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**LIVING ARRANGEMENTS OF THE ELDERLY IN BANGKOK, THAILAND:
IMPACTS OF LOW FERTILITY, LIFE-COURSES, AND NON-MARRIAGE**

A Thesis in

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by

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ABSTRACT

The primary focus of this dissertation is the living arrangements of elderly people in Bangkok, Thailand. The specific research questions are constructed around three major topics: the determinants of living arrangements; the dynamics of living arrangements; and the function of living arrangements. These issues are examined both quantitatively and qualitatively, using data collected during one year of fieldwork. A questionnaire schedule, designed to follow the lives of elderly respondents in a flexible manner, was used to collect over 1,000 cases of representative data from the entire Bangkok Metropolis. In-depth life history interviews were also conducted with both elderly parents and their co-residing children, producing a total of 28 taped, transcribed, and translated interviews. Contextual information gathered through such ethnographic approaches as participant observation in the life of Bangkok residents further added valuable qualitative data.

Analyses of the determinants of living arrangements have shown that the number of surviving children is a significant determinant of co-residence, suggesting that the future elderly with considerably fewer available children are less likely to live with a child in their old age. However, as suggested by the powerful positive effects of having never-married children, these children may contribute to the maintenance of co-residence; despite the lowered availability of children, if one child remains never-married, that child can co-reside with the parent. Because the marriage of children is a major risk for the loss of co-residing children, and conflicts with in-laws in extended families are obstacles for co-residence, never-married children are structurally more suited for co-residence. Moreover, the continuity of co-residence over time suggests that the children's decisions to remain at home are critical in ensuring co-residence in later life. In contrast to a common assumption, however, the results have found that household structures *per se* are not major determinants of the elderly's economic security, while such factors as the health

status of the elderly and the socio-economic status of children are more important. Significant contributions of the elderly to their households, economically and otherwise, also suggest a need to reconsider the function of co-residence, particularly with never-married children.

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Chapter 1

INTRODUCTION

This dissertation examines living arrangements of the elderly in Bangkok, Thailand. Thailand has experienced major demographic changes during the past few decades. The total fertility rate (the expected number of live births to a woman in her lifetime) has drastically declined since the 1970s, from approximately six to the current below-replacement level of less than two children. Life expectancy at birth has increased over these years from less than 60 to almost 70. Moreover, growing numbers of never-married people, noticeable particularly in Bangkok, have been recently reported as a new demographic phenomenon. This demographic situation, which will inevitably lead Thailand to an aging society, has provided an appropriate setting to test the impacts of demographic changes on the familial care system that has been said to be the major source of elderly support in Thailand.

The specific purposes of this dissertation are three-fold. The first goal is to investigate the determinants of living arrangements among the current elderly generation in Bangkok, with a focus on the impact of the number of children available for co-residence. In response to a concern for the future of co-residence, which has dominated old-age living arrangements, factors that determine co-residence are discussed. Going beyond existing studies, quantitative analyses include not only the characteristics of elderly parents but also those of their children that influence co-residence outcomes. The impacts of increasing numbers of never-married children, who are significant co-residence partners for elderly parents, are also examined. Moreover, qualitative analyses reveal the underlying structures and conditions that are important to co-residence in Thailand. Complementing the results of the quantitative analyses, issues such as the importance of having children who recognizes *bun khun* (a critical Thai concept that obligates children to take care of aged parents), the risk of children's marriages, and the practical

workability of co-residence, are examined to offer a broader understanding for the determinants of living arrangements among Bangkok elderly.

The second aim of this dissertation is to discuss the dynamics of living arrangements beyond a typical cross-sectional viewpoint. According to a traditional model of Thai old-age living arrangements, co-residence in later life is not a newly created arrangement, but rather a continuation of earlier co-residence as a nuclear family. In this model, Thai parents continue their co-residence by just changing their co-residence partners from never-married to married children. In assessing the adequacy of this model in the Bangkok context, the changes in living arrangements are examined using retrospective data that follow elderly respondents' living arrangements from the time when they were middle-aged to the present. The process of living arrangements over time is also investigated from the perspective of the elderly's children, with an emphasis on changes in their marital status during their co-residence. Moreover, transition patterns in living arrangements between a pre-old age point and the present age are examined to identify people who deviate from the norm of continued co-residence, and also to explore reasons for the deviations.

The final goal concerns the function of co-residence. The traditional form of co-residence with an adult child, particularly with a married child, is assumed to provide for the needs of elderly people, and accordingly, co-residing elderly are usually interpreted as a group of secure people. This assumption, however, has rarely been tested empirically. Similarly, in terms of the flow of support between co-residing generations, elderly parents have been treated as receivers of co-residence benefits, without serious considerations of their possible contributions to their households. The overall sufficiency of money in a household is examined to clarify the impacts of co-residence on the economic security of the elderly. Then, in addressing the issue of dependency within a household, topics such as payment of living expenses, ownership of a residence and household commodities, and divisions of housework, are further investigated.

Moreover, qualitative analyses provide insights into the indirect economic contributions of elderly parents. Because the economic success of children and the old-age security of their parents are closely related in the context of Thai co-residence, past parental financial investments in children are an important source of current economic security for these parents.

A methodological contribution of this dissertation is its holistic approach, with equally strong focuses on both quantitative and qualitative methods and data. The quantitative analyses developed in this dissertation are based on over 1,000 cases selected randomly from the entire Bangkok Metropolis. A local interview team and I collected these representative data through a questionnaire schedule that was designed to follow the lives of respondents in a flexible manner. The design of the questionnaire also helped improve the collection of retrospective data. The qualitative information was gathered through in-depth life history interviews with both elderly parents and their co-resident children, producing a total of 28 taped, transcribed, and translated interviews. In addition to taped interviews, other contextual information collected through participant observation in the life of Bangkok residents has provided valuable insights for analyzing, interpreting, and presenting the data both quantitatively and qualitatively. The merging of these two approaches is a methodological focus of this dissertation, and would not have been possible without intensive data collection based in the field.

This dissertation is organized in the following manner. Chapter 2 presents conceptual frameworks used in this study, including the demographic background of Thailand, implications of population changes for traditional old-age co-residence, and theoretical issues that guide the following analyses. Then, the specific research questions, constructed around the three major objectives identified above, are discussed. Chapter 3 concerns fieldwork activities, which lasted for one year. After an introduction to the context of this fieldwork, the Bangkok Metropolis, the process of data collection is explained. Significant issues experienced during the fieldwork are also critically discussed for the improvement of future fieldwork. Chapter 4 examines the data

collected through a questionnaire schedule. Issues relating to data quality, including sampling methods, sampling errors, selection bias, and survey instruments, are addressed. The following Chapters 5, 6, and 7 contain the results of the analyses based on both quantitative and qualitative data. Each of chapters explores one major topic of this dissertation: the determinants of living arrangements (Chapter 5), the dynamics of living arrangements (Chapter 6), and the function of living arrangements (Chapter 7). Finally, Chapter 8 is the conclusion, summarizing the significant findings from previous chapters and offering suggestions for the future of old-age living arrangements in Bangkok.

Chapter 2

CONCEPTUAL FRAMEWORKS

Introduction

This chapter reviews the conceptual frameworks that guide the analyses and discussions in this thesis. The first section addresses the demographic background of Thailand, focusing on the country's drastic fertility reduction and resulting aging of the population. A recent demographic trend, growing proportions of never-married individuals in Thailand, particularly in Bangkok, is also considered. I then discuss a commonly expressed concern related to the erosion of traditional familial care of the elderly as an implication of the aging society. The second section examines past studies relevant to the issue of the elderly's living arrangements, especially in, but not limited to, Thailand. I first explain the traditional Thai old-age living arrangements, along with the ideological concept supporting that system. Then, previous research is reviewed based on three major theoretical topics, which respectively guide the analyses developed in Chapters 5, 6, and 7. Finally, based on the previous studies, the last section identifies the three major research questions, including the determinants of old-age living arrangements, the dynamics of living arrangements, and the role of co-residence in meeting the needs of the elderly.

Demographic Background

Demographic Trend of Thailand: Population Aging

Since the second part of the last century, many Asian countries have experienced a shift from high to low fertility and a significant increase in life expectancy. In particular, Thailand is one of the few countries in Asia that achieved a more than 60 percent reduction in the total fertility rate (the expected number of live births to a woman in her life time) over 25 years, starting in the 1970s (Gubhaju and Moriki-Durand 2003:44). During this period, the total population of Thailand increased from 36 million in 1970 to 60 million in 2000, while population growth rates decreased substantially from three percent to less than one percent (Knodel et al. 1999:19). As a consequence of this marked shift towards low fertility, inevitable growth in the numbers and proportion of the elderly population is expected in the near future.

The demographic indicators in Table 2.1 show that the population of Thailand has become increasingly older. The number of older people (aged 60 years and older) has more than tripled in the 30 years from 1970 to 2000, and by 2040 the over-60 population is expected to be more than three times as large as the figure for 2000. The percentage of people aged 60 years and older, under five percent in 1970, has gradually increased to over nine percent in 2000 and is projected to be about 19.2 percent by 2025 and nearly 25 percent by 2040. In contrast, the younger population (younger than 25 years old) shrank from about 64 percent to 44 percent between 1970 and 2000, and is expected to further decrease to 30 percent by 2040. Furthermore, the proportion of the oldest old (aged 80 years and older) will start to increase noticeably in the near future. Even though the percentage of the oldest old has been less than one percent and will continue to stay low, it is expected to increase to over two percent by 2025 and further to four percent by 2040.

**Table 2.1. Key demographic estimates and projections,
1970 to 2040.**

	1970	1980	1990	2000	2025	2040
Population aged 60 and older (thousands)	1,777	2,409	3,442	5,714	13,946	18,666
Percentage aged over 60	4.9	5.2	6.3	9.3	19.2	24.9
Percentage aged under 25	63.7	61.0	53.4	43.5	32.7	29.6
Percentage aged over 80	0.3	0.3	0.4	0.7	2.1	4.3

Source: United Nations (2005). World Population Prospects: The 2004 Revision (Medium Variant), Vol. I: Comprehensive Tables.

Note: The United Nations reports three sets of projections (low variant, medium variant, and high variant) with different fertility assumptions.

This rapid growth in the proportion of older people in Thailand has largely resulted from a well-recorded sharp decline in fertility. As shown in Table 2.2, the total fertility rate (TFR) decreased from six children per woman in the period 1965-1970 to three in the period 1980-1985 and is currently below replacement level. It is projected to remain at this level over the next 50 years. The successful implementation of the National Family Planning Program that started in the early 1970s is the prime contributor to this drastic fertility decline (Rosenfield et al. 1982). Given the latent desire to control the number of children, the program worked well in providing needed contraceptive services (Robinson and Rachapaetayakom 1993). As a result, contraceptive use became highly prevalent within just ten years of the beginning of the program; as early as 1981, 58 percent of married women were currently using a method of contraception, while 79 percent had ever used contraception. The prevalence rate was high (52 percent currently using and 74 percent ever used), even among women with less than elementary school level education living in rural areas (Kamnuansilpa et al. 1982:52).

A major mortality reduction also occurred in Thailand during the same period, as indicated by the increasing life expectancy at birth. Table 2.2 shows that life expectancy at birth steadily increased from 59.1 years to 64.9 years between the periods from 1965-1970 to 1980-

1985, and then to 69.0 years for the period 1995-2000. It will continue to increase over the next 50 years, with a projection for 2045-2050 of almost 80 years. Moreover, while past mortality reduction was a consequence of decreased infant mortality rates, a further reduction is expected to occur among the older population (Knodel et al. 1999:3). Estimation suggests that life expectancy at age 60 has been gradually increasing as people who belong to younger birth cohorts enter their old age. For example, men and women who were born in 1915 had remaining life expectancies of 15.7 and 18.0 years at age 60, while those who were born 20 years later were expected to live another 17.7 and 20.8 years after age 60 (Prasartkul and Rakchanyaban 2002:14-15, 18-19).

Table 2.2. Total fertility rates and life expectancies at birth, 1965-1970 to 2045-2050.

Year	1965-1970	1980-1985	1995-2000	2010-2015	2020-2025	2045-2050
Total fertility rate (children per woman)	6.0	3.1	2.0	1.9	1.9	1.9
Life expectancy at birth (years)	59.1	64.9	69.0	73.1	75.5	79.1

Source: United Nations (2005). World Population Prospects: The 2004 Revision (Medium Variant), Vol. I: Comprehensive Tables.

These population dynamics show the demographic conditions in which the current elderly have lived their lives. People aged 60 years and older at the time of this research were born in and before 1944, when fertility rates were still high. A majority of these elderly themselves also produced many children during the pre-fertility transition period, before the introduction of the National Family Planning Programs in the 1970s, by which time even the youngest elderly cohort was already at least age 26. As Jones (1993:280-281) suggests, people who were born during the last phase of high fertility are predicted to face the most serious aging problems because they belong to a large population cohort but had significantly lower reproduction under the post-fertility transition patterns. In Thailand, the most severe aging

problems are projected to occur roughly between 2030 and 2045, the periods when the children of the current elderly generation enter their old age.

Demographic Trend of Thailand: Non-marriage

In addition to the expected impacts of population aging, researchers have recently noticed rapidly rising rates of non-marriage among the children of the current elderly population in Thailand. According to Jones (2002:20,24), the percentages of never-married Thai females aged 40 to 44 and 45 to 49 reached, respectively, 9.3 percent and 8.0 percent, while 7.8 percent of males aged 40 to 44 and 5.1 percent of males aged 45 to 49 were still single in 2000. The corresponding figures in 1970 were 3.9 percent and 3.0 percent for females and 3.1 percent and 2.3 percent for males. Although increasing age at marriage in Asian countries, including Thailand, has been noted earlier (Smith 1980), such notable levels of non-marriage have begun to be apparent only in recent years.

The prevalence of non-marriage is even higher in Bangkok, particularly among females. In 2000, 19.9 percent of Bangkok females aged 40 to 44 and 17.3 percent of those aged 45 to 49 were still single. The corresponding proportions for males aged 40 to 44 and 45 to 49 were 15.2 percent and 10.8 percent, respectively (NSO 2001:66, 68). It is remarkable that about one out of six females who has passed her presumed reproductive period remains never-married in Bangkok. In fact, Jones (2002:22) suggests that the level of non-marriage among Bangkok females aged 45 to 49 is exceptionally high compared with percentages in other Asian cities, such as Seoul (2.3 percent), Hong Kong (5.9 percent) and Singapore (12.6 percent).

It is important to note that prevalence of non-marriage in Thailand is a phenomenon observed across different educational levels. According to Guest and Tan (1994:10), similar proportions of males aged 40 to 44 with tertiary education (seven percent) and those with no

education (eight percent) remained single. As for females, although there was a marked increase in the level of non-marriage for more-educated women (12 percent for women aged 40 to 44 with secondary education and 19 percent for those with tertiary education), a significant portion of poorly educated women aged 40 to 44 (five percent for both no education and primary education) were never-married as well. The level of non-marriage among females with low education was even more pronounced in Bangkok. In 1990, as much as eight percent of Bangkok females aged 45 to 49 with no education or primary education were single compared with 15 percent and 21 percent for those with secondary and tertiary education (Jones 1997:59).

From the viewpoint of long-term population structure, non-marriage is a worrisome issue. As Jones (1997:72) points out, a decrease in the proportion of currently married women contributes to a further reduction in total fertility rates, and prevailing non-marriage will likely ensure the persistence of below-replacement fertility¹. However, having more single people may turn out to be a benefit for Thai society, at least in the short term, since never-married people can be available resources to aging parents. If single people continue to live in the parental house, the expected impacts of reduced numbers of available children can be mitigated by the continuing presence of children at home². As a step toward the examination of the relationships between these single children and their aging parents, behavioral patterns of never-married people, including their living arrangements, need to be investigated.

¹ Although little information is available about non-marital fertility in Thailand (Chayovan et al. 1988:34), researchers agree that the extent of non-marital fertility (i.e. births to women who are never-married) in Thailand is very small (Knodel et al. 1988:6). More importantly, such surveys in Thailand as the Population and Housing Census count both people who are officially married and those who are co-habiting without a formal registration as married. Thus, births to co-habiting couples are not considered non-marital fertility in this context.

² Even though details of non-marriage and living patterns of never-married people are not yet available due to the newness of the issue in Asia (Jones 2002:11), a study suggests that 63 percent and 61 percent of single Thai children aged 20 to 29 and 30 and above, respectively, lived with their parents in 1986 (Knodel et al. 1992a:114).

Implications of Population Changes: Erosion of Family Care?

With rapid reduction in the fertility level and the expected decline in the younger population, there has been growing interest in the future of the old-age care system in Asia, where family has traditionally taken the prominent role in elderly support. A major issue involves a commonly expressed worry about the erosion of extended families and the expected decline in welfare for the elderly. For example, Mason et al. (2002) anticipate deterioration in the traditional reliance on family support for old age in Asian countries and warn that families may not be able to shoulder the financial burdens of an aging society. They urge Asian countries to start preparing for the challenges of an aging society by moving towards a public support system. Similarly, Martin (1988) predicts a decline in the extent to which elderly people live with their children, as was the case in Japan. She also expects to see a growing role for pension systems for countries that do not yet have a robust social security system.

While sharing the same fear of the erosion of the familial care system, governments in Asian countries have responded primarily by emphasizing the importance of existing family support systems. At one extreme, Singapore has formally institutionalized values of filial piety by adopting the Maintenance of Parents Act in 1994, which made it possible for aged parents to sue their children for neglect (Chan 1997:38). The Thai government also places strong emphasis on the preservation of an extended family care system and associated social values of respect for elderly people. The Second National Long-Term Plan for Older Persons, endorsed in 2002, stresses the individual responsibility to prepare for old age and the role of families to support individuals. In the plan, government and public resources are mentioned only as the last means for those who fail to secure familial support (Jitapunkul et al. 2002:195-196). Thus, although the Thai government realizes the reality of an aging society, families are still emphasized as the major providers of old-age support in Thailand.

Consistent with the attitude of the government, the public social security system in Thailand is still in an early stage, with two types of social security schemes covering only a minor segment of the population. One such scheme is specifically for government employees³. Under this system, government employees with more than 25 years of service could choose either a monthly pension or lump sum payment on retirement, while those with between ten and 24 years of service were entitled only to the lump sum payment. In 1996, however, with a projected increase in the number of benefit recipients in the future, the system changed to provide lower amounts of monthly pension and a lump sum payment at retirement for the younger cohorts of civil servants (Knodel et al. 1999:7).

A second type of social security system targeting private employees was recently introduced. This new scheme is designed to cover those who work for enterprises that employ more than one person, and workers and the enterprises respectively contribute to the fund at the rate of five percent of monthly pay. The government also contributes an unspecified amount. Workers can collect their pension benefits after age 55, after having paid in more than 180 months, at the amount of 15 percent of the average monthly pay of the last 60 months. Those who paid in less than 180 months can collect a lump sum payment equal to the contributions of the worker and employer plus interest (Social Security Office, November 20, 2005).

According to statistics provided by the Social Security Office, however, the future development of this social security system does not look bright. Since the start of the scheme in 1994, the number of participating enterprises has increased more than five times. The total number of insured people, however, has increased only 1.5 times, from 4.7 million in 1994 to 6.9 million in 2003 (Social Security Office, March 16, 2006). The proportion of insured people only marginally increased by five percent, from 15.2 percent of the total labor force in 1994 to 20.4

³ Approximately seven percent of the total labor force was covered under these social security schemes for civil servants in 1998 (Knodel et al. 1999:7).

percent in 2003⁴, and there is no evidence to suggest a significant improvement in coverage in the future. Indeed, most Thai people, including professionals with whom I talked during fieldwork, did not know enough about the system (or were not interested in the system), and none of them expected to depend on the pensions that theoretically will be provided by this system at retirement. It is difficult to know why people are indifferent to this system, but it may be attributable to feelings of general mistrust that Thai people have about the governmental management of public welfare systems, especially for something like a pension system that requires a long period before people can receive benefits.

Theoretical Background

Co-residence in Old Age: The Traditional View

A number of studies agree that traditionally the predominant form of old-age living arrangements in Thailand has been co-residence with a married child. In ethnographies on rural Thai social systems, conducted mainly in villages located in north and northeast Thailand, Thai elderly are usually found in extended households, surrounded by the family of a married daughter (Cowgill 1968:159; 1972:94-95). Following a common post-marital residence practice, sons often live with their wives' families after marriage, while daughters remain at their parents' house for a short period of time until they can arrange their own households. As children gradually marry out or move out to their own households, ideally it is the youngest married daughter, who permanently lives with and cares for the aging parents and eventually inherits the parental house

⁴ Data from the Labour Force Survey (1994 and 2003) by the National Statistical Office of Thailand (National Statistical Office, March 16, 2006) were used to estimate the size of the total labor force in 1994 (30.7 million) and 2003 (34.1 million).

(De Young 1955:23, 64-65; Podhisita 1994:367). Based on these ethnographic accounts, matrilocality has been posited as the traditional post-marital Thai preference.

A closer examination of post-marital residence patterns by ethnicity and locality, however, reveals a more complex picture. Chamratrithirong et al. (1988:935) has reported that post-marital patterns differ between Thais and Chinese-Thais as well as among Thai people of different localities. According to their data, post-marital arrangements of rural Thais most resembled the traditional form of matrilocality: 45 percent of ever-married rural Thai couples indicated that they have ever lived with the wife's parents, while 16 percent lived with the husband's parents. In contrast, supporting the traditional Chinese preference for patrilocality, the percentage of Chinese-Thais who lived with the wife's parents was just eight percent, while as many as 37 percent lived with the husband's parents. For urban Thais, there was no substantial difference in the percentage of people who lived with either spouse's parents. The percentage of people who established a neolocal household was small for all categories, ranging from six percent for rural Thais to 14 percent for urban lower class Thais.

The reported variations in post-marital residence patterns result not only from differences in preference but also from the opportunistic nature of Thai residence patterns. Different researchers have repeatedly noted that residence rules in Thailand are characterized as flexible, practical, and temporary, allowing ample room for adjustments to deal with the different situations of each family (Chamratrithirong et al. 1986:37; Knodel et al. 1992a:111; Rabibhadana 1984:21,27). Chamratrithirong et al. (1988:940) uses the word "lucrilocality" to explain that for both Thais and Chinese-Thais, available parental resources significantly influence post-marital residence decisions; newly married couples are more likely to live with the parents who have more resources. They further emphasize that the opportunistic attitude towards the decision about co-residence shows the temporary nature of post-marital co-residence, where most of the couples

(except for the couples who permanently remain at the parental house) expect to stay with parents for only a limited period (p. 928).

Another important aspect of Thai households is that they repeat a basic developmental cycle over the course of marital development. In this cycle, after the initial period of co-residence with parents, a newly married couple moves out to establish a nuclear household when they are ready, or often as the result of marriages of younger siblings. Following the births of children, their growth, and eventual marriages, the newly formed nuclear family develops into a stem family, in which one of the married children continues to live with the aging couple (Foster 1978:151; 1984:86-87). If a household follows the expected cycle, the parents have opportunities to live with different sets of married children during the period when children are still marrying and leaving home. Then, finally, the aged parents can enjoy the benefits of co-residence with one married child who stays permanently at the parental house.

An underlying ideology that supports this developmental system is the children's obligations to support aged parents. According to Rabibhadana (1984:3), the most important concept that defines Thai family relations is the reciprocal ties organized around the idea of *bun khun*, which is described as "the favor or benefit, which has been bestowed on one, and for which one is obligated to do something in return." This concept obliges children to pay back debts to their parents for giving birth to and bringing them up, but these debts are described as impossible to repay entirely. Van Esterick (1996) also discusses the Thai word *liang* (supporting, caring for, or tending) in connection with the reciprocal relationship between mothers and children. A mother is seen as having expended time, energy, and money in providing her breast milk to her children. The cost of breast milk (or canned milk in the modern context), recognized as *kha nam nom* (milk price), is the amount of debt that the children owe to the mother (p. 26-27). The strong sense of indebtedness to parents, apparent in these concepts, comes from the Buddhist belief that being born as a human being is itself the great benefit a child has already received from the

parents since “only man can learn of the Buddha’s teachings and have a chance to reach Nirvana” (Rabibhadana 1984:5).

The feeling of indebtedness and the underlying Buddhist teaching further provide conceptual bases that prescribe different ways boys and girls can show their gratitude to parents. In elaborating the reciprocal relationship between parents and children, Rabibhadana (1984:21-22) explains that a boy can pay back significant debt by becoming a monk, an act reserved for men⁵. Because people believe that having a boy ordained generates sizable merit for his parents, ordination provides a good opportunity for reciprocation for boys. On the other hand, girls, who do not have such a chance, have to repay their debt by supporting their parents in daily life by physically taking care of and/or financially providing for them.

Another important premise of the developmental cycle of households and associated traditional co-residence with a married child in old age is that people follow the expected life cycle, involving marriages and childrearing. The developmental cycle of households would not “develop” if children did not marry; the household would continue as a nuclear family with increasingly aging children and elderly parents. Given the increasing prevalence of non-marriage in Thailand, however, particularly in Bangkok, it is important to re-examine the developmental process of households, paying more attention to the marital status of co-residing children.

Determinants of Living Arrangements: Fertility Level and Children’s Characteristics

Studies of the major determinants of living arrangements of the current elderly generation in Asian countries have attempted to assess the impacts of fertility decline on the life of the

⁵ Ordination, especially for a short period of time (typically for about three months), is traditionally seen as a prerequisite for marriage, giving males the opportunity to repay the debts to their parents before entering a new family relationship (Pramualratana et al. 1984:188).

elderly population. These studies try to determine the significance of various socio-demographic indicators for the formation of a particular type of household structure, co-residence with an adult child. Co-residence is viewed simply as a desirable outcome, based on the widely held (and rarely examined) assumption that family has been providing the safety-net for the elderly. Thus, the focus is on the structure of households, rather than their function, and “who can live with an adult child in old age” is one of the ultimate questions examined, without serious investigation of characteristics of the co-residing child.

The most prominent determinant of co-residence is apparently the elderly parent’s level of fertility, usually expressed as the number of living children a person has. As co-residence involves at least one child, by definition, it is reasonable to conceptualize co-residence as a function of the availability of children. Moreover, given the developmental cycle of Thai households and the flexible nature of household composition, having more children would simply increase the chance of keeping at least one child at home. Several studies have tested the impact of the number of children in Asian countries on the formation of co-residence, and their results suggest that the availability of children does matter.

These studies all agree that having more children plays an important role in determining the occurrence of co-residence with an adult child in old age. For example, Martin (1989:633), using data collected by the World Health Organization, reported that the number of surviving children significantly increased the probability of living with a child in Fiji, Malaysia, and the Philippines. Casterline et al. (1991:13) also found that having fewer sons and daughters increased the chance of living alone or with only a spouse in four Asian countries, including Thailand. Hashimoto (1991:371) found significant differences in living arrangement outcomes by the number of living children in Thailand and six other developing countries; people with more children tended to live with a child. These findings suggest that as one has more children to turn to, there is a higher chance that one can live with at least one of them.

Other more complex analyses have argued for the importance of including the characteristics of children in the analytical framework. One of the few studies to include the impacts of the characteristics of children in Asian settings comes from Malaysia. Da Vanzo and Chan (1994:108-109) found that not only numbers, but also age and gender of children had an impact on the formation of co-residence: results suggested especially strong effects of younger age (20 to 29) children of either sex for the married elderly group. Another study examining the impact of the age of the youngest child in four Asian countries, including Thailand, reported a similar result: the older the age of the youngest child, the lower the chance of co-residence (Casterline et al. 1991:14-15). These findings about the age of children have important implications with respect to the marital status of co-residing children: younger children are more likely to be single and to live with their aging parents.

A further issue related to the number and characteristics of children has to do with the quality of children who fulfill the widespread expectation to co-reside with aged parents. Knodel et al. (1992b:89) estimated the change in the future co-residence level under lowered fertility conditions in Thailand, and concluded that the reduction in the co-residence level would not be great, only slightly over ten percent. Another study also suggested that even among elderly with only one child, about 72 percent still co-resided with an adult child in 1990 (Knodel et al. 1995:15). Of more importance, qualitative information collected through focus groups emphasized the importance of having at least one “good” child who recognizes children’s obligations to care for their parents in old age (Knodel et al. 1992b:92-94; 1995:16). Thus, according to these studies, as long as there is at least one child, and if this child turns out to be a reliable one, the impacts of fertility decline in Thailand on the continuation of co-residence in old age are not as great as some may fear.

A key to assessing the actual impacts of fertility decline on co-residence seems to be the examination of children’s characteristics. If indeed the majority of elderly co-reside with a single

child rather than a married one, there is a need to reconsider the meaning of “co-residence” for the concerned elderly parents. In this case, the common attitude that views co-residence as providing a safety-net in old age may be mistaken. Thus, the pressing issue that needs to be investigated is not the mere continuation of co-residence but the content of co-residence, especially the marital status of children who are involved in co-residence. However, because little information on children’s characteristics is available, further analysis of children’s characteristics as a major determinant of co-residence has not emerged.

Determinants of Living Arrangements: Other Factors

Other major factors that have been considered important in the study of co-residence are conceptually organized within the framework of costs and benefits and include economic benefits of co-residence, the health status of the elderly, and the possibility of buying privacy with more resources. In this framework, co-residence is viewed as a form of living arrangement that can supply financial as well as in-kind benefits for both aged parents and their co-residing children, but that may demand a loss of privacy. In the following section, I review each argument and discuss its adequacy.

Since co-residence creates economies of scale in the cost of living, people may opt for co-residence for economic reasons. Da Vanzo and Chan (1994:104-105) examined this hypothesis and found that higher housing costs increased the likelihood of co-residence among a married elderly sample in Malaysia. Studies have also shown that co-residence is more prevalent in urban areas, especially in metropolises, where housing availability is typically lower and the costs of housing are higher (Casterline et al. 1991:15; Kim and Choe 1992:95; Wongsith and

Siriboon 1999:130)⁶. Moreover, Caffrey's (1992:110-111) study of the family care system of the elderly in rural Thailand showed that the elderly with more cultivated land and higher yearly income are more likely to be cared for in a traditional extended household. When aged parents do not own sufficient land, their children are likely to leave to find employment outside the family farm setting (p. 114). Although it is probable that economic considerations are a determinant of co-residence, a major problem with these studies is that it is difficult to determine who is benefiting from the co-residing arrangement, parents, children or both.

In line with the benefits of co-residence arguments, lower health status of the elderly is hypothesized as another major determinant of co-residence. Because co-residence can more easily supply day-to-day help and support that is particularly necessary for the physically and/or mentally disabled elderly, these elderly are expected to have a greater need than others for co-residence. However, empirical results so far present mixed findings, and the relationship between health status and living arrangements is not yet clear. Martin (1989:5), who used measures of Activities of Daily Living (ADL)⁷, did not find any significant effects of health status on living arrangements in South Korea, Malaysia, and the Philippines. On the other hand, Hashimoto (1991:367,370) found that the disability status (determined by ADL measures) of the elderly was positively related to the formation of extended families in Singapore, South Korea, and India.

In addition to benefits, co-residence entails costs, including the loss of privacy. Studies suggest that the elderly may prefer to live independently if they have sufficient economic resources to buy privacy. A study from the United States suggested that increases in social security coverage and benefits are the main factors in the increase in elderly widows' independent

⁶ However, impacts of rural-urban migration of the younger generation may be acting to reduce the availability of children and hence leading to lower co-residence rates in rural areas. See Mills (1999) for a discussion of rural-urban migration in Thailand.

⁷ The ability to perform basic everyday tasks, such as eating, walking, dressing, and bathing. See Chapter 5 for details.

living (McGarry and Schoeni 2000). An investigation into Asian countries tested this possibility and found that people with more economic resources (measured by home ownership and self-support) have a higher likelihood of living independently (Martin 1989:5-6). Another study similarly showed the positive effects of economic resources on independent living for unmarried elderly in Malaysia, using income as a measurement (Da Vanzo and Chan 1994:107). Thus, these studies suggest that having more economic resources is a negative factor for the formation of co-residence.

However, it is questionable whether the elderly with resources are more likely to be in independent living arrangements in order to secure privacy. The connection between having resources and wanting a non co-residing arrangement is important because, if the relation holds true, the development of social security coverage in Thailand (should it develop) may have a significant consequence, providing the majority of the elderly sufficient resources to live independently if they wish to do so. However, a study from Singapore suggests that the situation may be more complex. According to Chan (1997:41-42), even though Singapore's social security system, the Central Provident Fund, has a long history dating back to 1955, over 85 percent of the elderly still co-resided with a child in 1995. Moreover, close to 90 percent of the elderly did not make a plan for old age because 80 percent of them thought children would provide for them⁸. Judging from the persistent dependency on family observed in Singapore, it may not be appropriate to connect economic resources to the desire for independent living and privacy for Thais.

Finally, the concept of benefits and costs of co-residence may itself not be a good framework for understanding the determinants of co-residence in the context of Thailand. The

⁸ It should be noted that although currently over 85 percent of Singaporeans are covered under a Central Provident Fund, only about one-third of the current elderly generation has a Central Provident Fund account (Chan 1997:35,42).

concept of costs and benefits implies conscious decision-making and planning, based on the perceived advantages and disadvantages of co-residence. However, as Knodel and Saengtienchai (1998:12) have noted, it is often difficult for Thai people to talk about “why” they ended up in a particular living arrangement. I had the same experience in the field trying to understand why a particular child was chosen to be the co-resider or why an elderly person decided to live with this child. To my disappointment at that time, typical answers to these questions were “if I am not living here, where do I go?” or “Who else is available (other than the one living with him/her)?”

This does not mean that the concepts of benefits and costs are foreign to Thais. On the contrary, the idea of keeping a balance of pluses and minuses is fundamental, in the form of merit-making accounting. For example, summarizing the essence of Thai Buddhism, Kirsch (1982:21) states that “the significant Buddhist motivation for action is to accumulate merit...,” which is a constantly changing fund based on the balance of merit-making and merit-losing actions of individuals. Rabibhadana (1984:26) also explains that, excepting the tie with the parents, Thais can draw a line demarcating their kinship boundaries, depending on the perceived *bun khun* received in the past and potential benefits in the future, and consequently make decisions on the degree of contact they wish to have with particular kinspersons. The Buddhist background of the majority of Thais makes them familiar with the idea of making decisions according to mental calculations of pluses and minuses.

The difficulty of tracing the process that has led to the current living arrangements from the viewpoint of costs and benefits is probably not attributable to absence of these calculations. Rather, it may mean that elderly people do not rely on these calculations because they feel that reality often will not match their plan. Again, as Knodel and Saengtienchai (1998:13) point out, the process that leads to a particular living arrangement is often a result of unplanned incidence, a product of chance, or simply a consequence of some other person’s act. These issues are usually beyond elderly people’s control, and often they can only accept what comes to them. In this

sense, “determinants” of living arrangements should be understood as a situation to which an elderly person is exposed, rather than a set of factors the person uses to make conscious decision.

Dynamics of Living Arrangements

A common drawback of previous studies on living arrangements is that they usually examine living arrangements in a static framework using cross-sectional data. Information from the “snap-shot” of living arrangements is often inadequate to fully understand the processes that determine old-age living arrangements and their implications for the well-being of the elderly. Spitze and et al. (1992: S290) acknowledged the benefits of conducting longitudinal studies of living arrangements, because such studies help clarify questions of causal ordering which are sometimes raised by findings based on cross-sectional data. They also addressed the importance of knowing the process that led to the current living arrangement because, for example, the same “co-residence with an adult child” category can have different meanings depending on whether the co-residing child is a returning or never-leaving child. Agreeing on the importance of longitudinal data for studies of living arrangements, Richards et al. (1987:87, 93) examined the risks of transiting from an origin to a destination household type among the U.S. population aged 20 and over. Their analyses, based on a hazard model, showed that nuclear households were the most stable of all types, lasting seven or more years, and that higher income helped less standard household types, including single parent, single member, and other non-family (consisting of unrelated people) households, to become nuclear households.

Because of data limitations, there have been few studies, however, that discuss dynamic issues of living arrangements, especially of the elderly. Some studies have focused on the changes in type of living arrangements over time and examined the impacts of socio-demographic variables on these changes. One such study by Mutchler and Burr (1991:380) using a

longitudinal survey in the U.S., found that living alone was the most stable living arrangement in later life. They also suggested that economic resources, measured as the income level prior to the change, were positively related to independent living, while lower health status was associated with institutionalization (p. 386). Worobey and Angel (1990:S100) also found a strong tendency for unmarried American elderly to remain in an independent household unless health status declined significantly.

Other longitudinal studies on the living arrangements of elderly focus on changes in health conditions and residential mobility among elderly Americans. As a model for residential mobility, Litwak and Longino (1987) proposed three stages of relocations in later life: first moving to an area with favorable amenities following one's retirement; second, moving to a location close to a caregiver with the onset of disability in conducting daily life; and third, moving to an institution when more intensive care becomes necessary. Speare et al. (1991:S140) examined the relationship between changes in disability status over two years and the relocations of American elderly and confirmed the existence of the second and third types of moves presented by the model. They also suggested that when a significant decline in disability status happened, people responded to the deterioration by changing residence rather quickly.

These longitudinal studies of American elderly are informative for studying the dynamics of Thai old-age living arrangements, especially in the absence of similar studies concerning Thais. However, a direct application of American-based dynamic models to the Thai population is not appropriate because of the fundamental differences in normative expectations: American elderly prefer independent living (Mutchler and Burr 1991:376), while Thai elderly prefer co-residence with an adult child (Knodel et al. 1992a:106-107). Moreover, dynamic models in the American context assume the presence of an "empty-nest" stage prior to old age (Treas and Bengtson 1982:15), and consequently co-residence in later life is generally considered a newly created arrangement. In contrast, as suggested by the household developmental model by Foster (1984:

86-87), Thai old-age co-residence is largely a product of the past, being developed from earlier co-residence with dependent children. Therefore, there is a need to study the dynamic aspects of Thai living arrangements as a first step towards a longitudinal model of living arrangements in the Thai context.

Whose Needs: An Untested Assumption

The relative lack of attention to the process of living arrangements is related to another drawback of past studies in assuming that it is the elderly who receive the benefits of co-residence. According to Aquilino (1990:405-406), studies on parent-adult child co-residence are divided into two groups with different focuses: one on the characteristics of children and another on those of parents. The former tend to examine the home-leaving behaviors of young adult children with middle-aged parents, and the latter typically study the living arrangements of elderly parents. In these studies, the position of dependency is usually assumed, depending on the life course position of the parents; when the parents are elderly, parent-adult child co-residence is attributed to the needs of the parents. Consequently, co-residence with an adult child in old age has been taken as a response to the needs of the elderly and is considered to be a positive outcome by itself, without further exploration of the actual conditions of co-residence.

Some studies using data from the United States, however, have shown that home sharing between parents and adult children is probably to a large extent a response to the needs of the children regardless of the parents' age. Da Vanzo and Goldscheider (1990:254), who examined the home-returning behaviors of adult children, suggested that returning to the parental home was a common event among unmarried children in the United States as a result of the adult children's life changes, such as losing a job, dissolving a marriage, or finishing schooling or military service, and their needs to co-reside after these changes. Other researches also reported that elderly

parents who had a never-married child or a divorced/separated child, who would have greater need for co-residence, were significantly more likely to co-reside (Aquilino 1990:417; Crimmins and Ingegneri 1990:19; Ward et al. 1992:219). These findings suggest that characteristics and conditions of adult children that encourage them to stay at the parental home may be the major reason for elderly parent-adult child co-residence.

Furthermore, there are findings showing that more able elderly parents, rather than the less able, have a higher likelihood of co-residence in the United States. According to Aquilino (1990:413), among elderly parents aged 65 and above, neither parents' poorer health status nor their lower income significantly increased the chance of co-residence with their adult children. A majority (75 percent) of co-residence was also at the home of the elderly parents. Ward et al. (1992:216) similarly reported that parents with good or excellent health were somewhat more likely to live with an adult child, controlling for parental age. Finally, Crimmins and Ingegneri (1990:26) mentioned that over half of the children (56 percent) of elderly parents who lived with their parents in 1975 never left home, indicating that their co-residence was not a response to the parental needs, but a long-standing arrangement.

Even though there are ample indications that it is the needs of children, rather than parents, that are met by co-residence, surprisingly few studies have examined the financial and housework contributions shared by the two parties. One such study in the New York metropolitan area, in fact, found that the major part of household tasks in shared housing, including shopping for groceries, cooking meals, doing laundry, providing local transportation, doing house repairs (and other related maintenance work), and cleaning the house, was managed by the parents across all age categories. Even for older parents aged 65 and above, the parents, not their co-residing children, took care of 79 percent of these tasks (Ward et al. 1992:219). According to another study based on data provided by co-residing adult children in the United States, children's monetary contributions to the household is also modest: only 38 percent and 28

percent of co-residing male and female children contributed money for housing and/or food. The study further showed that males made more monetary contributions, while females helped more with housework. Better-educated co-residing daughters, however, had a lower likelihood of doing housework (Ward and Spitze 1996:721-722).

