55.4	317	68.2	644	68.1	3
House & extra	6	3.7	11	5.0	16	15.8	31	6.7	64	6.8	
House, ag, & extra	26	16.1	47	21.5	11	10.9	74	15.9	158	16.7	
Total	161	99.9	219	100.0	101	99.9	465	100.0	946	100.0	
NR or NA	1		1		0		5		7		10

Pearson's R = -.03, p = .158; Cramer's V = .128; Eta = .110

R's Place of Main Work	Respondent Bore Child in Research Interval										DK
	Residence of Mother-in-law										
	Same House		Same Village		Further Away		Deceased		Total		
	N	%	N	%	N	%	N	%	N	%	
House only	6	8.0	1	1.4	11	27.5	9	11.4	27	10.2	
House & agric.	55	73.3	49	69.0	21	52.5	62	78.5	187	70.6	
House & extra	4	5.3	4	5.6	2	5.0	2	2.5	12	4.5	
House, ag, & extra	10	13.3	17	23.9	6	15.0	6	7.6	39	14.7	
Total	75	99.9	71	99.9	40	100.0	79	100.0	265	100.0	
NR or NA	0		1		0		1		2		2

Pearson's R = -0.15, p = .008; Cramer's V = 0.192; Eta = .226

are also more likely to work only in the house if their mother-in-law is not available. The same relationships hold for those who have not ended childbearing. For the respondents who have ended childbearing or who did not bear a child during the research interval the relationship to extra work does not hold. However, the relationship between working only in the house and not having one's mother-in-law available holds even for those who did not bear a child (and for those who completed childbearing). Thus the data do provide evidence for the expected cooperation between mother-in-law and daughter-in-law in raising children and doing housework. Yet when viewed against all the factors involved in women engaging in work for extra income it is not of great importance.

#### Interpretation of Observed Differences

##### Background and Life Cycle Variables

Although the low multiple  $R^2$  achieved with multiple classification analysis in this study does not allow a full account of work for extra income the differentials still provide insight into this activity. We pay most attention here to the range of differences in the adjusted means, as a measure of the pure effect of each variable. The largest range of variation is found due to place of residence in 1975. Particularly in Hapch'on, women in the market town are almost three times as likely to engage in work for extra income as women in clan villages. Accessibility of the market place is probably the important factor in this difference. Such an explanation would fit the situation in Cheju, where the women in seaside villages are more likely to engage in work for extra income than are the women in the market towns.

In Cheju, because of the paved perimeter highway and good bus service, seaside villages have ready access to market places. Furthermore, the divers often live in seaside villages.

The second greatest range of adjusted means occurs according to level of education of the respondent. Almost as great a range as this occurs in categories of education of husband and use of contraceptives. These probably all indicate increased innovativeness or ability to respond to opportunities. That this may be so is suggested also by an analysis of variance at work for extra income which indicated a significant 3-way interaction between place of residence, education of respondent, and use of contraception. Table 7.12 shows that this interaction has a heightening effect. The urban, educated women who uses contraception is the most likely to be engaged in work for extra income.

It should be noted that end of childbearing and duration of marriage bear little relationship to work for extra income. Thus this work does not vary over the life cycle and with childbearing as does participation in the labor force in many countries. This is, as we have seen, due to the type of work being done.

#### Household Division of Labor

The first attempts at analysis of work for extra income produced two unexpected results. First, in some preliminary analysis it was found that work for extra income increased with greater numbers of dependent children present in 1975. (Definition of dependent children is given in Chapter Two.) Secondly, it was expected that women whose husbands were not present in 1975 would be more likely to be engaged

in work for extra income, because of greater need to do such work. Table 7.14 shows, however, that such women are slightly less likely to do such work. These results lead one to suspect that the more members there are in the household the more likely it is for the respondent to be engaged in work for extra income. This would fit with the observation that even students and the elderly help with work in an agricultural household. It also indicates a good deal of flexibility in the division of labor by sex.

