

Northern Co-residence across Generations

In Northernmost Norway during the Last Part of the Nineteenth Century

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1. Introduction

Today it is common knowledge that the proportion of elderly Norwegians living alone or with a spouse only is considerably higher than it was a hundred years ago. We also know that the nature of obligation among kin has changed. From 1989 to 2010, we have seen a decrease in the percentage of children (aged 0–17) who live with both parents from 82 to 75 per cent. More people cohabit—only 57 per cent of children live with married parents—and we have seen an increase in single parenthood.¹ It is very likely that the shift in attitudes of the elderly residing with their own adult children is connected to broader changes in family values. However, the reasons for these changes are still unclear.

The aim of this dissertation is to analyse family living arrangements in northern Troms and Finnmark (abbreviation: NTF area) during the last part of the nineteenth century from the perspective of the elderly. Intergenerational co-residence is an analytic concept, defined as the elderly (aged over 60 years) residing with an own adult child (aged over 18 years). The concept is discussed more thoroughly in Chapter 3.2, and 3.3.

Family-based norms may be strong or weak and there are a number of important questions to explore. By whom were these obligations initiated? Was it the younger or older generation that established and controlled the sources of support? How did demographic constraints shape the nature of domestic groups? Was there a substantial difference in intergenerational co-residence between Sámi and Norwegian? How did the complex mechanisms in the interplay between economy and politics affect living arrangements? In what way did living arrangements differ according to economic activity?

The NTF-area covers the two northernmost provinces in Norway, northern Troms – which is a part of Troms province, and Finnmark. The area shares national borders with Sweden, Finland and Russia. Three ethnic groups, namely the Sámi, Kvens (Finnish immigrants), and Norwegians lives and coexist in this Artic climate. During the period of study, the population increased from around 31000 in 1865 to 51100 in 1900. Their main economic activities were found in fishing, farming and reindeer herding.

1.1. Abstracts

The dissertation consists of three articles in addition to a comprehensive introduction. Article One is devoted to the complex issue of how ethnic affiliation should be understood in

¹ <http://www.ssb.no>. Statistics Norway: Population statistics. Children, 1 January 2010. Accessed October 2010.

population censuses. The focus is on the Sámi population in Finnmark in the period between 1855 and 1875. The article indicates that, despite quite clear instructions, registration practices demonstrate a variety of perceptions about how to categorize a person as Sámi. Further, it is argued that one way to understand this diversity in registration practices could be to analyse how ethnicity is displayed at the household level. The discussion is approached from three different perspectives, namely, ancestral, cultural and linguistic criteria. First, the article suggests that the household level gives a more accurate picture of how the ancestry criterion is used per se, because censuses also provide information on family interrelationships. Second, and perhaps more interestingly, the household level indicates why the census-takers in some cases used a criterion other than pure genealogy—we find a mixed marriage as a main reason for someone being registered as, for example, “Norwegian, but lives like a Sámi”. The study also demonstrates that the cultural criterion does not necessarily follow the typical patriarchal rule, whereby women were given the husband’s ethnicity in cases of mixed marriages. Article One constitutes an important basis for the construction of an ethnic variable in Article Two.

Article Two discusses what effects ethnic affiliation and economic activity had upon intergenerational co-residence in the NTF area during the last part of the nineteenth century. By the close of the century, less than half of all elderly people resided with an own adult child compared with approximately 60 to 65 per cent 35 years earlier. It is argued that ethnicity played a role; however, its effect disappeared after controlling for economic activity. Intergenerational co-residence was positively associated with being a married Sámi male with an occupation in farming or combined fishing and farming. As he grew older, he was increasingly more likely to live separately from an own adult child. This pattern changed towards the end of the nineteenth century. By the close of the century ethnic differences regarding intergenerational co-residence had disappeared, and headship position, irrespective of marital status, was strongly related to co-residence across generations.

Article Three starts where Article Two ends. By focusing on the group that showed the most significant changes in co-residence behaviour, that is, the widowed and dependent elderly, Article Three discusses from an ethnic perspective what effects demographic variables such as age, sex and marital status had upon the living arrangements of the elderly; more specifically, we examine how the position as head of the household can be a valuable expression of people’s dependency or independency when two adult generations co-reside. As a way to understand the changes, the article discusses the peasant’s pension system and how different inheritance practices may have affected property transfer and living arrangements. A

different inheritance practice among the Sámi, ultimogeniture, (that is, preference given to the youngest child), is argued to have had a pronounced effect on the higher rate of intergenerational co-residence found in 1865 and 1875. By the close of the century, we find a decrease in intergenerational co-residence among the elderly residing with married sons, and this change occurred irrespective of ethnic affiliation. Thus, just as the inheritance practice may have expressed an ethnic practice in 1865 and 1875, its articulation was less visible in 1900.

The introduction presents a meta-reflection and discussion of the three related articles. The historiography section discusses how the study of family living arrangements over the past 50 years may be viewed from two distinct theoretical and methodological perspectives and indicates how this dissertation is located within these perspectives. The model and theoretical discussion presented in Chapter Two constitute the framework for the analysis of all three articles. A more detailed discussion of the variables and methods used in the articles is presented in Chapter Three. The last section presents a thorough description of the family and household composition in the NTF area during the study period. The main purpose here is to demonstrate that intergenerational co-residence, defined as the elderly (aged +60 years) residing with an own adult child (aged +18 years), should be understood within the context of how the whole society constituted its living arrangements. Thereafter follows a discussion of key concepts such as ageing, family, household, kinship and the representation of these concepts in primarily local history books from the region.

The Conclusion aims to summarize the research objectives, the theoretical and methodological choices and how this dissertation puts forward new knowledge in family history.

1.2. Historiography: Living arrangements in pre-industrial Europe

Family history became a central research field for historians at the beginning of the 1960s. The main focus has been on how family life was organized in pre-industrial times, and how pre-industrial patterns may explain the typical nuclear household formation we see today, especially in north-western Europe and North America. The main agenda of this research was to criticize the theories put forward by sociologists and economists from the nineteenth and the first half of the twentieth century that stated changes in living arrangements resulted from industrialization. This debate is ongoing and mainly structured around the dichotomies of

continuity and change, and the related concepts of independency and dependency or individualism and collectivism.²

1.2.1. Continuity or change

Primarily based on interviews of people in European mining communities between 1833 and 1855, the French economist Frédéric Le Play (1806–1882) stated that urbanization and growing industrialization caused dissolution of what he defined as the stem family system.³ According to Le Play, pre-industrial family systems were formed either as a patriarchal stem family or as an unstable family system, determined by the type of property ownership. In a stem family, only one married child remained with the parents. All other siblings received a dowry and established their own independent households. However, with growing industrialization and urbanization, fewer families had enough property to pass on to the next generation. Consequently, all children left home upon marriage and lived separately from their parents.

In Germany, we find similar ideas put forward by the sociologist and political economist Max Weber (1864–1920). With the rise of modern capitalism, the household lost its function as a production area. According to Weber, both economic and personal bounds started to entail less meaning. Kinship ties, which had earlier represented the framework for decision making about production, education and upbringing, were gradually transferred to public and private institutions.⁴

In 1963, Peter Laslett and John Harrison published an article on the social structure of two seventeenth century English villages.⁵ For one of the villages, Laslett and Harrison found a listing of inhabitants, which allowed them to evaluate household structure. The results were surprising. In Clayworth, only about one in ten households included any kin beyond parents and children. After nine more years, and having now covered household analysis for about one hundred villages, Laslett and his colleagues at the Cambridge Group concluded that

² The NTF-area was preindustrial during the period of study. Accordingly, the concepts pre-industrial/industrial has not been used as analytic concepts in this dissertation. Interesting questions for further research may be in what way increased urbanisation and specialized fishing industry affected the family living arrangements in the area during the twentieth century.

³ C. B. Silver, *Frédéric Le Play on Family, Work, and Social Change*, Chicago 1982: 261.

⁴ M. Weber, *Economy and Society. An Outline of Interpretive Sociology*, in G. Roth and C. Wittich (eds.), New York 1968: 358–359.

⁵ P. Laslett and J. Harrison, Clayworth and Cogenhoe, in H. E. Bell and R. L. Ollard (eds.), *Historical Essays, 1600–1750: Presented to David Ogg*, London 1963.

Clayworth was highly representative and that extended families were in fact quite rare throughout pre-industrial England.⁶

Meanwhile, another Fellow of the British Academy, John Hajnal, published an article that would influence the next decade of work done by Laslett and his colleagues. In 1965, Hajnal revealed a European marriage pattern that he claimed to be unique in the world. By drawing a demarcation line from St. Petersburg to Trieste, running right through central Europe, Hajnal divided the continent into two parts displaying different marriage systems. The western side was typified by a high age of marriage and a high percentage of celibacy, and a relatively high proportion of women never married.⁷ East of this demarcation line, women married quite young.

In a later article, Hajnal expanded his argument by distinguishing between two kinds of household formation systems in pre-industrial times, in which age at marriage was a key factor. North-western Europe—including the British Isles, Scandinavia, the Low Countries, France and the German-speaking countries—were all characterized by high age at marriage for men and women, and corresponded with neolocality that gave a simple household system. Young unmarried people were typically circulating within the households as servants. On the other hand, the eastern side of the demarcation line was characterized by patrilocality, with large and extended households. Women married early and marriage did not involve establishing a new household—instead, it was an expansion of a pre-existing one.⁸

Following Hajnal's logic, Laslett and the Cambridge Group revised their earlier European model and contended that pre-industrial Europe was characterized by four different systems: the north-western, west/central, Mediterranean and eastern regions.⁹ According to Laslett, the nuclear family household dominated only in the north-western region and was to some extent also found in west/central Europe. The key variable in this household system was, in Laslett's view, the nature of post-marital residence, and the system as a whole was maintained by high age at marriage and premarital life-course service.

⁶ P. Laslett, Introduction, in P. Laslett and R. Wall (eds.), *Household and Family in Past Time*, London 1972.

⁷ J. Hajnal, European Marriage Patterns in Perspective, in D. V. Glass and D. E. C. Eversley (eds.), *Population in History*, Chicago 1965: 101–140. In the article, Hajnal referred to this as the European marriage pattern, but his model clearly defines another marriage system to be found in eastern Europe.

⁸ J. Hajnal, Two kinds of preindustrial household formation system, *Population and Development Review*, 1982, 8: 449–494. See also J. Hajnal, Two kinds of preindustrial household formation system, in R. Wall and J. Robin (eds.), *Family Forms in Historic Europe*, Cambridge 1983: 65–104.

⁹ P. Laslett, Characteristics of the western family considered over time, *Journal of Family History*, 1977, 2: 89–116. P. Laslett, Family and household as work group and as kin group: areas of traditional Europe compared, in Robin, Wall and Laslett 1983a: 513–563.

With the purpose of developing a universal tool for classifying and comparing household types, Hammel and Laslett developed a categorization scheme that has been widely used ever since.¹⁰ The household was defined as a “co-resident domestic group” of individuals who shared the same physical space for the purposes of eating, sleeping, taking rest and leisure, growing up, child rearing and procreating.¹¹ Laslett and Hammel made a distinction between four main household types. Each differed in composition around the centre of the household, the conjugal family unit (CFU), which consisted of a married couple with or without children. The nuclear family household (3a, b) was exemplified by one CFU. An extended family (4a–c) household was differentiated from the former in that one relative lived with the CFU. However, this person could not belong to a CFU of her or his own. If two CFUs formed a household, and they were connected by kinship, they were characterized as a multiple family household (5a, b). Hence, the household was defined as a houseful if the kinship ties were absent.

There are two concepts or presumptions that underlay the revised theory: the neolocal rule and the nuclear hardship hypothesis. First, the neolocal rule states that all adult children established their own independent simple households outside the parental home when marrying,¹² although it was not uncommon that widowed people moved into one of their children’s households, and children might have stayed at their parental house for a short period while establishing their own.¹³ Consequently, Laslett argued that nuclear households are found in a neolocal community together with a small group of extended households early in an individual’s headship period. Multiple households would just occasionally appear. Neolocal is the “modern” way of establishing households, but Laslett argued that this way of establishment was the most common in north-western Europe in pre-industrial times.

Second, and as a consequence of the neolocal rule, Laslett argued for the existence of the so-called nuclear hardship. This hypothesis refers in general to “difficulties imposed upon individuals when social rules require them to live in nuclear families.”¹⁴ The neolocal marriage practice is an example of such a rule. Laslett contended that people who were forced by established social rules to live in nuclear families encountered great difficulties when faced

¹⁰ E. A. Hammel and P. Laslett, Comparing household structure over time and between cultures, *Comparative Studies in Society and History*, 1974, 16: 73–109.

¹¹ Laslett 1972: 24–27; Hammel and Laslett 1974: 76.

¹² Laslett 1983a: 526, 531–532.

¹³ P. Laslett, *The World We Have Lost: Further Explored*, London 1983b: 92–93.

¹⁴ P. Laslett, Family, kinship, and collectivity as systems of support in pre-industrial Europe: a consideration of the “nuclear-hardship” hypothesis, *Continuity and Change*, 1988, 3: 153.

with circumstances such as widowhood, “unemployment, sickness or senility”, because the household was too small to absorb these blows. As a result, they sought support from their kin or, in the absence of kin, from friends, neighbours or institutions in the community at large.¹⁵

Thus, elderly parents unable to maintain their own independent households might join the households of their children, but only when invited, never by right.¹⁶ Such dependent parents were widowed in nearly all cases, and widows constituted the majority.¹⁷ The low frequency of two kin-related CFUs forming a multiple household formation was, according to Laslett, only in extremis, and might be looked upon as mitigation against nuclear hardship.¹⁸ Victims of nuclear hardship were seen in persons registered as solitary or in no-family households.

Critique of the work by Laslett and his colleagues followed, the most cited article being by Luz Berkner in 1972. According to Berkner, Laslett’s well-known conclusion that “the present state of evidence forces us to assume that its [family] organization was always and invariably nuclear”¹⁹ was only a result of the characteristics of the source material and of Laslett’s methodology.²⁰ The static picture given by population listings did not capture the different phases that individuals went through in the course of a lifespan. According to Berkner, a single family went through all the different household categories in Laslett’s scheme, determined by demographic events such as marriage, birth and death.

Consequently, Berkner stated that the family cycle had the characteristics of a stem structure at an earlier stage, and that the different categories introduced by Hammel and Laslett could be interpreted as a common development in the cycle.

¹⁵ Ibid: 153.

¹⁶ Ibid: 155.

¹⁷ Ibid: 164. R. M. Smith, Some issues concerning families and their property in rural England, in R. M. Smith (ed.), *Land, Kinship and Lifecycle*, Cambridge, 1984: 1–86; D. I. Kertzer, D. P. Hogan and N. Karweit, Kinship beyond the household in a nineteenth-century Italian town, *Continuity and Change*, 1992, 7: 103–121.

¹⁸ Laslett 1988: 155.

¹⁹ Laslett and Wall 1972: x, 73.

²⁰ L. Berkner, The stem family and the developmental cycle of the peasant household: an eighteenth century Austrian example, *American Historical Review*, 1972, 77: 398–418; L. Berkner, The use and misuse of census data for the historical analysis of family structure, *Journal of Interdisciplinary History*, 1975, 5: 721–738.

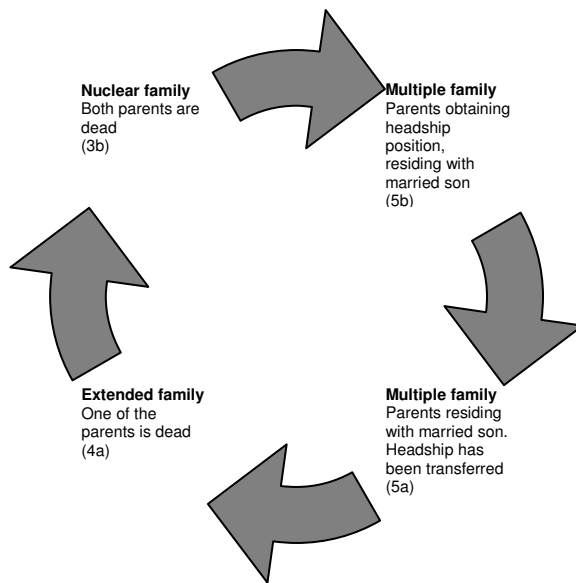


Figure 1: Berkner's family life cycle adapted from Hammel and Laslett's classification of households (shown in brackets).

Figure 1 shows the family life cycle going from the phase of the *multiple* family, where the parents resided with their married son and were still in the headship position, to a phase where the parental generation transferred the farm to the son. The next phase started when one of the parents died, the so-called *extended* family. When both parents were dead, the married son and his family constituted a *nuclear* family. When the new generation married, the circle closed with a *multiple* family type 5b. Thus, every phase became part of a stem family process. Consequently, Berkner pointed out that the stem family was not a particular household type, as suggested by the Cambridge Group, but was a process or a cycle.²¹

Age is also a crucial variable in understanding family and household arrangements. There is no doubt that a nuclear household tells two different stories when one is headed by a 65-year-old man and the other by a 30-year-old man—the categorization scheme does not take this issue into consideration. In addition, any possible bias that may occur when the scheme is operationalized as a categorization of an individual's relations to the head of the household must also be clarified. Applied to a small sample of the NTF area, preliminary studies show that the vast majority (78 per cent) of households in Skjervøy parish in 1865 were nuclear. However, only 39 per cent of these households consisted of one conjugal unit. The remainder consisted of one conjugal unit in addition to either servants, boarders or visitors (most of them paupers) registered in the household. The potential under-registration

²¹ Berkner 1972: 398–418.

of kinship relations to the head of the household amongst the additional, presumably non-related group may be considered a critical bias.