Studies that examine the help relationship between elderly parents and their children in Asia, including Thailand, typically analyze the issue from the viewpoint of intergenerational support exchanges. For example, Ofstedal et al. (1999:21-22) compared the patterns of financial, material (food and clothes), and social support (visiting) provided by non co-residing children to their elderly parents in the Philippines, Singapore, Taiwan, and Thailand. The authors reported that 58.4 percent of sons and 63.9 percent of daughters in Thailand gave modest amounts of money to their aged parents in the previous year, and moderate proportions (31.5 percent for sons and 35.0 percent for daughters) gave substantial amounts of money (more than 1,000 baht, about US\$40 at the time of their data collection). Besides money, 61.5 percent of sons and 63.6 percent of daughters gave food and clothes. In addition, significant proportions of non co-residing children saw their parents weekly when they lived in an adjacent dwelling (92.8 percent), in the same community (88.9 percent), in the same region (68.2 percent), or elsewhere (22.5 percent).

Chayovan (1999b:17, 19) provided more detailed accounts of support exchanges given to and received from non co-residing children of the elderly in Thailand, by area of residence. According to her study, among the elderly in Bangkok with a non co-residing child, the proportions of elderly that gave and received food or clothes were 2.3 percent and 6.3 percent (daily), 8.0 percent and 29.0 percent (weekly), and 14.2 percent and 53.5 percent (monthly). Also, those who visited and were visited, respectively, by non co-residing children living in the same community were 39.8 percent and 64.0 percent (daily), 46.0 percent and 76.6 percent (weekly), and 49.4 percent and 91.2 percent (monthly). A problem of these help exchange studies, however, is that they only examine the levels of help provided by (and given to) non co-resident children,

partly because of the nature of the exchange. Patterns of support exchanges with co-resident children are not examined; instead, co-residing elderly are assumed to be the elderly who are provided for by living with a child. Thus, based on high co-residence rates and substantial provision of help by non co-residing children, a common conclusion derived from these studies is that Thai elderly are embedded in the familial support network.

However, a closer examination of support exchanges between generations suggests a need to empirically test the actual support system within co-residence. Knodel and Chayovan (1997:17) presented percentages of Thai children, by the location of the children, who gave to and received money from their elderly parents. Among children who lived in the same house with their parents, 59.7 percent gave modest amounts of money and 42.7 percent gave at least 1,000 baht in the previous year. This finding indicates that the cash flow from co-residing children to their parents is not as frequent as it might be expected, and the amount of money transferred is often small⁹.

Supporting this impression, a study further indicates that the mean income provided by children, although not restricted to those who co-reside, is quite low. According to Chayovan (1999a:20-23), the main source of income for about half of the Thai elderly is children (49.4 percent), followed by one's own or a spouse's work (37.9 percent), other people (6.0 percent), savings and other properties (4.4 percent), and pensions (2.3 percent). However, the amount of mean income gained from children in a year ranks second lowest, only after income from others; in fact, the mean income from pension (140,012 baht) and work (42,748 baht) is 11.5 and 3.5 times higher than that from children (12,137 baht). The same study also suggests that among the

⁹ The provision of money of less than 1,000 baht a year is trivial, even in Thailand, and far from enough to support the daily expenses of an elderly person. My fieldwork experience suggests that at least 2,000 to 3,000 baht is needed to pay for monthly expenses (if there is no need to pay for housing), which suggests a need for at least 24,000 to 36,000 baht a year. Chayovan (1999a:6) estimates that the elderly with less than 10,000 baht of yearly income, which is half of the average yearly income of elderly Thais, are in poverty.

currently married elderly who live with others, including children, less than half (48.1 percent) have others pay for all or some of their household expenses, indicating that the other half is paying expenses by themselves (p. 27). Moreover, in addition to the suspected low financial contributions of co-residing children, the majority of elderly appear to be living at a house they or a spouse own (79.8 percent), while only 6.3 percent live at a house bought and owned by children (p. 28).

These studies suggest significant financial contributions made by the Thai elderly within co-residence and provide reason to question the role of co-residence in supporting their life. However, because most studies do not focus on the relationship between living arrangements and the provision of support, it is difficult to determine the level of support given in the framework of co-residence. Also, provision of non-financial support, such as housework help, is important in considering the role of co-residence in meeting the needs of the elderly and co-residing children. As an indication, Andrews and Hennink (1992:143) have shown the major contributions of Thai elderly in undertaking housework: about half of elderly females regularly prepare food, clean the house, and wash dishes, for example. Even 20 to 30 percent of males perform these household tasks. However, the exact division of housework between co-residing parents and children is unknown and yet to be examined.

Research Questions

Given the current demographic conditions of Thailand, my prime interest is in the living arrangements of elderly people in Bangkok. In order to understand the issue holistically, my investigations are constructed around three major questions. These questions are theoretically significant in terms of the previous studies reviewed above, and the results of this investigation

are also expected to provide empirical evidence to better examine the issues that have been identified as important but have not been adequately explored in the past.

1. What determines the living arrangements of the current elderly in Bangkok, Thailand? What impacts do children's characteristics have in deciding the living arrangements of their elderly parents? Is the growing prevalence of never-married adult children likely to contribute to the continuity of co-residence?
2. What are the dynamic mechanisms of living arrangements in Bangkok, Thailand? What are the processes that have led to the present living arrangements?
3. What are the actual benefits of co-residence for the elderly? What are the roles of co-residence in meeting the needs of elderly parents and their children? Does the degree of co-residence benefit for the elderly differ depending on the characteristics of their co-residing children?

The three identified themes are respectively examined in each analytical chapter (Chapters 5, 6, and 7), using both quantitative and qualitative data collected through fieldwork. Methods of data collection and their critical reviews are discussed in the following two chapters (Chapter 3 and 4) before the analytical chapters.

Conclusion

This chapter reviewed the background of this study, focusing on the demographic trends of Thailand and past studies relevant to the issue of living arrangements of elderly people. As a consequence of the drastic fertility decline that started in the 1970s, Thai society is currently experiencing rapid population aging. Given the expected reduction in the number of available children in the near future, there is a growing interest in the sustainability of traditional extended families that are said to be the major source of elderly care in Thailand. In the absence of robust

social security systems for the elderly, however, the major reaction of the Thai government has been to emphasize the importance of maintaining the existing tradition of familial care for the elderly. As a response to the socio-demographic conditions of Thailand, a number of studies have been conducted that concern the determinants of living arrangements of the elderly. These studies found that greater availability of children for co-residence is an important factor, indicating a possible future decline in co-residence rates, given the reduction in fertility. There are, however, growing numbers of never-married children in Bangkok who could be important co-residence partners for elderly parents, mitigating the negative impacts of the reduced availability.

Past studies have a number of shortcomings. These include a relative lack of attention to children's characteristics in determining the elderly's living arrangements, the tendency to ignore dynamic aspects of living arrangements, and the untested assumption that the elderly are the exclusive recipients of co-residence benefits. In order to address these questions, my research topics include the determinants of living arrangements, with a focus on children's characteristics, the dynamics of living arrangements, and the actual degree of co-residence benefit for elderly parents. Before examining these questions, the next two chapters deal with the process of fieldwork and critical reviews of both qualitative and quantitative data collected in the field.

Chapter 3

FIELDWORK

Introduction

This chapter discusses the site of this project, Bangkok, Thailand, and explains the process of fieldwork that was conducted from November 2003 to October 2004. The first section examines historical as well as demographic characteristics of the Bangkok Metropolis and shows the compositional complexity of this city. The second section presents chronological accounts of each stage of the fieldwork to explain the methods of data collection. It also suggests methodological improvement for future research, especially for projects conducted in urban settings. The last section discusses particular issues that presented problems in the current project and explores ways to deal with them in the future.

Field

The Bangkok Metropolis

This project was conducted in Bangkok, the capital city of Thailand. *Krung thep mahakhor* or the Bangkok Metropolis refers to areas that spread over both the east (Bangkok) and west (Thon Buri) sides of the Chao Phraya River. Bangkok was first designated the capital of Thailand by King Rama I in 1782. As a result of administrative reforms by King Rama V between 1894 and 1906, Bangkok was included in an old administrative system called *monthon* as *monthon krung thep* (Bangkok Province). The basis of the current administrative unit,

however, is traced to acts issued in 1933 that defined Bangkok as the capital province and Thon Buri as a separate province. In 1971, the two provinces were merged in one metropolitan unit forming the Bangkok Metropolis. Currently, the Bangkok Metropolis (often called simply Bangkok) covers a total area of approximately 1,570 square kilometers that is divided into 50 administrative districts (Bangkok Metropolitan Administration, July 20, 2005).

Since its establishment, Bangkok has been a thriving city with an expanding area and progressively increasing population. According to a historical estimation of Bangkok's population by Sternstein (1984), the population of Bangkok increased roughly by a hundredfold (from 50,000 to five million) over 200 years from the 1780s to the 1980s (p. 43). The pace of population growth was slow until the mid-nineteenth century, with high death and birth rates, coupled with an insignificant level of net migration into the capital. However, from the mid-nineteenth century onwards, Bangkok's population increased rapidly, primarily because of in-migration from the countryside. In-migration of overseas Chinese to Thailand also contributed to population growth in the capital. From the early 1920s, the mortality rate declined rapidly while the fertility rate remained high. Low mortality and high fertility, combined with a still-high level of net in-migration, allowed the population of Bangkok to expand greatly. Finally, despite a drastic decline in fertility from the 1970s, the population of Bangkok continued to grow as continuing in-migration offset the lower fertility rate (p. 58-62, 66-67). The population of Bangkok has continued to grow and over six million people are registered in the latest population census in 2000 (NSO 2001:1).

This rapidly expanding city was an ideal site for the project because of its population dynamics and its socio-economic complexity. As discussed in Chapter 2, all of Thailand has experienced a dramatic fertility reduction since the 1970s, and is currently at below-replacement level fertility, a situation which leads to rapid population aging. In addition, a growing number of never-married adults has been reported in recent years in Thailand, especially in Bangkok, and is

seen as a new and worrisome phenomenon (Jones 2002:3). These demographic characteristics provide a good setting in which to investigate the impacts of demographic changes on people's lives, particularly with respect to living arrangements. Bangkok further provides socio-economic complexity that allows us to make statements about variability in these phenomena. As the acknowledged center of politics, commerce, and development in Thailand (Dayley 1996:99), and as the source of power and respect (O'Connor 1987:12), Bangkok has developed a complicated social system in which many types of people co-exist. This heterogeneous population is engaged in the multiple types of employment that this large city can offer, organizes varied lifestyles, and experiences diverse life courses.

As an additional factor in the complexity of Bangkok, it is important to note that people "living in Bangkok" include a wide range of people with varying histories. For example, statistics suggest that a major percentage of elderly Bangkok residents are not natives of Bangkok. According to data collected in 1970 from people 15 years old or above (the age categories that include the current elderly generation), only 31 percent of interviewed household heads (i.e. males) were Bangkok-born (Prachuabmoh et al. 1972:18). As an alternative figure, a recent source reports that 60 percent of people aged 60 years and older who are currently residing in Bangkok are Bangkok natives (NSO 2001:155). Whatever the actual percentage, it is clear that a significant proportion of elderly in Bangkok are immigrants from different provinces located all over Thailand.

Furthermore, a sizable minority of elderly people in Bangkok are foreign born, mostly from Chinese-speaking countries and areas, including China, Taiwan, and Hong Kong. The Thai census records that about five percent of people aged 60 and above in Bangkok were born in one of these Chinese-speaking areas (NSO 2001:155). The current elderly generation belongs to the period in which the constant wave of Chinese immigration to Thailand, observed at least since the

15th century (Skinner 1957), has been diminishing¹⁰. Moreover, there is a sizable portion of elderly who themselves are Thai-born but are the descendants of Chinese immigrants to Thailand. To identify the proportion of these ethnic Chinese in Thailand, one study estimated that as much as 30 percent of residents in Bangkok show at least one characteristic that is associated with an ethnic Chinese origin (Prachuabmoh et al. 1972:45)¹¹. However, as mentioned by Punyodyana (1971), it is not an easy task to identify Thai people of Chinese identity even though “everyone would say that Chinese constituted a large portion of the population in the Thai capital” (p. 233). According to Freedman (1979:17), the difficulty occurs because Chinese descendants in Thailand have been assimilated well in Thai society, partly because their mothers are usually Thai women.

Because Bangkok has often been seen as an interesting geographical space, some studies focus on defining Bangkok as a city. This study is not concerned with that aspect of Bangkok. Rather, the current study treats Bangkok as the setting for diverse groups of people who partially overlap and who are partially autonomous. The focus is on understanding the different types of people that fill the whole of the administrative space called Bangkok. O’Connor (1978:4) rightly criticizes studies that consider only a particular community, such as a slum, and treat that community as an urban “village,” a more or less independent entity, ignoring power relations among the different areas of Bangkok. From a holistic standpoint, it is not appropriate to focus simply on a segment of a city, especially in a city such as Bangkok, where different components also interact with each other. Thus, phenomena in Bangkok need to be considered in the context of the whole of the city, and, depending on the issue, often in relation to areas beyond it.

¹⁰ Owing to legal restrictions on Chinese immigration to Thailand implemented in 1949, the number of Chinese immigrants became insignificant after this period (Prachuabmoh et al. 1972:17).

¹¹ Items used to identify ethnic Chinese origin were: Chinese altar, picture of Chinese leader, paper strips with Chinese characters, Chinese lanterns, old people with Chinese clothes, and Chinese newspapers.

Fieldwork Process: Method Notes

Prior to “Fieldwork”

Although I had been living in Thailand since June 2001, fieldwork officially started in November 2003. A non-governmental organization, the Office of Population Technical Assistance Team (OPTA), helped organize a team of local interviewers for the project. OPTA provides data collection assistance, mainly in the field of population studies as well as for general marketing research in Thailand, by recruiting and maintaining a pool of interviewers, and acting as an intermediary between non-local researchers and local interviewers, and manages project budgets. I held meetings with the director of OPTA to ask for assistance in data collection and to discuss the details of the project, including timing and length of each stage, the number and qualifications of interviewers, and the budget. OPTA prepared a project guideline and promised to secure a qualified group of interviewers by the beginning of the project. During this time, I also contacted the National Statistical Office of Thailand to request a simple random sampling of census blocks according to my sampling scheme (see Chapter 4 for sampling issues) and maps of selected blocks.

Area Survey

At the beginning of November 2003, I started area surveys along with a Thai staff member from OPTA who was to operate as my project manager. I had already worked with this staff member during a pilot study and I requested him as manager since I had been impressed by his personality and, more importantly, his sense of responsibility toward the project. As a more practical consideration, he was one of the few people at OPTA who could drive a car and owned a car that was made available for the project. His driving skills and the knowledge he had gained

of the geography of the Bangkok Metropolis from his participation in various data collection projects at OPTA, became immediately useful as the area surveys involved finding exact locations of the selected 50 census blocks, which were spread over the Bangkok Metropolis.

The area surveys, which lasted for about two weeks, were an important step for the project for several reasons. First, the maps provided by the National Statistical Office were quite rough, often lacking names of streets and rivers that were necessary for finding the area. Consequently, the manager and I needed to do some research to identify the approximate location of each area before driving out to them. In each area, we walked the locality, noting essential features such as the names of major markets, the numbers of *soi* (a branch street from a major street), and the names of *muu baan* (gated communities or estates), and added them to the original maps. We took special care to identify the exact marking of each census block so that there would be less error in drawing the neighborhood maps for the household listings at a later stage. When there was a disparity between the map and reality, we updated the map as well. This was necessary more often than one would expect, partly because of the speed of physical changes in Bangkok. Without the information we added during this period, the interviewers would have had tremendous difficulty getting to the areas and identifying the exact location of census blocks by themselves. The area survey stage also helped me to become familiar with each area. Visiting 50 blocks, one by one, I gained a sense of the characteristics of each block and of the people living there. By the end of the area survey stage, I had accumulated considerable contextual data about the sample areas, and had started to form an idea about the human and physical composition of Bangkok.

Interviewer Training: Part One

I began interviewer training in the middle of November with ten local Thai interviewers and two Thai managers from OPTA. Of the ten interviewers, six were students from Ramkhamhaeng University, Bangkok, and the rest were people in their late twenties who had already graduated from university but did not yet have permanent positions. At the suggestion of the director of OPTA we added a second manager to the project to provide ample supervision for the ten interviewers.

The purpose of this stage of interviewer training was to prepare to put together a complete household listing and to make detailed neighborhood maps of the sample census blocks. During the preliminary stage of the training, we introduced ourselves and the interviewers talked about where they lived and which areas of Bangkok they were more familiar with. This information was useful for deciding who covered which part of Bangkok in order to conduct data collection efficiently in terms of time and transportation. Ten interviewers were then divided into five teams of two, based on their place of residence, familiarity with each other, and sex. Because the interviewers were reluctant to form pairs with someone of the opposite sex, people of the same sex were matched. Teams were then allocated to their districts.

As the main component of the training, I discussed the general background of the project and specific issues regarding the mapping and household listing. In particular, time was spent explaining the definitions of important concepts, such as the household. When the interviewers seemed to have understood the basics of their assignment, we had a question-and-answer session. We found that it would be more convenient to have a list of symbols and abbreviations to convey information in a precise and accurate manner without unnecessary writing. Although it took some time to make a list that everyone agreed on, it was an important investment of time that assured we all understood the conventions we would use.

After the in-room training, we went to a practice block to map the area and list all the households in the block according to the agreed specifications. We then reviewed these maps and listings. Finally, the managers and I supervised the interviewers as they mapped and listed for a couple of days in the field. After the trial in the field, we met again in the office to review data, discuss errors, and make more adjustments and modifications to the specifications.

Mapping and Household Listing

The goal of this stage was to identify and locate every eligible interviewee, i.e. persons 60 years and older. Five teams of interviewers visited their respective census blocks in the allocated districts to: 1) list every household located in the given census block, 2) visit each listed household and ask about the number of elderly in the household, and 3) determine the sex of the resident elderly. If a person was (or seemed to be) too ill for an interview, or a person (or household member) was particularly uncooperative, these conditions were noted so that appropriate strategies for interviews could be devised. If the interviewers were told to make an appointment for interviews, contact information was recorded, along with any remarks that might be useful for revisits. Interviewers drew detailed maps of the census blocks, recording the major households in the area and other such landmarks as markets, temples, and schools. On the neighborhood maps, they located the exact site of each household where an identified elderly person resided by using the household address. The maps originally provided by the NSO and updated during the area survey were used to find the target census block and identify the exact borders of the block, while the neighborhood maps drawn by the interviewers were used to locate the target households for actual interviews. At the end of each visit, the interviewers recorded their observations about the block and their ideas about convenient times for revisits for the actual interviews. When I suspected irregularities or oddities about a listing or a mapping, a different

pair of interviewers was sent to check the data (seven census blocks were revisited for this purpose).

Even though the interviewers were supposed to obtain information through direct contact with a resident of the household, sometimes the situation did not allow them to do so in spite of repeated attempts. When the interviewers could not meet with a resident of the household because of real or pretended absence, they obtained information through: 1) neighbors, 2) maids, if available, 3) guards in gated communities or apartments, or 4) available community leaders. In these cases, the interviewers recorded the source of information using the appropriate codes. Obtaining information through these sources was allowed only as a secondary choice, but it turned out that under certain circumstances, asking through a third person actually worked better. For example, the teams quickly found that some people did not give accurate information; there was a patterned set of people who provided misleading information, and the interview team was able to devise strategies to deal with this. The tendency to provide misleading information was mostly noticeable among Chinese-Thai people who were not open to contact by outsiders and who sometimes denied the presence of an elderly person in the household. When we suspected false information provided by the resident of a household, we tried to talk with neighbors as well. Depending on the type and characteristics of a block, a community leader could sometimes be found, and he/she could provide detailed information about the people in the community. Guards, called *yaam*, also know about people living in the areas they guard, and proved good sources of information.

The mapping and listing stage not only identified prospective interviewees, but also provided valuable preparation for the project. First, this stage introduced the interview team members to people living in the target census blocks so that the residents recognized the interviewers during the actual interview visits at a later stage and felt more comfortable with their presence. Because Bangkok is a big city and people are very careful about strangers, being

known in the area was an important step to open houses for interviews. Second, it was also a good opportunity for the interviewers to get to know their allocated census blocks. In fact, they quickly grasped the characteristics of each area and were able to provide useful localized information, including rumors, demolition plans in a community, the origin of a community, the daily life pattern in a block, etc. I was able to compare notes with the interviewers and learn more about each area from them. Finally, accompanying them to different blocks provided a good opportunity for me to observe the way each interviewer worked.

Interviewer Training: Part Two

The second part of the interviewer training started at the beginning of January 2004, after a short break for the New Year. During the first week of the training, the interview team participated in intensive sessions during which I explained the instructions in Thai, assisted by a Thai graduate student and a Thai professor, both of whom are fluent in English. The main goals of the sessions were first, to train the interviewers to be competent in conducting an interview session independently, and second, to train them to reduce response biases resulting from the interviewers. Toward this end, the in-room sessions functioned to: 1) explain the research purposes and agenda and provide instructions on how to use the informed consent form; 2) teach the structure of the questionnaire, intended meanings of each question item, and the working definitions of the various terms; and 3) show the answer coding system and discuss the details of each answer category. Moreover, when the interviewers had problems understanding an answer category, I reconsidered the relevance of the category. We held discussions about the questions and their answer categories to develop a set of more relevant categories that we all could feel comfortable with. Finally, the sessions helped to standardize the way interviewers asked questions and recorded answers, especially for those questions that could be interpreted

differently, depending on the way they were asked. For example, interviewees were asked how long on average they spend time with their co-residing children. In asking this item, the interviewer was instructed to specify that “spending time together” includes such activities as eating, watching TV, talking, and doing housework, while just being in the same household engaging in different activities would not count as shared time. Upon receiving an answer, the interviewers made sure that the interviewee correctly understood the question by asking “OK, you spend about three hours with your child. What do you usually do (during this time)?”

Along with the core sessions, a series of informal sessions was also provided to equip the interviewers for the practical issues associated with being in the field as interviewers. The managers gave advice on how to dress and behave, and emphasized a non-threatening presentation to reduce possible fears about strangers. The project supplied two T-shirts with OPTA’s logo, a bag, and a name tag for each interviewer to use during work time so that people in the study areas could know who they were and feel more comfortable with them. We also gave talks on good ways to explain why the interviewers were in the study block, using a letter of introduction from Institute for Population and Social Research (IPSR), Mahidol University, and explored different techniques for talking with a stranger (i.e. prospective interviewees) for the purpose of data collection. Interviewers were also reminded not to show particular emotions and/or preferences about questions they asked and answers they received.

After the in-room sessions, training on the ground started. First, the interviewers were instructed to form pairs and to role play an interview. Second, we invited a couple of elderly test interviewees, and the interviewers took turns asking them questions item by item. Third, the interviewers went out and actually conducted interviews with willing elderly participants in the area. Finally, we all went to a test census block, and the interviewers formally conducted interviews under close supervision by me and the managers. The major purpose of the in-field training was to provide a chance for the interviewers to put into practice what they had learned

during the in-room sessions. Over the course of the training, the interviewers not only became fluent with the questionnaire, but also acquired the necessary skills to make the interview sessions run smoothly.

Training did not, however, progress quickly, and required considerable repetition. For example, it took three to five days for the interviewers, depending on their capabilities, to understand the structure of the questionnaire schedule and to become familiar with the coding system. The questionnaire covered a wide range of issues, and the structure of the questionnaire, involving a timeframe dating back several decades, was a challenge for the interviewers. Moreover, the coding system required the interviewers not only to understand the meaning of the answer categories, but also to be sufficiently familiar with them to conduct each interview session smoothly. These problems were more or less expected and time and patience solved them, with everyone in the training sessions reaching an acceptable level of competence.

Interview with Questionnaire

The training session was immediately followed by the actual interviewing stage, which lasted approximately three months. The prescribed course of an interview session was to: locate the house of an eligible elderly person using the household listing and neighborhood map; approach the prospective interviewee and show the letter of introduction from IPSR; explain the informed consent form and obtain a participant's consent; conduct the interview, and end the interview session with words of thanks and a small gift as a token of appreciation. The interviewers repeated this process from the first to the last eligible person listed on the household listings of each respective census block. When the interviewers finished one census block, they would receive a new list and a map for the next census block. On a good day, an interviewer could conduct up to five interviews, but on average, one interviewer could complete three

interviews per day. One net-interview session (i.e. after the introduction and before the post-interview chatting time) took about 55 minutes, on average. However, on some occasions the interviewers spent hours at the house of an interviewee drinking water, eating food, and listening to her/his stories, and I encouraged the interviewers to do so when they had a chance.

Over the course of the interview months, the managers and I paid careful attention to the allocation of census blocks to different pairs of interviewers. We made every effort to assign the same blocks as those from the household listing stage so that the interviewers were already familiar with the location, composition, and ambiance of the block. As Bangkok is infamous for its traffic congestion, knowing exactly how to get to the block was very important; if they got lost or caught in bad traffic, not only time and money would be wasted, but the enthusiasm of the interviewers for the project itself could also diminish. By this point, each interviewer had gained several reference people in each block, an especially welcoming elderly person, a helpful yaam (guardsman), or an official or unofficial community leader, and these people would help the interviewers gain access to the prospective interviewees when the interviewers returned to the block.

Using the knowledge from the household listing stage, the team tried to find the most convenient time for an interview for each census block. Since each block has certain characteristics and life styles, it was possible to make an educated guess about the probable times when the prospective interviewees were more likely to have free time to participate in interviews. For example, in a low-income area, elderly people are typically at home during the day tending their grandchildren or working around the house (for income), and it was usually fine to visit them during a weekday. On the other hand, in a relatively wealthy housing estate, elderly people were often not home during the day, visiting elsewhere. Even if they were at home, they would most likely not come to the door as they were afraid of strangers. They also may have been

instructed by their children not to open the door. In this case, the interviewers needed to visit them over a weekend when their children were around.

The interview team encountered several challenges in approaching households and collecting interview data. A seemingly trivial but in reality a serious threat to interview visits was presented by both stray and house watchdogs. Stray dogs are abundant in Bangkok, especially outside of central Bangkok districts, where they often roam in packs, with sometimes more than twenty dogs in a pack. When these dogs were wandering around a soi, the interviewers understandably felt nervous, and they needed to take precautions not to be attacked by the dogs; dog attacks and rabies are still common in Bangkok. Sometimes, the presence of dogs slowed the pace of interview visits for the day. Moreover, house watchdogs, either tied or free inside the gate of a household, were also possible obstacles for interview visits. At relatively wealthy households, there were typically several watchdogs that started to bark as soon as they spotted the interviewers. Because these dogs were big and strong, there were several incidents in which elderly women were willing to talk with the interviewers, but they could not control the dogs, so the interviewers needed to reschedule the interview. Although one interviewer received a minor bite, the team fortunately did not experience a serious attack by a dog. However, the presence of dogs was something that always affected the interviewers.

Contrary to the totally unexpected challenge of dogs, an expected problem was the difficulty of approaching wealthy families. After the area survey and household listing, it was apparent that there were a number of probable “difficult to access” areas, muu baan, and other individual households located in our sampled blocks. For example, at one exclusive muu baan, the guards would not let the interviewers enter the estate, and I finally needed to talk with the resident manager of the estate to ask for cooperation. People who live in an upscale muu baan have money and power, and it was not easy to visit them and have them participate in an interview. Because these people usually do not answer doorbells themselves, it was another

challenge to convince maids to let the interviewers see the appropriate elderly person (after successfully managing the howling dogs). Maids are instructed not to open gates to a stranger, and they often did not understand the purpose of our visit. Some of them had little education and many had language barriers, not being Thai speakers.

In order to obtain as many interviews as possible from these elite people, the interview teams tried different strategies. First, the presence of “central authority” greatly helped increase the participation rate. My association with a university in the United States and Mahidol University’s participation as the host institute seemed to have been enough to impress people. Second, it seemed that when I also went to the doorstep along with the interviewers, the maids were more likely to introduce us to a household member, and the elderly person in question also showed a more open-minded attitude. It is possible that many of these wealthy people had studied abroad and understood well that I was just collecting data for a thesis. Third, I started to notice that some interviewers did better with these wealthy people than others, despite the fact that they were all given the same training. Because an interview necessarily involves personal communication, it is important that interviewers be able to maintain the flow of conversation in a polite but confident manner, even with someone who is obviously in a much higher social status. This ease is a rare quality among Thai people who have been taught to be obedient to their seniors and social superiors. Realizing this, I tried to assign interviewers who had the necessary qualities to speak with elite seniors, and that strategy seemed to have worked.

The hardest challenge the team faced was accessing and obtaining data from Chinese-Thai people¹². When a pair of distressed interviewers called from our first block, where Chinese-

¹² In this thesis, the word “Chinese-Thai” refers to people who regard themselves as having Chinese origin, regardless of nationality status, number of generations in Thailand, Chinese speaking ability, and Chinese cultural competencies. But it should be noted that the third resident generation is said to be the crucial one by which people are well educated in the Thai language, and socialized as Thais (Phongpaichit and Baker 2004:11).

Thais were the predominant residents, to inform me that they could obtain data from only a few people in the block, I had not yet realized the seriousness of the situation. But the response rate from the first round of visiting that block was in fact very low, less than 20 percent, and I immediately needed to develop strategies to improve the response rate. After team meetings, we realized that a number of factors created difficulties for the participation of Chinese-Thai elderly people in interviews. First, Chinese-Thai elderly, especially of the first generation, can speak only one of several Chinese dialects, and even for those who speak Thai, fluency is often questionable. Second, as most of them are involved in trading businesses, there is a strong reluctance to waste time in a non-money making activity¹³. Finally, there is a tendency to avoid strangers and Chinese-Thai are typically not open to people outside of their circle. As an example, in one block a middle-aged Thai woman told us that she had rarely talked with the elderly Chinese lady who had lived next door to her for 20 years.

Accordingly, I looked for a Chinese speaker as an interpreter for the team. I interviewed several Chinese-Thai students from Chulalongkorn University who were majoring in Chinese and whose language proficiency was tested by a Chinese officer from the United Nations. Because their language proficiency was not good enough to conduct interviews, I was introduced to a middle-aged Chinese-Thai housewife who grew up speaking *Teochiu*, one of the major Chinese dialects spoken in Bangkok, at home and Thai at school. *Phii Lek* (older sister Lek), soon joined the team and accompanied the interviewers as an interpreter¹⁴. Her presence helped open the doors of Chinese-Thai people, and people chatted with her more casually. As a result, the response rate in the Chinese-Thai areas greatly improved to a more acceptable level (see Chapter 4 for details of the response rate). Her “Chinese” phenotype with whiter skin, and her casual

¹³ Coughlin (1960) describes the overseas Chinese as “very flexible people whose main concern is self-interest” (P. 193) and who value being “materialistic, concerned principally with the acquisition of wealth as an end in itself or as a means to social position” (p. 197).

¹⁴ All names used for people and places in this dissertation are pseudonyms.

conversation in Teochiu was helpful in making the Chinese-Thai people we visited comfortable. That she is the second generation of a Chinese-Thai family and still practices Chinese traditions in her everyday life worked to make elderly people feel that she was “one of them,” and consequently they were more open to the project.

Another strategy was to assign a Chinese-Thai interviewer to cover predominantly Chinese-Thai areas. In the interview team, one woman identified herself as a Chinese-Thai, and also was seen by others as belonging to this group. In her early thirties and with more experience than other interviewers, she was helpful in giving the team tips on the basic nature of Chinese people; according to her, Chinese people are afraid of people they are not familiar with. They also do not take action unless they see tangible benefits (such as financial gain) in doing so. She advised interviewers to talk quickly with Chinese-Thai people because they are very time-conscious. If they are bored or feel that they are wasting time, they will terminate an interview. (In fact, a couple of interviewers experienced sudden exits by Chinese-Thai interviewees, something that did not happen with Thai people). Even though she could not speak any Chinese dialect, her identity as a Chinese-Thai living in a shop house in the area known as Chinatown contributed to good response rates from Chinese-Thai people.

The team held weekly meetings throughout the data collection period in order to solve problems, improve interview strategies, and maintain data quality. During the meetings, the interviewers finished coding the questionnaires from the previous week for submission, clarified any points they were not completely comfortable with, and received maps and listings for the new blocks scheduled for the following week. I could talk with different interviewers to find out how they were doing, discuss any specific issues that need to be shared with them, and give them training and guidance as needed. Managers also talked to each interviewer in a very casual manner, trying to see if there were any issues the interviewers wanted to discuss. The managers

were useful as mediators as the interviewers sometimes could talk about things with the managers that they might not have wanted to say to me directly.

In addition to the regular meetings, several more actions were taken to ensure the quality of data. Over the course of the data collection, the managers and I continued to oversee each interview pair, either being in the field and visiting households with the interviewers, or randomly appearing in the field. Also, after the submission of completed questionnaires, a manager checked for errors and inconsistencies. When there was a problem, the manager either had the respective interviewers correct the problems while their memory was still fresh, or had them go back to the interviewee to obtain more data, if needed. It took a significant part of data collection time to properly enforce these methods, but it was well worth the effort.

To conclude, in spite of the challenges and problems, the data collection went reasonably smoothly and 1,125 interviews were completed. The data collection finished just before a major Thai holiday, when Bangkok becomes virtually empty as most people go back to visit their families up-country. That meant we could also successfully avoid the very hot season and the following rainy season, during which data collection would have been even more difficult. Another factor contributing to a relatively smooth collection process was that most of the contacted interviewees were open-minded and talkative with the interviewers, and the interviewers themselves usually enjoyed meeting with them. According to the post-interview questionnaires answered by the interviewers, what they liked about working for the project were: 1) feeling the generosity of people, 2) learning from the experiences of elderly people, 3) getting to meet many people from different social categories and knowing more about different areas of Bangkok, and 4) spending time with elderly people who sometimes needed someone to talk to.

Data Entry

The data were entered in an Excel file by two of the male interviewers, Noi and Nuu, in an unused office at a university. From this stage, I handled the project without the assistance of OPTA because there was no longer a need to keep a large number of assistants and the data enterers had shown their interest and commitment to continue to work on the project as long as I needed their assistance. They were two of the best interviewers from the team, with good insight, common sense, and a reliable work attitude. As they were already very familiar with the contents of the questionnaire, I only needed to go over particular points regarding data entry, including the format of the computer file, changes in the coding system for some items, and clarifications of coding methods for complicated items that involved reference to the past.

I was in the office during the data entry, answering questions, solving occasional computer problems, and keeping track of the entry records. I also maintained the master file, tested the workability of the Excel file as data were entered, and adjusted the coding and data entering methods as needed. Moreover, when data were stored, I browsed the file for obvious entry errors and then performed basic descriptive statistics for detection of other entry errors and inconsistencies.

In-Depth Interviews

During the latter part of the nearly three month-long data entry period, I started to review field notes, other related documents, and questionnaire responses to identify possible candidates for the semi-structured in-depth interviews. I planned to interview five elderly parent and married child pairs, another five pairs of elderly parent and their non-married child, and an additional five non-co-residing elderly. The main concern for the identification process of

potential interviewees was to include people from a variety of social categories. The specific criteria used for selection were: 1) socio-economic status for both elderly parents and their children (high, middle, and low), 2) type of living arrangements (co-residence or non co-residence), and 3) sex and marital status of co-residing child (ever-married or never-married).

After the potential interviewees had been selected and the data entry stage reasonably well completed, an assistant, Noi, and I started the interviewing stage. We worked together as a team in which I was the main interviewer and Noi was the interview assistant. All interviews were conducted in Thai, except for three cases in which interviewees could speak fluent English and preferred to have interviews in English. Noi sometimes added words to my sentences or restated what I had said when my Thai was not clear enough for the interviewees to understand well (by this time, Noi was good at understanding my often imperfect Thai). When interviewees were not fluent in central Thai, but fluent in *isaan* (a northeastern dialect related to Lao), Noi took the leading role, talking to them in *isaan*, as he is a native of this area. For interviews with a Chinese-Thai elderly woman, the aforementioned phii Lek accompanied us for the interview so that the elderly person could talk with us in Teochiu when needed.

On the day of an interview, Noi and I would meet in the residential area of the target interviewee and then visit the household together. For all cases, the elderly interviewees remembered that they had been interviewed by students a couple of months previously and were not particularly surprised to see us knocking on their doors. The elderly people with whom Noi had previously conducted an interview remembered his face right away and welcomed us before we said anything. Generally speaking, elderly people who had been contacted previously were friendly to us from the beginning and did not mind being approached for a taped interview. They invited us inside and asked how we and the other interviewers were doing.

After the pre-interview casual chats, we usually conducted the interviews inside the house or sitting in the yard alone with the interviewee. The interview conversations were

recorded on a tape recorder with the permission of the interviewees. The course of conversation was semi-structured, based on an interview guide that listed topics and questions. The responses of interviewees, however, were not restricted and they were free to add anything they thought important. The atmosphere of the interviews was relaxed and easy going, but the interviewees clearly treated us as interviewers, not friends. Even though we did not set any time restrictions, an interview naturally finished within about one to three hours, depending on the situation. The prepared topics were usually comfortably covered within this time, and the interviewees often showed by subtle gestures that they had finished. Given the style of interviewing and the orderly daily schedule generally followed by people in Bangkok two hours seemed to be the time people felt comfortable spending with a “familiar stranger.”

A challenge encountered during this stage was the difficulty of finding appropriate times to interview the children of the elderly interviewees. Noi and I visited most elderly interviewees in their houses without an appointment and usually did not have a problem finding them at home. On the other hand, it was very unusual to find their children at home, regardless of the day of the week, so we needed to make appointments through the elderly parent or by direct telephone calls to visit them on a later day. Even on weekends, children were always busy doing something outside of the house; people without regular office jobs do not necessarily have a weekend free, while office workers are often busy taking weekend classes for a graduate degree, as seems to be a trend among middle class workers, or driving their children from one activity to another. For example, the Sunday of one middle-aged interviewee with two school-aged girls was filled from morning to night with family commitments, starting with swimming and piano lessons and followed by a Chinese class for the six year old. However, since they were generally not against the idea of participating in an interview, once we could make an appointment for an interview to be held at a convenient time and for a certain length (i.e. about one to two hours), it was still possible to interview them.

We collected 28 taped semi-structured interviews, along with two interviews in which the elderly interviewees declined to be recorded, but did not mind answering questions. Additionally, as a result of the 12 months of fieldwork, there were field notes based on constant participant observations and regular informal interviews with various people, including Noi, Nu, other interviewers, workers at OPTA, and the different household members of the interviewees.

Transcription and Translation

The 28 taped interviews were transcribed word by word in Thai and then translated into English. Noi, who worked on the project from beginning to the end, took responsibility for transcribing the tapes. I translated the transcribed interviews into English, assisted by Noi. During translation sessions, Noi and I sat next to each other: Noi read the text in Thai, line by line, while I translated the lines accordingly. This was time-consuming and tedious, but the translation itself was not too difficult because we both had been in the interview sessions and already knew the contents of each interview well. It was a matter of perfecting the details of the conversations, clarifying parts I was not sure about, and reading between lines when necessary to make sense of the conversational flow. Again, given his extensive involvement with the project, Noi was more than helpful in assisting me. The 28 transcribed interviews produced more than 300 pages of single-spaced translated manuscript.

Towards Future Fieldwork

Interviewers as Ethnographic Informants

One of the major methodological goals of this project was to find ways to deal with the whole of Bangkok without losing the views of its locals. One means toward this end was to employ a group of local interviewers, train them well, and, when appropriate, to include their insights on the questionnaire schedule and answer categories. However, beyond fulfilling these initial expectations, the interviewers in effect functioned as a group of additional ethnographic informants to teach me what “*Thainess*” is and to help me make sense of what I was dealing with. I learned how Thai society worked in a broader framework, beyond the specific research questions, through their behaviors, comments, and reactions. For example, it was through them that I started to understand the meaning of a key Thai concept, *nam jai* (generosity), that is said to be the center of Thai personal relations.

The interviewers were helpful as providers of emic information as Thais, yet they also retained their roles as trained outsiders studying a group to which they did not belong, the elderly. This worked well in providing me with localized information in each block and giving me clues to better understand what was really happening in the field. For example, they told me about a plan to demolish a whole block for the construction of a new highway. The people living in that block would have no other choice than to be evicted from their residences without meaningful compensation when the time came. In contrast to my surprise at such conduct by the government, the interviewers did not seem to be surprised by the news. I later realized that this kind of eviction is common in Bangkok, especially among poor residents. I then understood why the interviewers wanted to include eviction as an answer option to the question about the reason for a move. I also started to understand why people were often being *chui chui* (showing an impassive

attitude towards something that could be challenging and adverse); they were used to a life of unreasonable incidents and a life without choices.

Overall, fieldwork was a process of growing together as a team. As I was busy as a student of Thai culture, the interviewers made efforts to improve themselves as interviewers. Although most of the interviewers were already experienced, they still needed to gain confidence in conducting this particular questionnaire as part of the team, knocking on the doors of random strangers in a city like Bangkok. They also had to find ways to deal with me on a daily basis as they quickly found that I was going to be with them instead of disappearing into an office at a university. Looking back now, one of the most difficult parts of the fieldwork was to guide the interviewers towards the research goals as the project leader and at the same time to be guided by them as a novice in their culture.