Table 7.15 shows the results of multiple classification analysis of work for extra income based on measures of possible division of labor in the household. In particular the variable composed of the number of household members economically active in 1975 and the net gain or loss of household members by moving in or moving out during the research interval is revealing. Looking at the raw mean scores we can see two effects: (1) above average proportions of .26 to .29 occur only where there were at least two persons economically active in 1975; and (2) wherever there was a net loss of members over the 1975-1978 period there is a below-average participation of the respondent in extra work, except where there had been 4+ members economically active in 1975 with a net loss of only one member. These effects are significant at the .05 level according to the F-test for one-way analysis of variance. The pattern is modified only very slightly when adjusted for effects of the other variables in the analysis. Considering the financial help which goes back and forth between rural and urban units of kin households the relationship between outmigration and woman's work for extra income suggests the following interpretation:

Table 7.15.--Proportion Engaged in Work for Extra Income by Selected Predictor Variables Including Household Supply of Labor

Predictor Variable	N	Proportion Working		Eta <sup>2</sup>	F
		Raw	Adj.		
Place of Residence					
Hapch'on, market	97	.38	.38		
rural, non-clan	176	.15	.18		
rural, clan	205	.11	.13		
Cheju, market	236	.23	.22		
seaside	228	.29	.28		
mountain	205	.20	.17	.035	8.38**
Education of Respondent					
none	329	.17	.20		
elementary	712	.22	.22		
intermediate +	106	.34	.27	.012	7.21**
Education of Husband					
none	152	.14	.18		
elementary	485	.19	.20		
intermediate	189	.28	.24		
high +	173	.32	.27		
husband not present	148	.18	.23	.021	6.04**
Use of Contraception					
not at all	603	.17	.18		
1975 only	100	.22	.23		
1978 only	301	.27	.26		
1975 and 1978	143	.30	.28	.017	6.58**
Residence of Mo-in-law					
same household	222	.18	.18		
same village	281	.27	.24		
further away	132	.23	.20		
deceased	512	.20	.22	.006	2.38
Supply of Labor					
#Econ.Active	Net Hhld				
1975	member change				
0-1	-5 to -1	40	.08	.06	
0-1	0 or +	184	.22	.18	
2	-5 to -2	43	.14	.18	
2	-1	125	.14	.15	
2	0	376	.27	.25	
2	+	31	.29	.28	
3	-5 to -2	51	.20	.23	
3	-1	50	.18	.23	
3	0 or +	97	.24	.25	
4+	-5 to -2	37	.14	.20	
4+	-1	39	.26	.30	
4+	0 or +	74	.20	.24	.018
Total (Mean)		1147	.217		1.89*
Total R <sup>2</sup> Adjusted				.052	

\*Significant at &lt;.05 level for one-way analysis of variance

\*\*Significant at &lt;.01 level.

households are seeking extra income opportunities, and the more they seek them in the cities, the less they will be able to seek them in the rural areas.

In summary, we see that participation in extra work relies to a certain extent on access to a commercial center of some sort, on the drive or imagination or education to take advantage of opportunities, and on adequate household manpower to allow time for the woman to participate in the work for extra income.

The significance of work for extra income in the areas surveyed is not its negative relationship to childbearing, which shows up only when the mother-in-law is not available. Rather, the data indicate that it relates to opportunities available for it and to household division of labor. The research suggests that studies of outward migration from rural areas and its relationship to household economics take account of the types of small-scale entrepreneurship or petty capitalism practiced in those areas.

## FOOTNOTES TO CHAPTER VII

1. It must be kept in mind that the sample doesn't include households where there is no married woman age 20-49. The villages have households of older persons whose sons have moved away. Perhaps it could be said that sons who moved away do not follow the custom. This will be discussed in a later section.
2. The market town, even where the town's population is over 10,000, have distinct clusters of houses with distinguishing names, which could be called one's maul, i.e., "village" or "hamlet."
3. Additional indications that this analysis of the problem holds are: (1) the occasional contradictory information on the chart of household members and the closing question on residence of parents-in-law; (2) the discovery in interviewing migrant families that the parents-in-law frequently went back and forth between city and country; and (3) lower proportion of changes accounted for in Cheju, where the parents-in-law may live in the same compound but eat separately.

## CHAPTER VIII

## SUMMARY

Although Chapter Six and Chapter Seven each had its own summary, for a sense of completeness it is good to take up the points of research listed in Chapter Three to give an explicit account of each one.