2. Theoretical framework

The neolocal rule and the nuclear hardship hypothesis imply assumptions of “loose” kin relations and organization of kinsfolk that were not family-centred, and in the following decades, researchers found that the Hajnal line and the four-type schematic domestic group household pattern proposed by Laslett were full of exceptions. Their complexity launched new ways of studying the nature of domestic groups; yet in all fairness, one can conclude that the proposal of a single-factor model that puts forward an economic, cultural, political, demographic or ecological explanation would serve to undermine earlier research.

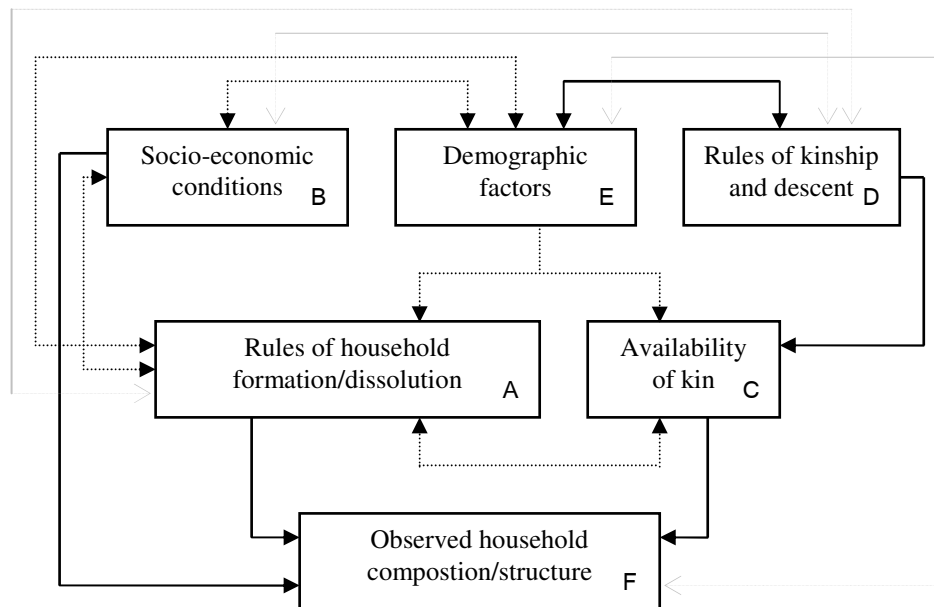


Figure 2: Kinship and households: Constraints and observed configurations: solid arrows show direct effects; broken lines represent feedback and possible associations. Source: Susan De Vos and Alberto Palloni, 1989. Suggestions for improvement to the model are shown in light grey.

De Vos and Palloni²² have developed a model that utilizes possible key features affecting family and household formations, which will serve as a framework for the

²² S. De Vos and A. Palloni, Formal models and methods for the analysis of kinship and household organization, *Population Index*, 1989, 55: 174–198.

theoretical discussion and theoretical assumptions underlying this dissertation.²³ Some possible changes to the model will also be discussed.

The solid arrows in Figure 2 show direct effects, whereas the broken lines represent feedback and possible associations between various objects. If we start at the bottom, we find the object of study, the actual household structure, its composition and size (F). Rules of household formation (A), socio-economic conditions (B) and the supply of kin (C) are determinants affecting household structure. Each of these features may also influence each other (broken lines), but not necessarily at the same time. In the upper-right section of Figure 2, we find demographic factors and rules of kinship formation (D and E). These affect the supply of kin directly, thereby exerting influence on the household organization.

The availability of kin members determines the range of potential living arrangements directly affected by demographic factors and kinship rules, whereas rules of kin formation determine who is appropriate for a marriage relationship (controlled by e.g. incest taboos and rules of polygamy). It also determines which of the consanguineal relatives is more or less important as a potential co-resident in a household. Common forms of descent are patrilineal,²⁴ matrilineal and bilinear, when both patrilineal and matrilineal descent principles are combined.

The connection between rules of kinship and rules of household formation (not indicated in the original model by De Vos and Palloni) is demonstrated by the Norwegian allodium and residing (åsetes) rights discussed in Articles 2 and 3. The allodium law gave the heir a special right to own the estate based on kinship ownership over a certain period. The residing (åsetes) right gave priority to the oldest allodium heir, in most cases the oldest brother, when the main residence was transferred to the next generation. As an inheritance system, the allodium and residing (åsetes) rights were an effective protection of the family property, and it provided feedback on the potential fissioning and fusion of the entire household, as well as exerting an influence on entrance into a primary household.²⁵

²³ How census instructions have defined family and household is discussed in the articles. See Article Two: 12–14; Article Three: 3. For additional reading, see A. Solli, *Livsløp–familie–samfunn: Endring av familiestrukturar i Norge på 1800-talet*, Ph.D. dissertation University of Bergen, 2003: 35–42.

²⁴ Both males and females belong to their father's kin group. However, only males pass on their family identity to their children (unilineal). A woman's children are members of her husband's patrilineal line.

²⁵ In most cases, coheirs received their legacy in terms of money claims on the heir, secured by a mortgage right on the estate. On the other hand, in a recent study, Lars I. Hansen has shown that this rent ownership system (skyldie-systemet) resulted in a complicated network of income sources, obligations and reciprocal relationships, thus indicating a complex practice produced by the allodium law and residing (åsetes) right. L. I. Hansen, Freeholding peasants in Telemark between strategies of in-marriage and joint ownership, in J. R.

Rules of household formation, socio-economic conditions and demographic factors will be discussed in detail in the following sections.

2.1. Rules of household formation

Household formation rules (A) determine its members' entrance into and exit out of households, and the potential fissioning and fusion of entire households. According to De Vos and Palloni, these rules are social norms or culturally determined preferences, such as marriage and remarriage, the younger generation leaving home, entering a primary household (e.g. the married children or the elderly parents), adoption or foster care, and entrance and exit of persons not related to the head of the household. Post-marital residence rules are given as one example of cultural values that structure the household formation, and refer to rules that specify where a couple will live after marriage. The most common systems are neo-, patri- and matrilocal residence. Neolocal residence refers to a system where each spouse leaves his or her parental home and establishes a new household. Patrilocal residence specifies that upon a marriage, a son brings his wife to his father's household, a principle associated with the stem family system described earlier. When a daughter remains in her mother's household upon marriage, it is defined as matrilocal residence.

This dissertation argues that one possible way to assess household formation rules when working with cross-sectional data is to focus on the headship position in the living arrangements between elderly parents and their own adult children. It is assumed that if the headship position were in the hands of the elderly, the household formation rule would mirror either a child staying in his/her parents' household upon adulthood, or an adult child's entrance into the parental home. The adult child's marital status will determine if the living arrangement is characterized as a stem family system.

2.1.1. Culture

By emphasizing the influence of cultural preferences on co-residence behaviour, and the common knowledge that this concept is complex, it is clear that we should take a closer look at the definition of culture and how it has been operationalized by family historians.

Geertz outlined culture as "a system of inherited conceptions expressed in symbolic forms by means of which people communicate, perpetuate, and develop their knowledge

Myking, G. Thoma and T. Iversen (eds.), *Peasant Relations to Lords and Government. Scandinavia and the Alpine region 1000–1750*, Trondheim 2007: 267–269.

about and attitudes toward life”.²⁶ Culture is also in a constant state of change. As a semiotic concept, “culture is not a power, something to which social events, behaviours, institutions, or processes can causally be attributed; it is a context, something within which [interworked systems of construable signs] can be intelligibly—that is, thickly—described [...]. Understanding a people’s culture exposes their *normalness* without reducing their *particularity*.”²⁷

Geertz views culture comprehensively and approaches the study of human societies with an assumption that values, behaviours, and ideologies are different from people to people. This way of understanding culture is also emphasized in Thomas Hylland Eriksen’s definition: “Common culture is what makes communication possible”.²⁸

In a review of household history and sociological theory, David Kertzer has proposed three main factors that affect household organization—and culture is one of them.²⁹ According to Kertzer, we find that household arrangements “reflect cultural norms regarding post-marital residence and the principles governing household fissioning.”³⁰ By referring to Laslett (1983) and Reher (1988), Kertzer states that the connection between political economy and household compositions is mediated by cultural norms and these may have independent influence, for example, households that are not determined by the logic of a productive unit—instead they are free to take on “something of the form and structure normative to the society that surrounds them.”³¹ Kertzer argues further that some household systems may have a kind of cultural momentum.³² This is exemplified with the case of stem family norms, which are considered strongly associated with peasant agriculture. Despite this, Kertzer maintains that studies have shown that people kept the stem family system as a resource to adapt to the demands of a changed economic situation. Thus, culture is often viewed as a mediating factor that affects demography and economy directly or indirectly.

Culture has been recognized, by family historians in general, in the construction of cultural boundaries, often contextualized in destroying myths and perhaps even in building up new myths. The following passage from Hareven perfectly describes the mood of research in the 1970s and 1980s.

²⁶ C. Geertz, *The Interpretation of Cultures: Selected Essays*, New York 1973: 89; Geertz 1973: 3–30.

²⁷ *Ibid*: 14.

²⁸ T. Hylland Eriksen, *Small Places, Large Issues: An Introduction to Social and Cultural Anthropology*, Oslo 2001: 60.

²⁹ D. I. Kertzer, Household history and sociological theory, *Annual Review of Sociology*, 1991, 17: 155–179.

³⁰ *Ibid*: 172.

³¹ *Ibid*: 174.

³² *Ibid*: 174.

“A major myth about the past is that a golden age once existed during which members of the older generation co-resided with their children and other kin, and elderly people were secure in receiving supports from their family members. The myth further assumes that industrialization and urbanization eroded kinship ties and diminished generational supports. Historical research over the past three decades ... has helped challenge these myths. In reality, the dominant form of household structure in Western Europe and the United States in the preindustrial period, as well as following industrialization, was nuclear: co-residence of three generations was not the dominant pattern in Western Europe and in the United States. Three generations rarely resided in the same household ... Co-residence was more prevalent, however, in later life, primarily when elderly parents were too frail to maintain a separate residence.”³³

Indeed, family historians have argued that Europe was separated into two (later extended to four) different household systems. The Hajnal line described earlier is another attempt to construct cultural boundaries.

Consequently, for the past 20–30 years, family historians have constructed their research with the purpose of either confirming or rejecting the existence of these cultural boundaries, and it is reasonable to say that the result looks more like an impressionistic patchwork quilt than a homogeneous sector map, with few exceptions to the rule. An empirical consensus is that this diversity, visible in both western and eastern Europe, was associated in part with regional differences in political and economic arrangements and ecological conditions.³⁴

Beatrice Moring may have captured the discourse when she stated: “The amount of regional variation found in the Nordic countries demonstrates that the reasons for variation are not necessarily cultural ... [during the nineteenth century] societies were being transformed economically and socially ... and if a locality shows change over time it is not *cultural* change that is being observed but rather the response of individuals and families to economic and social transformations.”³⁵ Obviously, Moring rejects culture as an explanatory variable because the diversity found does not fit the cultural boundaries earlier defined by

³³ T. K. Hareven, Introduction: Aging and generational relations over the life course, in T. K. Hareven (eds.), *Aging and Generational Relations over the Life Course: A Historical and Cross-Cultural Perspective*, Berlin 1996: 1–2.

³⁴ M. Mitterauer and A. Kagan, Russian and central European family structures: a comparative view, *Journal of Family History*, 1982, 7: 103–131.

³⁵ B. Moring, Nordic family patterns and the north-west European household system, *Continuity and Change*, 2003, 18: 103.

Hajnal and Laslett. On the other hand, in agreement with Moring, it is indeed questionable to what degree culture can explain the nineteenth century transformation. The point is, however, that it may be too narrow to operationalize culture as a geographical line or boundary.

Is it possible that the discourse in family history from the mid-1960s onwards, highly affected by Hajnal and Laslett, led to a narrow definition of culture and that culture for this reason has lost its significance as a way to understand family and household arrangements in the past?

2.1.2. The connection between culture and ethnicity

Articles Two and Three assess the effects of ethnic affiliation on intergenerational co-residence. If we agree that rules of post-marital residence and the principles regarding household fissioning are defined by cultural norms, we have to evaluate to what extent this cultural expression is ethnically determined. Thus, an obvious question that needs to be clarified is the connection between culture and ethnicity.

According to Niemi and Hansen, there are two opposite traditions of how to view ethnic differences within social science.³⁶ The first is an *essentialist* or *substantial* understanding, closely linked to culture. This line emphasizes the substantial difference between different cultural complexes displayed by the groups. Such a view will, according to Niemi and Hansen, limit itself to displaying cultural differences confined by each group's self-perception, thus emphasizing objective phenomena of fundamental art.

The second position is *relational* and views ethnicity as a social phenomenon, that is, how ethnic groups categorize and define themselves in meeting others. Ethnic differences are thus regarded as a result of communication between different groups, where cultural characteristics are emphasized, maintained and changed depending upon the changing needs for consolidation within the group, as well as establishing boundaries with other groups. Some cultural characteristics become important as symbols in demonstrating identity and unity within the group, at the same time as the symbols define the contrasts in meeting other groups and in the identification of others. Such symbols may be, for example, language, clothes, architectural traditions or economic niches.

Compared with the essentialist view, the relational approach emphasizes a dynamic aspect where ethnicity may change in time and space. It opens up the concept of choice and the possibility to change ethnic affiliation. The main criticism of the essentialist approach is a

³⁶ E. Niemi and L. I. Hansen, Etnisitet, in S. Imsen and H. Winge (eds.), *Historisk Leksikon*, 1999: 102.

lack of this dynamic aspect, both in time and space. According to an essentialist understanding, culture is viewed as something uniform and static, an almost determined complex of objectified cultural expressions. On the other hand, the relational approach has been criticized for neglecting culture and the cultural complexity within an ethnic group.³⁷

As mentioned earlier, culture is defined as “what makes communication possible”. Common language, common experience, common knowledge and common values are important elements in a cultural community. Furthermore, it is generally recognized that ethnic groups share a common culture, and that their culture differs decisively from that of other ethnic groups. Thus, cultural commonness shapes the baseline for group feeling.

In most cases, there is a correlation between ethnic boundaries and cultural differences; cultural borders follow ethnic lines, as is often the case with language and religion. When groups determine what makes them different from other groups, it is commonly assumed that they call attention to distinctive features allegedly not shared with others. However, according to Hylland-Eriksen, it might also be that ethnic identity is built upon a conception or an idea of cultural diversity, but the reality is frequently more complicated. Take language as an example. There are Sámi who speak English better than Sámi and who have Norwegian as a first language. The same is true for other cultural values and practices—variations within an ethnic group do exist and commonness exists across ethnic boundaries.³⁸

What this means is that there are quite evident ethnic boundaries without any large cultural variations, and there are also cultural variations without any ethnic boundaries. In other words, it is not the objective cultural differences that define ethnic identity, but the idea that such differences exist and are understood as important.³⁹ Thus, cultural differences are connected in varying degrees to ethnic differences, determined by their context. Societies with deep cultural differences between social classes, or between regions, such as between urban and rural areas, serve as examples.

2.1.3. Cultural identification: Individualism or collectivism— independency or dependency?

Collectivism and individualism are concepts used by sociologists to describe attitudes, beliefs and behaviours that reflect family interdependence/independence, attachment/separation,

³⁷ Ibid.

³⁸ T. Hylland Eriksen, Identitet, i T. Hylland Eriksen (eds.), *Flerkulturell Forståelse*, Oslo 2001: 48.

³⁹ Ibid: 49.

commitment/autonomy and hierarchy/egalitarianism.⁴⁰ An increase in living alone is thus explained by an adoption of values that emphasize individualism over family obligations. Pyke and Bengtson categorize family types into “individualist”, emphasizing values such as independence, loose kinship ties and self-sufficiency, while “collectivist” emphasizes kinship ties and familial responsibilities.⁴¹ Although living alone, as compared with co-residing with kin, does not necessarily denote a lesser degree of kinship contact, it does imply different relationships and ties.⁴²

Another cultural argument is related to the economic idea of privacy as a normal good. This implies a taste or preference for privacy that may be socially contingent upon and subject to change over time. In a review of cultural and normative effects on households, Elman and Uhlenberg describe the rise in the nineteenth century in the United States of the idea that the household should be a private, intimate setting with a few close kin, rather than a large collection of family, servants, boarders and lodgers.⁴³

2.1.4. Ethnicity and filial responsibility

One approach to understanding diversity in living arrangements is to focus on how expectations and attitudes towards filial responsibility⁴⁴ are defined as specific behaviour; Rossi and Rossi’s definition of family-based norms serves as a useful example. “Kin norms are culturally defined rights and duties that specify the ways in which any pair of kin related persons is expected to behave toward each other, ranging from prescribed terms of address through rights of access, *to obligations to exchange and provide support* [italics added]”.⁴⁵

Richard Wall has argued that family in the past only played a minor role in securing the financial well-being of elderly relatives. The responsibility for the elderly was to be shared between the state, the family and other charitably minded individuals.⁴⁶ As put forward by Richard Smith (1984), the reason for this is the concurrence in time of old parents in need

⁴⁰ K. D. Pyke and V. L. Bengtson, Caring more or less: individualistic and collectivist systems of family eldercare, *Journal of Marriage and Family*, 1996, 58: 382.