What I learned from the intensive contact with the interviewers is the importance of including the “right” kind of interviewers on the team, beyond a simple qualification like “college student” or “previous experience as an interviewer.” These qualifications may be helpful guidelines for estimating a person’s ability to absorb the training sessions properly and adequately digest the information provided. However, I found that even though good training is certainly necessary to collect reliable data, there is a limit to what training can provide. For example, an interviewer’s maturity, life experiences, and background or upbringing are qualities beyond the reach of interviewer training¹⁵. Yet, these elements turned out to be extremely important, particularly for securing good response rates and, of course, for conducting quality interviews based on a naturally flowing conversation. More importantly, when one expects to

¹⁵ For example, the male interviewer named Noi was a very talented interviewer. Unlike other interviewers, he was especially competent in dealing with people from higher social categories. I could not understand the reason for his skills as his background seemed not to differ from other interviewers. One week before the end of the project, he told me that he is the son of a minor wife of a powerful man in his native province. He grew up knowing the privilege of power, even though he never actually employed it.

spend a major part of fieldwork with these interviewers and will be indirectly learning about their culture through their behaviors, it is sensible to include these qualities when selecting interviewers.

In this regard, this project was successful but also had room for improvement. For example, having working students as a majority of the interviewers was good in the sense that they could easily build a rapport with many of the interviewees; both sides shared the similar background of coming from rural areas. The fact that they were not from affluent families meant that they were not typical Thai “elites,” who certainly have a different outlook from the mass of the Thai population. On the other hand, including more interviewers from higher social categories would have provided easier access to people with power and money. Moreover, Chinese-Thai interviewers who could ideally speak Teochiu would have been extremely helpful in contacting people in this category and building relationships with them. However, realistically, it is not easy to recruit these people for an extended time period because their availability as full-time data collectors is simply very limited. Therefore, for future fieldwork, the composition of the interview team should be carefully planned, with a realistic consideration of the availability of the desired interviewers, and a balance between how much time data collection requires and how long interviewers can commit to the project.

Building Relationships with Interviewers

Besides the day-to-day methodological challenges discussed earlier, one of the most unexpected and psychologically intricate issues encountered during the fieldwork was the difficulty of human resource management. The fundamental issue that I was forced to handle was being a *nai jaan* (employer) in Thai society, where the concept of patron-client relationships is pervasive. While I had read about the patron-client relationship, considered by ethnographers as

the fundamental building block of Thai social relations, at first I did not realize that this concept applied to me and that I was expected to play the role of patron.

In patron-client relationships, people occupy a position in the social hierarchy based on their level of accumulated *bun* (merit) and are expected to behave accordingly. A person who stands higher in the social order gives out benefits from the greater resources he/she has to people whose position is lower, in exchange for the services they provide (Hanks 1975:199).

Historically, the patron-client relationship has its roots in the scarcity of labor in Thailand and the necessity of effectively organizing it for political and economic purposes. The patron-client relationship in its original form consisted of *nai* (masters; princes and nobles) and *phrai* (mostly peasants) who were required to register under a *nai*, as part of a class system in which *nai* provided protection and assistance, while *phrai* paid respect to *nai*, conformed to *nai*'s requests, and rendered services and gifts (Rabibhadana 1975:94-97). The patron-client relationship in this form no longer exists, but the basic structure is still an important mechanism for Thai social relationships (Heim et al. 1983:7).

Once I saw myself as a patron, the words and behaviors of Thai people started to make sense, like the pieces of a puzzle falling into place. For example, a Thai professor who acted as a mentor for me repeatedly said that showing *nam jai* (generosity) to the interviewers is important to make them happy and to keep the project going. In fact, this professor and many other professors whom I met in the field as my superiors never failed to show generosity of different kinds to me. On another occasion, when I was struggling to put the team together, the director of OPTA advised me to be "understanding" and "good to the interviewers." She even suggested that the interviewers were not working simply for wages, but for "relations." At that time, it was difficult for me to understand what "relations" meant and I was reluctant to provide more than the pre-defined wages. However, I soon realized the wisdom of this advice; once I consciously tried to act like a "patron," the team started to work better.

In order to play the role of patron, I initiated several practices trying to increase the level of protection and assistance given to the interviewers. One of the benefits I managed to provide from my limited capacity as a patron was flexibility in the work schedule. Contrary to my initial assumption, the interviewers did not want to take regular days off during the project, except for an occasional a day off for running errands and taking school exams. This was important as the interviewers lived on the wages the project paid them, and, practically speaking, they could not afford to take many days off. As a result, they worked more days per month than the estimated 20 working days that assumed two days off per week. Another benefit was letting interviewers share taxi rides with me whenever possible; when interviewers were assigned blocks far from their residences, I arranged rides in the manager's car. In addition, I paid for lunches in the field for the interviewers who were with me. The cost of each lunch was small by Western standards, but considering their daily wage, the cost was not negligible and the interviewers seemed to appreciate it. More importantly, the very act of my not letting them pay seemed to be important to them. By this time, I understood that the pre-defined wage was just a basic condition of employment. I needed to establish a trusting relationship in which employees could feel that they would receive additional unspecified benefits, if I wanted to keep them for a long period of time. As I developed patron-like behaviors, the interviewers became more dependable and showed a greater willingness to perform extra duties for the project and for me.

This mutual dependency was more apparent with the two interviewers who volunteered to continue to work with me after the end of the large-scale data collection stage. For example, they did not complain when I asked them to go back to the field for additional data collection. They also played with my son like uncles. When I was looking for a replacement for my house help, one of them even introduced his girlfriend as a candidate. On my side, I provided food and clothes whenever available, found an office for the work at a convenient location for them, let them use air conditioning and a radio, and paid them on request. I never paid in advance but paid

whenever they needed money, effectively functioning like an ATM machine. They often received calls to their mobile phones from their parents up-country asking them to send some money, and this was often the time they needed money from me.

In contrast to the sustained relationship with these two interviewers, at the very beginning of the data collection stage the team lost some interviewers, partly because of my failure as a competent patron and partly because of unavoidable circumstances. During the first month of data collection, a total of four already trained interviewers left for full-time positions elsewhere and for other personal reasons. Because OPTA quickly found replacements and the managers and I repeatedly provided training for the new interviewers, the work was largely unaffected. As it happened, two of those who left the project were younger than the other interviewers and their youthfulness and typical Thai female modesty were not helping in conducting interviews, so their loss was not as serious as it might have been. Nonetheless, the defections came as a shock to me as the fieldwork depended on training the interviewers well and retaining them for the length of the project. In fact, we had already spent a large amount of time in training those who left.

My dilemma was to find the right balance between my position as an employer/patron, whose behavior made my employees happy and, thus, retained them, and my position as a researcher trying to do the best for the project. The simplest solution would have been to start with many more interviewers than needed (as Axinn et al. did in their 1991 study), so that we could dismiss people who did not meet the standard, and graciously accept the decision of some people to leave the project. However, this method necessarily involves generous funding and an underlying power relationship between the interviewers and the researcher, and as in the case of this project, may not always be possible. Thus, possible alternative methods for the future would be: 1) remembering that it is not easy to keep a group of people for a long period of time, especially in places where contracts *per se* do not mean very much, 2) establishing an effective training plan that does not require a lengthy period so that it is not too damaging for the project to

train new people, and 3) being conservative about the questionnaire design and creating measurement instruments with extra room for interviewer error.

Finally, another problem during the fieldwork was the difficulty of setting a schedule that was workable for both the interviewers and me. As mentioned before, the interviewers basically wanted to work as many days as possible. On the other hand, I found even the original schedule to be too demanding as there were many additional things I needed to take care of in the field, a time constraint I had not anticipated when I planned the project. For example, I needed more time to compile household listings after the mapping and listing stage before beginning the second part of the interviewer training. Because I failed to include time for these additional tasks, I used the Christmas and New Year break, during which interviewing was suspended. Because the interviewers felt these breaks were unnecessary, I risked the possibility of losing interviewers during this period.

This experience suggests the wisdom of including sufficient time between data collection stages, and budgeting so as to be able to pay the interviewers even during these non-data collection days, or planning workloads so that interviewers can perform other tasks during these periods when data are not being collected. Alternatively, when keeping the best set of interviewers is the priority, providing relatively good wages (or possibly paying a monthly salary if one is confident about the commitment of the interviewers) and trying to keep the data collection period as contained as possible may be the best strategy.

Conclusion

This chapter concerned the process of the one-year long fieldwork period in the Bangkok Metropolis, and pointed out the successes and shortcomings of the fieldwork activities. Bangkok proved to be an appropriate choice as the site of this project because of its demographic dynamics,

a rapidly aging population and growing numbers of never-married people. Bangkok was further identified as the ideal project site for its socio-economic complexity, hosting various peoples from all over Thailand and from abroad, particularly those from Chinese-speaking areas. Given the diversity of this city, treating the whole of Bangkok as the setting for different groups of people presented both a methodological focus and a challenge.

The chronological accounts of the fieldwork process suggest that it proceeded fairly smoothly, producing rich quantitative as well as qualitative data. Over time, I gained better understanding of the lives of people living in different areas of Bangkok as I went through each stage of fieldwork. Similarly, the interviewers improved their performance as they familiarized themselves with their allocated areas and received interviewer training. The interviewers also proved to be useful sources of ethnographic information. With them, I learned about “*Thainess*,” beyond the specific research questions I had in mind. One of the key concepts that I realized as important in working with them is *nam jai* (generosity), which forced me to be a good employer according to Thai social norms.

The fieldwork presented a number of challenges that required adjustments in interview methods, interviewer allocations, and work schedules. In terms of securing interviewees, approaching wealthy people and those of Chinese-Thai origin turned out to be particularly difficult. Moreover, there was the challenging issue of building a trusting relationship with the interviewers in order to keep them for an extended period of time without compromising my research agenda. After trying different approaches to these problems, I would emphasize, for future fieldwork, the importance of including interviewers with mature life experiences, the necessity to carefully budget for non-data collection periods, and the usefulness of establishing effective interview training plans without involving lengthy training periods and the need to incorporate appropriate methods to include the sizable Chinese-speaking population of Bangkok.

Chapter 4

DATA

Introduction

This chapter concerns the quality of the data collected through a structured questionnaire and specifically discusses issues related to sampling, selection bias, and the survey instrument that are considered to be important sources of error in the data. Examinations of the data reveal both strengths and weaknesses and provide background information for interpreting the analytical results that follow in the coming chapters. This critical analysis of data quality should also be useful for planning future research in similar settings.

The chapter is intended to complement the previous chapter by covering similar issues, but from a different perspective. In contrast to Chapter 3, which discussed methodological issues from the viewpoint of the field, this chapter investigates the results of the field activities from a more objective standpoint, relying on statistical concepts. The first section addresses the sampling scheme and evaluations of the sampling method and associated sampling errors. The evaluation suggests a low level of sampling error and a surprising heterogeneity within the census blocks that contributed to the good sampling outcome. The next section examines possible selection biases and assesses the representativeness of the data compared to census data. The results indicate the need for weighting to adjust for the under-represented segment. Finally, issues related to response bias are discussed in relation to the survey instrument and its format.

Sampling Issues

Sampling Design

Having argued for the importance of treating Bangkok as a whole I needed to find practical methods to capture in a meaningful way the multiplicity that is Bangkok. As Askew (1994:28) has pointed out, anthropological studies equipped with traditional participant observation techniques are often viewed as having methodological difficulties in dealing with large populations. On the other hand, studies that use survey techniques face the challenge of balancing the collection of large-scale data and understanding the views of local people. Recognizing these methodological dilemmas, this work attempts to study the whole of a large city by collecting representative data without losing sight of localized views. One of the devices used toward this end is the methodological focus on the census block.

The Bangkok Metropolis is administratively divided into 50 districts called *khet*, and within the administrative framework of the *khet*, the census block has been used for every survey conducted by the National Statistical Office of Thailand (NSO). According to the NSO, a census block is the primary sampling unit, organized to contain about 100 to 200 households, and is a segment of a larger unit called a census enumeration district. The census block has been used in municipal areas, including the Bangkok Metropolis (the equivalent of a census block in non-municipal areas is the village) during the census-taking period, when enumerators compile the list of households located within each enumeration district. Detailed records of the enumeration district and census blocks are maintained and adjusted by the NSO, taking into account such

factors as administrative changes regarding the size of a district and the total number of districts in the Bangkok Metropolis (Dr. R. Gray, personal communication¹⁶).

Census blocks are used as the primary sampling unit for the sampling scheme of this project, as a means to collect representative data from the whole of Bangkok Metropolis. The specifications for the sampling are:

- 1) Observation unit: an elderly person (aged 60 and over) residing in the Bangkok Metropolis, Thailand. An elderly person was counted as “residing” at a house and within a household if this person was considered to be regularly living at the house (i.e. eating and sleeping there on a daily basis) by him/herself or other members of the household, regardless of the official housing registration. A house is a place where a person resides, regardless of the existence of a government-issued household number, because a house can be built without an official housing registration, especially in the case of squatter areas. Based on the pilot study and local understanding, a household is defined as a group of people who usually live, eat, and share the same basic house utilities, such as electricity, water, and gas. This definition is reflected in the item in the questionnaire that asks about the person who pays for the elderly interviewee’s utility bills.
- 2) Target population: elderly people currently residing in a household in the Bangkok Metropolis.
- 3) Sampling unit: a census block.
- 4) Sampling frame: the official list of all census blocks for each district in Bangkok, Thailand.

The sampling design of the project is one-stage cluster sampling in which the census blocks in each district are the clusters. They are also the primary sampling units (PSU). Details of the sampling method follow:

¹⁶ Former director of the NSO, currently at the Institute for Population and Social Research, Mahidol University.

- 1) Select one census block from each administrative district in the Bangkok Metropolis. Since there are a total of 50 districts in the Bangkok Metropolis, a total of 50 census blocks was chosen. The National Statistical Office of Thailand (NSO), which maintains the official list of census blocks, performed the simple random sampling and provided maps of the selected census blocks.
- 2) Create household listings based on the maps of the selected census blocks. The household listing identified: a) the number and location of households in each census block, b) the total number of elderly in each household, if any, and c) the sex of the elderly person(s).
- 3) Interview every elderly person (aged 60 and older) identified in the household listings.

As commonly noted, a major drawback of a sampling method involving cluster sampling is that, given the same sample size, the precision of statistical estimations is lower than those from simple random sampling, yielding larger standard errors because the observation units in the clusters tend to be more similar in character than they would be in random selection (Sudman 1976:74-76). The intra-cluster homogeneity produces both less information per case and a reduction in variability in the collected data. Moreover, since statistical theories assume simple random samples, their use is problematic with samples collected through non-simple random sampling methods. Hence, utilization of common statistical packages for analyses becomes difficult without statistical modifications (Lazerwitz 1968:300).

However, in many cases the cluster sampling method has definite advantages that outweigh the possible disadvantages. From a practical viewpoint, when a sampling frame encompassing the list of all observation units is not easily available, dividing the population by clusters is a good way to construct one. More importantly, using a geographical unit as the cluster in a widely distributed population contributes to a reduction in traveling time and costs. The benefits of geographical proximity are particularly important when in-person interviews are planned (Agresti and Finlay 1997:27-28). Thus, in the case of this project, considering the geographical spread of the target population and the reality of the time frame and budget, using

the census blocks as the cluster and concentrating interview activities in the selected census blocks was the right approach.

Furthermore, it should be emphasized that in this project, the clusters effectively worked as a kind of ethnographic space where I could gain valuable contextual information. Since a census block is organized to make a reasonably sized area with 100 to 200 households (there are an average of 155 households per block for this project), it was a good size for the interviewers and me to walk without a car and to grasp a basic sense of the area, to get to know the residents of the block, and to obtain information important to the area and the people living there. If prospective interviewees were randomly located throughout the Bangkok Metropolis, we could not have secured this important local information. The information gained apart from the questionnaire, through observations and casual conversations, proved important in judging the adequacy of the statistical results and in interpreting them.

Sampling Errors

In order to estimate the level of accuracy in statistical inferences to be made using the collected data, sampling errors of major variables were calculated. Sampling error is a random error that results from having sampled data from a population instead of studying the entire population, and, due to this random error, estimates from sample to sample most likely differ (Lohr 1999:15). Table 4.1 shows the estimated sampling errors for key variables at the 95 percent confidence level¹⁷.

¹⁷ For two variables, $x = \sum x_a$ and $y = \sum y_a$, the variance and standard error of their ratio ($r = y/x$) are given by the following formulas (Kish 1995: 187), where f is the sampling fraction, a is the number of sampled blocks, s_y^2 is the variance of y , s_x^2 is the variance of x , and s_{xy} is the covariance of y and x :

$$\text{var}(r) = \frac{(1-f)a[s_y^2 + r^2 s_x^2 - 2rs_{xy}]}{x^2} \quad \text{and} \quad \text{se}(r) = \sqrt{\text{var}(r)}$$

Table 4.1. Sampling errors of major variables.

Variables	Sampling errors at 95 % confidence level
Mean age (in years)	0.415
% Male	0.022
% Never-married	0.020
% Married	0.047
% Widowed	0.036
% Divorced	0.019
% Co-residing with a child	0.030
% Living with spouse only (with/out others)	0.024
% Living with others only	0.025
% Living alone	0.009
% No education	0.028
% Elementary education	0.046
% High school education	0.027
% Above high school education	0.036

Note: Sampling errors take into account the complex sampling design (see footnote 17).

The fairly low level of sampling error is in part explained by a large total sample size and, more importantly, by the nature of residential clustering in Bangkok, in which highly heterogeneous housing types include a variety of people living in close proximity. As an example of residential mixing in Bangkok, a geographer discusses the development and expansion of a *soi* (lane or branch street of a major street) in Bangkok, in which one section is a slum occupied by poor immigrants from the countryside, while another section has a series of costly condominiums (Cohen 1985:5-6). The household listing from this project also found that most blocks sampled include a mix of residential types within their boundaries, except for few blocks in which Chinese-Thais are the dominant residents.

Housing types include houses with small to large land size, town houses, squatter houses, condominiums, shop houses, and houses in gated communities called *muu baan*. Among them, shop houses and *muu baan* are particularly noticeable in Bangkok for their distinctive physical structures and the lifestyles of the people living in them. For example, shop houses of three to four floors, with first floors used as shops and upper floors as living space, were found in many

blocks, especially in trading areas and on major roads where Chinese-Thai merchants typically reside¹⁸. Another notable housing type, *muu baan*, is literally a village, but in Bangkok is often a gated residential community or housing estate with pre-built houses of a similar scale and type. Although there are different ages, sizes, and degrees of elaborateness, upscale *muu baan* typically include an artificial lake and expensive restaurants inside tightly closed gates, guarded by men in uniform. Such *muu baan* are seen as “symbols of the middle-class lifestyle based on consumption, indulgence and display” (Askew 1994:174).

The mixing of residential types within census blocks and the resulting co-existence of “unlike” people contribute to reasonable heterogeneity within the clusters and hence to the low sampling errors. Thus, in this project, the cluster sampling method worked better than the common statistical notion that clusters are highly homogeneous suggests. Nonetheless, it should be noted that for the following analyses, because the data are not from simple random samples (the condition assumed for standard statistical analyses), statistical adjustments have been made using add-on functions in Statistical Package for Social Science version 13.0 that are designed to correct for the complex sampling design effects (Lee and Forthofer 2006:46)¹⁹.

Selection Bias

In an ideal sample, the entire target population is included in the sampling frame, and every member listed in the sampling frame should be successfully sampled (interviewed). However, in reality, a sample can rarely be free from the omission of segments of the target population, resulting in selection bias. This section examines the degree of selection bias related

¹⁸ See Skinner (1957) for historical accounts of Chinese immigrants in Thailand and their predominance in trading in Thai society, and Askew (1994:173) for the continuing preference of Chinese-Thai to engage in family business and to reside in shop houses.

¹⁹ If not adjusted, cluster sampling underestimates standard errors (Lohr 1999:133-134).

to under-coverage and non-response, which are theoretically important and particularly of concern for this project²⁰. Then, the distributions of the selected variables are compared with those from the 2000 census to evaluate the representativeness of the collected data and to better identify the segments of the population that might be under-represented. Examining selection bias constitutes a basis for possible weighting procedures for the statistical analyses in the following chapters.

Under-coverage

Despite careful planning and repeated attempts to include each elderly person in the sampling frame, there are possibly segments of the elderly who may not be completely listed. Although it is not possible to determine the degree of under-coverage with precision, as there is no available list for comparison, the knowledge gained through fieldwork suggests that segments of the population that may be under-covered are Chinese-Thai elderly and elderly who are dysfunctional because of mental and/or physical problems.

Under-coverage of Chinese-Thai elderly is the more significant potential problem and requires attention. As previously noted, it was a challenge to obtain cooperation from Chinese-Thai people, who typically reside in a shop house where the physical structure of the building itself is a closed one. Many of these elderly stay quietly in the upper floor of a shop house, which effectively hides them from the public. Because members of these households often did not want to let the interviewers approach their elderly parents, the team had to respect these wishes, even

²⁰ I do not specifically discuss item non-responses because the levels of missing values are generally quite low. In fact, most of the items have no non-responses at all. In the few instances of non-response, the maximum is just 4.5 percent of cases. Thus, item non-responses are not a main concern for this dataset. However, in the analyses that follow in the coming chapters, I specify the number of cases with missing values, if any, in the relevant tables.

when we suspected there were elderly in the household. The tendency was more noticeable in blocks in which Chinese-Thai people are the dominant residents.

On the other hand, the under-coverage level for the dysfunctional elderly is expected not to be a serious one. The under-representation of these people was a worry from the beginning of the project because the target population is elderly people, who have more age-related functional problems than the general population. However, at least for the household listing stage, these dysfunctional elderly seem to be well included in the sampling frame, rather than being simply unnoticed and omitted. Household members were generally open to saying “there is an elderly person in this house but she/he is too sick for an interview.” As a result, the dysfunctional elderly were listed in the sampling frame with a note: “sick, possibly not able to take an interview.”

Non-responses

For statistical inferences, it is important to examine the level of non-response, determine its main reasons, and identify the segments of the target population that are likely to be under-represented. According to a response rate calculation formula (Kalton 1988:66), the overall response rate for this project is:

$$\text{Response rate} = \frac{\text{Number of interviews completed}}{\text{Number of eligible elements}}$$

The number of eligible elements is the number of completed interviews (1,125) + number of refusals (433) + number of no-contacts (236) + number of incapable elements (35)²¹.

²¹ Following the customary procedure (Kalton 1988:66), “blank” elements (elements that are not eligible as respondents) have been omitted from the formula.

$$\text{Response rate} = \frac{1,125}{1,125 + 433 + 236 + 35} = \frac{1,125}{1,829} = .62$$

Of the total 704 non-responses, about 62 percent represents refusals to participate in an interview, 34 percent reflected the difficulty of locating the respondent at home despite repeated visits, and the remaining five percent is the result of the incapacity of the respondent (because of physical and/or mental illnesses).

As Kalton (1988:66) explains, it is sometimes difficult to distinguish a non-contact from a blank (non-eligible), and a portion of the no-contacts could actually be blanks. In Bangkok, physical changes take place quickly; for example, even during the six months of data collection, an entire housing section of a block suddenly became a vacant lot. If the change was already well underway, the interviewers could tell that the house was no longer lived in. However, when the change was still in progress, it was often difficult to tell whether the respondent still resided at the house (a move could have been in progress and the respondent, meanwhile, could have been living in two different places). When there was doubt, the household listing information took priority and the interviewee was treated as a “no-contact” in the calculation.

As for the 35 elderly who were initially non-respondents because of their incapacity, a special data collection period was provided later out of concern for under-representation of the seriously sick elderly. As a result, a total of 21 additional cases were collected using a short-form questionnaire (with ten refusals and four already dead). In fact, suggesting the accuracy of the initially collected data, compared to the regular 1,125 cases, these elderly turned out to have a lower health status: a higher proportion with a chronic disease (100 percent vs 80.1percent) and a higher proportion with an Activity of Daily Living disability status (65.3 percent vs 6.3 percent)²². However, it should be noted that the comparison of health status with a national sample from the

²² See Chapter 5 for the details of the Activities of Daily Living measure.

2002 Survey of Elderly in Thailand shows a consistently poorer health status for the sample²³, and there is no sign of particular under-representation of the elderly with poor health status even *before* the inclusion of the additional data. Thus, it is probably safe to conclude that the impacts of non-responses from “incapable” elements are at least not at a serious level, especially with the inclusion of the additional data.

In an effort to reduce non-response as much as possible, various measures were taken throughout the data collection period. First, the interviewers were trained to approach prospective interviewees in the culturally acceptable polite manner, with firm assurance of anonymity and repeated explanations about the importance of their participation in the interview. The interviewers were also instructed to visit a household several times while they were in the respective census block until they could meet the applicable interviewee. Moreover, after the first round of data collection was finished in every census block, second and third rounds of data collection were conducted in the census blocks that had relatively high non-responses. In the end, a total of 38 blocks had more than two rounds of data collection, and by the end of the last round, some households had been visited many times and marked “repeated refusals.” As much as the team wished to reduce refusals, further visits were considered pointless.

A more critical issue in non-responses is the detection of self-selection. When non-respondents are randomly distributed and non-respondents do not differ from respondents, the impacts of non-responses can be ignored (except for reduction in sample size). In reality, however, non-respondents usually differ from respondents, causing a bias in sample estimates, so the impacts of bias need to be properly treated, depending on the nature of the bias (Lohr

²³ Comparison was made with results from Rakchanyaban (2004:40) and measurements are adjusted to be consistent between the two datasets. Proportions of elderly with ADL disability status and functional disability are estimated at 3.1 percent and 45.8 percent in the national data, while the respective figures in the sample data are 3.5 percent and 47.4 percent. The proportions of elderly with self-perceived good health are 74.6 percent and 83.3 percent in the respective datasets.

1999:257-258). In this sample, a closer examination of response rates provides information suggesting that the non-respondents are not totally random, but likely to be Chinese-Thai elderly, and to lesser extent the wealthy elderly.

Examination of response rates by district suggests that blocks with a high concentration of Chinese-Thais in the sample have significantly lower response rates. The average response rate for the six blocks that include more than 50 percent of ethnic Chinese elderly is 42 percent²⁴. In two blocks where 100 percent of residents are Chinese-Thai, the response rates are 20 percent and 43 percent, respectively. In comparison, the average response rate of 16 blocks that have more than 95 percent of Thai elderly is 71 percent. The low response rates in predominantly Chinese areas and the relatively high response rates in Thai areas suggest that the Chinese-Thai are less likely to be respondents.

Comparison with Census Data

The aim of this comparison is to examine the distribution patterns of major demographic variables as a way to assess the adequacy of the collected data as a fair representation of the population, and to better determine under-represented segments of the population. However, because Thai census data are also derived from a sample of the population, it should be taken as a piece of information for comparison, rather than an absolute standard. Table 4.2 shows comparisons between distribution patterns for selected variables from the Population and Housing Census 2000 (for people aged 60 years and older residing in the Bangkok Metropolis) and from the collected data. According to the National Statistical Office, the response rate of the 2000

²⁴ The respondents were asked about their own sense of ethnicity. In this thesis, people who answered “Chinese” or “Chinese and Thai” are considered ethnic Chinese.

census for municipal areas in the central region (data particular to the Bangkok Metropolis is not available) is 69.0 percent (Ms. C. Areerat, personal communication²⁵).

Table 4.2. Comparisons of distribution patterns of demographic variables, corrected for cluster sampling design effects (95 % Confidence Intervals in parentheses).

Item	Category	Census 2000 (5,671 cases)	Collected Data (1,125 cases)
Mean age	In years	68.6 (68.4-68.8)	70.2 (69.8-70.6)
Sex	Male	44.8 % (43.5-46.1)	36.7 % (34.2-39.3)
	Female	55.2 % (53.9-56.5)	63.3 % (60.7-65.8)
	Sex ratio	0.77	0.59
Marital status	Never-married	5.4 % (4.9-6.1)	5.4 % (3.5-8.2)
	Married	67.7 % (66.5-68.9)	57.7 % (51.5-63.7)
	Widowed	22.5 % (21.5-23.7)	29.6 % (25.5-34.2)
	Divorced	4.0 % (3.5-4.5)	7.3 % (5.4-9.7)
	Unknown	0.3 % (0.2-0.5)	-
Religion	Buddhism	94.8 % (94.2-95.4)	97.0 % (92.7-98.8)
	Islam	3.8 % (3.3-4.3)	2.3 % (0.7-7.3)
	Other	1.4 % (1.1-1.7)	0.7 % (0.3-1.6)
Nationality	Thai	94.0 % (93.4-94.6)	97.1 % (95.3-98.2)
	Chinese	5.3 % (4.7-5.9)	2.8 % (1.7-4.6)
	Other	0.7 % (0.5-0.9)	0.2 % (0.0-0.7)
Educational level (highest attained)	No education	22.6 % (21.6-23.7)	12.4 % (9.9-15.3)
	Elementary	51.6 % (50.3-52.9)	58.8 % (54.4-63.1)
	High school	12.0 % (11.2-12.9)	15.1 % (12.6-17.8)
	Above high school	9.8 % (9.0-10.6)	13.8 % (10.4-18.1)
	Unknown	4.0 % (3.5-4.5)	0.4 % (0.1-1.0)

According to Table 4.2, the collected data have distribution patterns that are reasonably similar to the major demographic variables from the census data. One of the most important lessons learned from the comparison, however, is that the distribution of nationalities shows discrepancies, supporting the suspected under-representation of Chinese-Thais in my data. The proportion of elderly with Chinese nationality is smaller in my data, meaning that the first and possibly the second generation of Chinese-Thai are under-represented. According to my data, 75 percent of the elderly with Chinese nationality were born in China, and the rest were born in Thailand. Of those who were born in China, over 90 percent came to live in Bangkok before age

²⁵ A staff member at the National Statistical Office of Thailand.

30, suggesting that they are permanent residents rather than visitors (data not shown). These statistics are supported by the literature, which explains that most of the Chinese who were born abroad remain Chinese nationals because of the difficulty of officially changing nationality, despite the fact that they permanently reside in Thailand, and some Thai-born Chinese prefer to obtain Chinese nationality to avoid military service in Thailand (Coughlin 1960:171-175).

In addition to the under-representation of Chinese nationals, it is likely that Thai nationals of Chinese origin are also under-represented in my data. Although it is difficult to accurately estimate the proportion of ethnic Chinese in Bangkok (and the national census does not report the proportion of ethnic Chinese), Prachuabmoh et al. (1972:45) concluded that as much as 30 percent of people in Bangkok are ethnic Chinese. For 2004, the Bangkok Metropolitan Administration estimated that 25 percent of Bangkok residents are Chinese, people of Chinese origin, or those who belong to other ethnic groups (Bangkok Metropolitan Administration, January 7, 2006). Compared to these figures, the 15.3 percent (S.E. 0.029) of the sample who are identified as ethnic Chinese in my data are probably low.

The under-representation of Chinese-Thais can also explain the lower proportion of people with no education in the sampled data. The vast majority of Chinese immigrants are physical laborers, without plans or financial resources for education (Coughlin 1960:20-22). The high proportion of Chinese-Thais with no education is well shown by the cross-tabulation of sample data: in contrast to the low percentage of Thai elderly who have no formal education (8.4 percent, S.E. 0.010), as much as 34.0 percent (S.E. 0.034) of the ethnic Chinese elderly have no education (data not shown). Thus, we can assume that the lower inclusion rate of Chinese-Thais in the data created a lower than expected overall proportion of people with no education, while the proportion of people with an elementary school level education is higher than expected because of the inclusion of a greater proportion of Thai people.

Furthermore, a notable discrepancy between the datasets is seen in the distribution patterns of the sex ratio. Compared to the census data, males in my data comprise a smaller proportion than females (sex ratio of 59 vs 77)²⁶. And reflecting the higher representation of females, who have a longer life expectancy than males (Jitapunkul et al. 2003:403), the proportions of people who are married is lower while that for widowed people is higher. A slightly higher mean age in my data (70.2 years old) than that of the census data (68.6 years old) is explained by the higher representation of females as well. The under-representation in the Chinese-Thai segment may again account for this self-selectivity of males, at least partially, and the resulting differences in mean age and the marital status distributions because Chinese immigrants tended to be selected for males.

The under-representation of Chinese-Thai people, resulting from the difficulties of getting them to participate in the interviews, is compounded by their greater wealth. As often pointed out in the literature, Thai people of Chinese origin, particularly after the third generation, constitute the bulk of the most affluent group (Phongpaichit and Baker 2004:11), and success stories of Chinese-Thai people who climbed up the social ladder quickly, even within a generation, are abundant (Kirsch 1982:23-24). My experiences and observations living in Bangkok and contacting many Thai elites support these portrayals. Therefore, under-representation of Chinese-Thais, especially males, is to a certain degree understandable, given the strategic difficulties of accessing wealthier households and the general unwillingness among Chinese families to participate in interviews.

In order to adjust for the under-representation of Chinese-Thais, I applied weightings to the statistical analyses discussed in the coming chapters. Following the weighting method

²⁶ However it should be noted that data collected by the College of Population Studies, Chulalongkorn University in 1997 also show a lower sex ratio than the census data (sex ratio of 66). The target population for the Chulalongkorn study is also the elderly population aged 60 and over residing in Bangkok Metropolis (Wongsith and Siriboon 1999:108).

suggested by Kish (1995:558), inverse ratios were created separately for Thais and Chinese-Thais, based on the previously known distributions of Thais and Chinese-Thais in Bangkok and the distributions in my data²⁷. Data from the Longitudinal Survey of Social, Economic, and Demographic Change in Thailand (Prachuabmoh et al. 1972:45) were used as reference ethnic distributions. These ratios are used as ethnic weights throughout the analyses developed in this thesis.

Survey Instrument

Questionnaire Design

The questionnaire used for the project was designed for face-to-face interviews administrated at the respondent's residence. These interviews were chosen over other methods of data collection, such as telephone interviews and self-administered mailed questionnaires, because the low average educational level of the respondents required intensive mutual communication in order to gain their participation and obtain accurate answers. Moreover, as the target population is elderly people who tend to have weaker eyesight and/or poorer hearing and slower information processing, it was important that the interview could be administered in a flexible manner. For example, when a respondent had a problem understanding a question, the question needed to be re-stated in a way he/she could more easily understand. The in-person interviews also made it possible to probe for more information, when necessary, by casually chatting with the respondents and providing them more familiar examples.

²⁷ As indicated by Kish (1995:558), this weighting method assumes the unknown cases are similar to the known cases in terms of the topic of interest (i.e. living arrangement patterns, in this case). There are no indications that this assumption is violated, based on analyses of the data and information gained from the fieldwork.

The questionnaire is divided into three major parts, each with different formats and focuses. One part uses a standard cross-sectional design that asks about respondents' basic demographic information and their current economic, emotional, and health conditions. Another part is dedicated to information about respondents' children. Respondents provided information for each of their children, including age, sex, place of residence, marital status, the children's children, educational level, employment status, and occupation. Finally, the third part uses a life history calendar format, following the landmark life events of the respondents since age 40. Events such as change in marital status, place of residence, co-residence, jobs, and sources of income as well as deaths or marriages of children are recorded as they occurred in the life of the respondent.

The use of this nontraditional questionnaire format is a methodological attempt to collect data from a large number of representative subjects, and at the same time, increase the ability to follow the life of the respondents. Such potentially complicated data as the demographic details of each child can also be reasonably collected as a part of the respondents' life histories. Importantly, the information collected through all three parts is intended to be complementary so that the whole interview can reproduce the life of the respondent, including the past and the present. Introducing the retrospective perspective in the form of a life history calendar, and situating the whole questionnaire within the framework of the life of the respondent, is also intended to improve the overall data quality by reducing inaccuracy in responses.

Issues Related to Response Bias

A questionnaire in a life history calendar format is expected to reduce response biases because it has the unique capability to cross-check the timing of each event in the framework of related life issues. In particular, the use of landmark events as reference points for more minor

events improves recall ability (Freedman et al. 1988:41). In this study, using the places of residence and associated people (especially children) who lived with the respondents as the landmarks worked well to trigger the memory of the respondents and keep them focused on their life stories. The respondents showed surprisingly sharp memory over issues related to their children, and referring to those children in turn helped recall events that happened to the respondents themselves.

Moreover, since all the key questions are related in one way or another, it was rather a natural consequence that the respondents could recall things step by step in relation to each other. For many cases, once the respondents got through the first section asking about their basic demographic information, the interview was more like listening to their life stories using a pre-structured questionnaire format to encourage them to “talk” rather than “answer questions.” The questionnaire format, designed to help respondents reconstruct their past, also provided them many opportunities to realize inconsistencies in answers that resulted from simple mistakes and to correct information as the interview proceeded. Indicating the relative smoothness of the interviews, post-interview data written by the interviewers suggest that 91 percent of the respondents could understand questions well. Also, about 70 percent of the respondents did not have any problem answering questions, while 28 percent had some and only two percent had significant problems in answering questions.

The relatedness of the questions and the holistic nature of the interview should contribute to the reduction in reactivity in responses and the risk of recording incorrect information as well. As the interview does not consist of independent questions, it is unlikely that respondents can isolate a particular question from the flow of the interview and provide a perceived “right” or “good” answer in order to influence the interviewer in some way. Also, even if respondents intend to provide incorrect information, the connections to previous and forthcoming questions make it more difficult to do so. For instance, a question regarding house ownership at a previous

residence has to be answered truthfully in order to make sensible connections to a reason for moving to the current residence and to the ownership there. When discrepancies and inconsistencies emerged, it was easy for the interviewers to realize and point them out for correction.

In addition to the use of a life history perspective, there are further technical devices included in the questionnaire schedule in an effort to control inaccuracy in responses. One is the use of closed-ended questions in order to minimize recording errors and avoid the time loss and interpretation errors associated with language complications (answers would need to be translated to English at some point). To make up for the possible “narrowing” of the answer range, enough time was spent before, during, and after the interviewer training to discuss the response categories and recast them in language appropriate to the viewpoint of Thai people. Then, all the categories were pre-coded for immediate use so that the person who conducted an interview could also code the results. Along with the answer categories, a set of colored bar graphs was also used, when appropriate, to visualize the answer level, such as “not at all”, “a little”, “some”, “a lot”, and “entirely.” Since the graphs show the level intuitively, it was often easier for the respondents to answer, and at the same time, the graphs were helpful devices to calibrate the coding skills of the interviewers. Finally, different questions intended to measure the same thing were asked whenever possible and feasible in terms of the total length of the questionnaire and its sequence. Having more than one measurement later turned out to be a useful feature for verifying data.

Conclusion

This chapter focused on data collected through a structured questionnaire schedule and examined issues related to sampling, selection bias, and the survey instrument. Evaluations of sampling errors suggest low levels of sampling errors, indicating that cluster sampling methods

worked better than statistical theories would predict. Surprising degrees of heterogeneity observed in the census blocks that served as clusters have probably contributed to the favorable sampling outcome. Moreover, the use of census blocks as sampling units turned out to be a good strategy for the project because selecting one census block from all the administrative districts that cover the whole of Bangkok Metropolis made it possible to collect representative data, and at the same time to gather localized contextual information meaningful for the respective census block. If the prospective respondents had been scattered, as with a simple random sampling, I would not have been able to collect this ethnographic information.

The distribution patterns from the collected data and the census data reasonably resemble each other. However, it is also suggested that Chinese-Thai people are under-represented in the sample, indicating the need for ethnic weighting. Considering the difficulties of obtaining cooperation from Chinese-Thai people, which have been recognized in the field, their under-representation is probable. In terms of survey instruments, the questionnaire schedule used for the project is designed to capture the life history of respondents. The relatedness of questions not only encouraged respondents to talk about their lives without much recall problem, but also helped detect inconsistencies in responses and reduce reactivity.

Chapter 5

DETERMINANTS OF LIVING ARRANGEMENTS

Introduction

Given the heavy reliance on family for supporting the elderly, the sharp fertility decline observed in Thailand and expected reduction in the number of available children has caused concern for the continued high prevalence of co-residence with an adult child. In this chapter, I examine the factors that determine living arrangements in Bangkok in order to better address the impacts of the availability of children on the formation of co-residence. The results of analyses are presented in three forms: frequencies and cross-tabulations of living arrangements, logistic regression analyses of determinants of co-residence, and qualitative analyses of in-depth interviews of both elderly parents and their co-residing children. The first set of analyses confirms high frequencies of co-residence with a child in Bangkok and suggests the importance of the elderly's marital status in securing a co-residence. There are also high frequencies of never-married children in co-residence. The second set of analyses presents the estimated effects of various socio-demographic factors and identifies the marital status of children as one of the most important determinants of co-residence. The last set of analyses reveals the underlying structures that condition the formation of co-residence, including the willingness of children to recognize obligations to repay debts to parents, conflicts with children's in-laws, and the overall viability of co-residence.