Results of Specific Points of Research

- 1a. For those living in Hapch'on (Kyongnam Province) the custom of common residence of eldest son and parents was found to be strong.
- 1b. In Cheju eldest sons were no more likely to be living near their parents than were younger sons, and were only slightly more likely to be living in the same house.
- 1c. Migrants to the large cities from Hapch'on maintained an intention of living in common with parents if they weren't actually living with them.
2. Aging of parents may indeed increase the likelihood of common residence, but it couldn't be shown in this data for two reasons: (1) it is masked by the increasing likelihood of household division as the years go by; (2) although those of 30+ years of marriage with a parent alive had a higher rate of common residence than those younger than themselves, there were too few cases, and they had to be dropped from the multivariate analysis.

3. In Cheju, not in Hapch'on, the death of one parent greatly increases the likelihood of common residence.
4. There were not enough cases of a parent moving in to see whether this followed upon the daughter-in-law bearing a child or not. However, common residence was found to increase the likelihood of work for extra income among women who had given birth in the research interval.
5. There were too few cases of migrants to large cities who could be interviewed to consider analysis beyond that summarized in 1c above.
6. If the mother-in-law were not available, women who gave birth were only half as likely as those who didn't to work for extra income, but the effect was not important overall in explaining which women have such work.
7. The use of family planning has a strong positive relation to work for extra income.
8. Family planning appears to be used to end childbearing, rather than for spacing. Yet use of family planning does not signal a sure end to childbearing.
9. We cannot say that the bearing of children is taking place almost entirely within the first ten years of married life yet. However, women of 12-16 years of marriage have sharply reduced desire for children if they have three or more. The immediately younger cohort is adopting family planning to a greater extent than those who went just before them.

10. Having ended childbearing is a factor in work for extra income only if the mother-in-law is not available for help. This is true also for those married longer than ten years.
11. The family life cycle, as indicated by duration of marriage and number of children, is a strong factor in use of family planning, a significant but small factor in common residence patterns, and of very little importance in work for extra income.
12. Completion of childbearing has a small independent effect on common residence in Hapch'on, but not in Cheju.
13. Having had a net loss in household membership correlates with less work for extra income.

What do these findings imply about the direction of change in common residence and in woman's work?

(1) Continued decrease in the rate of common residence of parents and married son, but not widespread adoption of the conjugal family as the ideal. Since decrease in common residence in Hapch'on is due to the independent needs of the generations, and since common residence patterns in Cheju, which stresses independence, are stable, mainland residence patterns may converge on the residence patterns now observed in Cheju. That is not to say, however, that the cultural differences will disappear.

(2) Increasing use of family planning and decrease in child-bearing years and in number of children.

(3) Possibly more time to women in rural areas for extra income work, but this trend is offset by the net outflow of manpower from the rural areas.

(4) More variety in the roles of women as their average level of education improves. An increased importance accorded their role provided economic opportunities are available. And improved transportation allowing greater market accessibility would improve these opportunities.

Finally, if the reader will put up with a small amount of repetition, it is good to gather together the research findings which relate to the family life cycle.

(1) The years of childbearing extend from marriage to about 16 years after marriage, but depend also on how many children are born. The years of childbearing are becoming shorter and the number of children fewer.

(2) Childbearing is brought to an end artificially in the vast majority of cases, but adoption of birth control and its effective use is a complex process, not just an irrevocable decision which ends childbearing.

(3) The women of the sample, who are from rural areas and small cities, do not vary much in the length of their childbearing years. Especially in the expression of desire to have no more children there is little difference among the women when controlling for number of children and duration of marriage. However, the urban women in the sample are more effective than the rural women in carrying out this expressed desire. Since this may well be a temporary difference, the similarity of the women should be stressed. So we may speak of a typical period of childbearing of Korean women. However, the typical period should not be described merely in terms of years, but in terms

of both years and number of children. Homogeneity in childbearing is therefore one of the causes of Korea's pattern of childbearing, which shows a sharp peak at ages 25-29. Another cause is that Korean women tend to marry at an age near the median. Thus childbearing in much of Korea may be described as being "in phase." This implies that changes in the fertility patterns of the nation are more likely to have a strong impact of the subsequent age composition of the population.