⁴¹ Ibid.

⁴² E. Shanas, *Old People in Three Industrial Societies*, New York 1968.

⁴³ C. Elman and P. Uhlenberg, Co-residence in the early twentieth century: elderly women in the United States and their children, *Population Studies*, 1995, 49: 501–517.

⁴⁴ R. Angel and M. Tienda, Determinants of extended household structure: cultural pattern or economic need?, *The American Journal of Sociology*, 1982, 87: 1360–1383.

⁴⁵ A. S. Rossi and P. H. Rossi, *Of Human Bonding: Parent-child Relations across the Life Course*, New York 1990: 155–156.

⁴⁶ R. Wall, Relationships between the generations in British families past and present, in C. Marsh and S. Aber, (eds.), *Families and Households: Divisions and Change*, London 1992: 84.

of support with their adult children overburdened in duties related to the upbringing of their own children.

Peter Laslett concludes that “the co-residential family group is very difficult to adapt to all the eventualities of the individual life course, and providing for old age seems to be beyond its capacities...”⁴⁷ According to Laslett, one eventuality that the elderly most likely would have preferred was intimacy at a distance, or at least at some physical remove.⁴⁸ Thus, the rise in public and charitable institutions in pre-industrial Europe compensated for the inadequacy of family support for the elderly, and community intervention was the norm long before the advent of the welfare state.

On the other hand, Steven Ruggles finds that the apparent continuity argued by Wall and Laslett is merely an artefact of demographic constraints.⁴⁹ Instead, Ruggles argues that family living arrangements should be studied from the perspective of the elderly. Applying such an approach, his results show an increase in the number of elderly people living with a spouse only or alone, which is explained by a change from the collective family form to the rise of individualism in the twentieth century.⁵⁰

Several studies, most of them dealing with the present time, have pointed out that ethnicity (or race)⁵¹ has both direct and indirect effects on living arrangements.⁵²

With regard to elderly people’s living arrangements, contemporary results suggest a stronger association for minorities than for whites in the United States.⁵³ Going back in time, Ruggles has shown that non-white households were less nuclear and more often extended compared with white households, and that the change throughout the late nineteenth century

⁴⁷ P. Laslett, *A Fresh Map of Life: The emergence of the Third Age*, Cambridge 1991: 125. This view is coherent with Laslett’s earlier economic hardship hypothesis.

⁴⁸ Ibid.

⁴⁹ S. Ruggles, The transformation of American family structure, *American Historical Review*, 1994, 99: 115.

⁵⁰ Ibid: 127.

⁵¹ Beginning with the 1850 census, the enumerator registered “colour” with the following three options: B for “black” persons; leave space blank if person was “white”; M if person was mulatto. Throughout the nineteenth century, a gradually more complex enumeration was conducted. It is not until 1910 that we find race included in the enumeration. In general, it is assumed that the categories used prior to 1910 reflected social usage rather than race biologically or genetically, which is the definition today.

<http://www.census.gov/population/www/documentation/twps0056/twps0056.html#gd>, accessed September 7, 2010.

⁵² Angel and Tienda 1982; J. A Burr and E. Mutchler, The living arrangements of unmarried elderly Hispanic females, *Demography*, 1992, 29: 93–112; G. Spitze, and J. Logan, Sons, daughters, and intergenerational social support, *Journal of Marriage and the Family*, 1990, 52: 420–430; J. Coombs, Frontier patterns of marriage, family and ethnicity: cultural Wisconsin in the 1880s, *Journal of Family History*, 1993, 18: 265–282; M. King and S. Ruggles, American immigration, fertility, and race suicide at the turn of the century, *Journal of Interdisciplinary History*, 1990, 20: 347–369.

⁵³ Angel and Tienda 1982.

and up until 1980 was smaller among non-whites than whites.⁵⁴ In contrast, Ruggles later reported that elderly blacks were considerably less likely to reside with their children in the nineteenth century compared with whites.⁵⁵ Ruggles does not comment on these evidently contradictory results; however, the use of different methods in these two studies may be the reason for the differing results. The 1994 study uses a version of the Hammel and Laslett categorization schema and gives proportional results of type of household, e.g. solitary, nuclear or extended. In 2003, Ruggles measured the percentage of elderly people residing with an own adult child, thus avoiding issues such as different life expectancy, fertility and mortality. Therefore, it is more likely that the findings of the 2003 study are more reliable than conclusions drawn from the earlier 1994 study.

A crucial question that needs to be addressed is if ethnic differences were present after controlling for factors we expect to be conditional on elderly people's living arrangements. A positive association between intergenerational filial responsibility and ethnicity is found among blacks and Hispanics in the United States. The findings show that older blacks and Hispanics are more likely than older non-Hispanic whites to share living arrangements.⁵⁶ One explanation for this may be the fact that blacks have built up an extensive support network because of their long struggle for economic and social equality, while mechanisms related to immigration may explain why elderly Hispanics co-reside to a greater extent with an own adult child.⁵⁷ However, the impacts of race on the probability of residing with an own adult child tend to decline to a level of statistical insignificance when health status, economic well-being, and family characteristics are taken into account.⁵⁸

These diverse findings suggest that the factors that determine living arrangements are highly complex and there is no clear consensus regarding ethnic or racial differences in expectations towards filial responsibility.

⁵⁴ Ruggles 1994.

⁵⁵ S. Ruggles, Multigenerational families in nineteenth-century America, *Continuity and Change*, 2003, 18: 142.

⁵⁶ The findings are irrespective of whether the statements are phrased in terms of the adult child providing a home for the older parent or vice versa.

⁵⁷ J. A. Burr and J. E. Mutchler, Race and ethnic variation in norms of filial responsibility among older persons, *Journal of Marriage and Family*, 1999, 61: 676.

⁵⁸ Ibid: 684. On the other hand, other studies have shown quite the opposite, namely, that ethnicity does play a role after controlling for socio-economic status and other vital variables. The findings of a contemporary study of Florida by Lee, Peek and Coward (1998) show that, after controlling for socio-demographic characteristics such as age, sex, rural-urban location of residence, marital status, household composition, education, poverty status and employment status, elderly blacks expected more help from their adult children than similarly aged whites. G. R. Lee, C. W. Peek and R. T. Coward, Race differences in filial responsibility expectations among older parents, *Journal of Marriage and Family*, 1998: 404-412.

2.2. Socio-economic conditions

Socio-economic conditions (B in Figure 2) that directly affect household organization are defined by De Vos and Palloni as availability and cost of household relative to income or wealth, and the economic role of the household as a unit of production and/or consumption.⁵⁹ The latter condition includes a demand for household labour that might expand to co-residence with extended kin or adult children. From this viewpoint, when the household is a locus of production, its characteristics are moulded by productive forces. As an economic unit, the household has to respond to economic pressures in recruiting its members, or else the corporation will fold.

There are a number of examples of households-as-labour-units. Norway was clearly characterized in the eighteenth and nineteenth centuries by the different household organizations formed by farmers and cottars and fisherman households.⁶⁰ A parallel example can be found in mid-nineteenth century Sardinia. In the cereal-producing villages where privately owned land dominated, a nuclear family system prevailed. In the pastoral economy, mainly in the mountain areas, the nuclearity was organized around uxorial post-marital residence. This means that the newly-weds established their own household in the bride's natal home or, more commonly, a cluster of households emerged, organized around a group of married sisters and their mother. According to Oppo, the explanation for this pattern is that women remained in the villages to tend the family's local holdings, while the men spent long periods away in the mountains herding the flocks.⁶¹ The last example also demonstrates the feedback system between socio-economic conditions and kinship rules, which is not indicated in the original model by De Vos and Palloni.

Economic models have been used traditionally to explain the historical transformation of households from a productive unit into a unit of common consumption. Such models also propose the explanation that rising income levels have enabled the elderly to “purchase” more privacy in the form of living alone. In this, we find an assumption that privacy has always

⁵⁹ De Vos and Palloni 1989: 177.

⁶⁰ A. Solli, *Individ–hushald–samfunn: fisk og jord som grunnlag for hushaldsetableringa i Norge kring år, 1800*, Master's thesis, University of Bergen 1995; S. Sogner, *Familie, husstand og befolkningsutvikling. Heimen 1978*, XVII: 708; S. Sogner, *Far sjøl i stua og familien hans: trekk fra norsk familiehistorie før og nå*, Oslo 1990: 36–39; H. H. Bull, *Hushold og generasjonsskifter i Rendalen 1762–1900: Ættesamfunnets siste skanse?* Master's thesis, University of Oslo, 2000: 97–99; E. Fure, *Gamle i flergenerasjonsfamilier—en seiglivet myte?*, *Historisk Tidsskrift*, 1986, 1: 35; S. Dyrvik, *Farmers at sea: a study of fishermen in North Norway, 1801–1920*, *Journal of Family History*, 1993, 18: 341–356.

⁶¹ A. Oppo, “Where there's no woman, there's no home”: profile of the agro-pastoral family in nineteenth century Sardinia, *Journal of Family History*, 1990, 15: 483–502.

been a desired good. Old and young people have always wanted to live separately, but in the past they simply did not have the resources to attain this goal.⁶²

This dissertation emphasizes the point of view that socio-economic conditions should be viewed in a feedback relationship to other key features described in the model. This emphasizes the idea that the family institution was not a passive or residual object, solely determined by the economic conditions in the society.⁶³

2.2.1. Political economy

Political economy captures the essence of how political institutions (e.g. state/nation) and the economic system influenced each other.⁶⁴

Political economic pressures may explain much of the diversity of household systems found in pre-industrial Europe. In Iceland, for example, laws restricting the movement of poor families to the richer coastal regions hindered the establishment of independent households by poor young adults. Instead, they remained longer in their parental homes, and hence, complex family households were more common. When the restrictions were lifted later in the nineteenth century, extended households declined.⁶⁵ Another example is found in Finland and eastern Sweden where laws restricting fishing rights and property division resulted in large and complex households of property. However, after the law was abolished at the beginning of the nineteenth century, the proportion of complex households declined.⁶⁶

The Russian serf society in the late eighteenth and early nineteenth century is yet another example where household formations were affected by special legal constraints. As a consequence of landlord pressure, marriage did not involve the establishment of an independent household. Serfs not only possessed no rights to the land, but also were often regarded as property themselves.⁶⁷ However, the assumption that serfdom equals complex

⁶² See further theoretical discussion in section 2.1.3. Cultural identification: Individualism or collectivism— independency or dependency?

⁶³ A point of view that fits into Marxist family discourse. An interesting discussion of this view is in Solli 2003: 11–13.

⁶⁴ Thomas Malthus, Adam Smith and Karl Marx were some of the earliest exponents of political economy. Today, political economy may broadly refer to an interdisciplinary approach that applies economic methods to analyse how political outcomes and institutions affect economic policy or vice versa.

⁶⁵ G. Gunnlaugsson, *Family and Household in Iceland 1801–1930: Studies in the Relationship between Demographic and Socio-economic Development, Social Legislation and Family and Household Structures*, Uppsala 1988.

⁶⁶ B. Moring, *Skärgårdsbor. Hushåll, familj och demografi i finländsk kustbygd på 1600-, 1700- och 1800-talen*, Helsingfors 1994. See also J. Rogers, Introduction, *Journal of Family History*, 1993, 18: 283–290 for a Nordic context.

⁶⁷ Czap 1983; Wetherell and Plakans 1998. Plakan's study refers to Pinkenhof in the Russian Baltic province of Livland. C. Wetherell and A. Plakans, Intergenerational transfers of headships over the life course in an eastern European peasant community, 1782–1850, *The History of the Family*, 1998: 334. Czap's study refers to P. Czap,

household formations has been proved too simplistic by Soltzyek. In a study of eastern Europe, his findings show that in areas with stringent serfdom, like in western Poland, the anticipated large collectives of co-resident kin were almost non-existent. On the contrary, in areas where landlords made less effort to manage the peasant labour force, complex families were relatively common. The reason for these quite surprising results is found in the landlords' economic interests. A demesne system existed in western Poland and to benefit from this fully, the landlords wished to have as many peasant families as possible ready to perform duties.⁶⁸

As peasants owned or disposed of their own farmland, their household organization was directly affected by legal rules governing inheritance, and they were vulnerable to changes in inheritance laws that they themselves were in no position to influence.

In general, stem families were often found in places with impartible inheritance, where the heir, often the eldest son, ensured the continuation of the farm or the business. On the other hand, nuclear family households were connected to partible inheritance practices, although the timing of transference of authority over the property might have differed. Accordingly, evidence suggests that some stem system traditions gave the heir authority over the household upon marriage, while the older generation kept the headship until death in other traditions.⁶⁹

Another example is how the French Civil Code dating from 1804 influenced the legal systems of other countries. This law banned impartible inheritance; thus, one would expect to find a high frequency of nuclear household formations in countries that introduced partible inheritance as a statutory provision. However, not all segments of the rural population had land to transfer to their children. In central and northern Italy, household formation was characterized by patrilocal residence that gave a joint family system, which has been documented as far back as the ninth century.⁷⁰ Although the new Civil Code was introduced

A large family: the peasant's greatest wealth: serf households in Mishino, Russia, 1814–1858, in Wall and Laslett 1983: 105–151.

⁶⁸ M. Soltzysek, Three kinds of preindustrial household formation system in historical Eastern Europe, *History of the Family*, 2008, 13: 233.

⁶⁹ Wetherell and Plakans 1998: 335; A. Collomp, From stem family to nuclear family: changes in the co-resident domestic group in Haute Provence between the end of the eighteenth and the middle of the nineteenth centuries, *Continuity and Change*, 1988, 3: 65–82; A. B. Sørensen, Old age, retirement, and inheritance, in D. I. Kertzer and K. W. Schaie (eds.), *Age Structuring in Comparative Perspective*, New Jersey 1989: 197–214. See also J. Goody, Introduction, in J. Goody, J. Thirsk and E. P. Thompson (eds.), *Family and Inheritance. Rural Society in Western Europe 1200–1800*, Cambridge 1978, and Goody's chapter 'Inheritance, Property and Women: Some comparative considerations' in the same book, which demonstrate different heirship strategies.

⁷⁰ D. I. Kertzer, The joint family household revisited: demographic constraints and household complexity in the European past, *Journal of Family History*, 1989: 4.

in 1865, the joint family system dominated well into the twentieth century in central and northern Italy. According to Kertzer, the main reason for this was rooted in the political economy of share-cropping and not in the rules of inheritance.⁷¹ In the share-cropping belt, urban-based elite owned the land, and farming contracts were renewed each year with individual share-cropping households. The produce was divided evenly and thus it was in the landowner's interest to keep the number of adult labourers high. This interest, combined with the constant threat that landowners could reject contracts, made it feasible for labourers to join the workforce.

The complex mechanism of the interplay between economy and politics has been used to explain the increasing nuclear family arrangements that occurred during the latter part of the nineteenth century in the coastal area of northern Sweden. Impartible inheritance (bördsrett) was banned in the mid-nineteenth century.⁷² However, parallel to this change, Egerbladh argued that more intensive agriculture as a result of technical inventions, together with the increased possibility of working in other occupations, also clearly contributed to the increase in nuclear family arrangements.⁷³ Households that maintained their complexity did so either because of a shortage of land for new farming households or because of the conservation of traditional farming. Egerbladh contended that it was a weakening of kin obligations in the 1800s. Less value was placed on selling to kin, as indicated by the increased turnover of owners, particularly non-relatives. Separate housing for retired parents after a transfer in ownership suggests the same idea.⁷⁴

As discussed in Articles Two and Three, several studies have emphasized the connection between land ownership and extended family household formations in the Norwegian pre-industrial context. The residing (åsetes) right played a crucial role in maintaining a stem family system in Norway, however strongly associated it was with a sustenance economy. On the other hand, as this dissertation proposes, land ownership expressed different meanings according to ethnic affiliation. Thus, to address questions related to how the political institutions (e.g. state/nation) and the economic systems influenced each other, we need to assess their ethnic functions.

⁷¹ Ibid.

⁷² In 1857 (towns) and 1863 (country).

⁷³ I. Egerbladh, From complex to simple family households: peasant households in northern coastal Sweden 1700–1900, *Journal of Family History*, 1989, 14: 260.

⁷⁴ Ibid: 261.