Results of Frequencies and Cross-Tabulations

Dominance of “Co-residence”

Table 5.1 presents the distribution of living arrangements of the sampled elderly²⁸. The types of living arrangements are divided into four mutually exclusive categories: 1) co-residence with an adult child (households consisting of elderly person(s) and an adult child, with or without a spouse, minor children, or others), 2) co-residence with a spouse (households consisting of elderly person(s) and a spouse without an adult child, with or without minor children or others), 3) co-residence with others only (households consisting of elderly person(s) and others without an adult child or a spouse, with or without minor children), and 4) living alone (households consisting of an elderly person without a child, a spouse, or others). In the following analyses, an adult child refers to a child who is 15 years or older as Thai people become eligible for a national identity card and lawful employment at this age (SCM International Law Office, June 5, 2006)²⁹. Accordingly, national labor force surveys report the employment status of Thai people who are older than age 15 (National Statistical Office, May 15, 2006).

Supporting the previously reported predominance of co-residence in old age, Table 5.1 shows a high level of co-residence among the elderly population in Bangkok. Seventy eight percent of elderly in my data co-reside with an adult child. This figure compares with Wongsith and Siriboon (1999:131), who state that 75.4 percent of Bangkok elderly (those who lived in one sampled census block) co-reside with a child. Among those elderly with at least one adult child,

²⁸ In this chapter, all analyses are weighted to adjust for cluster sampling effects and under-representation of Chinese-Thais. See Chapter 4 for an examination of sampling effects and non-responses and for weighting methods. All analyses were performed using Statistical Package for Social Science version 13.

²⁹ The number of elderly respondents with a minor child is small. There are a total of 14 cases of elderly with a minor child (those younger than 15 years old). Two elderly cases have only a minor child (without an adult child); one case is a never-married woman who adopted one minor child and the other is a man who has a 39 year old wife and one minor child.

the co-residing proportion is even higher, covering nearly 85 percent. Similarly, Knodel et al. (1999:21) found that 80.0 percent of elderly who had at least one adult child lived with an adult child in urban Thailand (including but not exclusive to the Bangkok Metropolis) in 1995.

Table 5.1. Weighted percentage distribution of the living arrangements of elderly in Bangkok, all cases and among those with an adult child (unweighted *n* in parentheses).

Living arrangement (Living with)	All cases		Elderly with an adult child	
Adult child	78.3	(881)	84.4	(881)
Spouse	9.0	(101)	8.7	(90)
Others	9.4	(110)	4.8	(49)
Alone	3.2	(33)	2.1	(21)
Total	100.0	(1,125)	100.0	(1,041)

Note 1: Children include own, step-, and adopted children. There are a total of 29 step- and 22 adopted children.

Note 2: Others include parents, siblings, grandchildren, children-in-law, other relatives, friends, and live-in house helpers.

Even among elderly who do not co-reside with an adult child, Thai elderly who live outside of a familial setting are a minority. While 9.0 percent of all sampled elderly and 8.7 percent of those with an adult child live with a spouse, low percentages of elderly live totally alone (3.2 percent for all sampled and 2.1 percent for those with an adult child). Although a significant segment of elderly live only with others (9.4 percent for all sampled and 4.8 percent for those with an adult child), few among these elderly actually live with non-related people. Of all elderly who live with others without an adult child or a spouse (110 cases), only nine live with non-related people (a friend or a live-in house helper), while the rest live with relatives, including nephews, nieces, uncles, aunts, siblings, children-in-law, and grandchildren (data not shown). Clearly, the vast majority of Thai elderly lives within the circle of family.

However, a closer examination of co-residence patterns suggests that it may be misleading to interpret the dominance of co-residence with an adult child as persistence of the traditional model of old-age co-residence. In past studies, Thai elderly have been portrayed as

living in an extended household with the family of one of their married children, and these extended families have been viewed as a security-net for the elderly (see Chapter 2 for a discussion of the traditional model of old-age co-residence). However, Table 5.2 reveals that the involvement of married children in co-residence is not as high as might be expected. According to the results, even among elderly who have at least one adult child and co-reside with one of them, only 60.2 percent of co-residence (37.8 percent for with a married child only, 1.4 percent for both a married and a divorced child, and 21.0 percent for both a never-married and a married child) actually involves a married child. On the other hand, as much as 56.4 percent of co-residence is with a never-married child, including 35.4 percent of co-residence with a never-married child only. Thus, even though “co-residence” with an adult child is often treated as the typical traditional living arrangement (as opposed to living with a spouse only or alone), and used as an indicator of continuing reliance on the family for elderly care, the marital status of co-residing children suggests that a remarkable portion of co-residence is a result of the continuation of the original nuclear family, rather than the product of a newly formed extended family.

Table 5.2. Weighted percentages for elderly co-residing with an adult child by marital status of co-residing children (unweighted *n* in parentheses).

Living with		
Married child only	37.8	(319)
Both married & divorced child	1.4	(15)
Both married & never-married child	21.0	(186)
Never-married child only	35.4	(321)
Both never-married & divorced child	1.5	(12)
Divorced child only	3.0	(28)
Total	100.1	(881)

Frequencies of Living Arrangements: By Demographic Characteristics of the Elderly

In Table 5.3, living arrangements are cross-tabulated by the sex, age, and marital status of the elderly. One of the most important findings from this table is that marital status seems to play

an important role in determining living arrangements. First, never-married people, who in my dataset do not have children (and, thus, who do not have a chance to live with an adult child), have to live with others or live alone³⁰. On the other hand, taking advantage of their married status, virtually all married elderly are co-residing with an adult child or with a spouse. Widows and divorcees who also do not have a spouse to live with have noticeably different patterns of co-residence; in contrast to divorced elderly whose co-residence rate is significantly lower than married people, the same proportions of widowed and married elderly co-reside with children. Higher proportions of divorcees than widows appear to live alone or with others.

Table 5.3. Weighted percentages of living arrangements, by sex, age, and marital status (unweighted *n* in parentheses).

		Living with			Alone	Total
		Adult child	Spouse	Others		
Sex						
	Male	80.1 (333)	13.2 (56)	4.1 (19)	2.5 (9)	99.9 (417)
	Female	77.2 (548)	6.5 (45)	12.6 (91)	3.6 (24)	99.9 (708)
Age						
	60-69	78.4 (462)	11.4 (63)	6.7 (50)	3.4 (16)	99.9 (591)
	70-79	78.1 (313)	7.1 (31)	12.0 (45)	2.9 (14)	100.1 (403)
	80+	78.6 (106)	4.6 (7)	13.3 (15)	3.4 (3)	99.9 (131)
Marital status						
	Never-married	1.4 (1)	-	78.8 (53)	19.8 (9)	100.0 (63)
	Married	84.0 (546)	15.8 (101)	0.2 (2)	0.0 (0)	100.0 (649)
	Widowed	84.0 (284)	-	11.6 (36)	4.5 (16)	100.1 (336)
	Divorced	65.5 (50)	-	22.7 (19)	11.8 (8)	100.0 (77)

Note 1: The total number of cases is 1,125.

Note 2: Three never-married elderly adopted an adult child and one never-married elderly adopted a minor child.

Another point relating to widowhood is that more men than women live with a spouse (13.2 percent vs 6.5 percent). Higher percentages of widowhood for women (9.9 percent for men and 40.9 percent for women, data not shown) account for this difference and also explain the resulting higher proportions of elderly women who live with others or alone. Increasing age also

³⁰ As shown in Table 5.3, only four never-married elderly adopted a child. No never-married elderly gave birth to their own children.

lowers the percentage of people living with a spouse (11.4 percent for those aged 60-69, 7.1 percent for those aged 70-79, and 4.6 percent for those aged 80 and over) for the same reason, though it does not affect the proportions co-residing. The proportions of co-residing elderly and those of elderly who live alone seem to be stable across age categories, implying that they may be an already-selected population, fairly unaffected by other factors, such as deterioration of health and loss of the co-residing spouse, that are expected to accompany increasing age.

Information on the average number of surviving adult children by marital status further helps explain differences in co-residence level by marital status. As shown in Table 5.4, there are marked differences in the availability of children among people with different marital statuses; it is the widowed elderly who have the highest average number of living children (4.3 children), followed by the married (3.8 children), divorced (2.8 children), and never-married (0.0 children). Although neither widowed nor divorced elderly have spouses, the timing of separation from a spouse has probably caused the difference. Indeed, the fact that widowed people have a slightly higher number of adult children than married people indicates that these widowed elderly separated from a spouse at a later stage of their family life, after completing their course of childrearing as a married couple. Thus, although the literature suggests that widowed individuals, especially widows, are a more disadvantaged group because of their assumed economic vulnerability (e.g. Knodel 1999:50), these results suggest otherwise, especially if the number of available children in fact determines the co-residence outcome.

On the other hand, when the focus of analysis is the entire elderly population, these results show that never-married people are far more disadvantaged for co-residence because of the absence of children. These never-married people do not have the possibility of living with a child (the reason that multivariate analyses of living arrangements usually exclude people without a child), but their greater likelihood of living completely alone should not be dismissed. Indeed,

given the increasing proportions of never-married people in Bangkok, the living arrangements of never-married people require further attention.

Table 5.4. The average number of surviving adult children, by marital status (95 % Confidence Intervals in parentheses).

Marital status	Cases	Average # of children	95 % CIs
Never-married	63	0.04	(0.01-0.08)
Married	649	3.77	(3.58-3.97)
Widowed	336	4.31	(4.06-4.57)
Divorced	77	2.76	(2.35-3.17)
Total	1,125		

Note 1: Three never-married elderly adopted an adult child.

Frequencies of Living Arrangements: From the Viewpoint of Children

The background studies reviewed in Chapter 2 suggest the importance of children's characteristics, beyond their mere number, as a determinant of old-age living arrangements. Although detailed empirical examinations of children's characteristics have been scarce because of data limitations, my data allowed me to explore different characteristics of children in relation to their own living arrangements. The following analysis is based on data for surviving children (a total of 3,128 cases), provided by elderly respondents during the interview³¹. In general, elderly respondents show surprisingly sharp memories regarding their children and do not have difficulty providing information, although other household members occasionally supplemented information when necessary.

Table 5.5 highlights the profiles of the children of the sampled elderly. Unlike the sample of elderly parents in which women dominate, these middle-aged children (a little over 40 years old on average) are almost evenly distributed between the sexes (sex ratio of 99). Their

³¹ For the cases of children who were included twice, once through the mother and the second time through the father, the second entry was deleted from the dataset after checking for consistency between the two entries. Only surviving adult children are included in the following analyses.

average number of ever-born children is significantly lower (1.8 children) than that of their parents (4.1 children), reflecting both the sharp fertility reduction in Thailand and the fact that some children have not yet completed their reproduction. Indeed, confirming the findings of Jones (2002), a notable portion of children has not yet married; about 27 percent of children are still never-married³². Table 5.6 further shows that the prevalence of non-marriage is quite high even among older children: 31.6 percent (aged 30 to 39), 18.7 percent (aged 40 to 49), and 14.5 percent (aged 50 and over), implying that a sizable number of children are not marrying at all, rather than marrying late. Finally, Table 5.5 also suggests that the children of the elderly are significantly better educated than their parents. Only 1.8 percent has no education and 22.0 percent of children have only elementary school education, while 53.8 percent of children have a post-high school education, including 35.1 percent of children with a B.A. degree or higher. By comparison, as much as 12.4 percent of the elderly have no education and the majority (58.8 percent) have only an elementary level education, leaving the remaining 28.2 percent with a high school education or higher (see Table 4.2 in Chapter 4 for profiles of the elderly population).

³² Following practices in Thailand, both officially contracted marriages and de facto marriages (co-habitation) are counted as marriage.

Table 5.5. Weighted means and percentages of the characteristics of surviving adult children (S.E. in parentheses).

Variables	# (S.E.)	Unweighted <i>n</i>	Percentages (S.E.)
Mean age (in years)	41.1 (0.334)		
Sex			
Male		1,552	50.1 (0.011)
Female		1,572	49.8 (0.011)
Unknown		4	0.1 (0.001)
Marital status			
Never-married		839	26.8 (0.015)
Ever-married		2,266	72.7 (0.014)
Unknown		23	0.5 (0.002)
Number of children (among ever-married)	1.76 (0.033)		
Educational level			
No education		42	1.8 (0.004)
Elementary		677	22.0 (0.022)
Secondary		592	17.9 (0.011)
Post-secondary		599	18.7 (0.012)
B.A. or higher		1,080	35.1 (0.025)
Unknown		138	4.5 (0.009)

Note 1: The total number of cases is 3,128.

Note 2: Total number of cases for age is 3,036 as 92 cases have missing values for this variable (2.9 percent of the total child sample).

Note 3: Number of children is limited to ever-married children as no never-married child has a child. Thirty-six cases of ever-married children are excluded for this variable for missing values (1.7 percent of the ever-married sample).

Table 5.6. Weighted percentages for marital status, by age category (unweighted *n* in parentheses).

Marital status	Age categories				
	15-19	20-29	30-39	40-49	50+
Never-married	100.0 (18)	69.6 (180)	31.6 (336)	18.7 (214)	14.5 (80)
Ever-married	0.0 (0)	30.4 (88)	68.4 (701)	81.3 (972)	85.5 (439)
Total	100.0 (18)	100.0 (268)	100.0 (1,037)	100.0 (1,186)	100.0 (519)

Note 1: The total number of cases is 3,028.

Note 2: A total of 100 cases (3.2 % of the total child sample) were excluded for missing values for age and/or marital status.

Moreover, in terms of children's living arrangements, about 40 percent of children live in the same house with their parents, as shown in Table 5.7. However, the proportion co-residing varies greatly by marital status; while as much as 75.9 percent of never-married children live with

their parents, only 26.6 percent of ever-married children do so. This finding supports the discussion in the previous section that argues for the relatively infrequent involvement of a married child in co-residence for the elderly respondents. In addition, never-married children who do not live with parents tend to live fairly far away from the parental home, either in a different district within Bangkok or in another province. During the in-depth interviews, elderly parents noted that when single children live away from home, there is usually a specific reason to do so, such as school or work.

Table 5.7. Weighted percentages for place of residence, by marital status (unweighted *n* in parentheses).

	Marital Status			All
	Never-married	Ever-married	Unknown	
Place of residence				
Same house with parents	75.9 (646)	26.6 (613)		39.7 (1,259)
Same compound with parents	0.6 (4)	2.8 (72)		2.2 (76)
Same soi	0.7 (4)	5.7 (127)		4.3 (131)
Same district	2.9 (22)	8.5 (195)		7.0 (217)
In Bangkok	9.8 (87)	35.0 (771)		28.1 (858)
Outside of Bangkok	7.2 (53)	17.6 (404)	14.7 (2)	14.8 (459)
Abroad	1.9 (16)	2.6 (57)		2.4 (73)
Unknown	1.0 (7)	1.3 (27)	85.3 (21)	1.6 (55)
Total	100.0 (839)	100.0 (2,266)	100.0 (23)	100.0 (3,128)

Note 1: Unknown category for place of residence includes 11 cases of children who are in jail.

The modest involvement of married children in co-residence is not a finding unique to this study. Knodel et al. (1992a:114-115), who examined the living arrangements among Thai elderly in 1986, report a similar result: 59 percent of elderly co-residence is with an ever-married child (and with or without a never-married child), and 66 percent of single children live with parents. Equivalent figures for my data are 63.2 percent for elderly co-residence with an ever-married child (from Table 5.2) and 75.9 percent for single children's co-residence with parents (from Table 5.7)³³. In fact, considering that cross-sectional examinations of old-age living

³³ In my data, elderly co-residence with an ever-married child includes 37.8 percent with married children only, 1.4 percent with both married and divorced children, 21.0 percent with both married and never-

arrangements cover families at different stages of family cycle, it is natural that not all co-residence involves a married child. However, with a growing proportion of never-married children who typically do not leave home, co-residence with a single child seems to have become more important in Bangkok. Increasing non-marriage rates and the continued presence of children in the parental home may mitigate the effect of reduced fertility rates on co-residence, as long as co-residence refers to “living with an adult child.”

Multivariate Analyses: Predicting Co-residence

This section covers logistic regression analyses of the determinants of co-residence with an adult child. One of the basic purposes of this analysis is to replicate existing studies using my data on Bangkok elderly, and to determine the extent to which past results hold true for the current Bangkok population. Thus, following the previous theoretical emphasis, a major point of interest in this analysis is the effect of the reduction in the number of children elderly people have, expressed as the number of surviving children³⁴. Technical modeling specifications follow those of existing studies whenever appropriate and possible. However, a primary addition in this analysis is indicators of children’s characteristics. When we include children’s characteristics in

married children, and 3.0 percent with divorced children only. Fewer single children appear to be living with parents in Knodel’s data because the data used by Knodel cover all of Thailand and children in rural areas are more likely to leave the parental house for schooling or employment (Mills 1999).

³⁴ Although the number of children ever born is appropriate for measuring the fertility level of individuals, the number of surviving children (i.e. available children) is used in this model. This is because major mortality reduction has occurred in Thailand over several decades and mortality levels at younger ages are already low, leaving room for further mortality reduction mostly at older ages (Knodel et al. 1999:3). Data from the 2000 census suggest that the average number of ever-born own children to ever-married females aged 60 and above is 3.51 and that of surviving own children is 3.33. These numbers are not statistically different at the 95 % level. The equivalent figures from my data are 4.15 (ever-born own children) and 3.88 (those surviving), and they are not statistically different at the 95 % confidence level. I also tested the multivariate analysis that follows using both the number of ever-born children and the number of surviving adult children. The results were essentially the same. Moreover, since dead children cannot co-reside, the number of surviving children is operationally more appropriate. This specification follows other similar studies as well (e.g. Casterline et al. 1991; Martin 1989).

the model, we can examine co-residence from the perspective of both the elderly and their children.

Below is a summary of the theoretical framework discussed in Chapter 2 that guides the following analysis. The first and most important framework relates to the availability of children. According to this argument, elderly people who have more surviving children have a higher chance to live with a child because they have more opportunities to do so. Additionally, the elderly who have a never-married child are presumed to be more likely to be in co-residence. A single child should be more available for elderly parents because of the absence of competing demands from his or her own family. The second framework assumes that the needs of the elderly and perceived benefits of co-residence are the major driving forces that determine living arrangements in old age. It predicts that the more vulnerable elderly, such as those with functional disability, those without a spouse, and those in struggling economic conditions are more likely to live with a child because of their greater needs for assistance, which are supposedly better provided for with co-residence. On the other hand, the third framework, emphasizing the costs of co-residence, treats non-coresidence as a “commodity” and hypothesizes that the elderly with more purchasing ability are less likely to live with a child because of their capacity to live independently. The final framework, which questions the centrality of the “needs of the elderly” in deciding living arrangements, argues that the needs of children largely determine co-residence. Accordingly, the elderly who have a child in need of co-residence are expected to have a better chance of co-residence. As a major contribution, I examine the determinants of living arrangements by including all the variables derived from these theoretical frameworks in a single multivariate model.

Definitions of Variables

Based on the conceptual frameworks of previous studies and past empirical findings, I include the following variables in the multivariate analysis of co-residence with an adult child. Table 5.8 presents the weighted means and percentages of these variables.

Living arrangements: The household structure for an elderly person was determined by recording individuals who were recognized as living in the same household with the elderly respondent, regardless of the formal housing registration status³⁵. An individual's presence or absence was recorded in each five-year time slot indicating the age of the respondent, from age 41 until the current age (i.e. 41-45, 46-50, 51-55, 56-60, 61-65, 66-70, 71-75, 76-80, 81-85, and 86 and over). All recorded individuals were described in terms of their relationship to the elderly respondent, with terms such as child, sibling, and child-in-law, using a pre-defined coding system. For the children of respondents, sex and marital status (and changes in marital status) were also noted and included in the coding scheme. For the current multivariate analyses, information on the current household composition is used as the outcome variable. Household type is divided into the dichotomous groupings of co-residence with an adult child and non-co-residence, taking the value of one for co-residence and zero otherwise.

The number of surviving adult children: The number of surviving adult children was recorded. Step-children and adopted children were also counted as children, while their numbers were noted to distinguish them from biological children, if necessary. This is the main variable of interest for this analysis; if the availability of children argument is supported, the number of surviving adult children will have positive effects on co-residence.

³⁵ As mentioned in Chapter 4, a household is defined as a group of people who usually live and eat together, and share basic house utilities, such as electricity, water, and gas.

Age and sex: The birth year of the respondent was recorded using the Buddhist year (Western year plus 543 years), and the interviewer coded the current age. In this analysis, people who were aged 60 years or older on their last birthday at the time of contact were included as an elderly person; these are people who were born in and before 2487 in the Buddhist calendar (1944 in the Western calendar). Although most of the respondents did not have a problem providing their birth year, when the respondent was uncertain, the Chinese animal calendar was used to identify the year of birth. Sex was coded as 1) Male or 2) Female. Previous studies suggest that the variable age loses its original negative statistical significance once a variable reflecting the children's life stage, such as the age of the youngest child, is included in the model (Casterline et al. 1991:13; Da Vanzo and Chan 1994:107). Although sex is usually included as a control variable, its statistical significance has not been reported for Thailand in the studies reviewed.

Marital status: The marital history of each respondent was recorded, with the current status used for this analysis. Marital status is coded as 1) Never-married, 2) Married (regardless of any official marriage registration), 3) Widowed, and 4) Divorced (regardless of the official paperwork status). Although marital status is often divided into two categories of never-married and ever married (Stull and Scarisbrick-Hauser 1989:124-125), based on the cross-tabulation results of marital status and living arrangements that suggest different patterns of living arrangements among ever-married people, this analysis maintains the four separate categories for marital status. If co-residence is a response to the needs of the elderly, unmarried elderly should have a higher likelihood of co-residence.

Source of income: Main sources of income are coded as 1) Work, 2) Unearned sources (pensions, savings, and rent), 3) Spouse (including income from relatives, excluding children), and 4) Children. This variable is included to examine the impacts of economic independence on co-residence. If non-coresidence is a "commodity" that is purchased with higher socio-economic means, elderly who have access to independent sources of income will more probably be in

independent living arrangements. Martin (1989:633), who used the variable of self-support (including work, pension, and superannuation), found that in the Philippines self-supporting elderly are less likely to live with a child.

Home ownership: The ownership status of the currently lived-in house is recorded as 1) Owned or 2) Rented; and the person owning the house or paying rent is identified as 1) Respondent him/herself or spouse, 2) Relatives, excluding children, 3) Other non-related people, and 4) Children. Home ownership status takes the value of 1) Yes, when respondents or their spouses own a house in their name, as opposed to children's or other people's names. If a respondent does not own a house under his or her own (or a spouse's) name or rents a house, the home ownership status is coded 2) No. Home ownership status has been used in past studies as a measure of the socio-economic status of elderly, and it has been suggested that Asian elderly who own a house are significantly less likely to live with a child because of their higher economic status (Martin 1989:634).

Health status: The current health status of a respondent was measured using the Activities of Daily Living (ADL) index. The ADL index has been commonly used in health studies and has become a standard measurement tool in assessing disability status (Wiener et al. 1990:S229). The index was originally developed as an objectively quantifiable index to monitor the functional independence of older persons and chronically ill patients. ADL measures in their original form relate to six tasks performed in everyday life: bathing, dressing, going to the toilet, transferring (moving from one place to another), continence, and feeding (Katz et al. 1963:914). Based on the Katz ADL measures, the ADLs used in this analysis include a total of six daily tasks: taking a bath (shower), putting on clothes, going to the toilet, walking around the house,

getting up from a bed (or the place where the respondent sleeps), and eating food³⁶. Respondents were asked about their ability to perform each of them, and their responses recorded as: 1) Unable to perform, 2) Able to perform with help from other people, or 3) Able to perform without help. Health status is then coded as 1) Has functional problem(s), if a respondent cannot perform one or more of the ADL tasks or requires help to perform the tasks, or 2) Does not have a functional problem, if a respondent can perform all of the tasks without help³⁷. Although lower health status is theoretically expected to have a positive effect on co-residence, empirical studies have not shown consistent results for this variable.

In addition to the socio-demographic indicators of elderly respondents, I include the following variables concerning the characteristics of any surviving adult children in order to account for their influence on the occurrence of co-residence. As noted, information for children was collected through the elderly parents, and attributes for 3,128 children are incorporated in the analyses³⁸.

Sex and marital status of children: The sex and marital status of each child is identified and the information is included in the model as whether elderly parents have a child who is a married male, married female, never-married male, or never-married female³⁹. In this analysis,

³⁶ Contenance is not included because preliminary analysis with a WHO dataset suggests that the variables asking about frequencies of wetting and soiling have 91 percent and 98 percent of missing values, indicating the inadequacy of these indicators for Thai elderly. Contenance is also not included in other surveys conducted in Thailand, including the Survey of Elderly in Thailand 2002. Moreover, based on the finding that only 1.3 percent of Thai elderly have a self-eating problem (Rakchanyaban 2004:40), those with continence problems would be fewer. They would also be most likely to have other ADL problems and be included as individuals with an ADL functioning problem.

³⁷ This is a common way of specifying functional or dysfunctional status (e.g. Liu et al. 1995:S385).

³⁸ Children's attributes with missing values are not reflected in the analysis. See Table 5.8 for the extent of missing values for each variable.

³⁹ Widowed, divorced, or separated children are not considered in this analysis because preliminary analyses suggest that the proportion of these children represented in the data (1.6 percent) is low, and inclusion of this variable would not yield reliable results. Under-reporting of children with marital dissolution may have occurred because elderly parents do not always know the exact conditions of their children's marriage, especially when the marriage is a de facto one. The reporting of a never-married status

the age of the children is not included because previous findings suggest that the age of the youngest child is a proxy for the life stage of the child (i.e. marital status), and is also an indicator for the maturity of the household (e.g. Casterline et al. 1991:14). My data also show a significant degree of association between the age of the respondent and the age of the youngest child ($r = 0.58$, significant at the 0.01 level); the children's ages and their marital statuses are also positively associated ($r = 0.32$, significant at the 0.01 level). Based on results from the cross-tabulations of living arrangements, it is expected that having a never-married child increases the chance of co-residence, regardless of the sex of the child. On the other hand, having a married child decreases the actual availability of the child (as the majority of married children move out), and, hence lowers the likelihood of co-residence. Findings from the United States also report that never-married children are more likely to live with aging parents (Aquilino 1990:415; Ward et al. 1992:219).

Educational Level of Children: The educational level of children is divided into these categories: 1) No or elementary education, 2) Secondary education, 3) Post-secondary education (more than high school, but less than a B.A.), and 4) B.A. or higher. In discussing the Thai social class system, Vichit-Vadakan (1979:4-7) describes education as a vehicle for prestige and admission to a middle class position because higher education prepares people for non-manual labor jobs, an important element of identification as middle class or higher. She also mentions that having a secondary level education is considered the minimum prerequisite for attaining a decent life in Bangkok and emphasizes the eagerness of her informants to provide the best possible education for their children, even beyond the secondary level (p. 236). Thus, it is assumed that less educated children are economically more vulnerable and needy because of their limited opportunities in society and consequent weaker earning power. Accordingly, if the needs

is believed to be quite reliable, based on the frequencies of never-married people, which are similar to reports from a national survey in 2000.

of the children are an important factor for co-residence, elderly with poorly educated children are more likely to live with a child since needy children can be supported by their parents or parents and children can help each other economize on living expenses by living together.

Employment Status of Children: The employment status of each child is reported as 1) Employed or 2) Unemployed. This variable is included in the model as another indicator of the needs of children; jobless children are expected to have a greater need to economize in living arrangements, and hence elderly with an unemployed child are more likely to co-reside with a child who is dependent in the same way as poorly educated children. A study from the United States that tested this possibility, however, did not find statistical significance for this variable (Ward et al. 1992:218).

Table 5.8. Weighted means and percentages of predictive variables used in the logistic regression of co-residence with an adult child, among elderly with an adult child.

Variables	Means (S.E.)	Percentages (S.E.)
Elderly characteristics		
Number of adult child alive	3.96 (0.088)	
Age in years	70.5 (0.239)	
Sex (categorical)		
Male		38.9 (0.015)
Female		61.1 (0.015)
Marital status (categorical)		
Married		60.8 (0.026)
Widowed		32.5 (0.022)
Divorced		6.7 (0.011)
Source of income (categorical)		
Work		28.1 (0.020)
Pension/saving/rent		22.9 (0.013)
Spouse		9.4 (0.005)
Children		39.6 (0.034)
Home ownership (categorical)		
Yes		58.9 (0.028)
No		41.1 (0.028)
Health status (categorical)		
Have ADL problems		6.2 (0.011)
No ADL problems		93.8 (0.011)
Children's characteristics		
Sex and marital status (elderly percent with)		
Married male child		73.2 (0.016)
Married female child		69.6 (0.018)
Never-married male child		35.8 (0.023)
Never-married female child		39.0 (0.021)
Educational level (elderly percent with a child with)		
No or elementary education		30.1 (0.003)
Secondary education		39.0 (0.023)
Post-secondary education		39.3 (0.022)
B.A. or higher		60.3 (0.031)
Employment status (elderly percent with)		
Unemployed child		24.6 (0.017)

Note 1: The total number of cases is 1,038.

Note 2: The sample excludes four cases of never-married elderly who adopted a child. No never-married elderly have their own child.

Note 3: All variables concerning elder characteristics have no missing values.

Note 4: For the children's characteristics, the extent of cases with missing values is: sex (4 cases, 0.1 percent), marital status (23 cases, 0.5 percent), educational level (138 cases, 4.5 percent), and employment status (93 cases, 2.7 percent).

Results

Since co-residence with an adult child is a dichotomous outcome variable, logistic regression techniques are used to estimate the independent effects of predictive variables. I test two models, one including characteristics of elderly only, and the other including characteristics of both elderly and children. Both models are restricted to elderly who have an adult child, as co-residence with a child requires a child. In addition to the predictive variables used in the final models, initial analyses included the elderly's educational level. Because having more than a high school education and having a source of income from unearned income (pension, saving, or rent) are correlated ($r = 0.31$, significant at the 0.01 level), and inclusion of education does not improve the overall model fit, the educational level of the elderly was dropped from the final model⁴⁰. The educational level of the elderly is not associated with co-residence. The variable of ethnicity (Thai vs Chinese-Thai) was also dropped from the set of predictors since initial analyses show no simple, bivariate relationship with effects on co-residence. I also tested for interactions between the socio-economic variables of the elderly and those of the children because the combinations of parent-child characteristics may affect the co-residence outcome. Preliminary analyses, however, show no evidence for interaction, so these terms were dropped from the model as well (data not shown).

⁴⁰ I tested for multi-collinearity by examining the correlations between the predictive variables. I found generally quite low strengths of association. The only possible problem is the correlation between sex and marital status (sex and being married = 0.41 and sex and being widowed = 0.37). However, I decided to keep these variables in the model based on theoretical importance and on the findings that standard errors for estimated regression coefficients change very little with or without these variables.

Table 5.9. Logistic regression of co-residence with an adult child, among elderly with an adult child.

Predictive variables	Model 1		Model 2	
	coeff	SE	coeff	SE
Number of adult children ^a	0.129	0.053**	-	-
Age ^a	-0.029	0.016*	-0.013	0.015
Sex				
Male	-0.352	0.208*	-0.478	0.221**
Female ^b	-	-	-	-
Marital status				
Widowed	-0.330	0.335	-0.402	0.336
Divorced	-1.260	0.346****	-1.422	0.349****
Married ^b	-	-	-	-
Source of income				
Work	-1.262	0.321****	-1.513	0.344****
Pension/saving/rent	-0.772	0.301***	-0.895	0.337***
Spouse	-2.073	0.353****	-2.368	0.370****
Children ^b	-	-	-	-
Home ownership				
Yes	0.355	0.233	0.412	0.259
No ^b	-	-	-	-
ADL status				
Have ADL problems	0.595	0.514	0.775	0.520
No ADL problems ^b	-	-	-	-
Have married male				
Yes	-	-	-0.272	0.310
No ^b	-	-	-	-
Have married female				
Yes	-	-	-0.418	0.320
No ^b	-	-	-	-
Have never-married male				
Yes	-	-	1.087	0.299***
No ^b	-	-	-	-
Have never-married female				
Yes	-	-	0.963	0.287***
No ^b	-	-	-	-
Have child with no or elementary education				
Yes	-	-	0.539	0.237**
No ^b	-	-	-	-
Have child with secondary education				
Yes	-	-	-0.014	0.258
No ^b	-	-	-	-
Have child with post-secondary education				
Yes	-	-	0.151	0.286
No ^b	-	-	-	-
Have child with a B.A. or higher				
Yes	-	-	0.101	0.215
No ^b	-	-	-	-
Have unemployed child				
Yes	-	-	0.328	0.369
No ^b	-	-	-	-
Intercept	4.249	1.173****	3.438	1.151****
Pseudo R ²	0.132		0.238	
Sample size	1,038		1,038	

Note 1: Four cases of never-married elderly who adopted a child are excluded, and hence no never-married elderly are included in the analysis.

Note 2: ^a denotes continuous variable, and ^b designates reference category.

Note 3: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, **** $p < 0.001$.

I first consider the model including only the characteristics of the elderly (Table 5.9, model 1). The main purpose of this model is to test the impacts of availability of children, expressed as the number of adult children an elderly person has. As expected, the number of adult children has a significantly positive effect on co-residence, controlling for other predictor variables. It is estimated that the chance of co-residence increases by 1.14 times with a one-person increase in the number of adult children. This finding is consistent with other studies reviewed earlier and supports the availability of children argument. Elderly who have more children have a better chance of living with one of them; consequently, according to this model, the cohorts of the next elderly generations, who have considerably lower numbers of children, on average, will have a smaller chance of living with a child in old age.

Among other demographic characteristics of the elderly, marital status appears to have a large impact on co-residence. The chance of co-residence for widowed elderly is not statistically different from that of currently married elderly. This finding confirms the result from the cross-tabulations and provides more evidence to question the often-mentioned “disadvantaged position” of widows in an aging society. However, the effects of being divorced have a highly negative significance; the probability of co-residence for divorced elderly is as low as 0.28 times that of married ones. While neither widowed nor divorced elderly have a spouse to depend on, it is the divorced elderly who are more likely to be disadvantaged in terms of co-residence. In any case, contrary to Martin (1989:5), who found that elderly with a surviving spouse are significantly less likely to live with a child, my finding suggests that having a spouse is a positive factor. The difference in the findings may be attributed to the distinction in this model between widowed and divorced individuals, who have very different magnitudes of co-residence. This finding indicates that the needs of the elderly may not be a major factor in co-residence.

Providing further evidence against the “needs of the elderly” framework, neither the age of the elderly nor their health status shows the expected effects. Age of the elderly has the

opposite direction from the hypothesized positive effect with moderate statistical significance (at $p < 0.10$). This finding accords with a past study that also reports a negative, not positive, impact of age in several Asian countries, including Thailand (Casterline et al. 1991:Table 6). Moreover, the result suggests that the health status of the elderly, a more direct measure of their needs, is not a significant indicator for co-residence; elderly who have an ADL problem are no more likely to live with a child than elderly who do not have a problem⁴¹.

Finally, the elderly's sources of income have proven to be an important determinant of co-residence. Compared with elderly whose main source of income is from children, elderly who have an independent source of income (work, unearned income, and spouse) have a significantly smaller likelihood of living with a child. Previous results also show negative effects of independent economic resources for co-residence with a child (Martin 1989:633)⁴². The social meaning of income from work and from unearned sources, however, is quite different in the Thai context. A main source of income from work usually indicates that the elderly individual still has to use his/her body to earn a living, and subsequently implies lower economic status⁴³. On the other hand, a main source of income from pension, savings, or rent suggests having had prestigious employment that provides social security (i.e. being a civil servant) or wealth that can produce monthly income; in either case, income from unearned sources implies a higher social class than that of the majority of the population.

⁴¹ However, the impacts of poor health may not be properly reflected, considering the low proportion of elderly with an ADL problem (6.2 percent) and the high proportion of these unhealthy elderly (about 80 percent) who have been living with a child before their old age (50s).

⁴² Martin, who used "being self-supporting" in her model as an indicator for socio-economic status of the elderly, acknowledges that this variable may possibly have simultaneity bias and its effects may be over-estimated (Martin 1989:641). Recognizing the same possible problem with my model, I would argue that people would have known beforehand the likely sources of income in their old age. Gaining access to independent income requires appropriate previous conditions, such as being a civil servant for many years, keeping a lucrative bank account, and establishing a work history. Hence, it is more likely that the prospective source of income has influenced the living arrangement outcome, not vice versa.

⁴³ Among the elderly whose main source of income is from work (301 cases), more than 80 percent engage in a job that requires physical labor, including hawking, cleaning, construction, and craft work.

Given this information, the negative significance of each source of independent income can be interpreted differently. To begin with, the negative significant effect of income from unearned sources may be taken as a support for purchasing non co-residence with better financial and social resources. The model estimates that elderly who have unearned independent income (pension, saving, or rent) have much less likelihood of co-residence, about half that of elderly with income from children. Elderly with income from a spouse may also be living independently from children because a spouse's income enables them to do so. On the other hand, the negative significance for the group of elderly whose source of income is work may mean that answering the needs of the elderly and reducing their costs of living is not an important factor for co-residence; if these needs were determinative, economically struggling elderly should be more likely to be living with a child.

A highly significant negative effect of having income from work leads to the question of whether accommodating the needs of elderly has to be considered in relation to the condition of their children. The concept of *lucrilocality*, the tendency of newly married children to live with more resourceful parents (Chamratrithirong et al. 1988:940), may be helpful here (see Chapter 2 for details of *lucrilocality*). If married children judge the economic conditions of all parties involved (both parents and themselves), and tend to make the decision to live where there are greater resources, elderly parents who are poor may have fewer chances to live with a child because they do not have sufficient resources to attract one. Although not statistically significant in this model, the positive sign (the opposite of the expected direction) for home ownership status also suggests that having one's own place to accommodate children helps increase the chance of living with a child.

Next, I consider the model including both children's and elderly's characteristics (Table 5.9, model 2). For this model, in addition to the predictive variables included in model 1, gender, marital status, educational level, and employment status of children are introduced as the socio-

demographic characteristics of children, while the number of adult children is dropped as it is associated with having a child of the respective characteristics. With the introduction of children's characteristics, the age of the elderly loses its original moderate significance, an expected result based on a similar finding from a previous study by Casterline et al. (1991:13). However, the sex of the elderly becomes statistically significant at the $p < 0.05$ level, showing that male elderly are less likely to live with a child than are female elderly. My finding, which emerged only after including children's characteristics, should be noted because the literature on children's obligations to repay debts to parents often focuses on debt to mothers who have given birth to children (e.g. Van Esterik 1996:27). Combined with the earlier finding suggesting a statistically equal chance of co-residence for widowed and married elderly, this again suggests that it is misleading to focus on widowed females as the vulnerable group.

A most important result of this model is the strong positive impact of the presence of a never-married child on co-residence. As reported from the United States (Aquilino 1990:417; Crimmins and Ingegneri 1990:19; Ward et al. 1992:220), having a never-married child of either sex dramatically increases the chance of co-residence. Elderly with a never-married male child have a 3.0 times higher likelihood of co-residence than those who do not have any never-married male children. Similarly, the odds for the elderly with a never-married female child are 2.6 times those for the elderly with no never-married female children. It is apparent from the analysis that children's marital status is a major determinant of co-residence for the elderly. This model, which includes children's characteristics, suggests that despite a significantly reduced number of children per elderly parent in future generations, as long as one child remains single, that child can contribute to the maintenance of co-residence.

Another significant finding from the analysis is that elderly with a poorly educated child are much more likely to live with a child. Elderly who have a child with either no education or with only elementary school education are about 1.7 times more likely to be in co-residence.

Moreover, the finding that having a better-educated child (secondary education, post-secondary education, or a B.A. or higher) does not affect the chance of co-residence indicates that better education does not affect children's decisions about living independently from parents. Because better-educated Thais, particularly women, have a higher probability of remaining single (Guest and Tan 1994:10), having educated children would not negatively affect co-residence.

Finally, although this analysis has examined a model including children's characteristics to a greater extent than have previous studies, it has not been able to fully address some issues that need to be considered. One such issue is a more precise investigation of the relative socio-economic conditions of parent-child pairs. Based on the current findings, suggesting the dominance of the needs of children in deciding co-residence, the next step is to examine the needs of children in relation to those of elderly parents. To do so, we need more direct information on the socio-economic status of children, ideally their income level and source of income. Although the current analysis includes the employment status of children as an indicator of their economic status, the results do not show statistical significance, possibly because of the lack of precision in measuring their actual economic level. In addition, recognizing the secondary nature of the data on children collected through the elderly parents and realizing the limitations of such data, a possible improvement for the future is to include elderly-children pairs, with interviews of both parties.

Results from Qualitative Analyses: Elder's Preference and Situational Factors

Analyses in this section focus on the recurrent themes that emerged from the in-depth interviews. They examine the underlying structures that support co-residence in Thai society. The following analyses focus on issues that have not been adequately captured with the above multivariate analyses, and help us understand the determinants of co-residence in a more holistic

way. Data for the analyses derive from English-translated transcriptions of the in-depth interviews collected from a total of 28 Thai people (see Chapter 3 for the details of the in-depth interviews). Those interviewed include five pairs of elderly parents and one each of their ever-married children (including one divorced child), and six pairs of elderly parents and one each of their never-married children. Additionally, six elderly not living with an adult child were interviewed, including individuals who live completely alone, live with a friend, live with nephews and nieces, live with a spouse and grandchildren, and live only with grandchildren. In selecting interview candidates from the entire elderly sample, special care was taken to choose interviewees with a wide variety of socio-economic backgrounds⁴⁴. I used N6 software, the latest version of NUD*IST (Non-numerical Unstructured Data Indexing Searching and Theorizing), for the following qualitative data analysis to organize, explore, and categorize data⁴⁵.