(4) The end of childbearing has an effect of the woman's relationship to her mother-in-law, in that it lessens the need for her cooperation in raising children. This cooperation showed up in the data in several ways.

(5) In Kyongnam Province but not in Cheju Province, a difference shows up in correlates of the family life cycle of an eldest son and a younger son. The eldest son begins with a better home (by patrimony) than the younger son. But later in the life cycle the eldest son has a greater dependency burden than the younger son. No significant fertility differences showed up between eldest sons and younger sons, nor between women whose mother-in-laws lived in the same house or nearby and those whose mother-in-laws lived further away or had died.

(6) There is a tendency in both Cheju and Kyongnam Provinces to dwell in common with parents in the earlier years of married life. The occurrence of the pattern is not frequent enough to be called "typical." The data show it is more typical for the son to migrate out of a rural area before marriage and to not return.

## APPENDIX A

## QUESTIONNAIRE

## Change in Family Life Survey

Address: \_\_\_\_\_ myon \_\_\_\_\_ li, house number \_\_\_\_\_

Household head \_\_\_\_\_ Respondent's name \_\_\_\_\_

Identification numbers: enumeration district number \_\_\_\_\_

living quarter number \_\_\_\_\_

household number \_\_\_\_\_

respondent's number \_\_\_\_\_

(Transition statement from contraceptive prevalence questionnaire to  
Change in Family Life Survey: "Now I will ask a few questions about  
changes in the lives of household members since the population census  
2 1/2 years ago.")

1. Is \_\_\_\_\_ still head of the household?

1. Yes (go to Q3)

2. No \_\_\_\_\_ → 2. Who is the head of the household now?

\_\_\_\_\_

What is this person's relation to  
the former household head? \_\_\_\_\_

What is the reason for the change  
of household head? 1 death  
2 moving out  
3 retiring  
4 other

Result of Interview

1 completion

2 refused interview

3 cut off interview

4 couldn't locate house

5 moved away

6 respondent out

7 respondent moved

out of the household

8 respondent unknown

9 respondent died

Present address of  
households which  
moved away:

3. Please tell me the household members who are presently living in this house. Give them in order by relation to head of the house.

reference number	relation to household head	4. Sex
<u>01</u>	_____	<u>1 M 2 F</u>
<u>02</u>	_____	<u>1 M 2 F</u>
<u>03</u>	_____	<u>1 M 2 F</u>
<u>04</u>	_____	<u>1 M 2 F</u>
⋮		
<u>11</u>	_____	<u>1 M 2 F</u>
Total	_____	_____

5. Among these have any been born or moved in since October of 1975?

1 Yes                      2 No (to question 10)



6. Who is it? (ref. no.)	7. Type of Event 1 brth 2 mrrge 3 other	8. Date of Event	9. Mother's ref. no.
			(if a child)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

10. Also, are there any members, though not present now, who were here in October 1975?

1 Yes                      2 No (to question 15)



11. Who is it? (Rel. to hhld head)	12 Sex 1 M 2 F	13. Event leading to absence	14. Date of Event
		1 death 2 mrrge 3 other	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

15. According to the October 1975 population census there were at that time \_\_\_ persons, \_\_\_ males and \_\_\_ females in this house. After that \_\_\_ persons left and \_\_\_ persons were born or moved in. So that now there are \_\_\_ persons. Is that right?

16. In the meantime did you use any method to prevent having a child?

1 Yes →  
2 No

17. Which method was it?

18. Do you do mainly housework? Or do you also do farming? Or perhaps do extra work as well?

1 housework only →

2 housework & farming only →

3 housework & extra work only →

4 housework, farming & extra work →

19. Have you ever done extra work?

1 yes →

2 no  
(to Q23)