2.3. Demographic factors

Demographic factors (E in Figure 2) include basic factors such as fertility, mortality, nuptiality and migration. Rates of fertility affect how many of each type of kin are born, and rates of mortality affect the chances that the lifespans of kin will overlap. Marriage constituted the foundation of the pre-industrial family and a change in the number of single adults and divorce rates affected not only nuptiality but also the household and family arrangements.⁷⁵

According to De Vos and Palloni, there is no direct influence of demographic factors on observed household composition/structure; the path from E to F is only subject to constraints imposed by C, D, A and B. However, we know from previous research that demographic factors affect the distribution of characteristics such as age, sex and marital status in a given population, and that the rules of household formation and dissolution vary with these characteristics. Thus, overall change in household composition may occur when changing demographic factors alter the distribution of characteristics in the population.⁷⁶

Marion Levy was probably the first to recognize that under high mortality conditions, extended families cannot be the norm. It might have been the ideal, but in societies in which most people died before their grandchildren were born, or shortly thereafter, living with elderly kin was rarely the case.⁷⁷ However, when elderly parents did survive, they usually resided with only one adult child. Hence, under high fertility conditions, many adults did not reside with their parents because their parents were already living with one of their brothers or sisters.⁷⁸ Thus, it has been argued that the low percentage of extended or multiple family households found in studies that apply the categorization scheme designed by Hammel and Laslett had little to do with residential preferences.⁷⁹

Hans Christian Johansen has challenged the view that elderly parents, if they survived, commonly resided with an own adult child. By comparing the number of extended family households in the 1801 Danish census with a demographic calculation of how many such

⁷⁵ J. Kok and K. Mandemakers, A life-course approach to co-residence in the Netherlands, 1850–1940, *Continuity and Change*, 2010, 25: 288–289.

⁷⁶ A similar point has been made by G. E. Stockmayer, *The Demographic Foundations of Change in U.S. Households in the Twentieth Century*, Ph.D. dissertation, University of California, 2004: 10.

⁷⁷ M. J. Levy, Aspects of the analysis of family structure, in A. J. Coale, L. A. Fallers, M. J. Levy, D. M. Schneider, and S. S. Tomkins (eds.), *Aspects of the Analysis of Family Structure*, Princeton, 1965: 1–63. As mentioned earlier, the effect of high mortality among the elderly upon living arrangements between the older and younger generations was one of the central criticisms that Berkner (1975) made of Laslett's work.

⁷⁸ There are a number of approaches to measure demographic constraints on family arrangements. This study is based on the research by S. Ruggles (1987, 1993, 1994, 1996, 2003, 2007).

⁷⁹ See, for example, Ruggles 1994: 113.

households could have been formed, Johansen found that extended households were far from the rule. “Only about half of the people who were sixty years or more and who had married children lived in the same household as the children.”⁸⁰ Johansen argued that the reason for this was the social norm that required old people to set up their own households—geriatric neolocality—once the children had taken over.

The combination of parents dying early and children marrying late is another demographic condition that was not uncommon in pre-industrial societies. Hence, because of this short interval of co-residence, Berkner has argued that, on census day, most families would appear to be nuclear, even in areas where stem families predominated.⁸¹ Further, Berkner argued that the aggregated census data indicated only the proportion of stem families in the extended phase at a given time. However, the significance of this proportion cannot be evaluated without taking into account the age structure of the population and the distribution of wealth.⁸²

Among family historians, the work of Steven Ruggles is probably the most cited when demographic constraints upon pre-industrial living arrangements are evaluated. By using microsimulation,⁸³ Ruggles resurrected Levy’s hypothesis and asserted, “there were few extended families before the industrial revolution primarily because most people had a shortage of living relatives.”⁸⁴ Joining Berkner’s earlier assumption, Ruggles rejected The Cambridge group’s nuclear hypothesis, and argued that a large majority of those in pre-industrial England “who could have resided in stem families actually did so.”⁸⁵ As shown in Article Two, several researchers have criticized Ruggles’ contrasting theory.

These criticisms of Ruggles rest more or less on a rejection of his methods. Kertzer has argued that microsimulation is based on precise models of household formation rules that may have little relationship to any particular historical setting.⁸⁶ Kertzer’s main objection is that stem family rules were not the only way to form complex households in the past. The

⁸⁰ H. C. Johansen, The position of the old in the rural household in a traditional society, *Scandinavian Economic History Review*, 1976, XXIV: 129.

⁸¹ Berkner 1975: 721–738.

⁸² Berkner 1972: 408; Berkner 1975; M. Anderson, *Approaches to the History of the Western Family, 1500–1914*, London 1980: 30–36.

⁸³ A simulation model is based on the assumption that all individuals in the population have an equal probability of any demographic event, the so-called Whopper Assumption.

⁸⁴ S. Ruggles, *Prolonged Connections: The Rise of the Extended Family in Nineteenth Century England and America*. Madison, WI: University of Wisconsin Press. 1987: xviii. Article Two describes in greater detail Ruggles’ assertions on demographic constraints. This section only mentions the debate on using such an approach.

⁸⁵ Ruggles 1987: 121.

⁸⁶ Kertzer 1991: 172.

existence of high proportions of complex family households depended not simply on prevailing demographic conditions, but on cultural norms regarding post-marital residence and also on the principle of how to organize family and household arrangements. Kertzer does not deny that demographic constraints play a role; however, claiming that demographic constraints are more influential than economy or cultural forces cannot be sustained according to Kertzer.⁸⁷

Kertzer's empirical evidence is related to the high proportion of joint family households found in central Italy during the nineteenth century.⁸⁸ Here, a similarly high female marriage age as found in north-western Europe—which earlier has been connected to neolocality—was combined with a joint family household. In southern Italy, neolocality was the norm in combination with a low age at marriage for females.⁸⁹

Ruggles' counter-argument is that joint family households, such as those found in central Italy, would never be infrequent under any demographic conditions.⁹⁰ According to the Hammel and Laslett categorization scheme, joint family households are organized horizontally. On the other hand, demographic constraints have always referred to multigenerational extended families, and hence to vertical organization.

This dissertation does not use microsimulation as a method. However, the arguments for using a method that assesses family living arrangements from the perspective of the elderly have been developed from simulations. Thus, it should be mentioned briefly that Ruggles confessed his microsimulation “sins” in 1994. Because of a growing body of evidence arguing that a greater demographic homogeneity exists within a kin group than within a group of similar size consisting of individuals selected randomly from the population, Ruggles confessed that his models do not take into consideration the correlation among kin, or account for the possible under-estimation of the proportion of individuals without any kin of a given type.

3. Variables and method

This chapter aims to discuss the variables selected for this dissertation from the perspective of census instructions, how we understand the concepts today, and how the variables have been

⁸⁷ Ibid. See also D. I. Kertzer, Living with kin, vol 2 in D. I. Kertzer and M. Barbagli (eds.), *The History of the European Family, Family Life in the Long Nineteenth Century 1789–1913*, New Haven and London 2001: 40–72.

⁸⁸ Kertzer 1991: 155–179; Kertzer 1989: 1–15.

⁸⁹ Ibid.

⁹⁰ Ruggles 1994: 110.

operationalized for the quantitative analysis. Finally, explanation and discussion of assumptions underlying logistic regression are presented in the last section.

3.1. Head of household

What does headship identify? Is the registration self-selected by the persons within the household, or is it defined by the census enumerators? How is headship affected by age and gender? Are widows co-residing with an own married child registered to a lower extent as head as compared with widowers? Furthermore, is the census enumerator more likely to register the oldest person in the household as head because of hierarchal traditions? The census instructions may reveal some understanding of the concept, and bivariate analysis may also give some indications about how the headship position was distributed in the population. However, as will be discussed later, we are still left to make some assumptions about how this concept should be understood, especially in an ethnic context.

When an elderly parent is listed as head of the household and co-resides with an own adult child, we need to ask who is head of the household in reality, and what are the dynamics of the flow of assets and assistance within such a household? It has been argued that these questions cannot be answered from cross-sectional data and analysis.⁹¹ However, this dissertation argues that headship status derived from census data is an important indicator of who moved in with whom, since it is unlikely that an elderly parent, moving into the household of one of his/her adult children, would automatically adopt the position of head of household.⁹² Thus, the variable provides some valuable clues about which generation is the beneficiary of intergenerational living arrangements.

The census enumeration form instructed the census-taker to mark a number one for each separate household.⁹³ For each new household, each member was registered with a family position label, such as, “House father, Wife, Son, Daughter, Parent, Servant, Boarder, Visitor, etc.”⁹⁴ As it appears from the instructions, it is reasonable to assume that the members of the household were listed in relation to the household head, and that this information corresponds to the person listed as number one.

⁹¹ Hareven (ed.), 1996.

⁹² See further discussion in Articles Two and Three.

⁹³ NOS C No 1:1869: XXX.

⁹⁴ Copies of the original census enumeration forms can be viewed at http://nappdata.org/napp/enum_materials.shtml. North Atlantic Population Project. Accessed September 2010.

In a data set covering the censuses from 1865, 1875 and 1900, which consists of every household in the NTF area where one or more elderly persons are present,⁹⁵ we find that 85 per cent of all persons registered as head of the household (code 101) are registered as number one in the household. Only 1.2 per cent are women. The strong correlation between person number one being head of the household and male confirms the assumption of a patriarchal household system. On the other hand, the results may also have been affected by the different challenges the census-taker encountered when separating household units based on a system where people who shared living space and meals were considered as one household unit. Further, Figure 2 in Article Two shows the percentage distribution of household members' relationship to household head by age groups, and not surprisingly, we clearly see that the headship position is correlated with age. Steadily increasing from the age of 20 years to 40 years, between 50 to 60 per cent of household members were in a headship position. After the age of 60 years, the likelihood of being listed as a household head declined.

Eighty-five per cent of all men registered as head of the household and as number one were married, 8 per cent were widowers and 5 per cent were unmarried.⁹⁶ Among women, a different picture emerges. Ninety-two percent⁹⁷ of women listed as number one and with a relationship as head of the household were widows. As will be discussed in the section about the family relationship variable, further examination reveals that a large proportion of elderly widows kept their spouse title after their husband died, and because the majority of these widows are listed as number one, these women have been labelled as head of household.

What about other people listed as number one, but with a different family relationship code than head of household? Are they to be defined as head of household? Why did the census-takers decide to mark a new household next to these people's names?

In households with one or more elderly person residing, 75 per cent of persons not listed as head of household, but still listed as number one, were older than 60 years. Approximately 75 per cent of them were registered as boarders. Interestingly, this group is distributed equally by sex. Nearly 75 per cent of them are widowed, and roughly 90 per cent did not have an adult child present in the household. This small household size is common for nearly every household in this group: 80 per cent consisted of fewer than three household members.

⁹⁵ N=26793 (1865: N=4422; 1875: N=7998; 1900: N=14373).

⁹⁶ The remaining 2 per cent is "spouse absent" and "no information".

⁹⁷ N=50.

The small size was less characteristic in households where a member of the younger generation was registered as number one in the household, but not as head of household. In this group, 45 per cent of the households had fewer than three members. More pronounced was the distribution by sex, where 88 per cent were men. More than three-quarters of these men were aged between 20 and 50 years, and 42 per cent were married, with a slightly higher group of unmarried men (50 per cent). Seventy-five per cent of the men were registered as boarders.

The characteristics of persons in households where person number one was labelled with a code different than head of household were as follows: (1) the vast majority of these households were “headed” by boarders, (2) the majority of the elderly in this position were widowed without any own adult child present, (3) the majority of the younger generation in this position were unmarried men, and (4) more than half consisted of fewer than three household members. Subsequently, we get an immediate impression of households in a dependent relationship to other households. Very few of them consisted of a CFU and the fact that most of them were “headed” by boarders indicates a sharing of place of residence with a household that most likely is led by a household head. Thus, the headship position is not necessarily restricted in meaning to the level of a household unit; it may also be an expression of property ownership beyond the household level.

However, one of the questions in this dissertation is to evaluate who is dependent on whom, and the headship position has been used as an indicator of this. Accordingly, in households where no persons were registered as head of household, person number one is defined as head of household.⁹⁸

3.2. Age and sex

In this dissertation, intergenerational co-residence is defined as persons older than 60 years co-residing with an own adult child older than 18 years. How do the censuses report age and how accurate are the data?

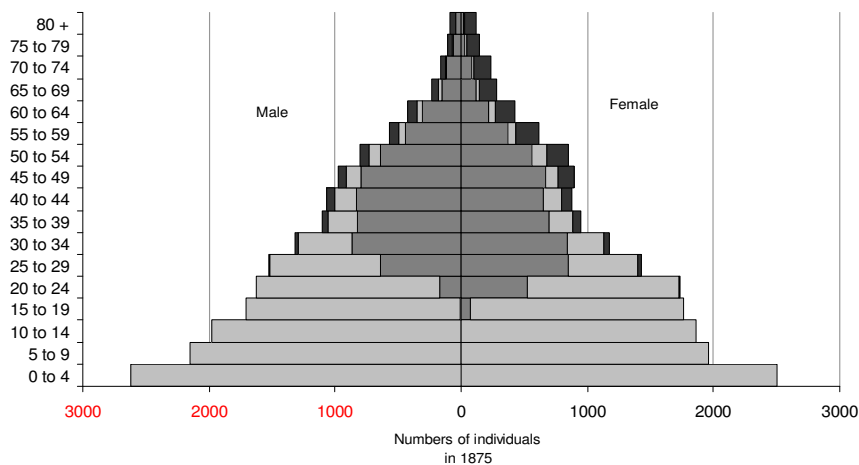
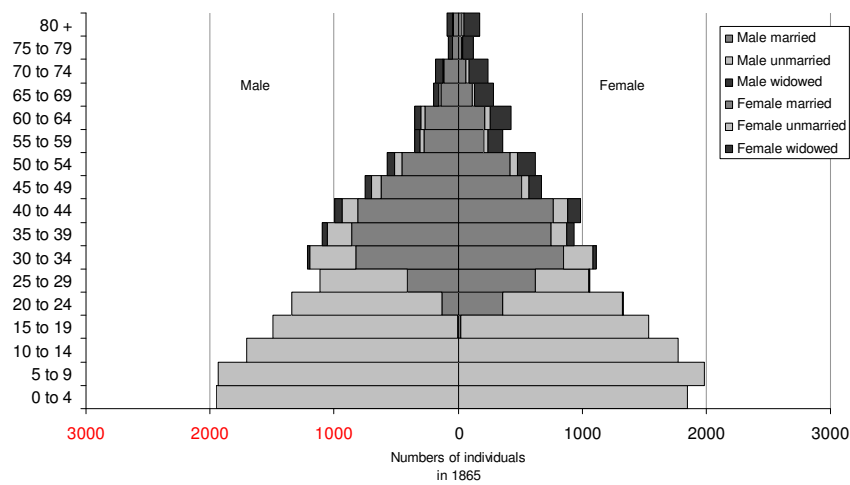
In 1865, we find that age was reported as age on the upcoming birthday,⁹⁹ and this registration practice results in a mean six-month older population. However, this has been compensated for in the digitalized version by constructing the age to be:

⁹⁸ In relation to the 395 households with person number one not registered as head of household, only seven of them had a person registered as head but with a person number greater than one.

⁹⁹ C. No 1. Resultaterne af Folketællingen i Norge 1. januar 1866: xxxi.

(census year + 1) – age / birth year.

In 1900, each child under the age of three years was to be reported with birth date, and individuals older than three years were registered with birth year.¹⁰⁰ How reliable is the age information given? Lisbeth Higley has compared the age given in baptism records with the age reported in the 1801 census for Ullensaker parish and concludes that the variance increases with an increase in age. Similarly, Arne Solli has found that rounding off to 10-year periods is most common for the age group older than 40 years. Is this result consistent with the later nominal censuses?



¹⁰⁰ L. Higley, *Husholdningsstruktur i Ullensaker i 1801 og 1865*, Oslo 1976: 19, Solli 2003: 47.



Figure 3: Age group distribution in five years by sex and marital status. NTF area, 1865–1900

Figure 3 shows the age group distribution in the NTF area by sex and marital status of all people living in the area at the time the censuses in 1865, 1875 and 1900 were conducted. It should be mentioned that the earlier reported cluster tendency found by Solli in the 1801 census is also visible in the 1865, 1875 and 1900 censuses when analysing the age distribution for each birth year (see Figures 11–13 in the Appendix). However, this dissertation operates on the level of five-year age groups and the profiles of all charts in Figure 3 are consistent with the pyramid form characteristics for the time under study, thereby strengthening the reliability of registered age. Women tend to marry earlier, and it is more common for widowed women to remain widowed. The clustering is equally distributed by sex and only visible from the age of 30 years following each 10-year period. This confirms what Higley found with increased variance with an increase in age. By using five-year age groups in the bivariate and multivariate analysis, the clustering effect is minimized. However, it is likely that the group defined as elderly may consist of some persons whose biological age is in the late 50s.

The distribution by sex is as expected for 1865 and 1875, with slightly more males than females. In 1900, we see a fairly equal distribution by sex up until the age of 14 years. From age 15 years, a different picture emerges, with a significantly higher proportion of males.¹⁰¹ Knowing that mortality is slightly higher among males compared with females, and considering the age distribution retrospectively (that is, age group 25 to 29 years in 1900

¹⁰¹ One hundred and eight over 100 for age group 15 to 19 years; 122 over 100 for age group 20 to 24 years; 124 over 100 for age group 25 to 29 years; 124 over 100 for age group 30 to 34 years; 119 over 100 for age group 35 to 39 years.

being age group 0–4 in 1875 etc.), we are left with two possible explanations, or a combination of the two. Either more males migrated to the region, or women moved out.¹⁰² Increased male migration fits well into the picture of a region with increased participation in typical male occupations, such as fishery and mining. In addition, the fact that distribution by sex and by marital status shows a higher proportion of unmarried males aged between 20 and 40 years may further strengthen this explanation.