A Wrong Question

One of the main concerns of the interview was to discover the process that has led to current living arrangement and to understand the attitudes, opinions, and actions of the elderly in deciding their old-age living arrangements. I approached the elderly as individual decision makers, influenced by the literature that focuses on individual decision-making as a basic mechanism for living arrangement outcomes (e.g. Mutchler and Burr 1991:375-376; Wolf and

⁴⁴ I first listed different combinations of parent-child pairs based on their sex and marital status. Then the parent-child pairs were divided into three economic-status categories (low, middle, and high), based on such indicators as educational level, types of housing, and employment histories. Finally, I identified eligible respondents for each socio-economic category, taking into account issues that are important for recruiting interviewees for in-depth interviews, including the ability of respondents to express themselves in detail and their willingness to allocate time for the interviews.

⁴⁵ N6 systematically stores and organizes qualitative data. It helps create categories and find patterned themes by abstracting data using a coding system called nodes (Richards 2002). I used N6 as a tool to locate themes and to seek patterns in the data. Thus, the following discussions are the result of explorations and abstractions of interview data, and the quotes cited support the ideas and patterns that emerged from the data.

Soldo 1988:389). Thus, one line of questioning focused on the elderly as actors, including such questions as; “Why did you decide to live with this child?” or “ Why did you choose to live with a child, not with your husband only, for example?”

Interview sessions and later analyses of the interview data, however, made me realize that I might have been asking questions from the wrong perspective. Instead of asking questions from the viewpoint of “your choices and decisions,” a more appropriate approach might have been to try to understand the situations and circumstances that led each elderly person to live in the current arrangement. As an example, in the case below, this elderly woman can explain only that she lost a co-residing single daughter and now lives with a married son. Only hearing the story from the co-residing child makes it clear why this child came to be the new co-residing partner. Because the process of co-residence is often a result of incidents beyond the elderly’s control, it is difficult for them to describe it as their decision.

AN ELDERLY MOTHER: Since 1964, when I came out to Bangkok, I had been selling things by carrying baskets of goods. I took my kids with me to Bangkok because my husband took a new wife in the countryside. So I left him and came here to this house. She (her child with whom she had co-resided) also came here and lived with me since she was 12 years old. But when she was 25 years old, she got hit by a car and died. (Yanawa 6-a)

HER CO-RESIDING MARRIED SON: I have six siblings, but one is dead. This one was living with my mother. I moved out once, but my sister (who was living with the mother) died. Then, no one was there to take care of mother when she was sick or like that. By then, I was already married and had moved out. We need a room for each family, right? So, we male children had to move out, letting my sister live here. (In answering whether other siblings wanted to come back to the house when the sister died). It is, how do you say, circumstances. The oldest one was living in the countryside. He has a family there. He had already left Bangkok and he did not have a job here that he could pick up. This was one reason (for the brother not to come back). On the other hand, I could work at the same place as before after the move. (Yanawa 6-b)

Another important factor is the often-emphasized preference of Thai elderly to live with a child. The preference for co-residence among the Thai elderly is well known and extensively reported in past studies. For example, Knodel et al. (1992a:106-107) acknowledge that “the norm

of living with children during old age is clearly evident in focus group discussions,” and cite comments by elderly Thais who emphasize their expectations to be cared for by children. I was originally skeptical about the pervasiveness and the degree of this preference, but the elderly people I came to know during the fieldwork, either through direct interviews or informal conversations before or afterwards, all expressed a desire to live with their children. Thai elderly, from poor to wealthy, want to live with children if the situation allows co-residence.

Taking “preference” as a starting point provides a more productive way of approaching the determinants of living arrangements. Instead of examining co-residence as a choice of the elderly, I tried to discover the preferences, choices and conditions of children, assuming that the elderly are ready to live with a child as long as the child is also ready and able. Therefore, the following analyses are organized around the premise that co-residence in Thailand is supported by elderly preference for co-residence and the conditions of their children that determine if co-residence is a realistic option. Three major themes are addressed in each section below as recurrent topics from the interviews. These themes, having a good child, in-law conflicts, and general workability of co-residence, are important factors in understanding the children’s conditions that largely determine co-residence outcomes. However, I do not intend to imply that the elderly are totally helpless in determining their living arrangements; the elderly themselves have taken direct and indirect actions, as will be evident in the following analyses.

Is There a Good Child?

The first theme to emerge from the interviews is the importance of having a child who recognizes the concept of *bun khun*, children’s obligations to repay parents. The concept of *bun khun* has been discussed in the literature as most important for defining parent-child relationships (Rabibhadana 1984:2) and having a good child who knows *bun khun* has been seen as the key to

co-residence in Thailand (Knodel et al. 1994; Knodel et al. 1995). My data provide further details of this concept and reveal the weight it has in determining elderly living arrangements. Essentially, if there is one child, whether this child recognizes bun khun is the crucial point. If there are many children, the co-residing children recognize bun khun. After discussing how the concept of bun khun works, I compare the living arrangement outcomes of elderly individuals with “good” children who practice bun khun and of those with “bad” children, who are said to have ignored bun khun.

The passage comes from an interview with a never-married elderly woman with some established wealth who currently lives with a life-long nanny (who is also an elderly person) and several nieces and nephews. Her story clearly shows why she was the one, out of many siblings, who lived with the mother and took care of her until her death.

Taking care of my mother was my happiness. We believe that because parents raised us, we should take care of them. I had the chance to return bun khun to my parents. I did everything for my parents. I felt happy rather than irritated about my situation.

(In answer to why she, out of seven siblings, was the one who took this responsibility). You need someone...need a child. Who stays depends on your willingness to do it. I saw my mother like that (widowed and unhealthy) and my other siblings had chosen to leave the house. I could not think of moving out of the house like the others. I also wanted to take care of her. My siblings saw that I was already taking care of her, and she was not in a troubled condition. They knew my mother could live like that with me. So they did not bother to come and take care of her. They did not need to ask for money and things from my mother; that was already good enough.

(In answer to whether she had been asked by the mother or siblings to take responsibility). No. It was from my own feeling that I decided to live with her. One person was needed to take care of her. I had three older siblings and three younger ones. But three older ones had chosen other ways already, after marriage. As for the younger three, they were still studying. So the one left was the middle one, me, who was not too young, but also not too established as an adult yet. I could not just let my mother live only with the nanny and the employees from her factory. I had to stay. No one could have ordered me to do that, though. If my siblings had told me that, I would have felt "you yourself are not taking responsibility." It needed to come from my decision, so I accept the situation. If someone had ordered me, I would not have accepted it. That is it. Nothing special to tell you. A usual story. (Watana 8-c)

The next comments come from a poor married woman who lives with her husband, three of her children, and her elderly parents. This family moved to Bangkok about 10 years ago to look for a more sustainable life; one of her siblings first asked her parents to come out to Bangkok for a job, and she and her family later followed the parents. In the end, the promised job did not work out and the other siblings left the parents. Currently, the whole family is struggling to make ends meet, day by day, by collecting trash and selling it at a market.

(In answer to why she lives with her parents, while all the other siblings have left). Well, my parents are old, and if I leave, no one else will be here to look after them. I have thought about it (moving out), but knowing the circumstances, I cannot go. If I go, two elderly, where do they go? They are old. Even when they get sick, no one will be there. I think that if I move out, my life could be better. But I think about it again, and I cannot do it, seeing the circumstances like this. Thus, I have never left my parents; I have been living with them the whole time. (Wangtonglarn 9-b)

The last passage comes from another never-married woman in her mid-thirties who lives with her elderly mother and the young son of her divorced and now ordained younger brother. She is a college graduate and has a relatively good white-collar job at an international company. She has bought a house with her savings and provides for all household expenses, including schooling fees for the nephew. For her, supporting not only her mother but also her nephew is a natural thing to do as an able member of the family; and she is happy to do so.

I would like to take care of my mother. I think she is very old. So I have to look after her. This is my responsibility, like any daughter has. We Thai people think we have to take responsibility. We have to take responsibility for our parents. I think, my mother, she has been taking care of me since I was a little baby. She must have been more tired than I am tired now, I think so. Thus, I can do everything for her as much as I can. Fortunately, I have a good job to support the family. It is because my mother gave me this opportunity; she sent me to school and to university so that I could get a good job. That is why I have to take good care of her.

My nephew is also my responsibility. He is my duty because I am his aunt; he is with me now. Sometimes I feel tired, but when I see his face, my nephew's, he needs my care. So I think it is OK. Yes, yes I accept this. My nephew is now in my family. So it is not strange that everything is on me, live on me. Also, the

reason why I can do everything for them is because I love them, everyone in my family. (Huaykhwang 2-b, interviewed in English)

Elderly parents who managed to have a good child, as in the above examples, and who consequently safely achieved co-residence seem to know with confidence that their old-age living arrangement is secure. Even though elderly parents usually do not have effective means to directly manipulate adult children, they are conscious of what they have provided their children and also know how successful the past investment has been. In a sense, whether one can live with a child in old age is the final test of how well past efforts in rearing the children turned out.

THE MOTHER OF A NEVER-MARRIED DAUGHTER: Some children marry and forget about parents. But my daughter does not do that to me because she used to tell me, "Mother, you only have two children. If we do not love you, who is going to love you? Who is going to love mother? Who is going to take care of mother?" (Huaykhwang 2-a)

THE MOTHER OF A MARRIED DAUGHTER: We (the elderly couple and the family of their married daughter) have been working together. Now, she cannot discard her parents (us). We help each other make a living. One son has already run away. Another son is working in Phuket. One daughter is in Prapaden. If no one is taking care of the parents, she (the co-residing daughter) does not dare desert us. So she lives here with us, making a living here. (Wangtonglarn 9-a)

THE MOTHER OF A MARRIED DAUGHTER: Moving out or not is up to her (the daughter). (If she moves out,) I would not complain. But she will not go, for sure. She is worried about me. (Wangtonglarn 1-a)

THE MOTHER OF A NEVER-MARRIED SON, A MARRIED SON, THREE NEVER-MARRIED DAUGHTERS, AND A MARRIED DAUGHTER: Raising six children and sending them to school was such trouble. I worked hard until one or two am. I had a small corner shop. We sold everything. At that time the children were still small. It was difficult to find a maid, back then. So I did it all by myself; it was tiring. When the children became about seven or eight years old, they started to help with doing the dishes, cooking, and ironing. The children sometimes helped with the shop, too. After they became 20 and finished studying, things got easier for me. They work and give me money. Whatever the amount they make, they give me money. (In answer to whether she had told them to do so). No, I do not need to tell them. They give the money by themselves. All I taught them was to study hard and work hard. But they know seeing the mother going through troubles (that they have to repay bun khun). They give money voluntarily out of what they make; keep some for themselves to use, and give me the rest. Some children do not give in Thailand. Some children are good, right? Good children give, depending on their minds. (Bangna 9-a)

The following provides a more obvious example of parents' long-term "strategies" to guide children to grow up "right." A married daughter who lives with two young daughters and her widowed mother openly discussed her own plan that she hoped would bring her co-residence in old age. This woman has a master's degree from one of the best universities in Thailand and earns good salary at a well-known company. Her lifestyle resembles that of foreign expatriates in Bangkok: she lives in an expensive house (that she bought), sends her daughters to international schools, and lets them take different after-school lessons, such as ballet and swimming. However, this woman hopes to live with at least one of the daughters in the future.

(In answer to whether she wants to live with a child in her old age). Actually, not an expectation but right now we think that the daughters observe something from our current living arrangements. I like my children to see how to treat the grandmother, and in the future they will treat me like that. You learn how a family is formed, how we stay with elderly. Then, they will have impression that they should do this. But I do not have high expectation; just cross my fingers. (Huaykhwang 1-b, interviewed in English)

Of course, in reality, not all children become "good" children who know bun khun. In contrast to elderly parents with bun khun-minded children, the elderly with "bad" children who do not recognize bun khun expressed their frustrations and anger against their children. In the case below, even though five children live with this elderly mother, except for two, all are dependent on the mother. When I talked with this elderly woman, she expressed her frustration with the situation and aggressively criticized her children for not knowing bun khun. In her case, and many other similar cases from low-income families, having many children does not seem to ensure a secure old age. Rather, the number of children seems to have increased her problems.

My children do not return bun khun. Only the fourth one and two females know it. The others, they do not know. I have been taking care of myself all the time. I raised them. After they grew up, I thought it would be *sabaay* (comfortable), but they are eating off of me. Here, the house is mine and they do not need to pay even for bills. They do not accept leaving the house, either.

The oldest one moved out. The second child, a female, she is now separated. She lives with us. She has one child, and he is also with me. The daughter pays for his school, but food is on me. It is oh-so difficult; buying food is *lamba*

(difficult). The third one, male and married; he lives here, but he does not deal with me. He eats by himself. He has a feen (girlfriend or wife), but seeing us having difficulties, they do not involve themselves with us. And the fourth one is a male, not married. I can get some money from him. At the end of a month, he gives me 1,000 baht. When I do not have money, I can ask him for an additional 200 to 300 baht. He is renting a house inside a soi (lane). He drives a car. The fifth one has been living with her father (respondent's ex-husband); I have not seen her for a long time. The sixth and seventh, single girls, are fine. And the last one is a female, married. She has two children that she abandoned with me.

They have not thought that there is no one to support their mother. They have not thought about it. They do not think how much trouble I am taking. In the past, I had a feen who supported me, but he is now disabled. I have to make money by myself, but there is no income. My children have not thought about these things at all. I am tired of criticizing them. Even if I scold them, they do not change. They even curse me. Oh, these days, I sit down and think it is better to die. (Khlontoy 10-a)

A common pattern observed in families with “bad” children is that elderly mothers have been raising grandchildren for their irresponsible children. Although these parents may complain about the conditions, they do not seem to have taken active steps to control ill-behaving children in order to better protect their own lives. Instead, they seem to have accepted the situation as a natural consequence of having irresponsible children. The following comments by a widowed elderly woman who lives with eight grandchildren without any of their parents are typical of many similar situations.

I live with my *laan* (grandchildren), a total of eight. The child over there is the latest addition. I have four children. The oldest one married and moved out but is already divorced. After she found a new husband, she abandoned her oldest child for me to raise. The second child, he has four children (all of whom I am now feeding). Out of four, two are already working; they have to pay so their younger siblings can study. One is studying at high school and the other one has just been weaned. One other child of mine has moved out and rents a place. He has two children who live with me. At the beginning, the parents also lived here. But they had fights. Then the mother of the child disappeared. The father of the child does not live here anymore, either. He lives with a new wife. The mother of this one, even when there was a chance to work at a decent place, did not do so. She finally got involved in dealing drugs and is now in jail for eight years. So I am raising her children, too (three of them). The little boy over there is a *leen* (great grandchild). His mother deserted the boy when he was four months. I have been taking care of him; I could not give away the boy to someone else because I felt too sorry for him. I am juggling money from different people to pay the bills, but it is not nearly enough. People say if you cannot manage to support the

grandchildren, why don't I send them to welfare. But, oh, I cannot do that. They are my grandchildren.

(In answer to whether she wants her children to come back to live with her). I hope they will be back. It will be unlikely though. If they come, they come late, stay for just a while, and leave. I cannot control them. His wife lives at the other side of the river, he has to live over there, like that. So, these laan they live with me. (Yanawa 6-c).

An implication of this grandparent-grandchild co-residence is that this living arrangement makes it difficult for the elderly to move into the common pattern of co-residence with a more able child, or to any other better living arrangement. As shown below, the elderly themselves realize that it is difficult for them to live with another better performing child as a dependent parent if they already carry dependents with them. They are also well aware of the reality that the future of the young grandchildren will be even more difficult without the grandparent, and this realization further keeps elderly with young dependents, from arranging possibly easier lives for themselves. Because these elderly find it difficult either to live with a better child, along with their extra dependents, or to sever relations with young dependents to move somewhere else, they continue their current living arrangements. Moreover, they are painfully aware that it is not realistic to hope these irresponsible children will live with them as able children. In this case, the elderly understandably seem to prefer to live without their problem children.

A WIDOWED ELDERLY WOMAN LIVING WITH GRANDCHILDREN: I do not want to live with any child. I do not like it. Actually, a daughter invited me to live with her in Chamburi. Her house is over there. But if I go, the other laan, what do they do? If I go to live with her, how can I leave these cuties? Who will take care of them? (In answer to whether she will go if the daughter is willing to take all of the grandchildren, too). She will not take them. She already has two daughters and there is her husband over there. The small one, she may take and take care of her. The grown up ones, she will not take. She cannot send the kids to school. She is not wealthy. Also, the oldest child wants me to live with him—the father of this grandchild (sitting next to me) who does not work. He wants to support me? He does not work, how could we live? Think about it, he cannot support us. Living alone (without him) is better. (Yanawa 6-c)

A SEPARATED ELDERLY WOMAN LIVING WITH GRANDCHILDREN AND DEPENDENT CHILDREN: My feen (husband) is not healthy living in Ayutthaya, but I have not visited him. If I go over there, it means I will be cut

off from here. If I go, there is no one to take care of my *laan* (grandchildren) here. If I go there, the *laan* here will have problems; they will not be able to continue to study. I do not want to live, these days. You die, and that is it. But I think of these two *laan*, whose mothers do not take them. Sometimes, I feel lazy and do not want to live with anyone. But if I go, where would they study?
(Khlontoe 10-a)

There is, however, a possible positive side to rearing the children of irresponsible children; once the grandchildren grow up, they can be valuable help for the elderly, provided that the grandchild turns out to be a “good” one. The remarks below come from a married elderly woman who lives with her husband and two adult male grandchildren. Like the woman quoted above, she earlier raised more than a handful of grandchildren, but now she is settled with these two grandchildren. She and her husband sell *gay yaang* (grilled chicken) on the street with help from the two grandchildren. She cheerfully told her story to me until she got to the incident described below; obviously, she was still upset by the incident and could not talk about it without anger and tears. She prefers to live independently rather than to depend on children with whom she has had bad experiences. In sustaining this living arrangement and securing necessary income, the help of grown-up grandchildren is essential. Her grandchildren prepare chickens for sale, wash the cart, and pay the rent, which they earn from factory work. In a sense, her past efforts to raise grandchildren are finally paying off and are now contributing to her living independently of her children.

We make money for food, just enough to eat everyday. But it is good. We can take care of ourselves. It is not like children come and give us 100 baht and later ask, "Mother, I gave you 100 baht. Did you already finish that?" I do not like that. If you give us money, you do not need to ask us if it is still there. If you can ask (you feel you have right to ask), why do you give it? Why do you ask if I still have the money? Like that, I do not feel comfortable. It is not like my money; (if it is really ours) if we use it, no one will criticize us. Do you like to be asked that? I give you money and ask if you have already used the money. Then, if you have to say the money is finished, it is not comfortable. *Gee* (impolite word meaning you) give us money, and gee ask if the money is still there. The one that received the money does not know what to say. You give only a little money, and still ask if the money is still there.

In usual conditions, living by ourselves like this is better. Living like this has *sabaay jai* (comfort of mind). We can still work. Then we can eat by ourselves. We do not bother them (children), I feel better that way. We can get some money from work. We pay by ourselves; there is no one who pays for us. So, we do not need to bother their life. We are comfortable like this. (Ratburana 5-c)

Non-marriage and Conflicts with Children's in-Laws

One of the most important findings from the children's interviews is that the concept and the practice of bun khun seems to encourage children to continue to live with parents as unmarried adults. The never-married children I interviewed frequently mentioned their attachment to their families and a desire to care for their elderly parents as a reason for their single status. Although these never-married children come from a variety of backgrounds, their logic is quite consistent. They see marriage as a potential obstacle to properly caring for elderly parents. In their view, marriage is something that brings more dependents to support and more worries and troubles to deal with. These children are not necessarily opposed to marriage *per se*, but they give greater priority to the family of origin rather than to a new family of procreation.

A NEVER-MARRIED MALE CHILD IN HIS FORTIES LIVING WITH PARENTS: People say that single people want to get into marriage, but married people want to get out of it. It is better to live with freedom. If I marry, I have to worry about my wife. But my mother is getting old day by day. In any case, as long as my mother is alive and healthy, I am proud. I am not rich but I am proud. (Dingdaeng 10-b)

A NEVER-MARRIED FEMALE CHILD IN HER MID-THIRTIES LIVING WITH HER MOTHER, HER DEPENDENT SIBLINGS, AND THEIR CHILDREN: (in answer to why she remains single) I have other obligations (than marrying) to support the family. I do not want to have my own family. I want to live like this. Moving out and living an outside life, I have not yet thought about it. If I go, there is no one to take care of the laan (children of her siblings). (Khlontgoey 11-b)

A NEVER-MARRIED FEMALE ELDERLY LIVING WITH A NANNY AND YOUNGER RELATIVES: Our family financial status allowed me to live without marrying or working. And (when I was younger) I realized that marriage would take time away from me being with my parents. If I were to marry, my husband and his family may not be nice to us. I do not need a marriage. I think

that marriage is not at all necessary. Marriage has not been a priority in my life; taking care of my parents had the highest priority. (Watana 8-c)

A NEVER-MARRIED FEMALE CHILD IN HER MID-THIRTIES LIVING WITH HER MOTHER AND A NEPHEW: (In answer to whether she will marry eventually). I think so, I think. But I think I have to plan before a marriage can happen, because now I have my mother and my nephew. So, I think, someone who is going to be my husband has to take them too, not only me. Everyone in my family. Right now, we (she and her boyfriend) are not a family; he is just my boyfriend. That is, he is in one place out of my family. Thus, I can do everything; I can make my decisions for everything in my family. But if we get married, if we have our own family, we have to share. I have to ask for his opinion. And I am not sure for the next two years to ten years, if he will be still as good as he is today (to my family). So, I have to think more. (Huaykhwang 2-b, interviewed in English)

Apparent in the last quote is that these bun khun-oriented never-married children have strong attachments to the family of origin, particularly to the mother, but also to other dependent younger relatives. In fact, the system of bun khun is built upon children's attachment to and sense of responsibility for the family of origin. Parents cannot fully receive the benefits of bun khun if the allegiance of their children has moved to the new family. The marriage of a child and the resulting presence of the child-in-law and associated new family often introduce a source of conflict in the family of origin. With the marriage of a child, parents have to face a potential danger that the child may no longer be able to practice bun khun to its full extent. Worse, the child may forget about bun khun entirely. During the interviews, some children, particularly those with low incomes, openly pointed out this problem.

A MARRIED FEMALE CHILD LIVING WITH HER PARENTS, HUSBAND, AND THREE CHILDREN: I think loving my family is one thing, and loving my parents is another. However, sometimes we have problems. If I give too much money to my parents, it is a problem for my family. But if I cut my parents off, that is too much a sorry for them. If I take my family, I feel sorry for my parents. I have to take my parents, too. (Wangtonglarn 9-b)

A DIVORCED FEMALE CHILD LIVING WITH HER FATHER AND SEVERAL CHILDREN: I already told my siblings that even if I have a lot of money, I would not let them come back (to live with the father) because they put more importance on their spouses. Like my brother, he likes his wife and children more, so they moved out and he does not live with my father. His wife does not get along with my father, so they cannot live together. Because I do not

have a family, I can live with my father. Living alone or living with kids only, you can live (with father). If you have a family, you move out and cannot live with father. (Ratburana 5-b)

Other children brought up the “risk of marriage” issue, particularly in relation to conflicts with future children-in-law, as a necessary consideration in thinking about their own old-age living arrangements. Even though they would like to live with a child when they become old, the realization of possible conflicts with children-in-law makes them take a more ambivalent attitude about co-residence.

A MARRIED SON WITH THREE CHILDREN: If we live together (in old age), there may be problems between the mother (his wife) and children-in-law. It is like a tongue and teeth; they do not get along. There are some pairs that are getting along, but these cases are few. In my case, I am lucky. My wife and mother talk to each other (and are able to live together). I am a lucky one. But in the future, I do not know. I do not know what kind of person my children-in-law will be when my children marry. Thus, living separately is better. If they miss us, let them come visit us. It is better to see their happy faces than living together and seeing unhappy faces. It is better to be prepared before these things happen. (Yanawa 6-b)

A MARRIED DAUGHTER WITH ONE CHILD: I used to ask my daughter if she is going to take care of me in the future. I used to say something like “after retirement, I will buy a house in Bang Khae,” and mentioned casually “you may want to be independent, too.” Then she said, “Why? No. I do not want to go anywhere. If I go, I will take you, too.” But she is just 16 now, right? But in my opinion, if she marries and her feen (husband) cannot take us (does not like us), in this case, I want to buy a separate house. I am afraid that I will not get along with him. (Wangtonglarn 1-b)

A MARRIED DAUGHTER WITH TWO CHILDREN: Whether I can live with my children is up to the situation then. Depending on sons-in-law, right? If the personalities of sons-in-law and mine are too contrasting, we cannot live together. I have two chances because I have two daughters. (Huaykhwang 1-b, interviewed in English)

Elderly people themselves were generally hesitant to openly admit there are or had been conflicts within their households. Given appropriate timing and trigger questions, however, they carefully mentioned problems associated with children-in-law that have affected their living

arrangements in various indirect ways⁴⁶. As a result of problems with children-in-law, the elderly people described below adjusted their living arrangements to live with a child in a better situation or to live without a child. This suggests that conflicts with children-in-law can effectively reduce the number of “available” children for co-residence, and when all children are married, there is a chance that an elderly person can end up with no available child, even though there were many children originally available (i.e. the number of surviving children). Marriage can constitute a threat to co-residence, first, because a child may move out at marriage, and second, because the elderly parent and the child-in-law may not be able to live together and someone has to move out.

Situation: After a taped interview during a casual conversation, an elderly woman told me what really happened. During the interview, this widowed Chinese-Thai woman said simply that she had let her son live outside (her house) after his marriage, and gave him a separate house.

Comments of the elderly: The second child (married male) is living separately with his own family because the daughter-in-law and I could not get along. I gave them a house and they left to live there.

Current living arrangement: Living with four never-married children and a married daughter and her child. (Bangna 9-a)

Situation: First, this married woman said the ex-wife of her son (the mother of the boy whom she is now raising) is working somewhere else and not living there. But later, talking about the ordination of her son (which is a special occasion for her to be proud of), she said the ex-daughter-in-law had actually found a new feen (boyfriend) and left. Then, she started to complain about her.

Comments of the elderly: When my son got ordained, we did not know the reason for it. But oh, he was sad; his wife got a new feen (boyfriend). But now he can cut these things off because he is ordained. When she (the ex-daughter-in-law) came over here, I told her that if she got a new boyfriend, I would not criticize her for it. My son also got ordained. But I said, “Please come see your son.” I have to tell my grandson that his mother went to work so that he can say so at school. And the father is a monk. So he does not need to feel inferior. If I put it directly, my son did not make money for the family to use. He drank and stayed out all night; his character was not good. She could not take him anymore. I cannot blame her. However, she is kind of a lazy person and not the type of person who can run the household as the wife and mother. I lived with her for

⁴⁶ The issue of family conflicts is a very sensitive topic to discuss in Thai society. In particular, when conflicts result in non co-residence, living without a child can be seen as a “failure” in the life of the elderly person. Understandably, people do not like this to be pointed out.

four to five months. She has never done sewing. She does not do laundry. After eating, she would not clean up, letting me do it. I used to tell her that if she lives with me, she needs to take care of the house more. If she is home around dinner time, she needs to help with cooking. But she is not able to. A woman who cannot do anything is difficult to live with.

Current living arrangement: Living with a never-married daughter and a grandson. (Huaykhwang 2-a)

Situation: After being asked about the detailed process (with some probing) by which he came to live alone, this elderly man reluctantly spoke.

Comments of the elderly: After they (his daughter and her husband) had a child, they built a new house. Her husband wanted to move out. If they had stayed, we would not have understood each other and would have been afraid of being annoyed with each other. There are also children and all these things.

Current living arrangement: Living alone with two adult grandchildren. (Yanawa 6-c)

Situation: This individual was originally living with a single son who had lost a leg, but who died 10 years ago. All four other children are married. She suggests that living with a married child is not comfortable for her. She emphasizes that all her children are economically able and still care for her by sending money and medicine.

Comments of the elderly: I do not want to live with children. I am afraid that I will have problems... We (the elderly woman and children-in-law) will not get along. I have been selling things for a long time. My leg pain is a recent thing, just for the last year. I have been living an independent life. I am used to it. So if I live with children and laan (grandchildren), not saying everything I want to say, I cannot be satisfied. Why do I need to live with children? Even if I live with them, when I die, I die. They cannot help me. Living like this, I feel *sabaay jai dii* (comfort of mind). I have more freedom of mind.

Current living arrangement: Living alone in a rented room. (Tonburi 8-c)

Viability of Co-residence

Co-residence is difficult if living together does not work out for all the people involved.

In addition to the desire of the elderly and the willingness of children, co-residence needs to be perceived as convenient, appropriate, and beneficial in practical ways. The tendency for Thai residence rules to place greater emphasis on flexibility and practicality than on norms and ideals has been well noted in the literature (Chamrathirong et al. 1986:37; Knodel et al. 1992a:111;

Rabibhadana 1984:21, 27). My data also show a clear preference by Thais for a viable co-residence. The comments below are from the interviews that refer to this aspect of co-residence.

A MARRIED MALE CHILD: (In reality) male children often marry and move out, not living with their mothers. However, according to the real Thai system (the ideal norm), female children have to go out. At first, female children marry and stay, but they move away later on. On the other hand, (in theory) male children will continue to live with their mothers. But these days, we do depend on the appropriateness; living like this is better or that is better. (Yanawa6-b)

A NEVER-MARRIED ELDERLY WOMAN: (Moving out after a marriage or not) depends on what they (parents and children) have agreed on or what is appropriate. A male child moving to live with the female's family is OK, while a female child moving out to live with the male's family is OK, too. It is not fixed. (Watana 8-c)

Moreover, the interview data suggest that the convenience and comfort of co-residence for children is particularly important. Although it does not mean that the workability of co-residence for the elderly is insignificant, the fundamental approach of the elderly is to live with a child as long as it is a realistic and viable option. In this sense, the elderly need to take a rather passive position, knowing what they can and cannot offer to children, and hope that some children stay with them. This attitude is clearly shown in the following statements by a widowed father and his divorced child.

INTERVIEWER: In your mind, do you have any ideas about whom you want to live with?

WIDOWED FATHER: For this issue, it depends on the children. Some of them moved out to work, and I have only this one (divorced daughter) to take care of me, only this one. She takes care of me, so I live with her. On this issue, I do not think too much. Whoever takes care of me (feeds me) is the person I stay with. (Ratburana 5-a)

INTERVIEWER: In the future, when you become old, with whom do you think you will be living?

CO-RESIDING DAUGHTER: When I get old...you have to ask, who is going to let me live with them. The question is who is going to let me live together with them. You need to think who is going to let you live together, like this (our situation). If I let him (the father) live here, he will live with us. If other siblings let him live with them, he lives with them. It depends on who is going to take you. (Radburana 5-b)

Obviously, one of the main issues that define the workability of co-residence is economic. A recurrent message that emerged from the interviews is the reality that children who have more options do not choose to live with poor parents. As an illustration, the widowed man mentioned above has been living in a rented one-room apartment with a divorced daughter and several grandchildren. He is renting this residence because he is a poor man who has worked as a physical laborer on boats all of his life. When asked about the possibility of other children coming back to live with him, he answered clearly:

None of them will come back because our economic status, like renting this place, is lower than theirs. I am poorer than they are. They have a better economic condition, so that I would have to go and live with them. They cannot come down to live with me. I would have to go up and live with them (but they would not take me).

Because she (the co-residing daughter) has been separated from her feen (husband) already, she lives with us. Her children go to school, and her work is close to here, so we can live together. Other children would not live with us, having a feen (spouse) or work to do (somewhere else). (Radburana 5-b)

The next case also conveys this same message that it is difficult for the poor parents to attract a child to live with. According to this poor elderly woman, all but one child had already run away from home to find a job and a better life because the parents had nothing to offer. She also recognizes that these children, who are all married, have their own families to support, suggesting that these children have chosen to focus more on their own families rather than struggling with poor parents. Interestingly, the only child who is living with this elderly woman and her alcoholic elderly husband is a married daughter introduced earlier as a good child who knows bun khun. While it may be true that this daughter observes the duties of bun khun, the account from her mother reveals other motives. This poorly educated daughter will probably not be able to survive without her parents; she has a jobless and abusive husband and her health is poor.

THE MARRIED ELDERLY WOMAN: My children also have families, making their own way. They also want to do better. They come to live here? They

would not come, for sure. They only come to visit once in a long time. They can come, but there is nothing here; living like this, looking for work to earn money. I have nothing to give them. We are struggling. Because there is nothing here, they also want to find a better place to make a living. Parents do not have anything with which to be able to employ children. Nothing. So they also want to make their way. They also have their own families.

If I leave, my daughter cannot make a living. I am also sorry for her. She cannot earn money anywhere. She cannot make much money. Her husband also hits her. When we say too much, he hits her. She does not have people who help her make a living. She has high blood pressure and diabetes. She does not have money to go to see a doctor. When her blood pressure gets high, she gets weak. No money for medicine, no money for blood testing at a hospital. She does not know which hospital to go to, either. When she works too hard, she faints. She is not very healthy. (Wantonglarn 9-a)

On the other hand, the following case shows how elderly parents' economic resources can contribute to keeping a child at home even after marriage. It is apparent from the quotes of the married daughter that her elderly mother has done the "right" things, intentionally or unintentionally, over many years, to secure one of only two children for co-residence and to maintain a workable living environment for the co-residing family. In particular, building a house when the daughter got married (when the risk of moving out was high) was an effective way to keep the daughter at home. This mother has also taken other more subtle steps to encourage co-residence, including raising her children to know *bun khun*, having helped with housework for the family while she was still able, and giving money for the family from her own savings when needed.

THE MARRIED DAUGHTER: I did not move out after marriage because we only have two children. Thai people think female children should stay in the house after marriage, and I am the only female child. I got married but did not move out. Usually, female children have to live with the mother. Most importantly, my mother only has two children, so we do not want to leave her. I cannot desert my mother; she is already old. At the beginning, I thought I would move out. But this way, there would be no one to take care of her. The *laan* (co-residing children of the mother's elderly brother) are still teenagers. They come home late. My brother also comes home only two to three days a week. But my brother helps with expenses, too; he gives more than I do. He gives a lot, 10,000 baht. He makes good money.

At the beginning, we (she and her husband) were thinking about buying a house apart from my mother's place. But mother built this house. Consequently... My family used to live at another place. We were renting land, and I was thinking about buying a house. And good timing, mother built this house, and she said I did not need to buy one; it is better to live together, if I pay some for the house.

Mother said that after marriage, living at his (husband's) house would be *lamba* (difficult). In the past, when my mother was younger and stronger, she used to cook for us. She also made clothes for us.

Sometimes, we do not have enough money, and mother helps pay. But to tell the truth, I do not want to bother her in that respect. I feel bad because I already have a separate family. We are like one big family, but in terms of money, I do not want to bother her because I am married. That is like a separate family. But mother knows our financial situation and helps us. She is worried. I am a civil servant (indicating that her monthly salary is not high) and my husband works for a private company that is not financially secure. Also, my husband is good at using money. He uses money with friends. (Wangtonglarn 1-b)

The next case also demonstrates how elderly parents' economic capacity has contributed to attract children to live with them. The example comes from a never-married male child in his forties who lives with his widowed father. This man and his married brother, who lives in the next room, work as iron door makers; the now-retired father started this business and taught his sons how to work with iron from the age of 14. The two brothers receive orders and make products at home. The man manages to earn just enough money to support himself, his father, and the family of his married brother (a wife with no children). This earnest man is worried about his financial situation and does not think that he can live independently from his father and the family business. Even though this business is not very profitable, the widowed father's provision of a way for his children to earn a living has positively affected the co-residence decision of the child.

I have thought about moving out. But I cannot. My economic situation does not allow me to do that. I am not good at studying. If you work in a civil service job or for a company, for example, you have to have knowledge. I just finished the first year of high school, only that. It is not much. You have to have more education (for these kinds of jobs). So, for me, what kind of work can I do? My father taught me how to work; I was trained by him. Like it or not, I have to do this job. I really do not have a good education.

Living with father is warm and nice. If I go out to live somewhere, I do not feel good and life is more difficult. Living together, you can take care of your father, too. If I live alone, moving-out from here, I need to pay various expenses at the new place. Here is our house, so living here is OK. My father also gives me advice. I am afraid that I may not survive living away from home. (Tonburi 8-b)

Besides the economic aspects of co-residence, the convenience offered by co-residing is another factor contributing to workability. Several people mention the convenience of having someone at home during the day while other family members go out to work, and others point out that they enjoy the fact that the elderly parents can take care of the housework. Because it is common in Thai families for the wife to work outside the house, just having an elderly parent at home (even if he or she cannot or does not do much housework) can be a considerable help. Moreover, these elderly people's residence in Bangkok is a positive condition for children who need (and prefer) to be in Bangkok for work and the schooling of their children; in particular, in cases where the spouses of children have to live away from Bangkok, the parents' (or the family's) home in Bangkok is a convenience. As Vichit-Vadakan (1979:214) writes, it is not easy for people who want to be in Bangkok to secure a place to live in this crowded and hectic city; thus, people who have a place in Bangkok are highly admired, and their houses usually function as a central space for families, relatives, and friends from the countryside to gather.

A WIDOWED ELDERLY WOMAN: When my daughter got married, she moved out. After this house was built, she came back to live here. She wanted to live with her mother (respondent). At that time, there was no one to take care of her house. In the morning, she goes to work everyday. Her husband is living at a place in the countryside (for his job). They have a house there. Now she goes to visit him there and he visits her here. Because her daughter (respondent's granddaughter) needs to study in Bangkok and she (respondent's daughter) needs to work in Bangkok, they cannot live with him. So they (daughter and granddaughter) moved in. (Bang Na 9-a)

A MARRIED DAUGHTER LIVING WITH HER WIDOWED MOTHER (her husband is stationed abroad with his company): I moved out somewhere near here after marriage and my mother was living with the family of my married brother. When we (she and her husband) moved into this house (a large house that she built), I was pregnant. So, we planned that we have my mother here. We had talked about it before. Actually, living with the daughter-in-law was... actually my mother was not comfortable with the daughter-in-law, who is

different from a real daughter. Also, because we (she and her husband) are both working, after my children come back from school, there was no one to take care of them. So, it is better to have someone we trust at home. My mother had stayed with my nieces before my children were born. Also, among my brothers and sisters I am the one, I think, who is most suitable in terms of housing facility (Huwaykhwang 1-b, interviewed in English)

A DIVORCED DAUGHTER LIVING WITH HER WIDOWED FATHER: I do not want to leave him because he is old. There is no one else to take care of him. He also does all the housework so that I won't be too tired. Because he takes care of the house, I am not too tired. He does everything for me; he cooks food for us. I only need to work. I eat and go to sleep; I do not have to do anything else. He is taking care of the children for me as well. (Ratburana 5-b)

Analyses of the interview data above suggest three major factors that condition the living arrangement outcomes of elderly Thais. Given the well-established preference for co-residence, it is the willingness of children to recognize and practice their obligations to repay their parents and to choose to remain in the parental home that supports co-residence in old age. In addition, conflicts with children-in-law appear to be an obstacle to co-residence. Chamrathirong et al. (1988:938) also note incidences of conflicts with in-laws among Thai families and suggest that avoidance of these conflicts is a cause for the fluidity of post-marital residence rules in Thai society. Finally for co-residing children, the viability of co-residence, including economizing on expenses and sharing housework, contributes to its continuation.

Conclusion

This chapter examined the determinants of old-age living arrangements in Bangkok from the perspectives of both elderly parents and their adult children. Both quantitative and qualitative data are used to provide a more holistic understanding of the subject. The results of the various analyses developed in this chapter confirm that the availability of children is a powerful determinant of co-residence in Bangkok. The "original availability" of children, expressed in the number of surviving children, is a significant factor for the formation of co-residence, as shown

in the multivariate analysis. In particular, having a never-married child is found to be the most important factor. This finding is also consistent with the results suggesting the high involvement of never-married children in co-residence.

Furthermore, the interview data reveal that having a good child who has the intention to live with parents and creating convenient conditions for actually living together are essential for the realization of the desire to co-reside with a child. Conflict with children-in-law also emerges as a major obstacle to co-residence. In this context, the number of originally available children is probably contributing to co-residence because elderly with more children can expect a better chance of ending up with a “right” child for co-residence. In addition, although it is theoretically possible to live with a child as long as there is one willing, unpredictable events, such as the death of a co-residing good child, means that having more children and, thus, maintaining a larger pool of dependable children, is an effective way to secure co-residence.