20. When was that?  
from \_\_\_\_\_ to  
yr mo  
\_\_\_\_\_ yr mo

21. Specifically with what kind of work group or in what field do you work?

22. What kind of work is it?

23. Since the October 1975 population census were there any major repairs of improvements to your house?

1 yes →

2 no

24. What did you do?

1 rebuilt, or added a room →

2 other improvements

25. So now how many rooms are there in the house?

26. Finally, I will ask about your husband. Is he a first-born son or not?

1 first-born

2 not first-born

27. And is your father-in-law living?

1 yes →

2 no

28. Where does he live?

- 1 same house
- 2 same village
- 3 same myon
- 4 further away

29. Is your mother-in-law living?

1 yes →

2 no

29. Where does she live?

- 1 same house
- 2 same village
- 3 same myon
- 4 further away

## APPENDIX B

## SURVEY OF CHANGES IN FAMILY LIFE

## Codebook

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
1-2	Province: 38: Kyongnam 39: Cheju	Survey, heading
3-4	Section ( <u>Gun</u> ); 49: Hapch'on 31: Pukcheju 32: Namcheju	"
5-6	Place ( <u>up</u> or <u>myon</u> ): 32: Pongsan      52: Taeyang 44: Samga        47: Yongju 11: Hallim        33: Choch'on 31: Andok        34: P'yoson	"
7-9	Enumeration District Codes as on 1975 Census	"
10-12	Living Quarter Number	25% sample, 1975 Census
13-15	Household Number Consecutive numbering	"
16-18	Person Number Consecutive numbering of household members	Survey, heading
19	Interview Result 0: 1978 interview not completed 1: Completed interview 2: Completed interview, second respondent in household (Household data is duplicated.)	Survey, front page
20	Reason for incompleteness or (for completed inter- views) reason for initial incompleteness 0: Completed regularly 1: Unaccountable incompleteness 2: Refused interview 3: Cut off interview 4: Household couldn't be located 5: Household moved away	Survey, front page

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
20 (cont.)	6: R not available 7: R moved out of household 8: R unknown to household 9: R died	
21	Household Head: 1: Same as in 1975 2: Changed since 1975	Survey, Q1
22	Reason for Change of Household Head: 1: Head died 2: Head moved out 3: Head retired 4: Other reason 9: Not applicable (NA)	Survey, Q2
23	R's Relation to the Household Head 1: R is household head (HH) 2: Wife of HH 3: Daughter-in-law of HH 4: Mother of HH 5: Daughter of HH 6: Other relationship 9: NA (R died or divorced)	Survey, Q3
24	Household Composition 1: Non-relative, one-person, or institutional household 2: Fragmentary (related persons, but no nuclear unit present) 3: Nuclear family 4: Stem family, R's parent-in-law present 5: Stem family, R's married son present 6: Nuclear plus married relatives, but not stem family 7: R and one or both of her parents 8: Other	Survey, Q3
25-26	Number of Persons in the Household, 1978	Survey, Q3
27	Number of Males in the Household, 1978	Survey, Q3
28	Number of Females in the Household, 1978	Survey, Q3
29	1: consistent account of household members, 1975 to 1978 2: consistent in total number, but not in number by sex	Survey, Q3 through Q14, comparing Q15

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
29 (cont.)	3: inconsistent account of number of household members, 1975 to 1978; or, for Pongsan <u>Myon</u> , no information available on 1975 members	
30-31	R's use of family planning during the 1975-1978 interval 00: Used no method 01: Pill 02: Loop (IUD) 03: Condom 04: Vasectomy 05: Tubal ligation 06: Douche 07: Abstinence 08: Rhythm 09: Injection 10: Withdrawal 11: Induced abortion 12: Other method 13: Used various "complete" methods 98: No response 99: NA (spouse not present)	Survey, Q16 and Q17
32	R's usual work 1: Only housework 2: Housework and farming 3: Housework and extra job 4: Housework, farming, and extra job 8: No response (NR) 9: NA	Survey, Q18
33	Had extra job or not in the past 1: Yes 2: No 9: NA (includes those who worked at extra job continuously to the present)	Survey, Q19
34-37	Year and month (two columns each) of starting date of extra job all 9s: NA (R has not had any extra job, or has held job continuously)	Survey, Q20
38-41	Year and month (two columns each) of stopping date of extra job 9999: NA (R has not had any extra job, or has held it continuously)	Survey, Q20