The skewed sex distribution has not been discussed in the dissertation articles. However, if we assume that the male dominance is an indication of a region in economic growth characterized by increased male labour demands, the findings strengthen some of the results presented in Article Three. The bivariate analysis showed that when sons married, they were less likely to reside with their elderly parents, and the change was explained by the increased possibilities of attractive occupations elsewhere.

The ages of 18 and 60 years express both biological and social ages. Children were regarded socially as being mature at age 15 years. At this age, it was common to go out in service and confirmation was set at this age. However, to be able to compare with other studies, I have defined the adult child as 18 years or older.¹⁰³ The age of 60 years is an assumed point in time when transition from maturity to old age took place. Being labelled as elderly is further associated with different connotations, from both objective and subjective perspectives—objective in how societies defined ageing, and subjective in how and why a person considered herself or himself old.

In Norwegian historical demography, there is a common acceptance of using the approximate age upon retiring as a proxy of ageing. Retirement contracts were usually signed when the retiring couple was in their 60s and the newcomers in their 30s. Thus, a standard generational length is estimated at 30 years.¹⁰⁴

In her dissertation about ageing in a changing society in urban Sweden, Högman discusses the concept of ageing historically. Contrary to Norwegian family historians, Högman rejects the use of headship retirement as an ageing indicator on the grounds that this

¹⁰² Thorvaldsen explains the sex distribution of the migration pattern in Troms as a mixture of both. Women moved to the bigger cities as servants while Finnmark attracted males to the good fisheries. G. Thorvaldsen, *Migrasjon i Troms i annen halvdel av 1800-tallet. En kvantitativ analyse av folketellingene 1865, 1875 og 1900*, Ph.D. dissertation, Tromsø 1994a: 165–166.

¹⁰³ I tested different age models in the preparation of the analysis in Article Two. The result was that the coefficients in all models came out quite similar when I used ages 15 and 18 years as the youngest adult child.

¹⁰⁴ S. Dyrvik, *Historisk demografi: ei innføring i metodane*, Bergen 1983: 178. S. Sogner, The Norwegian stem family: myth or reality?, in A. Fauve-Chamoux and E. Ochiai (eds.), *The Stem Family in Eurasian Perspective. Revisiting House Societies, 17th–20th Centuries*, Bern 2009.

indicator is correlated with the male position, thus fitting women poorly.¹⁰⁵ Instead, by applying a demographic perspective, a medical view of senescence and how old age has been defined in the poor laws, taxation laws and early pension systems, she defines ageing at the time when the last child left home, the so-called empty nest period. However, her analysis shows that the majority of elderly people never experienced an empty nest period.¹⁰⁶ Thus, it is difficult to see why the empty nest indicator should work better than, for example, headship retirement. Högman found the mean age of entry into the empty nest period to be close to 60 years; subsequently, 60 years is seen as the starting point of ageing.

What is the best ageing indicator for my model? The most appropriate age is found when we minimize the demographic constraints attached to a co-residential pattern between any parent living with an own adult child. Constraints regarding fertility behaviour are taken care of by limiting the study to consist of only co-residence with youngest child older than 18 years living in the parental home on census day. Then the question is: at what mean age are parents likely to be when residing with their youngest child of 18 years? If we assume that a mother gave birth to her last child at age 42 years, this child would reach the age of 18 years when the mother turned 60 years old. Although Ruggles argues that the starting point of ageing should be 65 years, I have tried different models by using the ages of 60 and 65 years, and the results did not differ substantially.

3.3. Family relationship

The population censuses used in the dissertation were extracted from the North Atlantic Population Project (NAPP), available from the Minnesota Population Center.¹⁰⁷ The NAPP data provide a constructed family interrelationship variable based on each country's family relationship variable and is therefore appropriate as a starting point for my research.¹⁰⁸ However, as discussed in Article Two, the constructed family interrelationship variables

¹⁰⁵ A. K. Högman, *Ageing in a Changing Society. Elderly Men and Women in Urban Sweden 1830–1930*, Ph.D. dissertation, Umeå University 1999: 34–35.

¹⁰⁶ Ibid: 46. Thirty-one per cent of the fathers and 47 per cent of mothers in the cohort born 1755–1770, and 24 per cent and 53 per cent, respectively, for the cohort born 1810–1819.

¹⁰⁷ Minnesota Population Center. North Atlantic Population Project: Complete Count Microdata. Version 2.0 [Machine-readable database]. Minneapolis, MN: Minnesota Population Center, 2008. Norway 1865 and 1900: The Digital Archive (The National Archive), The Norwegian Historical Data Centre (University of Tromsø) and the Minnesota Population Center. Version 2.0, Bergen, Oslo, Tromsø, Minneapolis 2008. Norway 1875: The Norwegian Historical Data Centre (University of Tromsø) and the Minnesota Population Center. Version 2.0, Tromsø, Minneapolis 2008.

¹⁰⁸ <http://www.nappdata.org/napp-action/variables/group/fam>. North Atlantic Population Project. Accessed September 2010. This page describes the constructed family interrelationship variables.

needed to be improved. Because of space limitations of the article format, the next section will discuss the issue in more detail.¹⁰⁹

The family pointers used in this dissertation are the MOMLOC (mother’s location) and POPLOC (father’s location). The variables indicate whether the person’s mother (MOMLOC) or father (POPLOC) lived in the same household and, if so, give the person number of the mother or father of where they are registered in the household.

Pernum (person index within household)	Relate (Relationship to household head)	MOMLOC	POPLOC
1	House father	5	0
2	Wife	0	0
3	Son	2	1
4	Daughter	2	1
5	House father’s mother	0	0

Table 1: NAPP’s constructed family interrelationship variables used in the dissertation. MOMLOC and POPLOC pointers in a household consisting of three generations

Table 1 shows a household consisting of five members; house father, his wife, son, and daughter; the house father’s mother also lives in the household. Each household member has a unique person index within the household, and this number is used as a reference number in the MOMLOC and POPLOC fields. Following the example given in Table 1, we see that person number one in the household, the house father, has a MOMLOC reference to person number five, who is his mother, etc.

The challenging part, however, is that the constructed family interrelationship variables have not been designed for households containing multiple individuals with the relationship of “head” or “spouse of head”. Instead, MOMLOC and POPLOC are given a code of 99 where these complex arrangements are detected.¹¹⁰ I have manually worked through all family pointers with a code of 99, and given appropriate codes to all individuals with the characteristics of relationship equal to “child” and marital status equal to “married”.¹¹¹

¹⁰⁹ A discussion on different aspects related to standardizing and coding procedures in Norwegian sources is presented in G. Thorvaldsen, The encoding of highly structured historical sources, *Computers and the Humanities*, 1994b, 28: 301–305.

¹¹⁰ <http://www.nappdata.org/napp-action/variables/189721> North Atlantic Population Project. Accessed September 2010.

¹¹¹ Fifty-four cases changed.

In addition to the above problem, the constructed family interrelationship variables were not composed for households containing a widowed person as head with a relationship of e.g. “parent” or “boarder” residing with a presumed married son. In cases including a widower, you often have the patronymic to rely on. With widows, one cannot be sure if the married person actually is her son or son-in-law. However, in cases where this person is registered with a relationship of “child”, the family pointer has been changed.

In making these changes, one may bias the widowed-son rate since in most cases the son is listed after his widowed parent and his spouse only registered as 201 (the spouse of previous).¹¹² However, I have found several cases where the daughter has her spouse living in her parents’ household, but then it has been specified that her spouse is the son-in-law. This indicates, not surprisingly, that the family relationship code 201 (spouse) is to a great extent gender specific.

This gender-specific registration practice is also found in the group of widows. Twenty-seven per cent of all elderly widows are registered with a family relationship code 201 (spouse), and the registration practice is frequently present in every ward. Accordingly, the code 201 has to be regarded as everlasting for women in particular. Ninety-five per cent of them are defined as head of the household; 60 per cent of these everlasting spouses resided with an own adult child; 62 per cent of the children were sons. Interestingly, 90 per cent of the sons were unmarried.

The constructed family interrelationship variable only includes biological children. However, some exceptions and assumptions are made. In cases where the relationship is “his child”, “her child” or “stepchild”, they are given a MOMLOC and POPLOC according to the married couple registered as the providers in the household. Remarriage is thus not controlled for.

In cases where members in different households in the same place of residence were kin related, it was not uncommon for the census enumerator to register relationships beyond the household level. A typical scenario could be that number one in the first household was registered as head, and number one in the second household was registered as “father”. In most cases, it has been possible to verify that the “father” label matches the parenthood to the previous household head, either through the patronymic or by checking the kinship relation in other sources.

¹¹² The widower-son rate is probably even more biased.

It is assumed generally that any complex variable that is registered by the hand of the enumerator in a strict conformant manner is more unreliable than a variable that shows different patterns within different wards.¹¹³ The fact that the enumerator took notice of complex kinship relations beyond the studied object strengthens the source reliability of family relationships. In cases where kinship beyond the household is registered, I have changed MOMLOC and POPLOC accordingly. This is done on the assumption that in places of residence where no such extended kinship was registered, it was not present.¹¹⁴

A total of 125 changes were made.¹¹⁵ This does not mean that there were no more than 125 places of residence with two or more interrelated households—what it means is that these 125 interrelated households had in common the fact that they were not defined in terms of intergenerational co-residence in the first place. In interrelated households where the “father” or “parent” had one or more children in his/her household older than 18 years, they were not registered twice. In these cases, the link was made within the household. Retired people with special benefits from the farm (kårfolk) with no primary registration of having an adult child in the household have not been revised. A retired person is not per se a kin term and would cause additional problems if included.¹¹⁶

By including a “beyond” element, a critical question concerns whether intergenerational co-residence should be interpreted equally within and beyond the household level. Ruggles has argued that however great the interaction of kin who live separately, it is bound to be less than the interaction of kin who live together.¹¹⁷ However, living separately is a relative concept and living next door represents a grey area in that respect. I therefore assume that next-door co-residence, defined by the same place of residence (farm name) differs substantially from kinship interaction where relatives live in separate places of residence.

Finally, it should be mentioned that cross-sectional census data present snapshots of a person’s life course, and thus have their obvious limitations. Regarding family relationship pointers, this means that there may be hidden pointers among the approximately 3000 elderly

¹¹³ Fure 1986; Solli 2003.

¹¹⁴ Further study is recommended, and this will be possible with the planned Norwegian population register.

¹¹⁵ Eighty-five cases with elderly registered with a relationship parent code (501), 23 cases with a parent-in-law code (601), and 17 cases with a grandparent code (1011). Of the 125 cases, 80 were changed to reside with their own adult child.

¹¹⁶ Further research should explore this topic longitudinally.

¹¹⁷ Ruggles 1994: 128. The argument is made on the assumption that we do not have a consistent source on kinship beyond the household, thus co-residence within the household is the most consistently available indicator of kin interaction.

people in all three census years that did not have an own adult co-residing child. This is demonstrated in the life course section in Article Three. However, it is a broad consensus that family relationship pointers became more consistent throughout the nineteenth century. Thus, with this increased consistency, we may interpret the decline in intergenerational co-residence that took place between 1875 and 1900 as a minimum expression.

3.4. Economic variable

The theoretical approaches previously described connect the economic influences upon living arrangements rather differently. From one perspective, we find family historians arguing that extended households were only maintained by the needs of the (frail) elderly; the other viewpoint is that intergenerational co-residence was encouraged by the economic needs of the children. Thus, the main objective of research has been to construct an economic indicator that may capture these two distinctions. This is made possible by a person's occupation, as registered in the censuses.

The next sections will discuss the motivation for registering occupation and how Statistics Norway defined the variable in each census. Finally, I present a more detailed description of how the variable has been constructed.

3.4.1. The productive and unproductive

The enumeration instructions concerning occupation or trade were constructed in a manner that made it possible for Statistics Norway to measure the national income.¹¹⁸ This was done by dividing the population into productive and unproductive groups. A productive person was operationalized by the classical economic working value theory expressed by people active within the money economy. A freeholder not active in farming was thus categorized as unproductive. This means that the productive and unproductive categories are not necessarily comparable with the categories of older statistical studies that only divided producers (“nærende”) from consumers (“tærende”).

Children above the age of 15 years were given a separate occupation field in the 1875 census, and were thus considered as active producers in the national economy.¹¹⁹ Women's work, however, was considered as a continual problem in terms of definition. Internationally, the head of Statistics Norway, Anders N. Kiær, recognized that his statistics colleagues

¹¹⁸ E. Lie and H. Roll-Hansen, *Faktisk talt. Statistikkens historie i Norge*, Oslo 2001: 114–120.

¹¹⁹ In the preparation of the censuses, they clearly distinguished between farmer sons as productive, while proprietor sons were unproductive until the age of 20 years. Ibid: 116. Although not specified in the enumeration instructions from 1865, the Tabellverkets published statistics using 15 years as an age limit for productive work. Women were consequently put into the categories of the unproductive.

wanted to give women a more visible space in the statistics. However, women were not to be defined as productive workers, but as consumers of men's earnings. According to Kiær, this definition was too narrow. In the population statistics derived from the 1875 census, we see that women are categorized as productive, and in 1900, their occupation was to be specified in a separate field together with productive children.

In addition to providing background information on the national economy, we also see that the enumeration instructions from 1875 and onwards were designed to categorize executive positions separately from subordinated positions, which provided statistics for the preparation of voting rules.¹²⁰

Overall, the census enumeration form and instructions were more comprehensive in the 1900 census compared with those in 1865 and 1875.

In 1865, occupation was registered together with information concerning family relationship; "House father (main person), wife, son, daughter, parents, servants, lodgers; everyone's social position or trade."¹²¹ In the enumeration instructions, the census-taker was reminded that in addition to information about everyone's family position, he was to specify the trade or social position for all those who in this respect had an independent position. If someone had several positions or dealt in several trades, only the most important (for him/her) was to be registered, in as detailed a manner as possible. For example, a farmer should be listed as a farm owner, tenant farmer or leaseholder.

In the 1875 enumeration form, occupation was given a separate field: a) for persons over 15 years, occupation (trade) or provided for by whom? b) for persons younger than 15 years, who had salaried work, specify what kind?¹²² In an additional field, space was given to a long and comprehensive list of rules on how to fill in the occupation field. Contrary to 1865, if a person had two occupations considered as equally essential, he was to be registered with both and the main occupation listed first. The first example given was "farmer and fisherman". Although type of work is emphasized in the instruction, the census-taker was also asked to fill in the social position.

The 1900 enumeration is more gender specific than the previous census forms and instructions, stating that the occupation and (social) position field should include "Housewife's or children's specific occupation. Enter clearly and specifically which trade and

¹²⁰ Lie and Roll-Hansen 2001: 120–122.

¹²¹ "Hvad Enhver er i Familien, Saasom Husfader, Kone, Søn, Datter, Forældre, Tjenestetyende eller Logerende, samt Enhvers Stand eller Næringsvei".

¹²² "a) For Personer over 15 Aar og derover: Livsstilling (Næringsvei) eller af hvem forsørget? b) For Personer under 15 Aar, der have lønnet Arbejde, opgives dettes Art."

business or branch the person performs or works at, and also the position in this trade. If someone has several occupations enter these, the main occupation first.” In the instruction, it was further specified that the occupation for widows and grown-up unmarried women should be registered.

3.4.2. Economic variable on the household level

To avoid age and sex bias, the variable is constructed on the household level.¹²³ The extracted data set is available with coded occupations that follow a contextualized version of the Historical International Standard Coding of Occupation (HISCO) system. This code system aims to have a common structure that allows for comparison not only in time but also across countries.¹²⁴

The HISCO codes are developed along two dimensions: trade branch and hierarchal position. Within each of these dimensions, individuals are labelled with a main and an additional occupation, according to the description given in the occupation rubric in the censuses. The hierarchal dimension describes the socio-economic level, with the unemployed and/or unproductive individuals at one end, and the landowners and capitalists at the other. Information on the industrial or economic sectors in which a person worked is contained in the trade variable. If a second occupation was stated, this has been classified in separate fields along the same dimensions. The codes for trade are based broadly on primary, secondary and tertiary economic sectors.¹²⁵

The first step in building the economic indicator was to start with the main occupation given in the trade or economic sector codes for the person listed as number one in the household.¹²⁶ The first person’s occupation was then transferred to the elderly person present in the household. In cases with elderly married couples, the husband’s occupation was given to the housewife if no information was given for her. Eighty-seven per cent of all elderly people were given an occupation code by means of these first two steps. About half of the cases that were not given an occupational code in the first stage originally had an individual occupational code. By applying this code, the number of missing cases fell to 7.1 per cent.

¹²³ An economic variable on the household level also solved the problem of missing occupation registration of elderly persons. As many as 50 per cent of all elderly did not have any occupation registered. For further discussion, see Article Two.

¹²⁴ M. Erikstad and G. Thorvaldsen, *Koding av yrker, Heimen*, 1998, 4.

¹²⁵ A detailed description is given at http://www.rhd.uit.no/koding/Kodebok_eng.pdf. The Norwegian Historical Data Centre (NHDC). Accessed September 2010.

¹²⁶ This section is only a description of technical interest. See Article Two for further discussion of the assumptions underlying this approach.

Fifty-eight per cent of the remaining missing cases were registered with an own adult child, and approximately 60 per cent of these children had an occupation registered. This information was transferred to the parent. The last operation, which reduced the number of missing cases by 3 percentage points, was to construct a household code with the occupational information gained from members registered as number two or greater in the household.