The results also show that it is the needs and conditions of children that largely determine co-residence. When elderly people have children in need of assistance, including children with poor education (and with presumably low income) and housekeeping needs, co-residence occurs more easily, provided these children have a willingness to live with their parents. On the other hand, some poor elderly have a difficult time attracting children to co-reside. In particular, it is even more difficult for these parents who are short of resources to keep children after marriage when competing demands are added to the lives of the children. In addition, given the strong preference for co-residence, a multivariate finding showing a smaller chance of co-residence for the elderly with independent income may be interpreted as their having greater ability to live independently should their children turn out to be undesirable co-residents. Moreover, children who know that their parents can survive without a co-residing child may be more inclined to leave their parents.

Finally, with respect to the future of co-residence in Bangkok, the results of this chapter suggest that the reduction in the number of children will probably negatively affect the formation of co-residence. However, the increasing proportions of never-married people suggest that these single children will be expected to contribute to the maintenance of co-residence. Never-married children are structurally most suitable for co-residence because they typically continue to live in the parental home, do not have a spouse who may not be able to get along with parents, and can more easily care for their parents without the competing demands of their own families. If the future of co-residence is supported by never-married children, it is good news for future elderly parents who can enjoy repayment of *bun khun* to the fullest extent (assuming that these children actually support the parents, and not vice versa). However, when these never-married children eventually become old, they will have a problem finding someone to co-reside with. If the high rate of non-marriage persists, single people in future generations will also have increasingly smaller circles of relatives with whom the never-married elderly can find a co-residing partner, meaning that more and more people will face the risk of living completely alone. The next chapter focuses on the process that has led to the current living arrangements and further examines the circumstances of people who do not live with a child, including those who live completely alone.

Chapter 6

DYNAMICS OF LIVING ARRANGEMENTS

Introduction

This chapter uses retrospective data to examine the dynamics of living arrangements over many years. Because current conditions are not independent of past history, it is important to understand the underlying processes that have led to present living arrangements. Although the same current living arrangement may have different implications for the life of the elderly because of past trajectories, studies largely based on cross-sectional data have not been able to address the dynamic aspects of those living arrangements. As a first step towards a longitudinal model of Thai living arrangements, the focus of this chapter is on the changes and transition patterns in past living arrangements of the current elderly. An emphasis on process can help examine reasons for co-residence and also determine the direction of support flows between elderly parents and co-residing children. The first section of the chapter discusses the data, the analytical approach, and the limitations of retrospective data. The analyses are exploratory, attempting to discover the basic dynamism of Thai living arrangements. The second section examines the relationship between living arrangements and the life-course of respondents, using the household development model as a guide. Changes in living arrangements are considered from the perspectives of both elderly parents and their children. The last section summarizes the trajectories of living arrangements from a point prior to old age to the present. The socio-demographic characteristics of the elderly who experience different transition patterns are also compared.

Data and Approaches

The living arrangement data used in this chapter were collected retrospectively from 1,125 elderly respondents. The respondents were asked about the people living in their houses during the periods when they were aged 41 to 45, 46 to 50, 51 to 55, 56 to 60, 61 to 65, 66 to 70, 71 to 75, 76 to 80, 81 to 85, and above age 86. Unlike the analyses discussed in the previous chapter, which focused on present living arrangements using cross-sectional data, the following analyses use this long-term living arrangement information starting from age 41, when the respondents were still middle-aged. Moreover, because I have data on both the elderly's living arrangements and the presence of respondents' children in their houses, I can trace movements for each child in and out of the parental house over many years. The coding scheme distinguishes the sex and marital status of co-residing children, and the timing of leaving and returning to the parental house is also noted (see Chapter 5 for details of the children's data). Sex and marital status of co-residing children are included here because, as shown in the previous chapter, these children's characteristics have been important in deciding the living arrangements of their elderly parents. A total of 3,128 cases are available to discuss children's living arrangement behaviors in relation to the parental house.

Although retrospective data are useful in addressing dynamic aspects of living arrangements, some limitations of retrospective data also need to be recognized. First, because longitudinal information was not collected prospectively, only people who survived to the interview date are included and living arrangement histories for those elderly who died prior to data collection were not available, leading to left-censoring of data. The data apply only to

survivors, and there is a possibility that non-survivors are different in some relevant way⁴⁷.

Second, the presence of individuals at a respondent's house was reported using five-year age intervals; consequently, only one move per five-year age interval was recorded. Only the living arrangement at the beginning of each period was recorded, even if more than one change was made. Although ideal data on living arrangements over time would record precise dates of moves, the decision to use the five-year age interval was made because it was impossible to record the movements of people over several decades using any shorter intervals⁴⁸. More importantly, since the five-year age intervals were also used to record other time-varying information, such as marital status, house ownership status, and employment status, it was important to use the same time interval to provide reference points that improve interviewee recall ability.

Given the nature of the data, the analytical approaches that follow are exploratory attempts toward finding the basic mechanisms of change in living arrangements. Rather than relying on more advanced statistical modeling, these analyses seek to understand transitions in types of living arrangements in relation to respondents' life-courses and try to capture trajectories and patterns of living arrangements by using descriptive statistics and cross-tabulations⁴⁹. These statistical summaries provide insights into the dynamics of living arrangements and help develop a more refined determinant model of current living arrangements and their implications for the well-being of the elderly. Also, because studies that consider the longitudinal aspects of living arrangements are scarce (Spitze et al. 1992:S290), and very little is known about changes in

⁴⁷ However, my analyses only concern survivors; I do not draw any conclusions concerning any differences between survivors and non-survivors.

⁴⁸ I tried to use a one-year interval for recording the presence of individuals. However, local supervisors and interviewers were strongly opposed to the idea because they thought it was impossible to implement, given the age of respondents and the complex structure of the questionnaire schedule that covered a wide range of topics.

⁴⁹ As with the analyses in the previous chapter, analyses developed in this chapter are weighted to adjust for the effects of cluster sampling and the under-representation of Chinese-Thais.

living arrangements in Asia and Thailand, situating the living arrangements of the elderly in a dynamic framework is a needed further step towards a longitudinal model of living arrangements.

Process of Living Arrangements

Living Arrangements and the Developmental Cycle of Households

As discussed in Chapter 2, an important feature of Thai households is that they repeat a developmental cycle. According to Foster (1984:86-87), a Thai household typically develops from a nuclear family into a stem family, in which the new family of one married child co-resides with the aging parents. This last stage of the developmental cycle, co-residence with a married child, is said to characterize Thai familial care of the elderly (Knodel et al. 1992:117). An important implication of this developmental model is that Thai old-age co-residence is an extension of previous co-residence, rather than a newly created arrangement. In other words, Thai parents continuously co-reside with a child; first with unmarried children in a nuclear family and then later with at least one married child as an extended family, with an intermediate period of co-residence with both married and unmarried children. However, the actual degree of adherence to the household developmental model is rarely documented, especially in places outside of the rural farming context in which Foster conducted fieldwork. In this section, I explore the process of living arrangements from the viewpoint of the developmental cycle of households and assess the adequacy of this model in Bangkok.

Table 6.1 below presents the distribution patterns of living arrangements during the middle to later life of elderly respondents. The types of living arrangements are defined as 1) co-residence with a never-married child only (nuclear family), 2) co-residence with a married child with or without a never-married child (extended family), and 3) non co-residence (living with a

spouse with or without other people, living with other people only, or living alone)⁵⁰. The proportions of each living arrangement type are classified by age interval, and the percentage of stem families among the extended families is also noted in the table. Only elderly respondents with an ever-born child are included in the analysis because the household development model is based on marriage and reproduction. Also, in order to avoid the possibility of cohort bias, only people who are old enough (aged 81 and above) to provide complete living arrangement information covering middle age, early old age, and later old age, are considered here (a total of 101 cases)⁵¹.

Table 6.1. Proportions of living arrangements from age 41, among those who have an ever-born child (unweighted *n* in parentheses).

Living arrangement	Ages								
	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81 +
Nuclear family	83.7 (87)	73.4 (75)	58.4 (57)	43.4 (39)	29.0 (27)	23.1 (22)	21.2 (23)	21.1 (21)	19.5 (19)
Extended family	12.7 (11)	23.8 (24)	39.3 (42)	54.3 (60)	69.0 (72)	69.0 (71)	69.5 (69)	64.6 (68)	65.8 (68)
Stem family*	95.8 (10)	69.9 (18)	68.4 (31)	66.5 (42)	73.3 (54)	77.7 (55)	73.4 (50)	82.8 (56)	83.8 (57)
Non co-residence	3.6 (3)	2.8 (2)	2.3 (2)	2.3 (2)	2.0 (2)	7.9 (8)	9.3 (9)	14.3 (12)	14.7 (14)

Note 1: Only elderly people who are aged 81 and above are included. The total cases included in this analysis are 101.

* As a percentage of extended families.

Thai parents' co-residence histories are affected by the marital and living arrangement decisions of their children as parents age and households mature. Children's decisions involve:

⁵⁰ Other people include nephews, nieces, uncles, aunts, siblings, children-in-law, parents, grandchildren, and other non-related people such as friends.

⁵¹ Since the sampled elderly respondents have different present ages, younger elderly people can not provide living arrangement information for ages they have not reached. This complete right censoring of data (their changes in living arrangements happen and end after the observation period) produces the possibility of a cohort bias (Blossfeld and Rohwer 1995:36). To avoid this possibility, I limited the analysis to people who belong to the same birth cohort. However, when I conducted the same analysis including all elderly (aged 60 and above), the trend of living arrangement over years and resulting conclusions were essentially the same, suggesting the absence of a serious cohort bias.

1) home-leaving behaviors of unmarried children, 2) marital decisions of children (whether they marry, remain single, or divorce), and 3) married children's post-marital residential decisions (whether married children form an independent nuclear family or co-reside with the parents). If people follow the normative living arrangement pattern suggested by the developmental model, the proportion of people in a nuclear family should gradually decrease with parental age, and be replaced by increasing proportions of people in extended families. The proportion of non co-residing people should consequently remain relatively unchanged as living arrangements change from nuclear to extended family households. On the other hand, if the elderly's unmarried children move away from home (either temporarily or permanently) as in the United States or Canada where the "leaving-home" behaviors of adult children are common and even expected (Mitchell 1998:24), the proportion of people in non co-residence is expected to increase with the age of parents and the associated desire of children to move out of the parental home.

According to Table 6.1, at age 41 when the respondents and their households are still relatively young, the dominant household structure is one of co-residence with a never-married child. The majority of middle aged people live with a never-married child only (83.7 percent) as a nuclear family at this point, while only 12.7 percent live with a married child. Non co-residing adults are also a minority (3.6 percent). With increasing age and the associated development of households (i.e. marriages of children), the percentage of people who live with a never-married child only gradually decreases to 58.4 percent at age 51 and then to less than half (43.4 percent) at age 56. Correspondingly, the percentage of people who live with a married child increases to 39.3 percent at age 51 and to over a half (54.3 percent) at age 56, after surpassing the percentage of people who live with a never-married child only. When parents reach age 61, 69 percent live in an extended family. Among these elderly who are in extended families, 73.3 percent live with only one married child at age 61, forming a stem-family. The stem-family, as opposed to the

joint-family where multiple married children co-reside, appears to be the dominant form of extended family over the years.

After age 61, the percentage of people who live in a nuclear family remains fairly unchanged. During the old-age period of 66 to 81, about 20 percent of people consistently belong to a nuclear family, suggesting that a significant portion of elderly parents has a never-married child who continues to live with them. In contrast, the percentage of people in non co-residence, which continues to be low during the middle age years, starts to increase moderately in later life. The overall scarcity of non co-residing people implies the relative absence of an “empty-nest” period for Thai parents⁵², while the timing of the moderate increase in non co-residence suggests that some parents who originally lived with a child lost all children as co-residents over the process of household development. This loss has resulted in non co-residence during old age, the period in which they are most likely to need a co-residing living arrangement.

The trend of living arrangements over the years suggests that Bangkok parents, for the most part, follow the expected normative pattern. The majority of parents change their living arrangements from a nuclear to an extended family in the process of household development without an empty-nest period. Also, following the normative pattern, which encourages an already married and co-residing child to move out of the parental house upon the next child’s marriage, a large percentage of extended families are in fact stem families, rather than joint families in which multiple married children live together. The proportion of stem families among extended families, however, may be lower in Bangkok than in the provinces because of the difficulty of finding an independent residence for each married child, leading to multiple married children living with parents. As a deviation from the model, a sizable percentage (from 29.0

⁵² There is a possibility that children have been away from home for a short time (less than five years) and returned home, and hence their absence is not recorded (e.g. present at age 51, absent from age 52 to 54, but present again at age 56).

percent at age 61 to 19.5 percent at age 81) of parents appear to remain in a nuclear family during their later lives without experiencing the last stage of the household development, co-residence with a married child. Moreover, some parents, all of whose children leave home, depart from co-residence in late old age during the time when co-residence is expected to be most beneficial to the parents.

Children's Movements

The analysis in this section shows the movements of children in and out of their parent's house, focusing on their marital status. Direct examinations of the children's marital status and their living arrangements help further clarify the relationship between the household developmental model and the living arrangements of Bangkok's elderly. The following analysis uses children's living arrangement data from the period when their parents were aged 41 to the present. The unit of analysis is the surviving adult children of the elderly respondents (a total of 3,128 cases); the perspective of analysis in this section is that of children rather than their parents.

Table 6.2 summarizes the children's presence at and absence from the parental house as four types of movements. The table also identifies the children's sex and changes in their marital status within each movement type⁵³. Mutually exclusive children's movement types are categorized as: 1) once lived with parents but permanently left, 2) always lived with parents, 3) absent at one point but re-joined parents (either children moved back to live with the parents or the parents moved to live with them), and 4) never lived with parents after the parents were age 41. Marital status and its changes are recorded for periods when children are at home and is

⁵³ Only sex and current marital status information was provided for absent children because obtaining accurate information on changes in marital status for non co-residing children is difficult. Thus, sex and marital status information for "always absent children" are not included in the analysis below.

divided as: 1) remained never-married, 2) remained married, 3) changed from never-married to married, and 4) changed from married to divorced/widowed.

Table 6.2. Children's movements by children's sex and marital status (unweighted *n* in parentheses).

	Movement types							
	Once present but left		Always present		Once absent but re-joined		Always absent	
Distribution (% of total)	52.1 % (1,603)		37.3 % (1,177)		3.2 % (108)		7.4 % (240)	
Marital status during time of co-residence (% within movement)	Males	Females	Males	Females	Males	Females	Males	Females
Remained never-married	17.2 (260)	11.9 (187)	22.4 (272)	31.0 (361)	4.7 (5)	13.9 (16)	-	-
Remained married	3.1 (52)	4.0 (67)	0.9 (11)	1.7 (16)	7.2 (9)	12.5 (15)	-	-
Changed from never-married to married	32.0 (529)	31.5 (505)	22.0 (244)	18.5 (229)	22.1 (20)	30.4 (33)	-	-
Changed from married to divorced/widowed	0.1 (1)	0.1 (2)	1.4 (17)	1.9 (27)	2.7 (3)	6.6 (7)	-	-
Total	99.9%		99.8 %		100.1 %		-	

Note 1: The total cases included in this analysis are 3,128.

Note 2: For the movement type "once absent but re-joined," marital status is the status after re-joining the parental home.

Note 3: Females who remained married include a total of four people who were divorced/widowed for the entire period (one case always co-resided and three cases were once absent but returned home).

Note 4: Children who were initially never-married but became divorced/widowed (after being married) are classified as changing status from married to divorced/widowed (a total of 52 cases).

According to Table 6.2, the most common pattern of movement is to permanently leave the parental household. A little over one half of children (52.1 %) leave home after a period of co-residence and do not return to live with the parent⁵⁴. Since the average age of children at the

⁵⁴ Almost all children (about 99 percent) experienced only one departure (i.e. no repeated process of leaving home, coming back home, and leaving again). However, since movement was recorded using the five-year intervals, there is a chance that some children might have come home for a short period of time and left again without leaving a record of coming back home.

beginning of the study period, when the parent was aged 41, is 11.6 years for all children and 15.4 years for the oldest child (data not shown)⁵⁵, these children are most likely to have lived with the parent from childhood to their departure. Among these “permanently-left” children, about 64 percent changed their marital status from never-married to married (about 32.0 percent each for males and females) during the time of co-residence with their parents before their departure. An additional seven percent were already married at the beginning and remained married. These children left the parental household after a marriage and the initial period of co-residence as a married child, following the common post-marital residential practice. In contrast, 17.2 percent and 11.9 percent of children who permanently left are never-married males and females, respectively, suggesting that while leaving the parental house before marriage is not a common practice, some children do leave home unmarried.

Another major pattern of children’s movement is to live with parents without a period of absence. These “always-present” children account for as much as 37.3 percent. Again, considering the low average age of children at the beginning point for these data, these children probably have continued to live with parents from childhood. A total of 40.5 percent of never-leaving children married over time, changing their status from never-married to married males (22.0 percent) and from never-married to married females (18.5 percent). Only a minority of those children who were always present was already married and remained married (2.6 percent) or became divorced/widowed (3.3 percent). Children who married while co-resident and children who were already married at the beginning of the period of co-residence reported are the children, out of sibling sets, who decided to co-reside with parents even after marriage. In terms of the development model of households, they are the normative co-residence partners who take care of

⁵⁵ Calculations of the average age exclude 194 children who have not been born at this point and an additional 92 children with missing values for current age.

the elderly parents in an extended family environment. On the other hand, a sizable number of children, 22.4 percent of males and 31.0 percent of females, never leave home and never marry.

About seven percent of children have never lived with their parents after the parents were age 41. There are several possible reasons for the complete non co-residence of children. Some children may have been living with a relative, including grandparents, since such a living arrangement is quite common in Thailand (Hashimoto 1991:363), as the qualitative analysis in the previous chapter shows. It is also possible that some children were actually present at the parental house earlier, but departed by the time the parent was aged 41. Moreover, in cases of marital disruptions, children who went to live with the other parent are also considered to be “always absent” here. Although accurate demographic information for these 240 always-absent children is difficult to obtain, data (not shown) suggest that there are more males than females (56.4 percent vs 43.6 percent), and the majority of them are currently ever married (89.8 percent). Moreover, consistent with an assumption of lower socio-economic status for their households, always-absent children have lower average years of education than those who have never left home (9.0 years vs 11.6 years), and have higher average numbers of siblings than the latter (5.9 siblings vs 4.5 siblings).

Finally, the remaining minority (3.2 percent) are children who left their parents once but later returned. The small number of returning children in the movement types means that Thai old-age co-residence is largely attributable to children who have never left their parents, rather than to those who have come back to live with aged parents. The majority of these returning children were never-married when they came back. However, many children married later, changing their marital status to married males (22.1 percent) and to married females (30.4 percent). More females in this movement type remained never-married (13.9 percent) than males (4.7 percent). On the other hand, suggesting the difficulties of moving back to live with parents along with a family of procreation, only 7.2 percent and 12.5 percent were married males and

females when they re-joined their parents. Notable proportions of children divorced or separated (a total of 9.3 percent) after a return.

A growing body of literature questions the nature of returning adult children, who typically have been assumed to be the caregivers to dependent elderly parents. Spitze et al. (1992:S295), who examined changes in living arrangements among American unmarried elderly parents, concluded that changes in household structures, even in later years, are largely influenced by the needs of children, rather than of parents. Similarly, according to a further analysis of my data (data not shown), the percentages of returning children are not different between children with older parents aged 81 and above (5.0 percent out of 368 cases) and those with younger parents (3.0 percent out of 2,760 cases)⁵⁶. This finding suggests that the crucial point in deciding old-age co-residence is whether children continue to live with parents; after the decision to leave home has been made, the aging of parents and their increasing needs are not the major reason children return.

Trajectories of Living Arrangements

Transition Patterns Before and After Age 60

In this section, I examine changes in the living arrangements of the elderly between the pre-old age point of age 56 and the present age in order to identify the types and frequencies of transitions made during those years. Cross-sectional analyses of living arrangements only concern current living arrangements as a static model, and do not tell us if people have continued in the same living arrangement over time. Because the same current living arrangements may

⁵⁶ The difference is not statistically significant at the 95 percent level.

have varied histories and resulting different implications for the present situation, it is important to capture the dynamics of living arrangements. Spitze et al. (1992:S290) stated a need to consider longitudinal aspects of living arrangements since the driving forces for the observed current arrangement may be different between a longstanding arrangement (e.g. co-residence with a never-married child who never left) and a newly created one (e.g. co-residence with a recently returned child). Studying living arrangements from the perspective of starting and ending arrangements is a useful step toward a dynamic model of living arrangements.

Table 6.3 provides an overview of transition patterns of living arrangements between parental age 56 and the present age. For the analysis below, I conceptualize living arrangements of the elderly in terms of five mutually exclusive states, including: 1) co-residence with a never-married child only (nuclear family), 2) co-residence with a married child with or without a never-married child (extended family), 3) co-residence with a spouse with or without other people, 4) co-residence with other people only, and 5) living alone⁵⁷. The five states are cross-tabulated by the initial living arrangement at age 56 and that of the current time. By specifying the starting living arrangement and examining the current arrangement in relation to the initial condition, the magnitude of changes in living arrangement during old age becomes clearer. The distinction of the initial arrangement also helps identify people who followed atypical living arrangement courses, outside the norm of co-residence.

⁵⁷ Although it is possible to move out of a state more than once (i.e. states are nonabsorbing), for people who made more than one transition, the middle living arrangement between the original and the ending states are not reflected in the table. However, a preliminary analysis shows that people made an average of 0.5 transitions from age 56 to present. Also, about 29 percent of people made one transition, while 7.6 percent made two transitions and an additional 1.7 and 0.6 percent respectively made three and four transitions. The rest made no transitions.

**Table 6.3. Transitions in living arrangements
(weighted percentages within original living arrangements in parentheses).**

Original living arrangements at age 56	Current living arrangements					Total
	Nuclear family	Extended family	Lives with spouse (with/out others)	Lives with others	Lives alone	
Nuclear family	230 (60.2 %)	94 (26.2 %)	29 (7.9 %)	13 (4.2 %)	4 (1.6 %)	370 (100.1 %)
Extended family	105 (18.5 %)	428 (71.2 %)	42 (6.6 %)	11 (2.2 %)	11 (1.5 %)	597 (100.0 %)
Lived with spouse (with/out others)	1 (1.1 %)	19 (31.2 %)	27 (42.2 %)	14 (18.7 %)	4 (6.8 %)	65 (100.0 %)
Lived with others	1 (1.9 %)	3 (3.6 %)	0 (0.0 %)	60 (91.2 %)	2 (3.3 %)	66 (100.0 %)
Lived alone	0 (0.0 %)	5 (13.2 %)	0 (0.0 %)	10 (36.1 %)	12 (50.7 %)	27 (100.0 %)
Total	337	549	98	108	33	1,125

According to Table 6.3, the major pattern of transition during later life involves co-residence at both beginning and current time, as predicted by the normative preference for co-residence, particularly with a married child. Among people who started in a nuclear family at age 56, 60.2 percent remained there, while 26.2 percent made a transition to an extended family. As much as 71.2 percent of people who lived with a married child at age 56 continued to do so at present. A noticeable portion of people (18.5 percent) who originally lived with a married child, however, moved to live with a single child. Changing co-residence partners from a married to a never-married child could be a common solution for conflicts with in-laws, discussed in the previous chapter, as long as a never-married child is available.

Despite the apparent preference for co-residence, the table reveals that a significant percentage of people actually make a “downward” transition from either a nuclear or extended family to living without a child. A total of 46 cases from nuclear families and an additional 64 cases from extended families moved to a non co-residing living arrangement, and these people represented 13.7 percent and 10.3 percent of respectively of all originally co-residing individuals.

In fact, the total number of non co-residing individuals was higher at the end (239) than at the beginning (158). This downward movement is unexpected because people are supposed to move to live with a child in old age, if they have not been doing so yet, rather than the opposite.

Furthermore, people who make an “upward” transition from non co-residence to either type of co-residence are few, even considering the percentage of childless people who belong to the non co-residence category at the beginning⁵⁸. Among people who lived alone at the beginning, only 13.2 percent moved to live with a married child and none moved to live with a single child. The rest of these people either remained living alone (50.7 percent) or moved to live with other people (36.1 percent). People who started out living with a spouse had a better chance to make a transition to live with a child; 1.1 percent made a transition to a nuclear and 31.2 percent to an extended family. However, as much as 42.2 percent remained in the same living arrangement, while 18.7 percent moved to live with others and 6.8 percent to live alone. Finally, the overwhelming majority of people who lived with others have maintained the same living arrangement (91.2 percent). The high stability of living with others indicates the dependability of relatives other than children in supporting the later life of people who do not live with a child.

Trajectory Types and Socio-Demographic Characteristics of Elderly

Based on the transition patterns found in Table 6.3 above, I next examine the socio-demographic characteristics of the elderly across the transition patterns, with special attention to the minority of people whose trajectory involves non co-residence. I particularly focus on the characteristics of the elderly who experienced non co-residence either at age 56 or the present

⁵⁸ The proportions of childless elderly in each living arrangement category at the beginning state are 23.9 percent (for those who lived with a spouse), 77.1 percent (for those who lived with others), and 52.6 percent (for those who lived alone).

time in comparison to those who have co-resided continually. The elderly who move in and out of co-residence apparently have children but did not remain in co-residence as did the majority⁵⁹. As Siriboon and Knodel (1994:22) point out, we lack research on the minority of Thai elderly who do not co-reside, even though they represent a clear deviation from the society's residential norms and may have particular characteristics that require attention. These authors suggest that non co-residing Thai elderly are self-selected for their advantageous economic and physical conditions, even though their conclusions, based on cross-sectional data, only concern a particular condition at the time of survey. The following analyses are useful in inferring the circumstances of the minority of elderly who deviate from the norm of continued co-residence⁶⁰. The comparison of characteristics also provides insights into reasons for departure from and entry into co-residence during old age and helps predict these transitions in the future.

⁵⁹ In contrast, the characteristics of people who continued in non co-residence are not specially mentioned as a comparison group here because 59.8 percent of them are childless, and their living arrangements are largely explained by this factor.

⁶⁰ It should be noted, however, that the statistical summaries shown here form rough profiles of people, with no formal tests of statistical significance or causal implications.

Table 6.4. Trajectory types and characteristics of the elderly.

Characteristics	Trajectory Types			
	Remained in co-residence	Moved downward	Moved upward	Remained in non co-residence
Average present age	70.3	72.3	72.0	68.8
Average # of surviving children	4.0	3.7	4.7	1.1
Average years of education	5.1	5.7	3.8	5.1
% male	38.7	44.5	33.2	24.2
% never-married	0.1	1.1	3.6	45.2
% married	61.2	61.4	67.6	24.7
% widowed	33.3	26.5	21.4	20.3
% divorced	5.4	11.0	7.5	9.8
% lost spouse (after age 51)	24.1	24.1	19.4	16.9
% with chronic disease	79.8	82.6	71.3	70.4
% with mild functional limitations	39.8	44.0	35.8	34.3
% working for income	26.4	38.3	33.4	39.2
% retired	53.8	41.7	32.1	44.0
% full-time home maker	19.7	20.0	34.5	16.7
% elderly retaining house ownership	65.6	63.8	47.1	41.2
% children retaining house ownership	14.0	5.8	5.6	6.5
% others retaining house ownership	2.7	11.1	0.0	34.9
% house ownership being changed to children	13.6	14.5	44.4	2.5
% moved after age 56	29.9	29.3	59.6	27.5
% moving from countryside	6.6	4.9	37.9	6.8
Cases (% of total)	857 (76.0 %)	110 (9.9 %)	29 (2.7 %)	129 (11.4 %)

Note 1: The total number of cases is 1,125.

Note 2: Missing values for years of education, proportions of people with a chronic disease, proportions of people who have given property, and the house ownership status are respectively 4 cases (0.4 % of total), 4 cases (0.4 % of total), 1 case (0.1 % of total), and 25 cases (2.2 % of total).

In Table 6.4, changes in living arrangements are classified as four trajectory types: 1) remained in co-residence (both people who stayed in the original nuclear or extended family and people who moved between the two types of co-residence), 2) remained in non co-residence (both people who stayed in any type of non co-residence and people who moved among any type of

non co-residence), 3) moved downward (people who moved from either a nuclear or an extended family to any form of non co-residence), and 4) moved upward (people who moved from any form of non co-residence to either a nuclear or an extended family). It should be noted that “moving” downward or upward here does not necessarily imply that people physically relocated, but that their household structures changed.

The elderly’s characteristics considered cover different aspects of their life, including some time-varying characteristics such as changes in marital status. Because most of the variables included have been discussed in the previous chapter, I only provide definitions of variables that require explanation.

Losing a spouse: Incidence of separation from a spouse (either by death or divorce) after age 51. Because it may take some time to adjust living arrangements for the loss, age 51 rather than 56 was selected.

Having a chronic disease: The presence of such chronic diseases as hypertension, rheumatism, diabetes, heart disease, bone diseases, body pains, paralysis, and ulcer.

Having mild functional limitations: Based on the health measures presented by Nagi (1976:442), functional capabilities of respondents such as squatting, walking about one kilometer, lifting an object weighing about five kilograms, climbing two to three steps, and getting into a car, bus, or boat were reported. In contrast to the Activities of Daily Living (ADL) measures used in the previous chapter, these measures are designed to capture the milder functional limitations of the respondents⁶¹. People who have at least one problem in conducting these activities are classified as having a mild functional limitation.

⁶¹ Activities of Daily Living measures are not used because some trajectory types have a small sample size, and given the low prevalence of ADL problems in the population, comparisons of people with an ADL problem are not very useful.

Employment status: Employment status is divided into the mutually exclusive categories of 1) Working for pay, 2) Retired, and 3) Full-time home maker. When respondents both work for pay and engage in home making full-time, they are identified as paid workers, and when respondents are retired and engage in home making full-time, they are considered full-time home makers.

Changes in house ownership status: Changes in house ownership since age 56 are defined as 1) Elderly person (or a spouse) retains ownership, 2) Children retain ownership, 3) Other people retain ownership, 4) Ownership has changed from either the elderly person (or a spouse) or others to children, and 5) Ownership has changed in other ways, including elderly to others as well as others or children to elderly. When respondents reside at a rented property, the payer of rent is considered the owner.

Residential relocation: Respondents were asked whether they moved during each five-year interval. People who moved after age 56 are considered movers. Among movers, people who moved from provinces outside of the Bangkok Metropolis are noted as moving from the countryside, indicating that they are recent immigrants to Bangkok.

According to Table 6.4, upward movers, who moved from non co-residence to co-residence after age 56, seem to be more involved in work both inside and outside the house than people who remained in co-residence (continued co-residers). The majority of upward movers still work either as a paid worker (33.4 percent) or as a full-time home maker (34.5 percent). In comparison, more than half of continued co-residers are retirees (53.8 percent), and 26.4 percent and 19.7 percent engage in a job or homemaking, respectively. Supporting their active involvement in work, the elderly who moved to live with a child are less likely to have a chronic disease (71.3 percent vs 79.8 percent) or a functional limitation (35.8 percent vs 39.8 percent), even though they are rather older than continued co-residers (72.0 years vs 70.3 years).

Upward movers are also distinctively different from continued co-residers in their home ownership status. The majority of continued co-residers still retain ownership of the house they

reside in (65.6 percent), and in only a minority of cases has ownership changed from the elderly themselves to a child (13.6 percent) after age 56. On the other hand, for upward movers, the proportions of elderly who retain house ownership (47.1 percent) and those who have changed ownership to a child after age 56 (44.4 percent) are about the same, suggesting that upward movers' present co-residence is divided between the house of the elderly parent and that of a child. In fact, the data show that the elderly moved in with a child (14 cases) almost as often as children moved in with the elderly (15 cases) (data not shown).

Moreover, information on residential relocation further suggests that upward movers are much more likely to have physically moved after age 56. Approximately twice as many upward movers changed residence (59.6 percent), compared with both continued co-residers (29.9 percent) and with people in the other two categories (29.3 percent for downward movers and 27.5 percent for continued non co-residers). Among upward movers who also physically relocated, 37.9 percent moved to Bangkok from the countryside. That is, they are recent immigrants to Bangkok and their proportions are significantly higher than those for other trajectory categories; 6.6 percent, 4.9 percent, and 6.8 percent for continued co-residers, downward movers, and continued non co-residers, respectively. The province-based nature of upward movers may explain their lower average years of education and higher average numbers of surviving children compared with other people (e.g. 3.8 years and 4.7 children for upward movers vs 5.1 years and 4.0 children for continued co-residers).

The profile of upward movers suggests that entering co-residence during old age itself is not a common transition pattern, but when it does happen there may be factors that attract children to the new residence pattern. In other words, it is unlikely that children who have moved out will return only to fulfill the elderly's needs and desires for co-residence. Without a personal benefit, either monetary or labor gains, children are unlikely to return. In fact, given the norm of continued co-residence in Thai society, these elderly are people who were once left without a

child, indicating that their children had reason to move out and needed strong incentives to live with parents again. One possible incentive for reunions with parents is their immediate availability for housework since Thai women usually have to work outside the home to supplement income (Sittitrai et al. 1991:24). When aging parents are left alone upcountry, inviting them to live together in Bangkok, with the prospect of their helping children in running the household sounds like a reasonable strategy. Children can simultaneously import useful labor and fulfill their obligations to repay parents by supporting them.

In contrast to the situation for people who entered co-residence in old age, the characteristics of downward movers who departed co-residence in old age are more similar to the continued co-residers, except that males and divorced persons are more numerous among downward movers. Some similarities between downward movers and continued co-residers include a high proportion of people who retain house ownership (63.8 percent vs 65.6 percent), a modest percentage of people who relocated after age 56 (29.3 percent vs 29.9 percent), a low percentage of movers who moved from the countryside to Bangkok (4.9 percent vs 6.6 percent), and moderate average years of education (5.1 years vs 5.7 years). The health status of downward movers and continued co-residers is also comparable, as shown in the percentages for those with a chronic disease (82.6 percent vs 79.8 percent) and for those with a functional limitation (44.0 percent vs 39.8 percent). However, more downward movers are more likely to work for pay (38.3 percent vs 26.4 percent for continued co-residers). There are also more males among downward movers (44.5 percent) than among continued co-residers (38.7 percent) or among other categories (33.2 percent for upward movers and 24.2 percent for continued non co-residers). Moreover, the percentage of divorced elderly is about twice as high for downward movers as for continued co-residers (11.0 percent vs 5.4 percent).

Higher representations of males among downward movers can be explained by weaker attachments between fathers and children. According to Kirsch (1975:185; 1982:27), Thai males

are not expected to have a strong sense of attachment to things of the world, including the family, because they must be ready to become monks whenever possible and appropriate. Females, on the other hand, are encouraged to be strongly connected to the family and children since their highest merit can be achieved by having a son ordained. This appropriation of connections and the different strength of emotional ties it creates may disadvantage fathers in terms of filial allegiance that can lead to living with children in old age. When children have a choice of moving out at marriage, elderly fathers, especially those without a wife (the mother of children), may face a greater risk of losing co-residing children. In particular, when there are sufficient resources in the family to support the independent life of the elderly father, children may be more inclined to leave the parental house.

Similarly, elderly who experienced a marital dissolution can be hindered from maintaining connections with children with whom they can possibly live in old age. The divorced parents need to decide on the custody of children, and either parent can be left with few children or even without any child if all children live with the other parent. In such cases, the non-custodial parent would have less opportunity for close contact with separated children. Significantly, the elderly respondents who did not know the current residence or marital status of their children were usually divorced and had been estranged from these children. Moreover, as qualitative analyses of interview data discussed earlier reveal, marital dissolution and a following remarriage are common reasons for desertion of children with grandparents. When these deserted children grow up, they understandably have stronger attachments to people who actually raised them than to their birth parents. These comments from interviews show children's stronger affection for the grandmother who has been taking care of them, than for the birth mother.

ELDERLY GRANDMOTHER LIVING WITH SEVERAL OWN CHILDREN AND GRANDCHILDREN: When I told my daughter to go to work to support her children, she said, "If there is money, I will raise them. If there is no money, I won't." What do you say to her? These kids are in the middle of studying. We need to give them encouragement. You know, her children call me "mother",

these two kids. They also love *paa* (aunt, referring to a never-married daughter of the respondent who pays the daily expenses for the entire dependent family) like a mother. I asked the kids, "On the 12th (the Mother's Day in Thailand) to whom will you give flowers?" They said they would give flowers to *mee* Jok (mother Jok, the respondent). I said, "You will not give them to your mother?" And they answered, "No, she does not take care of us. She is just around. Mee Jok raised us." (Khlongtoey 10-a)

In conclusion, transition patterns of living arrangements suggest that the majority of people who were in co-residence at a point before old age have remained there until the present. A significant minority, however, experienced a departure from co-residence after age 56, while only a small number entered co-residence after that age. This transition pattern is largely consistent with the household developmental model that suggests the continuity of co-residence over time, and confirms the importance of being in co-residence prior to old age. The characteristics of people in each transition type also suggest that people who entered co-residence are those likely to provide benefits to children in newly created co-residences. On the other hand, people who moved from co-residence may have lost all co-residing children because they failed to create strong emotional ties with their children in the years before old age.

Conclusion

The dynamics of living arrangements explored in this chapter suggest the continuity of co-residence from middle to old age. Living arrangements seem to support the household developmental model; the majority of Bangkok parents remain in co-residence simply by changing co-residence partners from never-married to married children. Stem-families are also dominant among people who live with married children, suggesting that with the exception of one married child, married children leave the parental house. A significant proportion of parents, however, never has a chance to experience the latter type of co-residence with a married child and

continues to live with a single child who never leaves home. Children's movement types also support this pattern. The major movement types of children are divided into: leaving the parental house after a marriage and remaining at the parental house. Among the never-leaving children, never-married children are slightly more common than ever-married children. Children who rejoin parents after once leaving home appear to be a minority.

Moreover, the transition patterns in living arrangements from a pre-old age point to the present confirm the dominance of people who remain within either type of co-residence. However, a number of individuals move from co-residence to non co-residence, and males and divorcees seem to be most frequently associated with this kind of transition. On the other hand, only a minority of people made the opposite transition, from non co-residence to co-residence. These elderly who entered co-residence in later life have more advantageous conditions; they tend to be healthier, married, and more active in employment and housework. The overwhelming majority of people who originally lived with others kept the same living arrangement, suggesting the stability and dependability of such a living arrangement for people who do not live with a child.

These findings imply that whether Thais can co-reside with children in later life is largely decided at a point prior to actual old age. Considering the minority of people who make the transition to live with a child after age 56 and the scarcity of returning children, the key to old-age co-residence seems to be the decision of children not to leave the parental house, either as a married or never-married child. Consequently, there may be a need to reconsider the selection of predictor variables in modeling the determinants of the elderly's current living arrangements to include indicators that deal with the ability of middle-aged parents to create situations that encourage young adult children to remain home. This would suggest that more qualitative research is needed in order to discover the motivations and circumstances of adult children as they decide to leave or to remain at home. Moreover, the finding that elderly who enter co-

residence during old age have better health and actively engage in paid work and housework suggests the necessity of questioning which group, parents or children, is dependent in co-residence. The next chapter empirically examines the economic arrangements between parents and children and shows the economic contributions of elderly parents to their households.

Chapter 7

LIVING ARRANGEMENTS AND THE NEEDS OF ELDERLY

Introduction

This chapter concerns the function of living arrangements in providing for the needs of elderly people in Bangkok. In particular, it focuses on the economic conditions of co-residing elderly people in order to assess the common assumption that suggests a dominant role of co-residence in providing for the Thai elderly. In past studies, co-residing elderly have been considered financially secure people, and accordingly their actual economic conditions have not received much attention. Similarly, help exchange patterns within co-residence have not been adequately explored since the assumption is that it is elderly parents who receive benefit, and the elderly's possible contributions to their households have been ignored. As a step toward a re-consideration of the function of co-residence, the first section of the chapter empirically tests the role of co-residence in meeting the economic needs of Bangkok's elderly using multivariate regression analyses. The analyses focus on the overall sufficiency of money in a household for covering the basic economic needs of elderly people. Further analyses in this chapter address the issue of dependency within a household by examining the economic and housework contributions of elderly people. I first investigate payment of household living expenses and ownership of residence and of household commodities. Then, the indirect economic contributions of elderly people are considered using qualitative data from in-depth interviews. Finally, for non-financial contributions, the proportion of elderly people who regularly undertake a range of household tasks is examined.

Co-residence and Economic Needs of Elderly

Multivariate Analyses

In this section, I empirically test the effects of co-residence in meeting the economic needs of Bangkok elderly⁶². As noted in Chapter 2, past studies have usually assumed that co-residence supports the life of the elderly, and accordingly, co-residence rates are often interpreted as the proportions of elderly people who are financially provided for by living with an adult child. However, findings from intergenerational help exchange studies have suggested that this may not always be the reality. For example, Knodel and Chayovan (1997:17) showed a relatively low prevalence of money flow from co-residing children to their aged parents; only slightly over 40 percent of co-residing children (42.7 percent) gave their parents a sum of money, defined as more than 1,000 baht, in the previous year. Chayovan (1999a:20-23) also pointed out that mean income provided by children to elderly parents is fairly low (about 12,100 baht during the previous year), even though children are the most frequently mentioned source of income for Thai elderly⁶³. According to this evidence, it may be misleading to merely assume that co-residing elderly are financially secure people.