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
42	Industry or work group of extra job 0: Had no extra job 1: One's own field or boat, or a neighbor's 2: Common agricultural or fishing groups or cooperatives 3: Small commercial shops 4: Five-day market, or hawking 5: Larger commercial firms 6: Small service establishments 7: Larger service establishment or government agencies 8: Home industry 9: Manufacturing companies	Survey, Q21
43	Type of work performed 0: No extra job 1: Manual, or semi-skilled 2: Selling, or acting as agent without owning a shop 3: Owning and operating a small shop 4: Work requiring long-term training or special talent 9: NA	Survey, Q22
44	Housing improvements over past two years, eight months 1: Made major improvements 2: Made no major improvements 3: Moved to another house 8: NR 9: NA	Survey, Q23
45	Type of improvement 1: Built house or added room(s) 2: Other major improvements 9: NA	Survey, Q24
46-47	Number of rooms in house used by the household 01, 02, 03, as recorded 09: 9 or more 98: No response (NR)	Survey, Q25 or Census, housing section
48	R's husband's birth order 1: eldest (or only) son 2: younger son 8: NR 9: NA	Survey, Q26

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
49	R's father-in-law 1: living 2: not living	Survey, Q27
50	R's father-in-law's place of resident 1: same house as R.      4: further away 2: same village (maul) 8: NR 3: same <u>up</u> or <u>myon</u> 9: NA	Survey, Q28
51	R's mother-in-law same as column 49	Survey, Q29
52	R's mother-in-law's place of residence same as column 49	Survey, Q30
53-94	Demographic events in chronological order	Survey, Q5-14
53	First event, relation of person to R 1: spouse 2: child, grandchild, daughter-in-law 3: parent-in-law 4: parent, grandparent 5: other relative	"
54	Sex of person 1: male 2: female	"
55	Type of event 1: birth to R 2: marriage into household ( <u>sijip onda</u> ) 3: move into household 4: birth, not to R 5: death 6: marriage out of household ( <u>sijip kanda</u> ) 7: other move out of household 8: division of stem family 9: unknown (missing information)	"
56-59	Year and month of event (e.g. 7606)	"
60	Second event relation of person to R Same as col. 53	"
61	Second event, sex of person Same as col. 54	"
62	Second event, type of event Same as col. 55	"

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
63-66	Second event, year and month of event Same as col. 56-59	Survey, Q5-14
67	Third event, relation of person to R	"
68	Third event, sex of person	"
69	Third event, type of event	"
70-73	Third event, year and month of event Col. 67-73 same as col. 53-59	"
74	Fourth event, relation of person to R	"
75	Fourth event, sex of person	"
76	Fourth event, type of event	"
77-80	Fourth event, year and month of event Col. 74-80 same as col. 53-59	"
81	Fifth event, relation of person to R	"
82	Fifth event, sex of person	"
83	Fifth event, type of event	"
84-87	Fifth event, year and month of event Col. 81-87 same as col. 53-59	"
88	Sixth event, relation of person to R	"
89	Sixth event, sex of person	"
90	Sixth event, type of event	"
91-94	Sixth event, year and month of event Col. 88-94 same as col. 53-59	"
95	Total number of births to R, 1975-1978	Survey, Q7, Q9
96	Total number of marriages into the household	Survey, Q7
97	Total number of other moves into the household	Survey, Q7
98	Total number of births, not to R	Survey, Q7
99	Total number of deaths	Survey, Q13

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
100	Total number of marriages out of the hhld.	Survey, Q13
101	Total number of other moves out of the hhld.	Survey, Q13
102	Total number who left by stem family division	Survey, Q11, Q13
103	Completion of childbearing of R 1: completed childbearing 2: did not complete childbearing	Census, wife section, Q9, Survey, Q7
104	Type of Community Residence, 1975 1: Hapch'on, daily market present 2: Hapch'on, no daily market, non-clan village 3: Hapch'on, no daily market, clan village 4: Cheju, daily market present 5: Cheju, no daily market, seaside village 6: Cheju, no daily market, mountain village	Survey, address heading
105	Duration of Marriage in 1978 1: 0-9 yrs.      3: 20-29 yrs. 2: 10-19 yrs.    4: 30+ yrs.	Census, wife section, Q18
106	Blank space	
107	Highest level of schooling R attended 1: never attended 2: elementary 3: intermediate 4: high 5: junior college 6: college or university and above	Census, Q13
108	Completion of highest level of schooling 1: presently attending in 1975 2: graduated 3: quit before graduating	Census, Q13
109	Highest level of schooling of R's husband 1-6: same as col. 107 9: NA (no husband present, 1975)	Census, Q13
110	Completion of highest level of school 1-3: same as col. 108 9: NA (no husband present, 1975)	Census, Q13