The remaining 1 per cent was excluded from analysis. Since the adult child's occupation has been transferred to a group of elderly parents, this may bias the percentage of elderly people residing with an own child by economic sector. However, this would only be to a small extent, since the number transferred was relatively small. After accounting for almost all missing cases, the primary sector was divided into two different economic sectors.

The first category, fishing households, earned their main income from the sea; the second category, farming households and fishing–farming households, exploited a combination of sea and land resources. Finally, households in the secondary and tertiary sectors were merged into a third sector, characterized by industrial and civil service workers.

As stated in Article Two, the aim is not to measure the effect of socio-economic status, but rather to apply an ecological perspective. This is achieved by assuming that the environment allowed for a certain degree of choice in living arrangements, and that household residents chose the alternatives that gave them optimal economic adjustment. Consequently, it is assumed that household members shared economic effort, which allows the use of the fishing–farming household term. This term describes the livelihood of the members of a residential unit, in most cases husband and wife, where the husband was the fisherman and the wife was the farmer.

3.5. Ethnic variable—the observer and the observed

In Articles One and Two, we find a discussion about the authorities' motivation for registering ethnicity in the censuses, followed by a discussion of the registration practice. Furthermore, a theoretical standpoint has been adopted to provide a framework for how ethnicity is communicated. Thus, several layers may blur and complicate questions related to a person's identity in the nineteenth century. Important layers discussed in this dissertation are:

Statistic Norway's motivation

How the nineteenth century Norwegian authorities defined ethnicity

Registration practice (the observer and the observed)

Our understanding of ethnicity

This dissertation has constructed ethnic categories based on individually recorded labels. An obvious criticism of this approach is my own argument in Article One that ethnicity in many cases was expressed on a family level—even in cases of mixed marriage. Originally, I intended to construct a contextualized variable on the household level, but the process revealed more problematic questions than it solved. Early in the process, I also recognized that it would be interesting to separate families with mixed marriages from ethnically homogeneous marriages to be able to test the effect upon elderly people’s living arrangements. I encountered problems regarding elderly people presumably not residing with any relatives. Was it likely that a 75-year-old Sámi man defined himself as Norwegian if he lived as a lodger in a Norwegian household? Moreover, which markers within the household should determine its ethnicity? Article One clearly shows that men as well as women changed their ethnic affiliation when, for example, they married a person from a different ethnic background to themselves.

When the ethnicity variable was constructed, 19 per cent of the elderly lacked an ethnic marker in 1865, while 12 per cent lacked it in 1900. To get a full data set, the remaining missing cases were given an ethnic marker equal to the distribution of those reconstructed, with proportional allocation, for sex, marital status and the presence or absence of an own adult child in the household. Proportional allocation, or mean substitution, is perhaps the simplest method of replacing missing values in a data set. The technique is to use the mean of the cases you already have as an estimate of the missing values.¹²⁷

3.6. Logistic regression

Logistic regression is a widely used and accurate statistical technique to model the probability of a categorical binary variable. As for regression methods in general, the *logistic function* “maps” the extent to which changes in the values of the independent variables may increase or decrease the probability of an event occurring. This is measured by maximum likelihood

¹²⁷ W. Paul Vogt, *Dictionary of Statistics and Methodology. A Nontechnical Guide for the Social Sciences*, California 2005: 150. Hot- or cold-deck imputation is another common method. The main principle of hot-deck imputation is to use the current data (donors) to provide imputed values for records with missing values. By contrast, cold-deck imputation selects donors from another data set; see G. Schoier, On partial nonresponse situations: the hot-deck imputation method, <http://www.stat.fi/isi99/proceedings/arkisto/varasto/scho0502.pdf>. However, the argument for using proportional allocation is that the variable missing, ethnicity, is not correlated per se with other variables used to detect donors. See Article Two for further discussion of how the imputation was carried out.

estimation, which means measuring the maximum probability for the dependent variable (0 and 1) to occur.

A logistic regression is a three-step transformation that starts with the concept of *probability*, transformed further into *odds* with a final outcome in *odds ratios*. The effect of the independent variables on the binary dependent variable in question has three possible interpretations. Either the effects of the independent variables on the log odds are linear and additive, or the opposite, non-linear and nonadditive. The third option is a mixture of these two outcomes.

Let me exemplify the transformation. The dependent variable is coded as either 1 (success, the event occurs) or 0 (failure, the event does not occur). Suppose the analysis shows that seven out of ten elderly fathers resided with their own adult child while three out of ten elderly mothers resided with their own adult child.

The probability for an elderly father residing with an own adult child (success) is:

$$p=7/10=0.7$$

The probability for an elderly father not residing with an own adult child (failure) is:

$$q=1-0.7=0.3$$

The same probabilities for elderly mothers are:

$$p=3/10=0.3$$

$$q=1-0.3=0.7$$

Now we can use the probabilities to transform the “success” *odds* for both males and females.

$$\text{odds(fathers)}=p/q=0.70/.3=2.33333$$

$$\text{odds(mothers)}=p/q=0.3/0.7=0.42857$$

The last transformation would be to find the *odds ratio* for “success”, which is the ratio between the two odds:

$$\text{OR}=2.33333/0.42857=5.44$$

Bear in mind that the focus in all three transformations has been the probability, odds and odds ratio of success. Thus, for an elderly father, the odds of residing with an own adult child is 5.44 times greater than the odds for an elderly mother to reside with an own child.¹²⁸

Theoretically, odds can run from 0 to positive infinity. When the odds equal 1, the probability of success is equal to the probability of failure. When the odds are less than 1, the probability of success is less than the probability of failure, and when the odds are greater

¹²⁸ This adjusted example is taken from: Introduction to SAS. UCLA: Academic Technology Services, Statistical Consulting Group: <http://www.ats.ucla.edu/stat/stata/faq/oratio.htm>. Accessed February, 2009.

than 1, the probability of success is greater than the probability of failure. The odds ratio is the ratio of the two odds.

When the odds ratio equals 1, the odds for group 1 are the same as the odds for group 2. When the odds ratio is greater than 1, the odds for group 1 are greater than the odds for group 2. When the odds ratio is less than 1, the reverse is true. The higher or lower the value of the odds ratio goes, the stronger the association among the variables.

Several assumptions need to be established before running the logistic regression. Some of them can be tested, others not. First, the model has to be specified correctly, which means that only relevant variables are to be put into the model, and the independent variables need to be related linearly to the log odds of the dependent variable.¹²⁹ Second, all independent variables must be measured without any misleading information; it is easier to score some independent variables with high accuracy than others, for example, sex.

Third is the absence of multicollinearity, which means that there is a correlation between several independent variables. High correlations result in difficulties in separating the effects of the variables from each other. In addition, the significance value will be unreliable.

When measuring correlation we are measuring the linear association between two variables, which is straightforward when working with continuous (numeric) variables.¹³⁰ However, all variables used in this dissertation are categorical, which requires a statistical test that is designed to test whether two categorical variables are independent—the Chi square for independence generated in contingency tables.¹³¹ The null hypothesis is that two variables are not associated; the alternative is that the two variables are associated. If the p-value is small, the null hypothesis is rejected; if the p-value is high, the two categorical variables are probably associated.

Fourth is the absence of discrimination or “separation”. A common problem in models with a binary dependent variable is “separation”, which occurs when one or more of a model’s independent variables perfectly predict the binary outcome. The simplest example is a 2×2 table of X and Y with an “empty cell”. From an estimation perspective, separation leads to infinite coefficients and standard errors.

¹²⁹ A. Agresti and B. Finlay, *Statistical Methods for the Social Sciences*, fourth edition, New Jersey 2009: 483–488. A more intuitive introduction into logistic regression may be found in: Per Arne Tufte, *En intuitive innføring i logistisk regresjon*, Statens institutt for Forbruksforskning, no 8, 2000.

¹³⁰ This is the automatic option in any statistical software program.

¹³¹ Agresti and Finlay 2009: 507–508.

Fifth, one has to be aware of “outliers” or “influential observations”. Outliers are by definition a case with an extremely large residual, which is to say that there is a large gap between the observed and predicted probabilities of the independent variable. However, outliers may increase the standard error for a parameter or lower the likelihood ratio, but they do not change the estimates. An influential observation, on the other hand, is usually an “extreme” value of the independent variable that would markedly change the estimates. It is common advice to confirm that outliers and influential observations exist in the data, which can easily be detected by any statistical software. Stata/IC 10 has been used in the analysis for this dissertation.

Each model in Article Two has been adjusted for issues related to multicollinearity, discrimination and outliers.

4. Further exploration of the NTF area

In Arne Solli’s dissertation, “Life course, family, society: change in family structures in Norway during the nineteenth century”, he tested three different models. First, a demographic model with yearly population growth as an explanatory variable on the municipality level. Second, an economic model applied to six economic regions: mountain district, rural flatland community, woodland district, industrial district, shipping district, and fishing community.¹³² The third approach was a core–periphery model where Solli used five politically and culturally defined areas: centre, utter centre, coast and utter fiord, valley/mountain and fiord, and northern Norway, combined with variables expressed on the municipality level.¹³³ Without going further into Solli’s discussion and conclusions about each model, I find it necessary to dwell upon his geographical units.

How well does northern Norway represent a territorial enclave in an economic, political and cultural context? First, none of his models considered the effects that different economic activities (fishing, fishing–farming and reindeer herding) had upon life course and household structures.¹³⁴ Second, it is problematic to define a multi-ethnic region as one single political and cultural unit.

The following section uses some of Solli’s household and family analysis of the entire country as a comparative starting point for describing some of the household characteristics in the NTF area. The discussion presented in Articles Two and Three, where the denominator is

¹³² The trade categories have been used in Norwegian statistics since the late nineteenth century. For further discussion, see Solli 2003: 125.

¹³³ For more detail, see Solli 2003: 146.

¹³⁴ The significant differences are discussed in Article Two.

households with an elderly person present, constitutes the framework for this discussion where all households represent the denominator.

By looking at changes in household size, and household and population growth, Solli argues that the correlations between the variables indicate different demographic explanations that may contribute to our understanding of structural changes in household formations in the past. Based on the number of households, the following equation can be used to find the yearly growth rate of households.¹³⁵

$$(((\text{population in } t2 / \text{population in } t1) ^ (1/t2 - t1)) - 1) * 100$$

The growth in the number of households will indirectly tell us something about the growth in the means of livelihood. Furthermore, the mutual dependence between population growth and household growth is expressed thus: If population growth is greater than household growth, then mean household size will increase. On the contrary, if household growth is greater than population growth, then mean household size will decrease.

According to Solli, the latter scenario was the case in nineteenth century Norway. The drop in mean household size was closely related to an increase in solitary households, mainly among young people establishing their own independent households.

In 1900, more than in 1865, Solli found that both households and population increased proportionally, and that the mean household size dropped. From an analysis of the regional and municipality levels, Solli interpreted the increase of solitary households in the period between 1801 and 1865 as a consequence of pressure on resources.¹³⁶ The increase in solitary households primarily occurred in areas of low population and low household growth. In 1900, on the other hand, Solli found that the increase in solitary households correlated with household and population growth, and that the solitary households were primarily households headed by males in the age group of 20 to 29 years.¹³⁷

Year	1865	1875	1900
Mean household size	6.48	6.28	7.21
Mean family size	5.48	5.38	5.58

¹³⁵ The equation was initially developed to measure yearly population growth between two points in time: Solli 2003: 143–144. The equation assumes a uniform population growth between t1 and t2—geometric interpolation: Dyrvik 1983: 53–54.

¹³⁶ Solli 2003: 236.

¹³⁷ Ibid: 242.

Period		1866–1875	1876–1900
Yearly population growth	-	1.59	1.37
Yearly household growth	-	2.29	0.79

Table 2: Household and family size, and yearly population growth in the NTF area 1865–1900

Table 2 shows the household, family and population characteristics for the NTF area during the period under study. Between 1865 and 1875, the NTF area experienced population and household growth. Subsequently, the NTF area followed a normal development with a decrease in mean household size because of the mutual dependency between increased population and growth in the number of households. Thus, the situation in the NTF area is similar to the general development in Norway.

However, in the next period, 1876–1900, a different scenario emerged. Similar to the rest of the country, we see a positive yearly population growth and a yearly increase in the number of households. On the other hand, and rather unexpectedly, we see an increase in the mean household size.

How do the data from the first period in the NTF area compare with the national level; and why did the next period result in larger households?

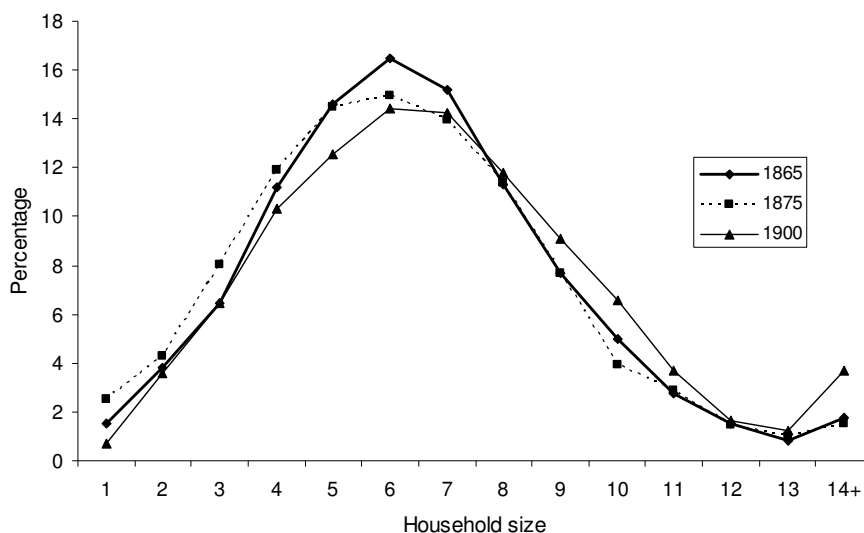


Figure 4: Households distributed by size. NTF area, 1865–1900. 1865: N=31005; 1875: N=36297; 1900: N=51286

Figure 4 shows the percentage of households by size for each census year. While Norway as a whole showed a remarkable increase in solitary households during the nineteenth

century, from 1 per cent in 1801 to 10 per cent in 1900,¹³⁸ this is not the case in the NTF area.¹³⁹ In fact, there was a slight increase in solitary households between 1865 and 1875, which is not comparable with national level data. According to Solli, solitary households on the national level accounted for 8 per cent in 1865, as against 1.5 per cent in the NTF area, and this level increased by 1 percentage point over the next ten years. The first reason for the decrease in mean household size is that it became more common to live in smaller households containing only one to four members. Second, it became less common to live in the average household, that is, with five to seven members.

In 1900, on the other hand, small households became less popular. Instead, we see an increase in the number of large households. The proportion of average households, with five to seven members, also declined in this period.

In areas of strong population and household growth combined with increasing mean household size, Solli suggested that this may indicate that each household focused its economic activity on new economic niches. Such an explanation, however, does not fit in with either Solli's or Ståle Dyrvik's explanation of the fragmenting effect that the fishing industry had upon living arrangements.¹⁴⁰ Nevertheless, I argue that this explanation may correspond well with the general economic situation in the NTF area. Towards the end of the nineteenth century, people in the NTF area experienced an increase in different occupational options, although it has been argued that economic expansion did not result in a change of lifestyle.¹⁴¹ People were in fact used to multiple activities, and one more additional activity was not considered a particular challenge or a major change in everyday life. Although it may not have challenged the traditional lifestyle of a fisherman–farmer, it may be argued from my study that economic expansion did indeed affect the composition of the household—it became larger.

There may be an additional explanation for larger households. If we compare the two different demographic scenarios in the two different periods—the slower yearly population growth combined with a relatively small household growth in the period 1875 to 1900

¹³⁸ Ibid: 91.

¹³⁹ Ibid: 229 notes that Finnmark, with its 7.9 per cent of solitary households in 1865, does not fit the theory about large population growth correlating with few solitary households. However, according to my data set, Finnmark only had 1.7 per cent of solitary households in 1865.

¹⁴⁰ Between 1801 and 1865, Solli found that in northern Norway in particular, the reduction in mean household size was greater than household growth. According to Solli, a possible explanation for this combination is that the fishing industry in some places may have had a fragmenting impact on household structure. Solli 2003: 232; Dyrvik 1993.

¹⁴¹ See the discussion in Article Two.

compared with the period 1865 to 1875—it may reflect the fact that towards the end of the nineteenth century, the NTF area encountered a situation of general housing shortage that resulted in more crowded houses.

Looking specifically at the last period, a number of interesting points can be made about the characteristics of the increase in larger households. In family history, we often take complex and large households as synonymous with large families. However, living arrangements across generations do not necessarily mean that the households were large. The mean sizes of intergenerational households in the NTF area were 5.3 in 1865, 5.2 in 1875 and 5.6 in 1900. This was approximately 1.0 lower than the overall household size (Table 2). A second point is that a change in household formations does not necessarily follow that of family living arrangements.