Moreover, given the high proportions of Thai elderly who live with a never-married child, it is also important to differentiate between traditional style co-residence with a married child and a newer pattern of co-residence in a nuclear family with a never-married child, in considering the function of co-residence. A study from Japan reports a heavy financial dependence on parents by never-married Japanese children who continue to live with those aging parents as “parasites”

⁶² As with the analyses in the last two chapters, all analyses in this chapter are weighted to adjust for sampling effects and non-responses.

⁶³ Her study does not distinguish the co-residence status of children. Including monetary contributions from non co-residing children, however, means that contributions from co-residing children are even lower.

(Yamada 1999). Similarly, Domingo and Casterline (1992:75-76) document elderly parents from the Philippines who complain about the continued financial dependency of their married children, many of whom struggle to support even their own dependents. This study shows that the elderly who co-reside with a married child are not necessarily financially better-off. In Thailand, a premise of old-age co-residence is that the family of a married child supports the aged parents, and this form of co-residence has been emphasized as an ideal living arrangement. The reality of this co-residence, however, has been largely unexplored; a critical issue, therefore, is to clarify the function of “co-residence” in meeting the financial needs of elderly parents by differentiating the marital status of co-residing children.

Definitions of Variables

Table 7.1 below presents the weighted means and percentages of variables included in the following multivariate analyses. Here, I provide definitions of new variables that were not discussed in the previous chapter as part of the model of the determinants of living arrangements⁶⁴.

⁶⁴ For definitions of age, sex, marital status, and health status of elderly, refer to the section on definitions of variables in Chapter 5.

Table 7.1. Weighted means and percentages of variables used in the logistic regressions of predicting the insufficiency of money (S.E. in parentheses).

Variables	Entire sample	Co-residing sample
Outcome variable		
Sufficiency of money (percentage)		
Not enough	18.3 (0.020)	17.2 (0.020)
Enough (reference)	81.7 (0.020)	82.8 (0.020)
Predictor variables		
Co-residence with an adult child (percentage)		
Yes	79.1 (0.016)	-
No	20.9 (0.016)	-
Co-residence with a married child (percentage)		
Yes	-	59.8 (0.026)
No	-	40.2 (0.026)
Age of elderly (mean years)	70.4 (0.236)	-
Sex of elderly (percentage)		
Male	37.5 (0.015)	38.4 (0.015)
Female	62.5 (0.015)	61.6 (0.015)
Marital status of elderly (percentage)		
Never-married	5.2 (0.012)	-
Married	57.7 (0.028)	62.1 (0.023)
Widowed	30.5 (0.021)	32.4 (0.020)
Divorced	6.5 (0.011)	5.5 (0.010)
Educational level of elderly (percentage)		
No education	16.6 (0.021)	17.6 (0.025)
Elementary education	57.5 (0.023)	57.5 (0.024)
Secondary education	14.0 (0.013)	13.4 (0.014)
Post-secondary education	11.8 (0.018)	11.5 (0.018)
Health status of elderly (percentage)		
No ADL problems	93.9 (0.010)	93.7 (0.014)
Have ADL problems	6.1 (0.010)	6.3 (0.014)
Home ownership (percentage)		
Rent	15.0 (0.027)	14.1 (0.027)
Own	85.1 (0.027)	86.0 (0.027)
Youngest age of child (mean years)	-	35.1 (0.364)
Educational level of children (elderly percent with a child with)		
No or elementary education	-	31.5 (0.029)
Secondary or some post-secondary education	-	64.2 (0.025)
B.A. or higher	-	61.2 (0.032)
Total cases	1,108	869

Note 1: The entire sample excludes 17 cases that have missing values for sufficiency of money. The co-residing elderly sample excludes 11 cases with missing values: 7 cases for sufficiency of money and 4 cases for the age of youngest child. One never-married elderly who adopted a child and who lives with this child is also not included in the co-residing sample.

Note 2: The extent of cases with missing values is: educational level of elderly (4 cases, or 0.4 percent, for the entire sample, which includes 3 cases, or 0.3 percent, for the co-residing sample) and age of youngest child (4 cases, 0.5 percent of co-residing sample). The educational level of 138 children (4.5 percent of all children) is missing and their educational attribute is not reflected in the model. All other variables have no missing values.

Sufficiency of money in a household to pay for monthly bills: The outcome variable of the analyses is whether respondents report there is enough money in their households to pay for the various living expenses, such as payment for gas, water, electricity, telephone, groceries, medical treatment, and rent or mortgage. Money sufficiency was asked for the household level because it is difficult to differentiate the income of the household from that of individual elderly persons, especially when they live with children. Moreover, it is important to note that the income levels of elderly, their children, or their household are not considered here because the purpose of this multivariate analysis is to determine the overall availability of money to cover the daily economic needs of the elderly (the absolute economic condition of the elderly). The point is the sufficiency of money to meet individuals' needs, not the economic level of respondents in relation to others; the level of need and associated amount of required money to cover expenses can vary for each person. It is also methodologically problematic to accurately measure the income level of households, as the elderly parents may not know the actual amount of income that their children make. The reported sufficiency of money in a household is dichotomously coded 1) There is not enough money to cover expenses, and 2) There is enough money to cover expenses.

Co-residence with an adult child: This is the main predictor variable for the first multivariate model that focuses on the impacts of living with an adult child in securing needed money to cover daily expenses. Respondents who live with an adult child and those who do not are respectively coded 1) Living with an adult child or 2) Not living with an adult child. According to a widely held assumption, the financial needs of elderly who co-reside with an adult child are provided for, so co-residing elderly should have less likelihood of a financial shortage, compared with those who live without an adult child.

Co-residence with a married child: The main predictor variable for the second model distinguishes the marital status of co-residing children among co-residing elderly to examine the effects of living with a married child. Co-residence is divided into these categories: 1) Living

with a currently married child (with or without a never-married child and or a divorced/separated child), 2) Not living with a currently married child. If married children are indeed satisfactorily providing for their aged parents, as implied by the traditional old-age co-residence model, the elderly in extended families are expected to be less likely to report shortages of money.

Educational level of elderly: The educational level of respondents is divided into: 1) No education, 2) Elementary education, 3) Secondary education (including some post-elementary education), and 4) Post-secondary education. This variable relates to the socio-economic level of respondents as the educational levels of individuals clearly define their social standings in Thailand (Vichit-Vadakan 1979:4-7). In particular, for the current elderly generation, having post-elementary school education or higher indicates their economically advantageous positions in society; Chayovan (1999a:20) reported that Thai elderly with secondary education or higher have about four times the mean yearly income of those with only some elementary education. More importantly, as noted in Chapter 5, preliminary analyses of data also show that having post-secondary education is significantly positively related to having an income from unearned sources, such as pensions, savings, and rent ($r = 0.31$). This association suggests that better-educated elderly are likely to have had a prestigious government position that offers a pension plan or have properties that produce regular income. Hence, it is expected that better-educated elderly are less likely to experience a shortage of money because of their own greater economic resources, particularly an income that they can receive regularly.

Ownership of residence: Elderly who live at a house or condominium that they own are coded as 1) Living at an owned residence, while those who rent are coded as 2) Living at a rented residence. In past studies concerning living arrangements of Asian elderly, home ownership status has been used as an indicator of their socio-economic status (e.g. Martin 1989:634) and the elderly who rent are assumed to be poorer than those who own a residence and to have more

problems in meeting their daily financial needs. Moreover, renting means more monthly expenses to cover, adding a greater financial burden for renters⁶⁵.

Age of youngest child: For the second multivariate analysis that focuses on co-residing elderly, the age of the youngest child is included in the model in order to examine the effects of having younger and more likely dependent children. In a past study on the living arrangements of Asian elderly, the age of the youngest child was used to capture the life cycle stage of the elderly's children. The study found that older ages for the youngest child decreased the likelihood of co-residence (Casterline et al. 1991:14-15). It is expected that the elderly respondents in more mature households with older children are less likely to experience shortages of money because expenses will be lower for households with fewer dependent children. Adult and established children, in turn, may also have greater ability to contribute to household finances.

Educational level of children: The educational level of the respondents' children is divided into three categories: 1) No or elementary education, 2) Secondary or some post-secondary education, and 3) B.A. or higher. Given the prevalence of the concept of *bun khun*, which obliges children to financially support the aged parents as a way to repay debts to them, more educated and hence more economically able children may contribute more to the parental household. Thus, the elderly who have a better-educated child are expected to receive more money and to have less likelihood of problems in covering expenses.

⁶⁵ Only a minority of elderly (10.2 percent), among owners of residences, report that they need to pay a mortgage. This is probably because the majority of people own residences through either inheritance (about 13 percent) or by paying cash (about 76 percent) (data not shown). It is a common practice in Thailand to build a house step-by-step whenever cash is available.

Results

Since the outcome variable, whether the economic needs of respondents are met or not, is dichotomous, I conducted logistic regression analyses with two different models. The first model involves the whole sample and investigates the effects of co-residence with an adult child. The second model focuses on the co-residing sample and estimates the impacts of living with a married child, as opposed to living with a never-married child (without a married one). Based on preliminary analyses, the variables of ethnicity, children's sex, the number of co-residing children, and the employment status of the respondents or their spouses (currently working for pay vs not working) were dropped from the final model as they did not have simple or bivariate relationships with effects for the insufficiency of money and did not improve the overall model fit. The initial analyses also considered the interaction effects between the marital status of co-residing children and having an ADL functional problem. This is because poor health in the elderly may add an extra burden to the household finances, and co-residing children who are married may be able to handle difficult situations better than those who are never-married. However, the interaction term was not significant in the multivariate model, so it was dropped from the final model⁶⁶.

⁶⁶ I also tested for multi-collinearity by examining the correlations among the predictor variables and found no significant problems. The only possible concern is the associations of marital status of the elderly with sex (being married and being male = 0.42, being widowed and being female = 0.34) and with co-residence status (being never-married and not co-residing = 0.45). However, I kept the marital status of elderly in the model for its theoretical importance. The inclusion of this variable did not change the standard errors for the estimated regression coefficients very much.

Table 7.2. Logistic regression predicting the insufficiency of money, entire sample and co-residing sample.

Predictive variables	Model 1 (entire sample)		Model 2 (co-residing sample)	
	coeff	SE	coeff	SE
Co-residence with an adult child				
Yes	- 0.225	0.221	-	-
No ^b			-	-
Co-residence with a married child				
Yes	-	-	0.259	0.283
No ^b	-	-	-	-
Age of elderly ^a	- 0.041	0.015***	-	-
Sex of elderly				
Male	- 0.113	0.142	- 0.328	0.153**
Female ^b	-	-	-	-
Marital status of elderly				
Never-married	0.607	0.537	-	-
Widowed	0.512	0.265*	0.276	0.275
Divorced	0.908	0.374**	0.795	0.517
Married ^b	-	-	-	-
Educational level of elderly				
No education	- 0.434	0.307	- 0.480	0.394
Secondary education	- 1.063	0.267****	- 0.543	0.394
Post-secondary education	- 1.647	0.512****	- 0.742	0.514
Elementary education ^b	-	-	-	-
ADL status of elderly				
No problems	- 1.112	0.270****	- 0.940	0.336****
Have a problem ^b	-	-	-	-
Home ownership				
Rent	0.466	0.233*	0.418	0.301
Own ^b	-	-	-	-
Age of youngest child ^a	-	-	- 0.066	0.016****
Have child with no or elementary education				
Yes	-	-	0.112	0.260
No ^b	-	-	-	-
Have child with secondary or some post-secondary education				
Yes	-	-	- 0.047	0.282
No ^b	-	-	-	-
Have child with B.A. or higher				
Yes	-	-	- 1.472	0.265****
No ^b	-	-	-	-
Intercept	2.521	1.116**	2.196	0.750***
Pseudo R^2	0.115		0.228	
Sample size	1,108		869	

Note 1: ^a denotes continuous variable, and ^b designates reference category.

Note 2: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, **** $p < 0.001$.

I first discuss the model involving the entire sample, which estimates the effects of co-residence with an adult child in meeting the economic needs of the elderly, controlling for other predictor variables. According to model 1 (see Table 7.2), living with an adult child is not a significant factor for deciding the sufficiency of money to cover living expenses. The direction of the effects is in the expected direction, negative, suggesting that the elderly who live with a child are less likely to experience a shortage of money. However, the lack of statistical significance of co-residence indicates that co-residence status by itself is not a major factor for determining the financial security of elderly people.

While co-residence is not statistically significant in explaining the sufficiency of money for covering the basic economic needs of the elderly, factors associated with characteristics of the elderly show several significant effects. The widowed elderly are more likely to report insufficient money compared with married elderly. The previous logistic analysis in Chapter 5 found that widowed elderly are no more or less likely to co-reside than married elderly, and the assumption of their economic vulnerability is not supported based on this favorable co-residence opportunity. The finding from this analysis, however, suggests that widowed people are in fact more economically disadvantaged than married people, given the same co-residence status. Moreover, divorced elderly are significantly more likely to experience a shortage of money; the divorced individuals are 2.5 times more likely to report insufficient money than their married counterparts.

The elderly who live in rented housing represent another financially disadvantaged group. The elderly who live in a rented residence are significantly more likely to have a problem covering living expenses; renters experience money shortages 1.6 times more than homeowners. In discussing upward social mobility among Bangkok residents, Vichit-Vadakan (1979:213) mention that being able to secure a permanent residence in the city is a critical indicator of financial success for rural migrants to Bangkok. Several respondents from my in-depth

interviews also talked about their struggling financial conditions in association with their rented housing. Stories of eviction from rented housing were common during my fieldwork, suggesting the powerless social status of renters. Renters, with already deficient financial resources, have the additional burden of paying a monthly rent from a meager income.

In contrast to the disadvantaged groups, better-educated elderly are less likely to report a shortage of money. Compared to the elderly with only elementary schooling, better-educated elderly have a significantly lower likelihood of financial shortage: only 0.35 times for those with secondary education and 0.19 times for those with post-secondary education. In interpreting the impacts of educational levels, it is important to note a positive association between having a better education, especially a post-secondary education, and having unearned sources of income. Indeed, when sources of income are included in the model, instead of educational levels, having unearned income (including pensions, rent, and savings) has significant negative effects at the 0.01 level (data not shown). That is, the elderly who receive unearned income are less likely to experience money shortages compared with those whose source of income is from children⁶⁷. This finding indicates that the income provided by children may not be as reliable as it might otherwise be, while the regular income provided by pension, rent, or savings (particularly when the elderly can live on interest payments or periodically withdraw money from lump-sum retirement payments) may be contributing to the financial security of the elderly. Moreover, considering modest pension amounts that current elderly can receive (only former civil servants are entitled to pensions), the regularity of income, rather than the amount, may be more important in terms of meeting the basic economic needs of the elderly, as long as the income is above a certain level.

⁶⁷ I did not use sources of income for the final model because the overall model fit was better when educational level was used. I also wanted to avoid a possible association between source of income and type of living arrangement (to live with an adult child or not).

Another predictor variable that has major effects is the health status of the elderly. The elderly who have no ADL problems are significantly less likely to report a lack of money, compared with those who do have an ADL problem. Because ADL status and employment status (working for pay or not) are not associated, and employment status is also not related to sufficiency of income (data not shown), the advantageous financial position of healthy elderly in meeting their economic needs can not be explained by work opportunities and the resulting availability of income. Health status, however, could be related to greater expenses for medical treatment, including doctor's visits, medicine, and possibly hired help.

It is possible to receive medical treatment free or at a low cost using the public health services. Thai elderly are entitled to free medical treatment at a government hospital (Knodel et al. 1999:5-6), and a new health scheme called "The 30-Baht Health-Care Scheme," which enables patients to receive most medical treatment at a participating hospital by only paying 30 baht, became available from 2001 (Gubhaju and Moriki-Durand 2003:11). However, Bangkok people seem to be hesitant to rely on these services because of (perceived or real) lower quality treatment provided at such hospitals⁶⁸. For example, several interview respondents complained that when they saw a doctor through a public welfare scheme they could only receive medicine such as aspirin, that does not help cure disease. The respondents indicated that they preferred not to use such services if they could afford regular hospital visits. Hence, unhealthy elderly may feel that if they hope to receive adequate medical treatment they have to spend their own money. Besides the costs of medical treatment, frail elderly with ADL problems need someone who regularly takes care of them. Even when a family member takes the care-giving role, avoiding the need to pay for hired help, the household has to commit a worker, often a married daughter or a relative,

⁶⁸ About half of the elderly respondents (50.1 percent) in my data report that they have never used these public health programs.

to the unpaid work of taking care of a sick elderly person⁶⁹. Therefore, families with unhealthy elderly have to expend resources for medical expenses and for care to the frail elderly, either by hiring help or foregoing the paid labor of a family caretaker.

Finally, the age of the elderly also shows significant negative effects. The direction of the effects may be puzzling at first, because older age is expected to increase the risk of money shortage because of its positive association with frailty and widowhood. However, as further analysis shows, because the age of the elderly and the age of the youngest child are positively related ($r = 0.58$, among those who have a surviving child, significant at the 0.01 level), it is likely that the age of the elderly is a proxy for the life-cycle stage of the household. Thus, older elderly are less likely to have financial stress since their households are more mature, with fewer financially dependent children. Supporting this interpretation, a fairly high percentage of respondents with a child report that they still needed to provide financial help to their children at ages 56 to 60 (49.4 percent) and at ages 61 to 65 (26.6 percent). The proportion decreased to 11.7 percent, at ages 66 to 70, and to 7.4 percent at ages 71 to 75 (data not shown)⁷⁰. In other words, the negative impact of the age of the elderly implies that the elderly, especially those who are younger, are still active in supporting the household finances, rather than being dependent on household members.

I next consider the second model, involving the elderly who have a co-residing adult child. The main interest of this model is to examine the impacts of living with a married child. Accordingly, the variable of co-residence with an adult child was dropped from the model, replaced with the variable of co-residence with a married child in the analysis. Moreover, two additional variables, the age of the youngest child and the educational levels of the children, were

⁶⁹ According to my data, the most frequently mentioned caregivers to the elderly with an ADL problem are a married daughter (36.6 percent) or a relative (18.8 percent).

⁷⁰ Only respondents who are older than 71 are included in the analysis (a total of 462 cases).

added as control variables in order to estimate the impacts of household maturity and the financial ability of children. The age of the elderly was dropped from the model because of the aforementioned strong association with the age of the youngest child.

According to model 2 (see Table 7.2), the effects of co-residence with a married child are not statistically significant, suggesting that the likelihood of financial shortage is not different for the elderly who live with a married child and for those who live without a married child. Interestingly, however, the direction of the effects is positive, indicating that the elderly living in extended families are more likely to report insufficient money compared with those who live in nuclear families. Even though old-age co-residence with a married child is said to be the major source of elderly support in Thailand, this finding implies that extended families do not function particularly better than nuclear families in terms of meeting the economic needs of elderly parents.

One of the most powerful determinants of economic security of co-residing elderly, however, is the socio-economic status of children. The elderly who have a better educated child, with a B.A. or higher, have significantly less likelihood of experiencing a money shortage. Their probability of having a money shortage is estimated to be as low as 0.23 times those who do not have a well-educated child. Similarly, the effects of the age of the youngest child are significantly negative, suggesting that the elderly with older youngest children, who are presumably in a more mature household with fewer economically dependent children, are less likely to report shortages of money. These results suggest the importance of having established children who are not only financially independent of aged parents but who also are economically capable of contributing to the finances of their parents.

It should be noted that with the inclusion of the educational levels of the children, the initial positive statistical significance of co-residence with a married child disappeared, suggesting that higher education and the associated economic capability of children, rather than the mere fact of living with either a married or never-married child, is a major factor contributing

to the economic security of co-residing elderly parents. Moreover, when the educational levels of co-residing children are tested with the same model, instead of the educational levels of (all) children, the effects of having a well-educated co-residing child (those with a B.A. or higher) are negative and significant at the 0.01 level (results not shown). That is, these elderly are less likely to report insufficient money. According to this finding, the educational level and associated economic capability of co-residing children are also significant factors for determining the economic conditions of elderly parents⁷¹.

With the introduction of the new control variables concerning children's characteristics, the sex of the elderly becomes statistically significant, showing that males are less likely to report money shortages than females. The effect of sex probably emerged because having more well-educated children is positively associated with being male, while it is negatively associated with reporting shortages of money, and the educational levels of children act as a suppressor variable. On the other hand, other characteristics of the elderly, including educational levels, marital status, and home ownership become no longer significant. These results suggest that, among co-residing elderly, economic security is more likely to be affected by their children's characteristics than their own; having a child with high socio-economic status is critically important.

Among the elderly's characteristics, ADL status, however, remained statistically significant, even after controlling for children's characteristics. As with the first model, elderly with no ADL problems are much less likely to report insufficient money than are elderly with an ADL problem. The strong impacts of ADL status suggest that living expenses relating to the elderly's medical costs are uniquely independent of other expenses, even taking into account the children's economic capacity to provide for aged parents. For example, costs for some medical

⁷¹ I used the educational levels of (all) children in the final model, rather than those of co-residing children because the possible financial contributions of non co-residing children should not be excluded. The overall model fit was also better when the educational levels of (all) children were used. The effects and significance levels of other variables were essentially the same when either variable was used in the model.

treatments and medicine, especially those for non-life threatening diseases, may not be considered a part of daily expenses, and children are more reluctant to take on these payments. In particular, for the elderly in poor households, obtaining medical treatment for not immediately life threatening conditions can be seen as a luxury, and such conditions could lead elderly respondents to report a shortage of money for obtaining the “luxurious item.”

In conclusion, multivariate analyses of the economic security of the elderly have shown that a co-residing living arrangement by itself does not affect the financial condition of the elderly. The lack of significance for co-residence questions the adequacy of treating co-residence as the safety-net for the elderly without considering other factors that are more important in deciding the economic conditions of elderly people. Among the entire sample, the elderly’s characteristics, including marital status, home ownership, and educational level, are more important. On the other hand, the children’s characteristics, rather than those of the elderly themselves, are more significant determinants for the economic security of co-residing elderly. Also, co-residence partners, living with either a never-married or a married child, are not decisive factors, while the economic capability of children, reflected in their educational levels, is critical. Finally, the poor health status of the elderly with an ADL problem has sharp positive impacts in both models, suggesting that unhealthy elderly may have higher expenses and have to struggle to meet their needs for medical treatment.

Living Arrangements and the Issue of Dependency within Households

Contributions of Elderly: Payment of Living Expenses

In contrast to the above multivariate analyses that concern the overall sufficiency of money in a household to cover living expenses, the analyses in this section focus on the actual

payer of living expenses in a household. Because payment of living expenses is one of the most basic economic needs of elderly people, it is important to identify who pays the costs when considering economic security. In particular, for co-residing elderly, the payment of living expenses is a useful indicator for determining the direction of economic support between elderly parents and their co-residing children. If elderly parents are, in fact, financially supported by their co-residing children, the main payer of living expenses for a household should be a co-residing child.

The following analyses also focus on the economic contributions of co-residing children, differentiated by marital status. Since a significant proportion of co-residence is with a never-married child, the economic behaviors of never-married and co-residing children have important implications for the benefits of co-residence for elderly parents. Co-resident never-married children with no dependents of their own may be in a better position to support their parents than their married counterparts, who could be struggling to pay for the needs of their own dependents. On the other hand, because the large majority of never-married children are continuing earlier co-residence from childhood, as discussed in Chapter 6, they may continue their economic dependency as “children” of the household. In contrast, co-resident married children may have to be more responsible for household finances. Since they have chosen to remain home as married children with their own families, it may be more difficult for them to remain dependents of their parents.

For the analyses below, the payer of costs of expenses is defined as the main person who is in charge of paying for household bills, including gas, water, electricity, telephone, and grocery costs. Elderly respondents identified the main payer of household bills, with the responses classified as: 1) elderly respondents themselves or a spouse, 2) co-residing never-married children, 3) co-residing ever-married children, 4) non co-residing children, and 5) others. Living arrangements are divided into the following categories by differentiating the marital status of co-

residing children: 1) living with a never-married child only (with or without a spouse and or others), 2) living with an ever-married child only (with or without a spouse and or others), 3) living with both a never- and an ever-married child (with or without a spouse and/or others), 4) living with a spouse only (with or without others), 5) living with others only, and 6) living alone⁷².

Table 7.3. Payers of monthly bills¹ (in percentages) by living arrangements, (unweighted *n* in parentheses²).

Payer	Living Arrangements: percentages (and unweighted <i>n</i>)					
	Never-married child only	Ever-married child only	Both never- & ever-married children	Spouse	Others	Alone
Self or spouse	55.0 % (178)	29.1 % (108)	35.7 % (75)	80.0 % (82)	28.4 % (30)	65.7 % (23)
Co-residing never-married child	37.3 % (118)	-	27.6 % (47)	-	-	-
Co-residing ever-married child	-	59.1 % (213)	32.3 % (66)	-	-	-
Non co-residing child	5.8 % (20)	3.7 % (17)	3.6 % (5)	11.7 % (8)	7.5 % (8)	20.8 % (6)
Others	2.0 % (8)	8.1 % (25)	0.7 % (2)	8.3 % (8)	64.1 % (69)	13.6 % (4)
Total ³	100 % (324)	100 % (363)	100 % (195)	100 % (98)	100 % (107)	100 % (33)

$\chi^2 = 946.7$, $df = 20$, $p < 0.001$. Only three cells of 30 in the above table (10 %) have expected frequencies of less than five. Thus, the critical assumption of Chi-square, 20 % or fewer tabular cells with expected frequencies of less than five is not violated.

Note 1: Monthly bills include gas, water, electricity, telephone, and grocery bills.

Note 2: The total number of cases is 1,120. This number excludes 5 cases that have missing values for the main payer of the bills.

Note 3: Some columns may not sum to exactly 100 % as a result of rounding.

Table 7.3 presents the main payers of monthly bills by living arrangement. Across all living arrangement categories, sizable proportions of elderly are the main payer of household bills.

In particular, the elderly who live with a spouse have high proportions of self-payers (80.0

⁷² The category of others for both living arrangement and payer of living expenses includes nephews, nieces, uncles, aunts, siblings, children-in-law, grandchildren, parents, and non-related people such as friends.

percent), suggesting that the elderly living as a couple are economically more self-sufficient. When they do not support themselves, non co-residing children (11.7 percent) or other people (8.3 percent) pay for the elderly. Similarly, as much as 65.7 percent of elderly who live alone are self-payers of living expenses, while 20.8 percent of them have non co-residing children who pay. In addition, other people are the main payers for 13.6 percent of elderly living alone.

In contrast to the high degree of economic independence among the elderly who live with a spouse and who live alone, the majority of elderly who live with others tend to be dependents within the household. In fact, elderly who live with others have the lowest proportions of self-payers (28.4 percent) of all living arrangement categories. The dominant payer in this group is other people, such as nephews, nieces, uncles, aunts, and siblings (64.1 percent), but some non co-residing children (7.5 percent) also pay the bills. Findings from Chapter 6 suggested the dependability of other people as co-residence partners for people who do not live with a child. The results of payer status here also show that when the elderly live with others, those people are most likely to be the actual providers for them, rather than being casual housemates without financial involvement.

Similarly, the elderly who live with an ever-married child only are more likely to have their living expenses provided for by the co-resident children. Less than 30 percent of the elderly who live with an ever-married child (29.1 percent) pay bills themselves, while as much as 59.1 percent of payers are their co-residing married children. For a minority of cases, non co-residing children (3.6 percent) as well as other people (8.1 percent) are the payer of bills. These results show that married children are indeed the financial supporters for their co-residing elderly parents, consistent with the expected function of co-residence as the safety-net of the elderly. It seems that when children decide to remain home after marriage, they tend to take up the role of financial provider for the household, possibly changing their status from a more dependent never-married child to a more responsible married child who now has to support the household.

Supporting this interpretation, a sizable number of elderly who live with a never-married child are still the breadwinners of their households, instead of being dependents of the co-residing children. As much as 55.0 percent of the elderly who live with a never-married child only pay bills by themselves; in contrast, only 37.3 percent have co-residing children pay for the household bills. The percentage of elderly whose monthly bills are paid by non co-residing children (5.8 percent) or other people (2.0 percent) is even smaller. In considering the low financial contributions of never-married co-residing children, it is important to note that the average age of the elderly who live with a never-married child (69.3 years) and of those who live with an ever-married child (71.2 years) do not differ greatly (data not shown)⁷³. The higher percentages of self-supporting elderly in nuclear families (55.0 percent for the elderly living with a never-married child only vs 29.1 percent for those living with an ever-married child) is not explained by parental age and associated physical capacity to work. Rather, the results imply that when the elderly live with a never-married child, they tend to let the never-married co-resident children remain financial dependents, while the elderly themselves continue providing for the household.

However, the fact that notable percentages of never-married co-resident children do take on the responsibility of paying living expenses should not be overlooked. Among nuclear households, never-married co-residing children pay bills for 37.3 percent of the elderly. Based on results from the earlier multivariate analyses, which suggest the significance of children's education in meeting overall economic needs of their households, these never-married co-residing children may be those with better education and with a resulting comfortable income, allowing them to make economic contributions more easily. Similarly, co-residing children's economic capacity may be relevant for the elderly who live with both never-married and ever-married

⁷³ The differences in the average age are marginally significant at the 95 percent level; the 95 percent confidence interval for the average age of the elderly living with a never-married child (69.3 years) is (68.2-70.3), while the confidence interval for that of the elderly living with an ever-married child (71.2 years) is (70.3-72.2).

children. When both types of children are present in a household, payment is fairly evenly divided between never-married children (27.6 percent) and ever-married children (32.3 percent). In these households, ever-married children may ask never-married siblings, who do not have dependents and may have higher economic ability, to be the principal payer of household bills. If never-married siblings assume this role for the household, ever-married children can allocate their money for the specific needs of their own families, such as the education of their own children.

Contributions of Elderly: Ownership of Residence and Household Commodities

In addition to payment of living expenses, the ownership of residences and household commodities is an important economic contribution of the elderly to their households. In considering the issue of dependency within co-residence, the ownership of a residence is an important indicator to determine who is benefiting from co-residence, the elderly parents or the co-residing children. Owning a permanent residence significantly contributes to economic security in Bangkok. Similarly, examining the ownership of household commodities helps show who provides the convenience of modern appliances for the household. As with payments of living expenses, the following analyses distinguish the marital status of co-residing children to further examine which children, never-married or married, are more likely to provide for co-residing parents.

Table 7.4 presents the percentages of elderly people who own a residence and household commodities, broken down by living arrangements. The household commodities considered here include a fan, television, refrigerator, washing machine, and air conditioner. These items were chosen because they are common modern commodities that are widely available and desired, and

their ownership is relatively little influenced by particular preferences and/or needs⁷⁴. In order to clarify the ownership contributions of the elderly, compared to co-residence partners or other people who may have purchased these commodities for the household, the analyses are limited to the elderly who live in a household that has the selected household commodities. For the same reason, the elderly who rent a residence are excluded from the analyses for residence. Thus, ownership here is defined as elderly having a residence under their own (or their spouse's) names, as opposed to their children's names. The ownership of household commodities also means that elderly people have themselves purchased the respective items that are being used in their households.

Table 7.4. Percentage of elderly who own a residence and household commodities by living arrangements.

Percent of elderly who own respective item	Living Arrangements (percentages)						All
	Never-married child only	Ever-married child only	Both never & ever-married children	Spouse	Others	Alone	
Residence	73.5 %	64.3 %	75.8 %	75.0 %	39.0 %	84.1 %	67.9 %
Fan	69.9 %	45.9 %	58.9 %	73.8 %	37.4 %	76.7 %	57.6 %
Television	67.9 %	43.5 %	56.4 %	70.1 %	34.6 %	67.4 %	54.9 %
Refrigerator	67.1 %	39.0 %	49.6 %	75.0 %	34.5 %	68.9 %	52.4 %
Washing machine	58.2 %	29.5 %	35.3 %	65.5 %	24.4 %	44.7 %	41.8 %
Air conditioner	51.3 %	34.9 %	37.4 %	65.8 %	29.3 %	76.2 %	42.6 %

Note 1: The total number of cases is 1,125.

Note 2: There are 3 missing values for a refrigerator and a television and 2 missing values for a fan. These cases with missing values have been excluded from the analysis of the respective item.

⁷⁴ Ownership of a washing machine, however, may be influenced by the presence of a household helper in a household because washing clothes by hand is often a part of a house helper's job. Thus, households with a helper may not need a washing machine. Some modern commodities that are often included in surveys of elderly in Thailand (e.g. Survey of the Elderly in Thailand 1995), such as motorcycles, cars, and telephones were not included in the analyses because ownership of these items may be heavily influenced by personal tastes, needs for work, and capability of use. In addition, telephones were excluded because of the difficulties of accurately recording the possession of this item. Mobile phones have been readily available in Bangkok and are popularly used among younger people. Thus, some households may not have a land line telephone but household members may have a mobile phone that may or may not be available to elderly people.

The results of Table 7.4 resemble the patterns of the elderly people's economic contributions found in payment of living expenses. Overall, a significant proportion of elderly own a residence (67.9 percent), suggesting that the majority of elderly who have obtained a residence still reside at the house as the homeowner, providing a shelter for the family. Supporting an earlier finding, the economic self-sufficiency of elderly living with a spouse or alone, high proportions, 75.0 percent of those living with a spouse and 84.1 percent of those living alone, are homeowners. A large proportion of the elderly also own the household commodities that are available in their households. A notable exception, however, is the ownership of a washing machine among elderly living alone; although the ownership of other household commodities ranges from 67.4 percent for a television to 76.7 percent for a fan, ownership of a washing machine is as low as 44.7 percent. It may be that those who live alone have less need for a washing machine and are, therefore, more reluctant to buy a washing machine by themselves. If there is a washing machine in the household, someone else is likely to have purchased it. In fact, in contrast to the near-universal availability of fans (99.3 percent), televisions (98.7 percent), and refrigerators (96.4 percent) in all households included in the analyses, smaller percentages of households have a washing machine (76.3 percent) or an air conditioner (44.0 percent), indicating that these two appliances are considered less necessary appliances in Bangkok households (data not shown).

The elderly who live with other people are also much more likely to be provided a residence as well as household commodities, suggesting the significant role of other people in supporting the living expenses of non co-residing elderly. A notably low proportion of elderly are homeowners (39.0 percent) when they live with others, showing that the majority of these elderly live at the house of other people, rather than in their own houses. Additionally, small proportions of elderly living with others are the owners of household commodities: 37.4 percent for a fan, 34.6 percent for a television, 34.5 percent for a refrigerator, 24.4 percent for a washing

machine, and 29.3 percent for an air conditioner. A slightly higher average age for the elderly living with others (72.5 years old), compared with the elderly in other living arrangements, especially those who live with a spouse (68.8 years old), may partly explain the dependency status of elderly living with others⁷⁵. However, considering that the majority of elderly living with others were doing so prior to old age, as addressed in Chapter 6, their older ages are not likely to be a relevant reason. Rather, living with others in Thai society may involve a mutual understanding that the other co-residing person is going to be the old-age financial supporter⁷⁶. As a result of this understanding, it may be easier to start economic dependency in old age when people live with others.

Finally, consistent with the findings on the payment of living expenses, the elderly who live with a never-married child only tend to be the owners of their residences and the household commodities, in contrast to those who live with an ever-married child only. As much as 73.5 percent of elderly living with a never-married child are the owners of the shared residence, while 64.3 percent of the elderly living with an ever-married child are home owners. A more significant difference is found in the ownership of household commodities; high proportions of elderly living with a never-married child purchased a fan (69.9 percent), television (67.9 percent), and refrigerator (67.1 percent) by themselves for the household, compared to much lower proportions for the elderly living with an ever-married child (45.9 percent for a fan, 43.5 percent for a television, and 38.0 percent for a refrigerator). Fewer elderly in either nuclear or extended families are the owners of a washing machine or an air conditioner, but the elderly living with a

⁷⁵ The 95 percent confidence interval for the average age of the elderly who live with others is (70.7-74.2), while that for the average age of the elderly who live with a spouse is (67.0-70.5) (data not shown).

⁷⁶ Indeed, one elderly person who did not want us to record the in-depth interview (out of two such cases) was a widowed female living alone. She had lived with a nephew from his childhood, after earlier losing her husband. According to information from her long-term neighbor, however, the nephew left her after his marriage. Although this elderly woman never said that she was sorry for his act, it was apparent from the ways the neighbor as well as my local interview assistant reacted to her situation that the nephew was expected to provide for her in old age. The assistant was reluctant to ask detailed questions regarding her living arrangements out of sympathy and sadness for her.

never-married child are still much more likely to be owners than those living with an ever-married child. The respective figures are 58.2 percent and 29.5 percent for a washing machine, and 51.3 percent and 34.9 percent for an air conditioner. Therefore, the ownership of a residence and household commodities further suggests the relative economic dependency of never-married and co-resident children. Because the majority of their co-residence is at the residence of parents, it may be a natural consequence that never-married co-resident children tend to avoid financial responsibilities, especially if their elderly parents are still healthy, as is the case for most of the never-married children considered here.

Indirect Economic Contributions of the Elderly: Insights from Qualitative Data

In this section, I illustrate examples of the indirect economic contributions made by the elderly to their household economy. Because economic arrangements in a household can be a complicated matter, including issues such as the employment status of household members, the wealth of the household, and the past histories of economic relationships between generations, it is sometimes difficult to identify the actual economic contributors and receivers in a household. For example, some elderly parents may appear to be financially dependent on their children, living at a child's house and having their living expenses paid by them; these same elderly, however, may have given these children a profitable business from which they are making a living. The following analyses, using data from in-depth interviews, focus on such indirect economic contributions of elderly people to show the different ways through which seemingly dependent elderly people are positive actors in household economies⁷⁷.

⁷⁷ As with the qualitative analyses discussed in Chapter 5, I used N6 software for the analyses of interview data.

The first case below relates to the past economic investments of elderly parents in educating their children. As a result of their education, the children of these elderly parents now have earning potentials far greater than their parents' during their working years, and can comfortably support their parents. The following passages come from an interview with a widowed mother who co-resides with well-educated never-married and married children in a big house built in a typically upper-middle class gated-housing estate. The house was built by one of her daughters, fulfilling her late father's wish that all the children would live together. In fact, every child, except for one married son, lives in the house at present. The elderly mother realizes her current economic dependency on her children and feels bad about not having her own wealth to give them as inheritance. However, at the same time, she emphasizes her past efforts to provide her children with education on which they have built their present successful status. She is also proud of the outcome of her efforts. She and her husband managed to use their modest income to produce three children with junior college degrees, two with B.A.s, and one with a master's degree from a university in England.

AN ELDERLY WIDOWED FEMALE: The third daughter is the one who bought this house; she built it. She lets everyone live here. She also owns a company. (On the other hand), I do not have anything; I gave everything to my children. I gave them schooling. I gave them schooling, even though I do not have any wealth to give them now. (In answer to whether she is happy with her current financial condition). I am very happy, living in such a big house. I have never lived in such a big house before; in the past, the house was a small wooden one. I moved here and feel very good. I am satisfied. I have food to eat. When I need to see a doctor, my children take me there. They also provide me with a residence, a good one. I am satisfied and proud, too. (Bangna 9-a)

One of her co-residing children, a never-married male who earned a master's degree from a British university, is a good example of this elderly mother's successful investments in her children's education. This man has taken advantage of his higher education and now holds a well-paying job, as indicated by the substantial amount of money he can give each month to his mother. The amount he gives, which is a portion of his pay, is much higher than the income of a

civil servant with a B.A. He notes that he gives money to his mother just to express his gratitude to her, even though he thinks that she does not need the money for everyday use and saves it for now. The elderly mother has effectively contributed to the household economy by educating the children to begin with, and by further wisely saving extra money, which the well-educated children can now produce; the saved money will in turn become a significant savings for the family.

A NEVER-MARRIED CO-RESIDING MALE CHILD: (In answer to whether he contributes money to the household). I contribute some, and my sisters do as well. Actually, I always give her (the mother) monthly 9,000 baht, but I think she puts it in a deposit account. I think she does not need the money right now. That is why she puts it in the account. She does it just in case anybody in the family needs money (in the future). (In answer to why he still gives money knowing that the mother does not need the money right now). Maybe it is the way we can return something to the mother. Actually, it is my pleasure to give her something, but I do not know what she likes. So, I just give money so that she can turn the money into anything she likes. I have been doing this since I started to work; I would cut some of my salary to give it to her. (Bangna 9-b, interviewed in English)

The indirect economic contributions of the widowed elderly mother examined next similarly involve her savings. This woman also willingly accepts monthly money from children and co-residing nephews and nieces, given as token of respect. However, she intentionally puts this money aside, adding to her own accumulated savings from earlier working days; she knows that there will be time when people in the family need a large sum of money, and she wants to prepare to assist them at such a time. Thus, although she is dependent on her children in terms of her daily living expenses, when a large sum is required by the family, her savings are actually an important resource. Household members also seem to recognize her indirect contributions to the household economy, and rely on her for purchasing expensive items that are difficult to afford with the modest income of average middle class workers.

A WIDOWED WOMAN CO-RESIDING WITH A MARRIED CHILD AND RELATIVES: When the monthly salary is paid, any people (in the family) who want to give some money to me, they do. If they do not want to (give me money), I do not complain. But each of them gives money to me. I never asked for it.