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
111	Occupation of R, 1975 0: none, or retired 1: professional, technical 2: administrative, managers 3: clerical 4: sales workers 5: service workers 6: farm owners, managers 7: farm workers, fishermen 8: laborers, except farm 9: military	Census, Q30
112	Occupation of R's husband, 1975 same as col. 111	Census, Q30
113	Household type, 1973 1: Non-relative; single-person or institutional 2: Fragmentary; related persons with no nuclear unit among them 3: nuclear, census definition 4: stem, Parent(s) of hhld head present 5: stem, married son of hhld head present 6: other types	Census, Q10
114	Number of dependent children in hhld, 1975 number as recorded	Census, Q10, Q26
115	Ownership of place of work, 1975 1: family owned 2: owned by others 3: both of the above 4: NR, don't know 5: NA blank: NA	Census, Q32
116	Number of rooms in house used by household, 1975 1, 2, 3, etc. as recorded 9: nine or more	Census, housing section
117	Number of persons in hhld economically active, 1975 number as calculated from individual hhld members	Census, Q26
118-119	R's code number on 1975 census	Census, wife section

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
120-121	Children ever born to R, total in 1975 00: 0 01: 1 02: 2 . . . 55: refusal to take interview in 1975 due to physical or mental disability 66: not at home 77: refusal in midst of interview 88: vacant house or not a dwelling unit 98: NR or don't know 99: NA	Census, wife section, Q1
122	Desire for children, 1975 1: Yes, desire more children 2: No 3: Uncertain 4: DK or NR (sometimes a blank) 5: NA	" Q9
123-124	R's year of first marriage	" Q18
125	Present marriage R's first or not 1: first marriage 2: second marriage . . . 7: seventh or more 8: DK or NR 9: NA	" Q19
126-127	Current use of family planning, 1975 00: using no methods 01: 1 method 02: 2 methods                   induced abortion .                                   is not included . . . 12: 12 methods or more 13: DK or not certain 14: NA	Census, wife section, Q25
128-131	Case identification number, sequential.	

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
132-133	Relationship of R to the head of hhld, 1975 01: head of the household 02: wife 03: unmarried child 04: unmarried brother or sister 05: parent 06: grandfather or grandmother 07: wife's brother or sister 08: wife's parent 09: married son or daughter 10: other relative 11: non-relative 12: maid 13: head of one-person household 14: head of institutional household 15: member of institutional household 20: married woman, other than wife of the head, with children 21: her children 30: second married woman, other than wife of head, with children 31: her children	Census, individual section
134-135	Completed years of age of R, in 1975 00,01...99, as reorded	Census, individual section
136	Marital status of R, 1975 1: single (never married) 2: currently married 3: widowed 4: divorced	"
137-138	Age at first marriage of R (as recorded)	"
139	Number of male children living with mother in the hhld (as recorded)	"
140	Number of female children living with mother in hhd (as recorded)	"
141	Number of male children not living with mother in hhld (as recorded)	"
142	Number of female children not living with mother in hhld (as recorded)	"

<u>Column</u>	<u>Description of Item</u>	<u>Source</u>
143	Number of male children dead (as recorded)	Census, individual section
144	Number of female children dead (as recorded)	"
145	Major work done during the reference period, 1975 1: worked 2: layed off 3: unemployed 4: unemployed looking for job for the first time 5: housewife 6: student 7: aged; too old to work 8: physically or mentally unable to work 9: others not classified above blank: NA (less than 14 years old)	"
146	Worked for pay or profit? 1: yes 2: no blank: NA (less than 14 yrs old, or R worked or was layed off)	"
147	Looking for job? 1: yes, but couldn't find a job 2: not looking for job due to temporary hindrance 3: never looked for a job blank: NA (less than 14 yrs old or answered "yes" col. 146)	"
148-150	Industry (Codes given in a special manual)	"
151-153	Occupation (Codes given in special manual)	"
154	Class of worker 1: employer 2: self-employed 3: unpaid family worker 4: employed full-time regular 5: employed part-time or not regular 6: employed daily basis blank: NA	Census incividual section

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