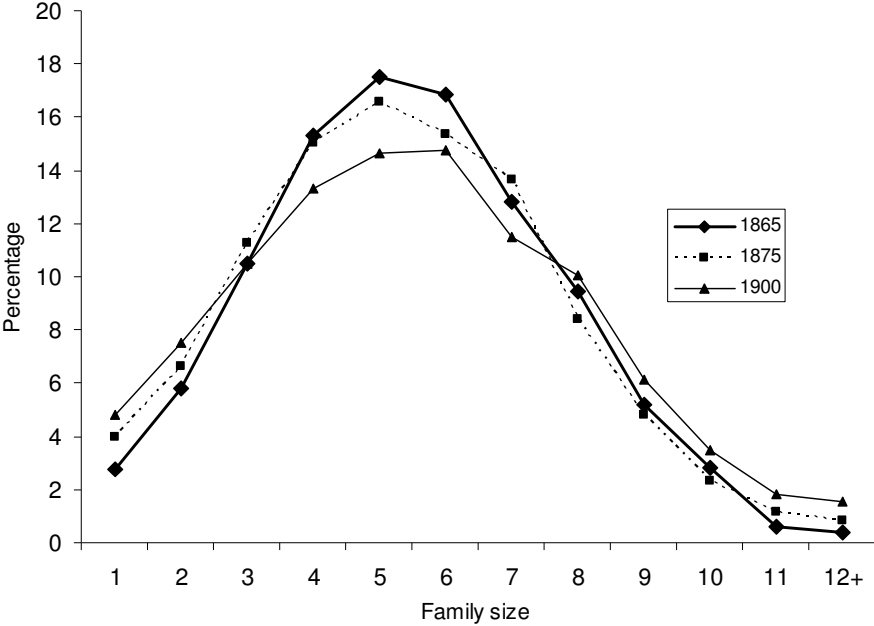
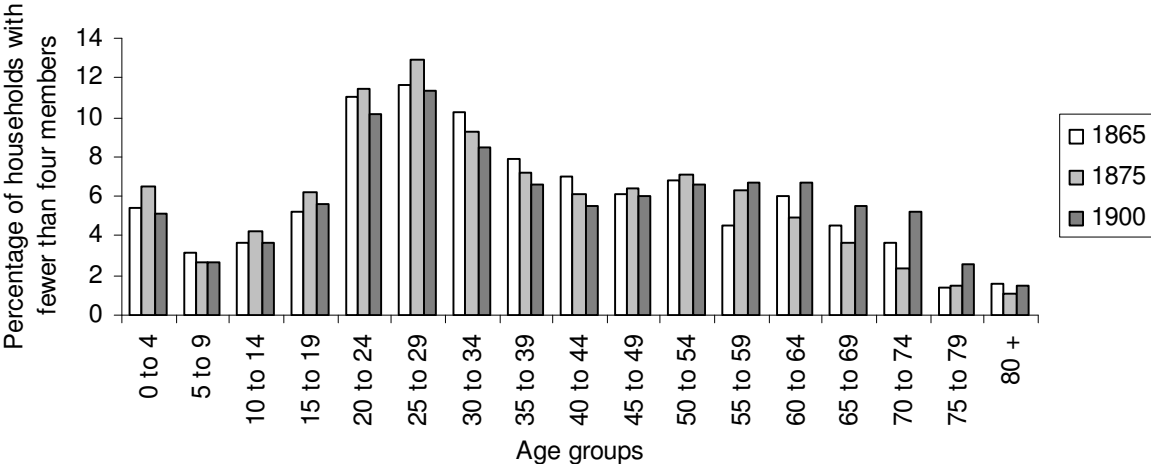


Figure 5: Distribution of primary family size. NTF area, 1865–1900

Figure 5 shows the percentage distribution of primary family size. Although the mean family size was highest in 1900, with a mean family size of 5.58 individuals compared with 5.48 in 1865, we see from Figure 5 that the most frequent family size in all years, that of five individuals, decreased by 3 percentage points between 1865 and 1900. While the family size of three to seven individuals was less common in 1900 than in previous years, we see an increase in small families consisting of fewer than four individuals, combined with an increase in large families with more than eight individuals.

Comparing the household size distribution with that of family size distribution (see Figures 4 and 5), we see the same tendency of a peak contraction combined with the curve moving towards the right, that is, characterized by an increase in larger households and larger families in 1900, and fewer households and families consisting of four to seven individuals. The difference, however, is that households with fewer than four members decreased during the last part of the nineteenth century, while the opposite is true for smaller families. A possible explanation for this may be that single-family members lived in households with non-relatives in 1900 to a greater extent than before. This explanation is consistent with the conclusion in Article Three stating that elderly people who did not reside with an own adult child did not necessarily live alone; they were also found as lodgers living in households with non-relatives.

Let us take a closer look at the smaller family and household sizes, and turn our attention to how age is distributed in families and households with fewer than four members. The percentage of small families exceeded that of households. Was this change as a result of a change in age distribution?



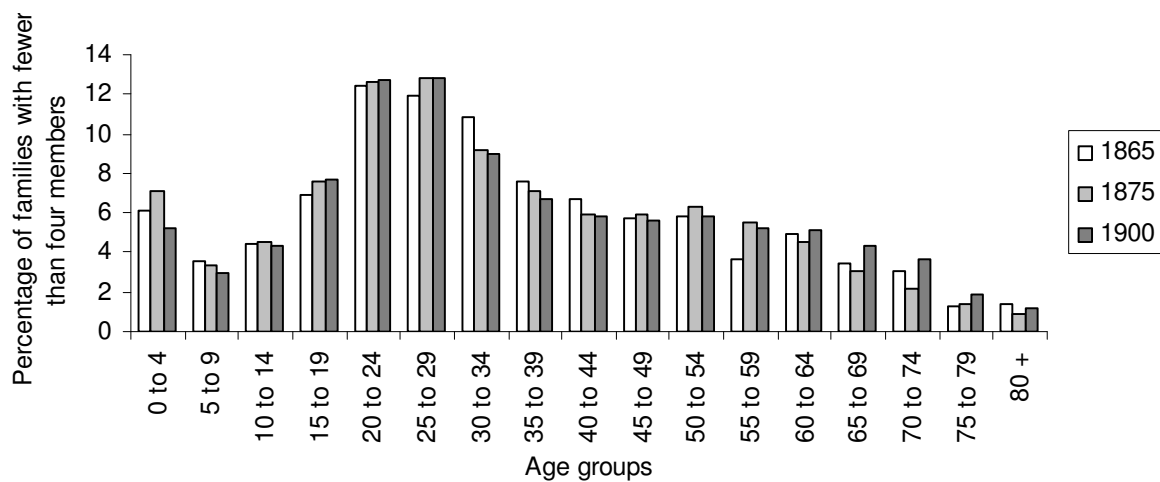


Figure 6a and 6b: Age distribution in (a) households and (b) families with no more than three members, by year. NTF area, 1865–1900

Looking at the age distribution in small households, Figure 6a shows an increasing number of small households with members older than 55. The opposite trend is visible for all other age groups. The same pattern is apparent when limiting the age distribution only to family members, although it is less pronounced for family members younger than 60 years.

What we found is that, relative to their own age group, individuals younger than 55 years disappeared from the small households. The proportion of elderly people in small households increased. In small families (Figure 6b), it was the age group of 15–30 years and the elderly that, relative to their own age group, increased the overall proportion of small families towards the end of the nineteenth century.

However, this relative proportional increase of elderly people in small families did not change the fact that intergenerational co-residence declined. Paradoxically, this happened while the mean household size increased. Instead of more family members sharing a roof and their daily bread, we see an increase in people with presumably no kinship relation residing together. This trend is also seen in Article Two, Figure 2, which indicates household members’ relation to the head of household by age group.

4.1. Family history and the visibility of ageing

Family, household economy, kinship and ethnicity are basic concepts in the dissertation. The concepts are analysed and discussed within the geographical borders of the NTF area. Articles Two and Three give a general description of the area and the different economic occupations common for the household economy during the nineteenth century. The literature in this area is comprehensive and the following section will shed some light upon how family and

household arrangements are presented, the visibility of elderly people and how family and kinship operated in an ethnic and economic context.¹⁴²

4.1.1. Family and household

The reviewed literature does not clearly express continuity or change in family arrangements. The nuclear family, with parents and their children, is implicitly seen as a social life baseline and as the most common living arrangement.¹⁴³ A typical life cycle pattern is one where elderly parents gradually moved into one of their children's households when they were no longer able to keep an independent household.¹⁴⁴ Moving beyond the family level, a regional society had a great number of neighbourhoods. Their main function was to share the work during the different seasons. In most cases, a neighbourhood included households living on the same number in the land register. During the harvesting season, households collaborated in collecting grass, driftwood, eggs and down. Herding and sheep round-up were also considered as shared work. Joint organization of transportation to church and market places, guidance at school and preparation of confirmation tied the families' social life together. Whenever a new child was born, women helped each other and, if needed, also assisted with funerals when someone died.¹⁴⁵

Randi Rønning Balsvik addresses questions concerning family and household somewhat differently in her book about Vardø, a town in eastern Finnmark,¹⁴⁶ which reminds us of the complexity described in the theoretical model underlying this dissertation.¹⁴⁷ Balsvik does not deny the dominance of nuclear family arrangements; however, the reasons for this dominance are to be found in the demographic constraints, mainly caused by migration.¹⁴⁸ Children rarely had contact with their grandparents or other relatives because they lived in

¹⁴² The following literature was reviewed: R. R. Balsvik, *Vardø. Grensepost og fiskevær 1850–1950*, bd 1 & 2, 1989; J. P. Nielsen, *Altas Historie*, bd 2, Alta 1990; A. O. Hauglid, *Balsfjorden og Malangens historie*, bd 2, Balsfjorden 1991; H. D. Bratrein, *Karlsøy og Helgøy Bygdebok*, online version: <http://karlsoy.com/bygdebok/>, Karlsøy 1989–1994; E. Richter-Hanssen, *Lyngen regionhistorie. I stille vær, i storm og vind*, bd 2, Lyngen 2004; I. Bjørklund, *Fjordfolket i Kvænangen. Fra samisk samfunn til norsk utkant 1550–1980*, Oslo 1984; E. Niemi, *Vadsø's historie*, bd 1, Vadsø 1983.

¹⁴³ Bratrein: 642; Bjørklund 1984: 194. The nuclear unit was the core with additional grandparents. Time perspective is not discussed. Niemi 1983: 309–315 discusses family arrangements based on Adelaer registration from 1690 and concludes that the nuclear family dominated, and still dominated around 1830 when the book ends its story. However, Niemi also adds that it is likely that intergenerational co-residence was more common among Sámi than among Norwegians. Ibid: 315.

¹⁴⁴ Bratrein: 114. This view fits well with the discourse in family history discussed in Article Two.

¹⁴⁵ Bratrein: 644.

¹⁴⁶ In 1900, Vardø was the largest town in Finnmark, population 2600.

¹⁴⁷ See Chapter Two.

¹⁴⁸ The relatively high male mortality rate may also have contributed to a high proportion of nuclear family households. See note 71 in Article Three.

other places in Norway. Around 1900, the effects of prior migration were weaker, and the presence of grandparents consequently became more common. Usually, they lived with one of their adult children.¹⁴⁹

My data confirm Balsvik's conclusion. It did indeed become more common for the elderly in Vardø to reside with an own adult child in 1900 compared with 1875. However, in both census years, it was more common to reside with non-relatives than with relatives.¹⁵⁰ A possible explanation for this fairly low level of intergenerational co-residence found in Vardø, especially in 1875, could be the relatively high proportion of independent widows. According to Balsvik, Vardø was one of the places in Norway where most women lost their husbands because of drowning. It became a matter of honour to take work instead of poor relief.¹⁵¹ Thus, it was not uncommon for women to become independent workers upon widowhood, and it is not unthinkable that widows became role models for other women in the same situation. From an economic perspective, we might speculate that it was perhaps more efficient economically to rent out rooms to fishermen during the seasonal fishing than have one of your own adult children living with you.

One of the conclusions in Article Three is that adult daughters maintained a living arrangement that included elderly parents, and Balsvik's analysis of the migration pattern in Vardø sheds light upon this pattern. According to Balsvik, the migration pattern differed by gender. Based on registered place of birth, more women than men were born in Vardø, and the number of women born in Finnmark and living in Vardø was about three times higher than that of men.¹⁵² The immigration pattern among men in Vardø showed that they came from places further away. For example, more men moved from Nordland to Vardø than from Troms.¹⁵³ This pattern may indicate that adult daughters were more stationary, and that they moved only shorter distances—if they moved at all. We also know that the majority of women moved to work as servants. Working as a servant was temporary work, which ended when they got married. Perhaps it was easier for daughters to move back to their parents when we take into account the shorter distance, the time-limited work, the expectation of marriage, combined with a higher uncertainty that brothers would come home—an uncertainty that is reflected both in the longer migration distance and the high proportion of men drowning.

¹⁴⁹ Balsvik 1989 bd 2: 39.

¹⁵⁰ Fifty-eight per cent of elderly resided with non-relatives in 1875; the figure was 54 per cent in 1900.

¹⁵¹ Balsvik 1989 bd 2: 54–55.

¹⁵² Based on the emigration pattern, Thorvaldsen found the opposite trend in Troms, with a female surplus among people who migrated long distances south. Thorvaldsen 1994a: 179–180.

¹⁵³ Balsvik 1989 bd 1: 58.

Balsvik followed 116 men born in the period 1865—1870 and asked how many of them were living in Vardø when they became adults in their 30s. Adjusting for mortality, she found that approximately 60 per cent had moved out of the city during the period 1876–1900.¹⁵⁴

4.1.2. Care of the elderly

The provision for old age was primarily based on family care. In the reviewed literature, we find the elderly described as grandparents, but seldom as parents. Another visible group of the elderly is the persons living on poor relief in households with no relatives. The payment from the municipality was small and it has also been argued that in most cases it was the poor who took care of the poorest.¹⁵⁵ Although expenses were low per individual, we do have reports from several municipalities about a disturbing increase in poor relief during the last part of the nineteenth century.¹⁵⁶

The increased cost of poor relief, combined with the supposedly weaker family ties that are demonstrated by the decline in intergenerational co-residence between 1875 and 1900, may have given rise to some quite difficult challenges concerning provision for old age. The new Poor Law from 1900 may be understood as a public reaction to these challenges.

The poor law created expectations of a new and perhaps more humane way of caring for old and sick people. Public care or cure institutions had negative connotations and they were renamed as “old-age homes” and “nursing homes”. The old poorhouse demand for work was replaced with an ideology of a well-deserved rest for the elderly.¹⁵⁷ It was no longer a house, it was a *home*.¹⁵⁸

The Norwegian Sámi Mission (Finnemisjon) became a central player in this work in northern Norway, and in 1901, they issued a proclamation in support of the establishment of a nursing home for sick and old Sámi—this became a reality in 1903, and the first nursing home was opened in Kistrand.

Provision for old age also became a political issue. Vardø approved a new plan to provide pauper care in 1902. Two years later, before municipal elections, the foundation of an old-age home for paupers and “worn-out” elders could be found in the Liberal Party’s programme. The first old-age home in Vardø was opened in 1907. These changing attitudes

¹⁵⁴ Balsvik 1989 bd 1: 65.

¹⁵⁵ Ibid: 227.

¹⁵⁶ Hauglid 1991: 492.

¹⁵⁷ A. L. Seip, *Sosialhjelpstaten blir til. Norsk sosialpolitikk fra 1740–1920*, Oslo 1984: 153–154.

¹⁵⁸ The transition from house to home has been discussed in an interesting article by Hamran. T. Hamran, Å skape et hjem—kvinner plass i den tidlige institusjonsbyggingen. Norge-Norge før 1940, *Sosiologi i dag*, 2007, 37: 71–89.

towards the elderly were initiated by the central authorities. People were generally more engaged in social questions and these were stated in the programmes of political parties.

Hamran analysed letters written in the period 1919–1927 by women who worked as nurses in Kistrand and three other places in Finnmark; an evaluation of the question—“who were the elderly in the nursing homes” is of special interest in this context.¹⁵⁹ Were the “worn-out” elderly coming for a final resting place? Were they confined to bed?

One patient was confined to his bed for only three or four days before he was out fishing again. Another man was sawing wood. His work was highly valued as he delivered all the firewood needed for the nursing home! Cleaning fish is a skill that is never forgotten, and since fish was the main course, it was good to have patients doing this work—approximately 50 kg of fish had to be cleaned each week. In the haying season, men participated and the elderly women were said to provide a helping hand. Gender-specific work was as prevalent in the nursing home as it had been in the homes the elderly had once established. A female patient would spin wool, and another cut fabric for making clothes. Women knitted socks and stockings for their grandchildren and sewed small shoes (reindeer skin shoes—komager), and they were happy every time they sent off a package. In one nursing home, patients were spinning an unusual thick, strong yarn that “looked like what people used in old times.”¹⁶⁰

Although it is not possible to deduce from these reports whether the elderly described here represent an entire group of the elderly in nursing homes, the descriptions reveal that old people in nursing homes were not necessarily “worn out”. They continued to perform activities typical of their old household economy. Why then, did they not live with their relatives? Indeed, there were examples of patients who, when the smell of spring and summer came, left the nursing home to live “in the tent and take care of oneself” or who went back to their once-established home. When the autumn and cold wind came, the nursing home was once again a good place to be.¹⁶¹ Both the 1875 and 1900 censuses were conducted during the winter, and thus it is an interesting question whether the establishment of nursing homes at the beginning of the twentieth century was a necessary reaction to the decline in intergenerational co-residence that was present in 1900?