However, when I receive money, I save it. I save the money and give it back to them when they need money; I save and give it to them as a big sum. I do not use it. For example, the eldest *laan* (nephew) that I have raised since he was a small baby, just like his mother, said, “Mother, I will buy a car and a large down payment is needed.” He asked his father (who is a still-working older brother of the respondent) about borrowing 200,000 baht. And the mother (the respondent) gave him 100,000 baht. I saved the money. So, the money is his. When he needs the money, I give it to him. I help him. Like this, I do not use their money. (Wangtonglarn 1-a)

Although many elderly Thais who have barely managed to feed their families and educate their children do not own significant property, some elderly parents can transfer property to their children to help create a solid economic base. In the following case, a widowed elderly man gave pieces of land to each of two children when they married. The provision of land enabled the children to start independent household economies. The married daughter built a shop house (a two- to three-story building in which the first floor is a shop and the upper floors are a residence) on the given land, located right next to the father’s house, and runs a small corner shop there. The married son built an apartment about five minutes away from the father; he earns money by renting out rooms and by working at a company. He and his family also reside in one of the rooms of the apartment and he lets younger relatives live with his father. However, the elderly parents sold off their formerly large landholding, piece by piece, to provide money for the children’s education, and then divided the remainder between the two children. The elderly father has no significant amount of land left, although he could have made a fortune if he had kept the land, as the conversations below between the widower and his in-law (an elderly woman married to a brother of this man’s wife) suggest.

INTERVIEWER: How did you obtain the land?

A WIDOWED ELDERLY MAN: Inheritance. The land was my wife's.

HIS RELATIVE: His wife received the land from her mother. The mother also received it from her mother.

THE WIDOWED ELDERLY MAN: Then, I divided it between my two children. I divided it into equal amounts; the male child got half and the female child got

the other half. I had two *rai* (a measure of land, about 1,600 square meters), so that each child received one *rai*.

HIS RELATIVE: All the land to the left side (of the street) was under his name before.

THE WIDOWED ELDERLY MAN: A long piece of land reaching all the way there.

HIS RELATIVE: The longest end reached the *soi* (lane) over there. In the past, my son bought some pieces of land from him. At that time (30 years ago), the land was 1,000 baht per *tarangwaa* (a square meter). My son bought 50 *tarangwaa*, and paid 50,000 baht. He (respondent) had a lot of land. But he sold it to different relatives.

THE WIDOWED ELDERLY MAN: We were the owner of the land, but I have already sold it off. At that time, I needed money to send the children to school.

HIS RELATIVE: He sold land cheaply. He only made 50,000 baht for 50 *tarangwaa*. The land was cheap in the past; if he sells that much land now, he can make 100,000 baht or more (per *tarangwaa*). This area is a part of Bangkok. (Yanawa 6-c)

For this widowed man, the transfer of land and the consequent economic independence of his children have heavily influenced his current economic arrangements with the children.

Following the division of land, the elderly father now co-resides only with adult relatives. The two children, however, economically support the widowed father in various ways: utility bills are paid by his daughter, food is delivered by both children, and money is provided by the son by letting the father collect rent from the apartment. The father, on the other hand, helps run his daughter's corner shop by watching the store while she is away taking care of other household errands. The early division of land that might have encouraged children to leave home, ultimately may have been a good strategy for the elderly father in terms of providing money-making opportunities for his children; from the income that the children earn, they can more comfortably pay for the economic needs of their elderly father. Further quotes from conversations between the widowed man and his relative show in detail the economic arrangements between the widowed father and his non co-residing children.

THE WIDOWED ELDERLY MAN: (In answer to what the respondent usually does). I do nothing. Well, I help my daughter sell things at a corner shop (that his daughter owns).

HIS RELATIVE: He helps his daughter's shop. They take turns. When the daughter goes home to cook, he comes out to look after the shop. The house over there is the house of his son, who delivers food to him. His daughter cooks rice for him. However, he lives alone; his children live alone (without the father).

THE WIDOWED ELDERLY MAN: It is nothing special. I am not in a financially difficult situation, either. Right? In the evening, my children bring food; the daughter brings rice, while the son brings food to eat with rice. If I need to call for help from them, I can. But I do not know for what reason I might need to ask for their help right now. If I need anything, I tell them what I want, and they give it to me. If I ask for money, they give it, but I also have my money (and do not need to ask for it). My daughter pays the water and electricity bills. Also, the son has several rooms being rented out, and he lets me collect part of the rent. (Yanawa 6-c)

Examinations of the economic arrangements of the elderly suggest that elderly people's economic positions in their households differ greatly, depending on their living arrangements. In particular, there is a sharp contrast between the economic positions of elderly parents who live with a never-married child and those who live with an ever-married child. While sizable proportions of the former parents, who live in nuclear families, are still economic contributors through payments of living expenses and ownership of residences and household commodities, the majority of the latter, who live in extended families, are provided these economic benefits by their co-resident children. Moreover, the qualitative data reveal there are different ways through which seemingly dependent elderly actually contribute indirectly to the economic well-being of their households. The economic activities of children and their aged parents are closely connected in the context of Thai old-age co-residence. As a result, helping children establish themselves by providing education, distributing property, and securing large savings not only contributes to the household, it can also solidify the old-age security of the elderly themselves.

Non-financial Contributions of the Elderly

This section discusses non-financial contributions of elderly people by examining the division of household tasks. Although non-financial contributions of elderly parents are often overlooked in studies of aging (Andrew and Hennink 1992:142), research on intergenerational help exchange suggests that elderly people undertake significant burdens of household tasks for their households. According to Ward et al. (1992:219), co-residing elderly parents aged 65 and over in the United States performed an average of about 80 percent of household tasks, including shopping for groceries, cooking meals, doing laundry, cleaning the house, providing transportation, and doing chores related to house maintenance. A study by Andrew and Hennink (1992:143) also reported similar heavy involvement of Thai elderly in housework; as much as 78 percent of Thai elderly regularly performed at least one task such as food preparation, house-cleaning, sewing, dish-washing, laundry, and gardening. Their study, however, also suggested that female elderly are much more likely to undertake various household chores (ranging from 22.7 percent for gardening to 49.8 percent for food preparation), compared with male elderly (ranging from 7.2 percent for sewing to 34.3 percent for gardening).

In addition to their housework contributions, studies have suggested that elderly people, particularly females, are significant providers of care in their households. According to Andrew and Hennink (1992:143), over one half of female elderly (52.4 percent) aged 60 to 64 regularly took care of grandchildren in Thailand. The percentage gradually decreased with the age of the grandmothers, but 17.5 percent of those aged 75 to 79 were still the regular care-givers to their grandchildren. Moreover, Wongsith and Siriboon (1999:124) suggest that elderly women are the major care-givers to their spouses; among urban Thai elderly, a spouse was the most frequently mentioned care-giver to males (32.1 percent), followed by a daughter (24.7 percent). On the other hand, a daughter was the major provider of physical help to females (41.8 percent).

Interestingly, the same study also notes that as much as 24.7 percent of males and 31.1 percent of females identified themselves (no other person) as the main person who provided physical care, indicating that sizable proportions of Thai elderly are taking care of themselves, without relying on physical support from other people.

Although it is not clear whether these self-caring elderly do not need care or simply do not have any other person to care for them, the finding nonetheless implies that physical dependency is not a common condition among Thai elderly. In fact, considering the low prevalence of elderly with ADL problems among the elderly population (6.1 percent in my data), it is likely that the vast majority of Thai elderly are fairly self-sufficient and do not need to rely on physical support. The estimations of self-care life expectancy (the expected number of years spent in a physically independent state without requiring assistance for conducting one or more ADLs, including feeding, grooming, transferring, toileting, dressing, and bathing) by Jitapunkul et al. (2003:403) also suggest that the current Thai males and females aged 60 to 64 will spend only 1.6 years and 2.6 years of their remaining life (20.3 years for males and 23.9 years for females) in physically dependent conditions. Given current life expectancy, the period when elderly parents require intensive daily care is expected to be relatively short, even though co-residence is said to be best suited for providing such daily care to the elderly. Instead, elderly parents are likely to be productive contributors to their households throughout most of the co-residence period.

Table 7.5 below shows the housework contributions of the elderly by their sex and living arrangement. The analysis was limited to the elderly who have a co-residence partner (i.e. the elderly who live with a child, a spouse only without a child, or others only) because the elderly who live alone usually have to take care of the housework by themselves. Similarly, elderly respondents who have a house helper were excluded from the analysis, as neither the respondents

nor the co-residence partner are likely to conduct housework in these households⁷⁸. The types of household tasks considered in the analysis include preparing food, cleaning the house, washing dishes, doing laundry, doing chores related to house maintenance (such as changing light bulbs and fixing/replacing broken objects), and caring for co-resident minor grandchildren. These household chores were selected because, with the exception of caregiving for grandchildren, they are common daily needs that are applicable to most people⁷⁹. (For care for grandchildren, only the elderly who co-reside with both a child and a minor grandchild are considered.) Respondents were asked to rate how often they perform these selected household tasks: 1) never, 2) once in a while, 3) sometimes, 4) often, and 5) always. Answers were then recoded as 1) rarely conduct the task for the answers “never” and “once in a while”, 2) occasionally conduct the task for the answer “sometimes”, and 3) regularly conduct the task for the answers “often” and “always.”

⁷⁸ A total of 100 respondents (9.0 percent of the elderly who live with a child, a spouse, or others) have a house helper.

⁷⁹ Some chores that apply to specific individuals, such as tending animals and taking care of a garden, were not included in the analysis to avoid high frequencies of missing cases.

Table 7.5. Housework contributions of elderly (in percentages) by sex and living arrangements (unweighted *n* in parentheses).

Types of tasks	Frequency	Sex and living arrangements of elderly					
		Male (living with)			Female (living with)		
		Child (309)	Spouse (49)	Others (15)	Child (504)	Spouse (40)	Others (75)
Caring for a grandchild	Rarely	54.7	-	-	37.1	-	-
	Occasionally	28.2	-	-	19.8	-	-
	Regularly	17.1	-	-	43.1	-	-
Preparing food	Rarely	71.2	60.4	42.3	30.4	8.6	43.2
	Occasionally	15.9	17.6	7.0	18.9	12.2	10.6
	Regularly	13.0	21.9	50.7	50.7	79.2	46.2
Cleaning the house	Rarely	68.0	51.9	35.4	41.0	8.4	46.3
	Occasionally	21.3	37.7	15.1	27.5	35.9	19.5
	Regularly	10.8	10.4	49.5	31.5	55.7	34.2
Washing dishes	Rarely	66.5	58.9	31.2	37.4	5.3	45.4
	Occasionally	24.0	34.9	19.3	33.3	42.3	25.9
	Regularly	9.5	6.2	49.5	29.3	52.4	28.7
Doing laundry	Rarely	70.0	63.5	39.6	42.6	10.7	44.4
	Occasionally	19.8	22.1	2.7	22.7	25.6	12.4
	Regularly	10.3	14.3	57.7	34.7	63.7	43.2
Maintaining the house	Rarely	57.4	24.7	40.8	81.9	66.5	73.9
	Occasionally	12.0	7.5	7.0	1.5	0.0	2.5
	Regularly	24.7	50.6	41.7	6.3	15.1	15.4
	Not applicable	5.9	17.3	10.5	10.3	18.4	8.1

Note 1: The total number of cases included in the analysis is 992. Respondents living alone (33 cases) and those who have a house helper (100 cases) are excluded from this sample.

Note 2: Cases with missing values are excluded from the analysis; 15 cases for preparing food, washing dishes, and maintaining the house (1.1 % of the sample), 16 cases for cleaning the house (1.2 % of the sample), and 17 cases for doing laundry (1.4 % of the sample).

Note 3: When respondents reported that their households had not needed maintenance, their answers were classified as “not applicable”.

Note 4: For caring for grandchildren, only co-residing respondents with a minor grandchild are considered (a total of 454 cases). Out of 454 cases, 13 cases (2.7 percent) have missing values for this item.

According to Table 7.5, sizable proportions of female elderly undertake the range of household chores for household members, with the exception of house maintenance. In particular, high proportions of female elderly take care of food preparation; even among co-residing elderly, about half of females regularly prepare food (50.7 percent), and an additional 18.9 percent occasionally do so. Understandably, among females who live with a spouse only,

females who rarely cook are a minority of people (8.6 percent), while most of them either regularly (79.2 percent) or occasionally (12.2 percent) cook. Although higher proportions of females living with others rarely cook (i.e. someone else, most likely co-resident others, cooks for them) compared to those living with a child (43.2 percent vs 30.4 percent), still a little less than one half (46.2 percent) of elderly living with others regularly prepare food. In addition to preparing meals, large proportions of females participate in caring for their grandchildren; as much as 43.1 percent and 19.8 percent of co-residing females with minor grandchildren look after them regularly or occasionally.

As for household tasks other than cooking, however, the contributions of female elderly in their households are somewhat smaller. About one-third of elderly living with a child regularly clean the house (31.5 percent), wash dishes (29.3 percent), or do laundry (34.7 percent). On the other hand, many co-residing females report that they rarely do these chores (41.0 percent for cleaning the house, 37.4 percent for washing dishes, and 42.6 percent for doing laundry), letting other household members (most likely co-resident children) do them instead. The females living with others generally show similar patterns of housework contributions as the co-residing ones. More female elderly living with a spouse, however, regularly clean (55.7 percent), wash dishes (52.4 percent), and do laundry (63.7 percent) than those who live with someone rather than a spouse.

In contrast to females, housework participation by male elderly is substantially lower. For example, the proportions of co-resident males who rarely conduct household tasks range from 54.7 percent for caring for grandchildren to 71.2 percent for preparing food, while small percentages of them regularly cook (13.0 percent), clean (10.8 percent), wash dishes (9.5 percent), do laundry (10.3 percent), or take care of grandchildren (17.1 percent). As an exception, higher proportions regularly contribute to maintaining the house (24.7 percent). Males living with a spouse tend to share more housework, especially in maintaining the house (50.6 percent regularly

conduct) and preparing food (21.9 percent regularly conduct). For other tasks, they are clear receivers of service. Males living with others are few, but are much more likely to take care of housework. About one half of them regularly cook (50.7 percent), clean (49.5 percent), wash dishes (49.5 percent), or do laundry (57.7 percent), indicating that these males without a spouse or a child may have no choice but to do these tasks themselves.

The next analysis focuses on the housework contributions of co-residing female elderly, differentiated by the marital status of co-resident children. Table 7.6 classifies the percentages of co-resident females who regularly prepare food, clean house, wash dishes, do laundry, and care for grandchildren for each type of co-residence and further by the age of the elderly⁸⁰. Co-residence types are defined as 1) nuclear family (living with a never-married child only) and 2) extended family (living with an ever-married child with or without a never-married child). The age of elderly is divided into four groups, 60-64, 65-69, 70-74, and 75 and older. It is expected that female elderly in nuclear families are more likely to undertake housework because these elderly with a never-married child have continued their roles as the wife and the mother who runs the household. On the other hand, female elderly in extended families may be more likely to have given up this role to let other family members (most likely the co-resident married child or the child-in-law) take care of the housework. Also, naturally, greater numbers of younger elderly are expected to undertake household tasks than older ones, as higher ages and associated functional problems make it more difficult for older females to engage in housework.

⁸⁰ Maintaining the house is not included for this analysis because the number of co-resident female elderly who regularly perform this task is too small to perform a cross-tabulation.

Table 7.6. Percentage of co-resident elderly females who regularly perform household tasks by age groups and co-residence types (unweighted *n* in parentheses).

Co-residence types	Age (<i>n</i>)	Household tasks				
		Prepare food	Clean house	Wash dishes	Do laundry	Care for grandchild
Nuclear family	60-64 (55)	76.6 (41)	58.2 (33)	61.4 (31)	63.4 (34)	-
	65-69 (40)	66.4 (24)	54.4 (17)	38.3 (13)	48.6 (16)	-
	70-74 (36)	38.5 (15)	21.6 (10)	18.3 (9)	32.4 (13)	-
	75+ (33)	32.4 (12)	14.5 (5)	24.1 (7)	26.0 (7)	-
	All (164)	54.8 (92)	38.9 (65)	37.1 (60)	44.3 (70)	-
Extended family	60-64 (70)	65.1 (42)	31.7 (20)	33.2 (20)	30.2 (19)	54.2 (32)
	65-69 (97)	58.2 (55)	33.6 (32)	26.7 (25)	34.3 (33)	50.3 (37)
	70-74 (73)	48.4 (33)	27.0 (20)	29.9 (22)	33.2 (23)	35.9 (20)
	75+ (100)	27.6 (27)	20.4 (20)	15.8 (18)	24.1 (26)	33.3 (19)
	All (340)	48.7 (157)	28.0 (92)	25.6 (85)	30.1 (101)	43.7 (108)

Note 1: The total number of cases included in the analysis is 504. For caring for a grandchild, only female elderly in extended families with minor grandchildren are considered (262 cases).

Note 2: Cases with missing values are excluded from the analysis: 5 cases for preparing food and washing dishes (0.6 % of co-resident females), 6 cases for cleaning the house and doing laundry (0.8 % of co-resident females), and 8 cases for caring for grandchildren (1.6 % of co-resident females).

According to Table 7.6, female parents tend to engage in housework when they are younger and when they live with a never-married child. In particular, preparing food seems to be a major task for younger elderly, engaged in by 76.6 percent of female parents aged 60 to 64 and 66.4 percent of those aged 65 to 69 who live in nuclear families. Smaller but sizable proportions of younger females in extended families also regularly prepare food (65.1 percent for those aged 60 to 64 and 58.2 percent for those aged 65 to 69). Younger elderly females in nuclear families are also significantly more likely to provide other housework regularly, compared with those in extended families. Of those elderly aged 60 to 64 who live with a never-married child, as much as 58.2 percent, 61.4 percent, and 63.4 percent regularly clean the house, wash dishes, or do laundry, while the respective figures for their counterparts with an ever-married child are 31.7 percent, 33.2 percent, and 30.2 percent.

However, among females in nuclear families, the percentage of those who regularly undertake household tasks rather rapidly decreases with increasing age, especially after age 70. While as much as 66.4 percent of females aged 66 to 69 in nuclear families still regularly cook, the proportion drops to 38.5 percent for females aged 70 to 74, and further to 32.4 percent for those 75 and older. Similarly, the proportion of females who regularly perform other tasks substantially decreases between the age groups 65 to 69 and 70 to 74; the proportions fall from 54.4 percent to 21.6 percent for cleaning the house, from 38.3 percent to 18.3 percent for washing dishes, and from 48.6 percent to 32.4 percent for doing laundry. After age 70 to 74, however, the decrease is not large, indicating that some very old females (aged 75 and older) are still taking care of housework (14.5 percent for cleaning house, 24.1 for washing dishes, and 26.0 for doing laundry). The patterns of housework contributions indicate that sizable proportions of elderly mothers in nuclear families continue to undertake housework until fairly late old age, but their family members (most likely their spouses or their co-resident never-married children) tend to take over the role when the elderly mothers enter their 70s.

On the other hand, the proportion of females who regularly take care of housework remains relatively unchanged across age groups when they live in extended families, except for the preparation of food, for which regular contributions steadily decrease with age. Among females aged 65 to 69 who live with an ever-married child, 33.6 percent regularly clean the house, 26.7 percent wash dishes, and 34.3 percent do laundry. These proportions change little for the 70 to 74 age group (27.0 percent for cleaning the house, 29.9 percent for washing dishes, and 33.2 percent for doing laundry). The proportions finally drop for those 75 and older to 20.4 percent (cleaning house), 15.8 percent (washing dishes), and 24.1 percent (doing laundry). However, noticeable proportions of females aged 70 to 74 (35.9 percent) and even those aged 75 and older (33.3 percent) still regularly provide care for grandchildren.

Examination of the housework contributions of female elderly provides support for the expectation that co-residing children may participate in housework differently, depending on their marital status. Large proportions of elderly females who live with a never-married child continue to undertake housework before age 70. After that point, the proportions of regular housework participants fall sharply, indicating that the co-resident never-married children start to take more responsibility in running the household, rather than being dependent “children” who can simply enjoy the housework services provided by their mothers. They may have to reconsider their dependency status as their mothers age and develop functional problems; the proportions of elderly with an ADL problem increase from 0.0 percent for those aged 60 to 64 and 2.1 percent for those aged 65 to 69 to 5.4 percent for those aged 70 to 74, and further to 15.9 percent for those aged 75 and above (data not shown). In contrast, elderly females who live with an ever-married child are significantly less likely to do housework, even at an early stage of old age. Perhaps their co-resident children who are married and have their own family members are likely to be in the position to run the household, letting their elderly mothers “retire” from housework. However, relatively small but constant percentages of elderly mothers in extended families regularly provide housework across age groups, implying that they may be people with specific reasons to engage in housework. Finally, of the range of household tasks considered, preparation of food appears to be the housework for which most elderly mothers continue to be responsible, possibly because this task requires more time and effort and co-resident children tend to rely on the experience and available time their elderly mothers have for cooking.

Conclusion

This chapter examined the function of living arrangements in providing for the needs of elderly people in Bangkok in response to a widely held assumption that co-residence is the major system of elderly support in Thailand. Results of multivariate analyses that estimate the effects of co-residence in meeting the basic economic needs of the elderly suggest that the structure of households *per se* does not have significant impacts on the economic security of elderly people. Among the entire elderly sample, the probability of experiencing a shortage of money is not different for those who co-reside and those who do not co-reside. Similarly, among co-residing elderly, the types of co-residence, either living with a never-married child only as a nuclear family or living with an ever-married child as an extended family, do not affect the sufficiency of money to cover living expenses.

The results suggest, however, that socio-economic status, particularly that of children, is critically important in obtaining old-age economic security. Accordingly, it is misleading to interpret co-residing elderly as economically secure just because they live with a child; on the contrary, it is the educational level and the associated economic ability of children that matters. Only when the elderly have economically able children do their old-age economic needs seem to be safely provided. Further supporting this finding, the significance of the children's economic capacity is also shown in the qualitative analyses in the elderly's indirect economic contributions. The analyses reveal that elderly parents' past investment in education is now benefiting them because children with better education and with higher earning power can provide more to elderly parents, if the children have the intention to do so. For the elderly, the concept of *bun khun* is hugely important in Thai family relations; this concept, which requires the continued emotional attachment of children to their parents, can help ensure children do not move away, especially after parental investment.

The analyses in this chapter also provide insights into the issue of dependency within households. In accordance with the expected role of married children as supports for their elderly parents, the results suggest that elderly parents in extended families tend to be dependent on co-resident children, financially and otherwise. On the other hand, elderly parents living with a never-married child are more likely to be contributors, rather than receivers, of benefits. The tendency for continued dependency by never-married and co-resident children implies that the elderly parents of these children may have to continue their parental roles as household providers because they did not have the opportunity to reverse the flow of dependency in their relationships with the co-residing children. As the traditional model of old-age co-residence suggests, having married children and living with one of them may be better for initiating the reversal of support flow than remaining in nuclear families.

Finally, in considering the future of old-age living arrangements in Thailand, it is important to note that the economic and housework arrangements of the elderly examined in this chapter are based on the continued physically functional state of the majority of the current elderly population. Because elderly people in general are still physically independent, with no need for daily care from other people, they can continue to contribute to their households. However, in the future, if the life-expectancy further increases and the time spent functionally disabled lengthens, it is questionable how well the present system of co-residence can adapt to the situation. For example, there may be more households that have to struggle economically to provide for functionally disabled elderly, as suggested by the major effects of poor health status in predicting money shortages. After all, co-residence, particularly with a never-married child, is not designed to support totally dependent elderly parents; the benefits of co-residence, as it presently operates, partly rely on contributions from the elderly.

Chapter 8

CONCLUSION

The demographic conditions of Bangkok, Thailand, have provided an ideal setting to examine the impacts of demographic changes on the living arrangements of the elderly. During the past few decades, Thailand has experienced both a remarkable reduction in fertility and an increase in life expectancy. As a result, the total fertility rate is currently below-replacement level, and life expectancy at birth is close to 70 years, rapidly leading the country to an aged society. The declined fertility rate has caused concern over a shortage of available children for co-residence because co-residence has been the major source of elderly care in Thailand in the absence of a robust social security system for the elderly. In particular, the traditional form of old-age co-residence, provided by a married child in the extended family environment, has been said to characterize the Thai elderly support system, and accordingly, the government of Thailand has emphasized its continuation as the ideal form of old-age living arrangement. However, rapidly increasing rates of non-marriage among the children of the current elderly generation have been recently noted, providing a further demographic factor that may affect this traditional elderly care system.

As a way of examining the impacts of population changes, a number of studies that concern the determinants of living arrangements have been conducted. They have found significant negative impacts of the reduced availability of children on co-residence, and have indicated a possible decline in co-residence rates in the future. However, reviews of previous studies show that they share several shortcomings. First, the characteristics of the elderly's children have received relatively little attention in explaining determinants of living arrangements.

Limited studies that examined children's characteristics, including their ages and willingness to live with parents, have suggested the importance of considering not only the number but also the characteristics of children in the analytical framework. Second, most studies on living arrangements of the elderly have been conducted from a cross-sectional perspective, ignoring the process that has led to the present living arrangements. However, based on the developmental model of Thai households, there is a need to assess the transition patterns of living arrangements among Bangkok elderly because the same co-residence can have different implications, depending on the history of co-residence. Lastly, previous studies have emphasized the maintenance of co-residence without empirically testing the function of co-residence in providing for the needs of the elderly. The elderly have also been assumed to be the receivers of co-residence benefits, while the possible dependency status of co-residing children has not been well studied. To address these issues that have not been adequately examined in the past, the theoretical focuses of this dissertation have been the determinants of living arrangements, including the impacts of both the number and the characteristics of children, the dynamics of Thai living arrangements, and the actual benefits of co-residence as determined by the marital status of co-residing children.

In order to obtain the necessary data for a holistic study, the fieldwork equally emphasized both quantitative and qualitative data. Quantitative data were collected for over 1,000 cases, using a multi-dimensional questionnaire that was designed to reproduce the life course of the respondents by following their landmark life events in a flexible manner. The unique capacity of the questionnaire to cross-check the timing of key life events contributed to the detection of inconsistencies in responses and also to the reduction in their reactivity. In addition to the collection of large-scale representative data, the fieldwork focused on in-depth interviews collected from both elderly parents and their co-residing children by selecting interview candidates from a variety of socio-economic backgrounds. In-depth interviews

revealed the preference of Thai elderly to co-reside, a result found across social status. It also became apparent that it is often difficult for elderly people to describe the process leading to the current living arrangement as their own decisions and choices because the current arrangement is often a product of circumstance and other people's actions. On the other hand, because co-residence has often been the result of children's conditions, interviewing adult children and uncovering their understanding of the process that has led to co-residence was essential to capture the underlying structures that condition Thai co-residence.

A major methodological challenge of this dissertation was to collect large-scale representative data without losing the views of the local people. To achieve this aim, a cluster sampling method was used, focusing on census blocks as the sampling unit and selecting one from each administrative district in the entire Bangkok Metropolis. In contrast to a common statistical assumption, the analysis of sampling errors suggests that they are low; the high residential heterogeneity observed within census blocks has probably created diversity in the data and has contributed to this favorable sampling outcome. The use of census blocks has also provided an opportunity to collect locally meaningful contextual information through participant observation and casual conversations with people living in the area. The qualitative data turned out to be an important source of information for conducting the quantitative analyses. For example, when I needed to create categorical variables, such as the levels of education, from a numerical variable, I could reasonably decide how to place divisions based on the suggested social meanings and implications of each category in Thai society. Moreover, the qualitative data collected in the field helped me interpret the statistical results and gain confidence in the conclusions drawn from the quantitative data.

In addition to the formally collected data, local Thai interviewers proved to be an important source of ethnographic information, teaching me fundamental Thai concepts such as *nam jai* (generosity). This concept was not only important for managing the interview team

effectively, but was also useful in understanding how the Thai system works in a broader framework. The experience of working with local interviewers, however, suggests the importance of creating an effective and quick interviewer training plan, because even though fieldwork relies on well-trained interviewers, it is not always realistic to employ a group of interviewers over a long period of time, especially in an urban setting like Bangkok.

Replacements need to be hired and trained. It is also useful to include interviewers with various backgrounds, beyond the standard qualifications measured by the educational level or previous experience in the field, since interviewer qualities such as maturity and life experience, greatly contribute to good response rates. Furthermore, the difficulty of obtaining interview cooperation from Chinese-Thais suggests the need for a Chinese-speaking interview assistant, who is more likely to be accepted by these people and able to interview them.

One of the major analytical topics discussed in this dissertation is the impact of fertility decline on the living arrangements of the elderly. Because elderly support in Thailand has relied on familial care, the expected decrease in the availability of children for co-residence has been considered a worrisome issue. The results of the analyses do confirm that the number of surviving children is a significant determinant of co-residence in Bangkok; the elderly who have more children have a better chance of living with one of them. Consequently, it is suggested that the elderly in future generations, with considerably fewer children, will be less likely to live with a child in their old age.

However, more detailed analyses, including those of the characteristics of the elderly's children, show that having a never-married child, either a male or a female, is a powerful determinant of co-residence. The finding indicates that despite the lowered availability of children in the future, as long as one child remains never-married, that child can be the co-residence partner for the parent. The positive impact of never-married children is particularly significant, given the noticeably increasing proportions of never-married people in Bangkok.

That is, if co-residence is the important matter, and if that co-residence can involve either a never-married or a married child, the increasing prevalence of never-married children can contribute to the maintenance of co-residence, mitigating the expected negative impacts of fewer children.

Further providing support for the powerful impacts of never-married children, analyses also reveal that these single children are actually structurally more suited as co-residence partners than those who are married. Examination of the movements of the elderly's children in and out of their parental home suggests that Thai children tend to move out of the parental house after a marriage, while the majority of never-married children remain co-resident with parents, implying that the marriage of children is a major risk for the loss of co-residing children. Moreover, conflicts with in-laws emerge as a possible obstacle for co-residence, because even if a child has made a decision to remain in co-residence after a marriage, family problems in a new co-residence arrangement can prevent the family from continuing to live together.

In addition to the marital status of children, their willingness to recognize their obligations to repay parents in the form of old-age support is hugely important in considering co-residence outcomes among the Bangkok elderly. Because the fundamental preference of elderly parents is to live with a child as long as co-residence is a realistic and viable option, whether children recognize this concept, called *bun khun*, is critical. If no child recognizes *bun khun*, having many children does not necessarily help ensure co-residence in old age. On the other hand, children's desires to properly practice *bun khun* is a motivation for their non-marriage; having a family of procreation and taking care of one's own dependents are seen to reduce the children's ability to carry out their obligations as a member of the family of origin, and some children who place more priority on the family of origin are reluctant to marry. In this context, having more surviving children is a benefit for the elderly parents because with a larger pool of children, there is a better chance that at least one child will recognize this obligation and become a desirable candidate for co-residence.

Furthermore, investigation into changes in living arrangements over time suggests the continuity of co-residence in Thailand. The majority of Bangkok parents continue to live in co-residence throughout the cycle of household development, without experiencing an empty-nest period. Similarly, the scarcity of returning children among co-resident children shows that Thai old-age co-residence is primarily attributable to children, either never-married or married, who never leave home. Thus, in the process of living arrangements that leads to old-age co-residence, it is primarily children's decisions to remain home that ensure co-residence in later life, and these decisions are made before parents become old.

The finding that the majority of Thai old-age co-residence is not a newly created arrangement has important implications with respect to the determinants of living arrangements. Because most old-age co-residence is decided before actual old age, there may be a need to include indicators that deal with the ability of middle-aged parents to keep at least one child at home. Based on the known tendency of newly married Thai children to live with parents who have more resources, it may be that the economically disadvantaged middle-aged parents have less ability to keep married children at home, and, consequently, will live without a child in old age. Supporting this possibility, the results of the determinants of old-age co-residence suggest that elderly people who still have to work for pay, an indication of their long-term financial difficulties, are less likely to co-reside with a child. Qualitative analyses also show that poor elderly parents, who cannot offer co-residence benefits for children, have more difficulty in attracting a child to co-reside, implying that economic advantage for children, rather than for parents, is an important condition of co-residence.

My results have also led to the need to question who receives the benefits of co-residence, elderly parents or their co-residing children. In fact, the finding that elderly people who have a poorly educated child have a higher chance of co-residence indicates that poorly educated children with lower earning power tend to live with their elderly parents, possibly because of their

own economic needs. Moreover, in contrast to a commonly held assumption that co-residence is the major source of elderly support in Thailand, the structure of households *per se* does not have significant impact on the economic security of elderly people. Similarly, the type of co-residence, either with a never-married or married child, also has no significant effects for that of co-residing parents. What is more important, however, is having a better-educated child who is more likely to have better ability to provide for parents. Because of the close economic connections between adult children and their elderly parents, the past parental efforts to help children establish themselves can benefit the parents later by assuring their old-age economic security, as the qualitative analyses have shown.

Analyses of the economic and housework contributions of the elderly offer further insights into the issue of dependency within households. According to the results, elderly parents who live with never-married children are economically less likely to depend on co-resident children, compared to those who live with ever-married children. Similarly, in the area of housework, female elderly in nuclear families are much more likely to be involved in household tasks than their counterparts. In other words, never-married children tend to remain dependents, living at their parent's residence, using household commodities that are available in the house, having their living expenses paid, and enjoying the housework services provided. In contrast to the married children who have chosen to remain co-resident even after a marriage, these never-married children may not have had an opportunity to reverse the flow of dependency, and are likely to be allowed to be dependent on their parents. Therefore, in terms of obtaining support in old age, living with a married child could be a better option than remaining in a nuclear family. Accordingly, if the future of co-residence in Bangkok is dominated by co-residence with a never-married child, the function of old-age co-residence may have to be re-considered as it may provide greater benefit for co-resident children rather than for elderly parents.

The findings from this study offer a number of policy implications for the living arrangements of Thai elderly in the future. Most importantly, the impacts of never-married children for determining old-age co-residence need to be carefully evaluated from both short-term and long-term perspectives. As discussed earlier, in terms of ensuring “co-residence” in Thailand, rising rates of non-marriage and high involvement of these never-married children in co-residence are positive factors. Even though members of the next generation of elderly people will produce significantly fewer numbers of children per couple, they are expected to have a good chance of living with an adult child, given a high probability of children being single and remaining in the parental home. If the total fertility rate in Thailand remains around 1.9 for the next 50 years as fertility projections suggest (United Nations 2005:422), we can expect to see the continued high rate of co-residence in the Thai society, if in fact high proportions of these children do not marry.

However, the prospect that future co-residence in Thailand is likely to be supported by never-married children requires greater attention to parents’ well-being. Co-residence as a type of old-age living arrangement has been emphasized as an ideal arrangement in Thailand, assuming the universality of children’s marriage and the formation of traditional co-residence with a married child. In this traditional co-residence, the elderly parents are assumed to have their needs provided for in the extended family environment, and, consonant with this picture, the results from this study do suggest that the elderly with a married child are more likely to be dependent on the co-resident child. However, since the assumption of universal marriage no longer holds true and co-residence with a married child is not as common, the advantages and disadvantages of “co-residence” with a never-married child have to be assessed before merely stressing the maintenance of co-residence as the ideal model.

Relevant to this question, this study has shown that the elderly parents in nuclear families with never-married children tend to be more self-supporting, letting co-resident children depend on them. This dependent status of co-resident never-married children may be a problem if

parents need more support from children but are unable to obtain it. For this reason, co-residence with a never-married child needs to be viewed with caution in terms of the welfare of elderly parents. On the other hand, if the parents are willing and able to take on more responsibilities in the household and, as a result, co-resident never-married children appear to be dependent, co-residence with never-married children has its advantage; the elderly parents can satisfy their desires to continue to live with a child without risk of family discord caused by in-laws. The parents and their co-resident never-married children can help each other in the same household, gradually shifting the burden of support between generations. Therefore, in order to better evaluate the benefits of “co-residence” with a never-married child, prospective longitudinal studies that follow generational monetary and non-monetary transfers within nuclear families are urgently needed.

Even if “co-residence” with never-married children provides a benefit for the welfare of the elderly in the short term, the long-term consequences of this type of co-residence are likely to be negative for Thai society. It is a danger for a society to rely on the non-marriage of children and their involvement in co-residence as the source of old-age support; the current availability of these single children for co-residence not only ensures continued low fertility rates, but also inevitably leads to an increasingly smaller circle of relatives in the future. This study has emphasized the significance of relatives in supporting those elderly who do not currently live with a child. The transition patterns of living arrangements have shown that the elderly who currently live with other people, including siblings, nephews, nieces, uncles, and aunts, did so at a pre-old age point as well, suggesting the enduring nature of such living arrangements and the reliability of other people as co-residence partners. Moreover, other people tend to be actual economic providers for the co-resident elderly, rather than casual housemates without financial responsibilities.

The most problematic consequence of achieved low fertility and emerging high non-marriage rates may be the loss of a rich circle of relatives that currently functions as a powerful secondary source of elderly support when children are not available. Because the current children's generation includes several siblings, it would not be difficult for those middle-age children who remain never married and co-resident with the elderly parents to secure a co-residence partner for their own old age from their circle of relatives. However, the option of living with a relative may not be easy or even possible for the children of the current children's generation. Given replacement level fertility among their mothers' generation, these people will have, on average, only one sibling who may or may not marry and have a child (producing a nephew or a niece for the other sibling) with whom they can possibly live. Therefore, given the already low fertility rates in Thailand, sharply rising rates of non-marriages should sound an alarm and not be ignored, despite the possible short-term benefits of having available never-married children for elderly support.

Ironically, the concept of *bun khun*, which has been a persistent social norm supporting elderly parents, seems to be an underlying reason for non-marriage among some Thai children. I can not provide comprehensive accounts of non-marriage because this study did not set out to investigate the issue of non-marriage itself. However, as the results of the study have shown, it is probable that the very idea of wanting to properly take care of one's own parents is contributing to the non-marriage of some children. What is also important to mention is the finding that these never-married children express their continuing strong affection and dependent feelings for parents as a reason for not needing to marry; they do not necessarily practice *bun khun* simply because of obligations. Informants' frequent presentation of such ideas, formally and informally, convinced me that the concept of *bun khun* is not only intact among young generations living the modern life in Bangkok, but also is strong enough to motivate some children not to choose marriage.

In other words, the social norm to respect the elderly, along with the governmental emphasis on this family value, has successfully maintained the high rates of co-residence in Thailand. However, given the suspected relationship between the traditional value of bun khun and non-marriage, it may be time to re-consider the impacts of stressing that concept without taking into account its possible other effects for society. Moreover, if both children in the past and present are similarly adhering to the concept of bun khun, and there is no apparent reason to suggest they are not, we have to question why it seems to be more difficult to practice bun khun and to marry at the same time in the context of current Bangkok life. In order to answer this question, empirical studies that focus on the reasons for and conditions of non-marriage across socio-economic statuses are critically needed.

Finally, although this study has offered more holistic research methods than previous studies, there are also several issues that need to be further considered. One such issue is the necessity of collecting data directly from both elderly parents and their children. Because the decisions of children are critical in deciding co-residence, it is useful to have information about their characteristics, particularly their income level, from the children themselves. Moreover, including non co-residing children in in-depth interviews is also important for discovering more about the circumstances of children, married or unmarried, who decide to leave the parental home. As the living arrangement of elderly parents concern all children, the full story becomes clearer when both “good” children who stay and “bad” children who leave home are examined. Again, it is also important to include non co-residing children to better investigate the connections between the value and actual practice of bun khun and the emerging problem of non-marriage. This study has attempted to answer questions about the future of living arrangements of the elderly in Thailand as the country undergoes rapid and dramatic demographic changes. As is often the case, the study has both provided answers to a number of questions and developed yet another set to be explored in further research.

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Appendix

Transliteration and Glossary of Thai Words

In this thesis, Thai words have been transliterated according to the system developed by Haas (Hass 1964). The respective English meaning is listed in parentheses when a Thai word appears for the first time in a chapter. Although the Thai language has five different tones, for the purpose of simplicity, I do not include any tonal marks with the transliteration. The following is the list of Thai words used in this thesis and their English translations. They are listed alphabetically by English transliteration.

Baht: the Thai currency (\$1 U.S. = approximately 40 baht at the time of fieldwork)

Bun: merit

Bun khun: a given favor or benefit for which one is obligated to do something in return

Chui chui: impassive attitude

Feen: husband or wife, boyfriend or girlfriend, or lover

Gay yaan: grilled chicken

Gee: impolite word meaning you, he, him, she, her, they or them

Isaan: northeastern region of Thailand and the dialect of that region

Kha nam nom: milk price

Khet: district

Krung thep maha nakhon: Bangkok metropolis

Laan: grandchildren

Lamba: difficult

Leen: great-grandchildren

Liang: supporting, caring for, or tending

Mee: mother

Monthon: province

Monthon krung thep: Bangkok Province

Muu baan: village, gated community, or estate

Nai: master

Nai jaan: employer

Nam jai: generosity

Paa: aunt

Phii: older sibling

Phrai: commoners, ordinary peasants

Sabaay: comfortable (physically or financially)

Soi: lane or branch street of a major street

Teochiu: a Chinese dialect

Yaam: security guard

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