¹⁵⁹ Hamran 2007. In addition to Kistrand, letters from nursing sisters in Lebesby, Bugøyfjord and Kautokeino constitute the basis for Hamran’s analysis.

¹⁶⁰ Hamran 2007: 81.

¹⁶¹ Ibid: 83.

4.1.3. Property ownership

During the last part of the nineteenth century, property ownership in northern Troms changed from a leasehold system to freehold.¹⁶² This happened at a time when the central authorities were working in favour of more efficient agriculture, a policy put forward by public servants and educated agriculturists. A transition to freehold was seen as a major motivation behind this project, as landowners would then become more interested in their land production. What consequences did this transition have for living arrangements?

Assuming that property ownership increased the value of and interest in land production, it could result in an increased reluctance to split up the property between family members. Combined with the rapidly increasing population, it is reasonable to assume that the pressure on available land was even more apparent. Such a situation was seen in Balsfjorden and Malangen, somewhat south of the NTF area, which resulted in a growing number of landless adult sons.¹⁶³ The alternatives were to rent a room, work as fishermen, become a fisherman on a polar vessel, or work in the mines and in road or railway construction. It is also reasonable to assume that the lack of a land problem was most prevalent in areas where agriculture was possible, beyond the minimum need to feed a household.

In the transition from leasehold to freehold, we also see that some places experienced an increased proportion of cottars, mainly because of the pressure on available land.¹⁶⁴ However, being a cottar did not necessarily mean that you belonged to a social class below freeholders. In living environments where the household economy was partly or wholly based on fishery, it has been argued that cottars had an economic advantage that freeholders did not have—they never risked aggressive traders collecting debts.¹⁶⁵

The threats were realistic, established and maintained by a credit system that existed between the local merchants and the fishermen. With the premise of repayment from future catches, fishermen purchased needed equipment and goods. Credit was further expanded to include goods needed in the household while the men were away at sea.

The system obviously put fishermen in a more vulnerable situation, especially during failed fishing trips. However, the merchant's main profit came from distributing and selling fish. Thus, it was unprofitable to cut off the credit to those who delivered the raw material—the fishermen. It should be mentioned briefly that although the credit system was terminated

¹⁶² Bjørklund 1984.

¹⁶³ Hauglid 1991: 281.

¹⁶⁴ Bratrein: 385. The same is found in Kåfjord, Stofjord, Lyngen and Sørfjord, Richter-Hanssen 2004: 72.

¹⁶⁵ Bratrein: 388–390.

after 1900, we see that the concentrated economic, political and social power that was in the hands of the merchants already showed signs of dissolution during the last decade of the nineteenth century. They lost their monopoly in trade, and fishermen had increased their opportunities to borrow money from banks. On the other hand, the weaker ties to the merchants did not necessarily mean an immediate benefit for the fishermen. An increase in compulsory auctions took place in some areas during the very last years of the nineteenth century.¹⁶⁶

Did the characteristics of property ownership and especially the transition from leasehold to freehold result in different attitudes towards transferring property between generations? It has been argued that a transfer of leasehold from the old to the younger generation was acknowledged as a proper right, and was not essentially different from the allodium law.¹⁶⁷

What may have influenced a greater change in how property was transferred to the next generation was the rise of the new religious movement established especially among the Sámi and Finnish immigrants, the Læstadian religion. When the “faith” gained ground, farmers found it inappropriate that not all the children got a part of the property. The result was an equal split of the farm.¹⁶⁸ On the other hand, if partible inheritance was widespread, one would assume that this resulted in a closer relationship between siblings and parents, and that one of the adult children resided with the parents. The findings presented in Articles Two and Three suggest that this was not the case.¹⁶⁹

4.1.4. Kinship and property ownership among the Sámi

It has been argued that the transition from leasehold to freehold was yet another milestone in assimilating the Sámi population into Norwegian law and culture.¹⁷⁰ This is an interesting statement, one that raises interesting questions. How was property ownership originally determined and conceived among Sámi? If the transition was experienced differently among the Sámi, did this affect family living arrangements? As stated in Article Two, the NTF area was characterized by two different inheritance systems, an ultimogeniture practice among the

¹⁶⁶ Richter-Hanssen 2004: 255.

¹⁶⁷ Bratrein: 494–495.

¹⁶⁸ Richter-Hanssen: 307. Yngvar Meijland who collected memories for Norsk etnologisk granskning cites his informant from Kåfjord.

¹⁶⁹ An interesting project in the future would be to assess the effect the first generation læstadinister had upon living arrangements in areas where læstadianismen were strong.

¹⁷⁰ Bjørklund 1984: 89.

Sámi and a primogeniture practice among the Norwegians. This section aims to discuss property ownership in an ethno-political context.

Because of the increased need for income for the state, a more comprehensive tax system was developed during the seventeenth century, based upon land rent and size of the farm, the so-called cadastral tax. However, along the fiords in Nordland and Troms, there were Sámi places of residence (*Finnerydninger*) that were exempt from this taxation. Thus, the Sámi population living along the fiords stood outside the ordinary leasehold system.¹⁷¹ Were they freeholders as understood in a Norwegian context, e.g. subject to allodial rights? The similarities between *finnerydning* and freeholders may have been captured by some contemporary civil servants as the system was named *finneodel*—Sámi allodial units. However, it has been argued that the importance of genealogical linkage in the transfer of property was not as important in the *finneodel* institution as it was among Norwegian freeholders.¹⁷² Notwithstanding the fact that property was transferred from father to son, we do find examples where the Sámi moved between different places of residence and exchanged places of residence with other Sámi. This may indicate that the Sámi allodium rights were related to a larger group, where different kinship relations could be exploited immediately. It has been suggested that this relationship was connected to a kind of *siida* community.¹⁷³

However, an interesting question is whether such practice was simply related to the old *siida* organization prior to the sixteenth and seventeenth centuries when reindeer-herding nomadism was developed. In other words, the *siida* constituted a geographical, social and economic community based on hunting and fishing, with a collective distribution of work and profit. In this system, approximately six to fourteen or fifteen households shared game, fish and pasture resources, and it is also assumed that in most cases the families were related through kinship and marriage/in-laws. At the same time, it seems that the Sámi along the coast of Finnmark and Troms who earned their livelihood to a greater extent from fishing and farming, may have had a more independent position compared with the more collective unit described above.

With the specialized reindeer nomadism developed during the sixteenth and seventeenth centuries, we see a change in the use of land areas determined by the migration route from inland to coast. Thus, the old inland *siida* areas changed to east–west-oriented

¹⁷¹ L. I. Hansen, *Finnerydninger*, in S. Imsen and H. Winge (eds.), *Norsk Historisk leksikon*, Oslo 1999: 112. See also L. I. Hansen and B. Olsen, *Samenes historie fram til 1750*, Oslo 2004: 298–305.

¹⁷² *Ibid.*

¹⁷³ Hansen and Olsen 2004: 302–303. L. I. Hansen, *Astafjord bygdebok, Historie bd. 2, Astafjord ca. 1570–ca. 1730*, Lavangen 2003.

resource areas. Perhaps more importantly, the *siida* gained a new meaning—an assembly of households that shared reindeer herding and carried out the migration together. Furthermore, it has been argued that this process also resulted in the *siida* losing some of its importance as an economic unit. Contrary to the wild reindeer that were not determined as property until hunted, the domesticated reindeer was determined as private property from which only the owner could profit.¹⁷⁴

Based on a Sámi nomad's account written sometime in the period between 1852 and 1863, Bjørklund reconstructed how the winter *siida* was organized from a social and economic perspective and thereby showed how important bilateral kinship was in the *siida* organization.¹⁷⁵ The bilateral kinship system is already discussed in Article Two; however, there are some additional points that need to be made in relation to parent–child co-residence. The Sámi nomad, whose name was Anders Persen Bær, was related to people who lived a settled life in Kvænangen and Kautokeino. In each of the locations, the kinship ties served as a means of securing different forms of assistance that were important for the household economy. Anders' maternal uncle, who lived as a fishing farmer in Burfjorden, gave a helping hand with the herding in the autumn and Anders' father's brother-in-law, who lived in Kautokeino, helped out during the spring.¹⁷⁶ Thus, kinship established the framework for how work was organized and by connecting kinship ties with other parts of the fiord—primarily through marriage—a greater variety of resources was secured.¹⁷⁷ The Norwegians in Kvænangen, a fiord in northern Troms, depicted the Sámi kinship network with expressions such as “to be seventeenth cousin just like the Sámi” (*å være atten-menninger liksom finnan*),¹⁷⁸ which may express the importance of large kin groups among the Sámi population. The expression also communicates that the Sámi kinship may have been articulated differently among Sámi than among Norwegians.

Through the specialized reindeer nomadism, we also see an increased interest in the exchange of goods between two different economic niches specialized in resources from the sea and from the inland, respectively. It is supposedly during this period that we find the first attempt to create what has become the *verdde*—institution.¹⁷⁹ A symbiotic relationship

¹⁷⁴ L. I. Hansen, *Siida*, in S. Imsen and H. Winge (eds.), *Norsk Historisk leksikon*, Oslo 1999: 374–375.

¹⁷⁵ I. Bjørklund, The anatomy of a millennarian movement, *Acta Borealia*, 1992, 9: 37–46.

¹⁷⁶ Bjørklund 1992: 42.

¹⁷⁷ B. Larsen, *Giftermål og etnisitet: samer, nordmenn og ekteskap i Karlsøy 1770-1900*, Ph.D. dissertation, University of Tromsø, 2008.

¹⁷⁸ Citation from Bjørklund 1984: 157.

¹⁷⁹ Hansen and Olsen 2004: 251.

between reindeer herders and coastal Sámi was developed through this *gjestevenn*—arrangements. The coastal Sámi helped with housing, and boat and fishing equipment and the reindeer herders provided the coastal Sámi with meat and skins in the autumn. Is it possible that the *verdde* relationship also included the arrangement where the elderly of a certain age stayed as members of the household in the summer *siida* instead of following the family to the winter *siida*. This might explain the low intergenerational co-residence among the Sámi in 1900. However, it does not explain the change. Why would an elderly Sámi decide, or have the decision made for him/her, not to follow his/her family and the reindeer to the winter *siida* in 1900 and not in 1875?

Kinship constituted an important economic, ecological and social basis in the Sámi population, especially among the reindeer herders, and thus we cannot exclude from our discussion the fact that this recognition—despite a supposed decline in the importance of kinship as an economic unit—implied that kinship articulated different meanings ethnically. In terms of intergenerational living arrangements, this means that although ethnic differences more or less disappeared towards the end of the nineteenth century, the change may have been experienced differently among the Sámi compared with Norwegians because of different perceptions of kinship and thus filial responsibility. Despite this, my dissertation has shown that co-residential behaviour expressed by residing with an adult child decreased during the last 25 years of the nineteenth century.

5. Conclusion

This dissertation is a statistical analysis of family living arrangements in northern Troms and Finnmark during the last part of the nineteenth century.

Reading Norwegian family history, there is a broad consensus that nuclear households dominated pre-industrial family arrangements. My argument, however, is that this nuclear dominance was merely a consequence of demographic conditions and constraints. Late age at marriage, combined with no deliberate fertility limitation, resulted in generations tending to be long. In addition, the combination of long generations and relatively short life expectancy reduced the potential number of years it was theoretically possible for adult children to live with their parents. Furthermore, since married brothers and sisters seldom resided together, relatively high fertility also resulted in family living arrangements that extended beyond the nuclear form and would always be in the minority.

Thus, as a way to avoid the demographic obstacles described above, I have analysed family living arrangements from the perspective of the elderly. Hence, the proportion of

elderly people co-residing with an own adult child constitutes the probability of any vertically living arrangement beyond nuclear household formation. Consequently, the proportion of nuclear households becomes less important in the study of family living arrangements.

The motivation behind two adult generations living together in the same household has been evaluated from two different theoretical perspectives. One is the nuclear reincorporation theory, which argues that individualistic family behaviour has always been the preferred family living arrangement. This is evident in the fact that every child left home upon adulthood. Then, when the parents became too frail to maintain their own household, they moved into one of their children's households. This theory implicitly indicates that independence was sought and encouraged by both generations, and intimacy at a distance was the preferable choice as long as health permitted.

By contrast, the economic development theory states that pre-industrial living arrangements were dominated by collectivism. The collective family form was characterized by a stem family system where both generations were economically dependent on each other. In a stem family, one married child remained with the parents. All other siblings received a dowry and established their own independent households. However, growing industrialization and urbanization increased opportunities for the younger generation, mainly by means of a substantial increase in cash income. This change, in combination with diminishing patriarchal authority, led to the dissolution of the stem family system and a rise of individualism.

While the economic development theory stresses economic change as the major factor behind widespread change in family living arrangements, there is no specific engine of change in the nuclear reincorporation theory. Rather, this theory indirectly states that household formation was *not* influenced by shifts in economic, political, social or cultural changes, and posits a static preference for independent residence across generations. The two theories also differ sharply on how kinship ties operated in the past. While economic development theory emphasizes that co-residence was a pattern of *ucceeding generations* (interrupted only by death), the nuclear reincorporation theory argues for discontinuous co-residence.

Results from my bivariate analysis and logistic regressions support the idea of a stem family system, at least up until 1875. Approximately two-thirds of all elderly Sámi resided with an own adult child (10 percentage points lower among Norwegians), and the vast majority of these households were headed by the older generation, suggesting a patriarchal system prompted by the economic needs of the children and sustained by economic dependency of both generations.

In 1900, fewer than half of the elderly lived together with an own adult child. The change happened in the Sámi as well as in the Norwegian population, however it was most pronounced among the Sámi. The change was further characterized primarily by a decline in the number of married sons staying in their parental home, and the decline was persistent in all economic sectors. The change, together with evidence indicating that the vast majority of the elderly in intergenerational living arrangements kept their headship position, suggests that family living formations were not characterized as discontinuous co-residence, as advocates of the nuclear reincorporation theory assert. It was the other way round—either one child stayed with his/her parents upon adulthood, or he/she moved back into the parental home after a period of independence.

What we see in the period between 1875 and 1900 may be an expression of a decrease in collectivistic family behaviour. The rise of individualism was strongly correlated with sex and marital status of co-residing adult child. However, it is difficult to conclude that this individualism was driven in its first stage by a preference for privacy. Instead, the period was characterized by looser kin obligations, although these were not necessarily encouraged by both generations. What we see is an increase in elderly people living as lodgers in households of supposedly non-relatives. In 1900, when fewer than half of elderly parents co-resided with an own adult child, Norway passed a new poor law. This law created expectations of a new and perhaps more humane way of caring for old and sick people. Thus, an interesting question is whether the establishment of nursing *homes* at the beginning of the twentieth century was a necessary reaction to the decline in intergenerational co-residence that was present in 1900.

What explains the nineteenth-century intergenerational co-residence pattern? What explains the transformation? By applying a multi-causal model, my aim has been to discuss these questions from four different perspectives: demographic features, household economy, political economy, and ethnicity. Each category may have a direct or indirect relationship to the observed family arrangement and the model assumes a feedback connection between the categories.

A focus on household economy has revealed that intergenerational co-residence was positively associated with an occupation in farming or combined fishing and farming compared with an occupation in fishing. These differences may be explained by the way work was organized. In fishing households, the working crew was often organized across the household boundaries. Young sons went out early to participate in fishing, and this gave independence in the form of them having their own income. Thus, the decline in

intergenerational co-residence from 1875 onwards may have been as a result of the increased participation in fishing during the last part of the nineteenth century.

The association between political economy and intergenerational co-residence focuses on the effects of legal rules governing inheritance. The allodium law gave the heir a special right to own the estate based on kinship ownership over a certain period. If the estate was sold outside of the family, the allodium law ensured that the legitimate heir could invalidate the sale. An additional provision (*åsetesrett*) gave the oldest son the right to inherit the farm, and in 1863 it was decided that he could take over the farm at a price below the appraised value.

As an inheritance system, the allodium law was an effective protection of the family property, as the estate was secured for the next generation upon the death of the deceased. Equally interesting for this dissertation are the various practices that existed in the time prior to the estate being divided—before the elder died. Who secured the parents' old age? The answer to this cannot be fully understood unless we approach it from an ethnic perspective.

Unlike the Norwegian system that benefitted the oldest son, the youngest son's right (ultimogeniture) has been determined as a Sámi system. Not only did the youngest son inherit his parents' farm or business, he was also given the responsibility to care for his parents until their death. Thus, differences in intergenerational co-residence between Norwegians and the Sámi, at least up until 1875, might therefore be explained by differences in inheritance practice. This conclusion is also strengthened by the age pattern showing that age did not have any pronounced effect on co-residence behaviour among elderly Sámi, compared with elderly Norwegians. However, how strong is the evidence for ethnically different co-residence behaviour?

Controlling for demographic features, census years and economic activity, there were no substantial differences in the likelihood for elderly Sámi to live together with their own adult child compared with elderly Norwegians. Therefore, we do not actually know if the differences in elderly people's living arrangements for the Sámi population compared with Norwegians are because of differences in economic activity of the household or because of ethnic differences. Hence, it is difficult to assess to what degree inheritance practice is an ethnic expression or if it is instead determined and defined by ecological conditions and economic niches.

On this first issue, my results show that, among farmers and fishermen—farmers only, being Sámi was positively associated with intergenerational co-residence compared with being Norwegian. This result indicates that there were some ethnically defined mechanisms that affected living arrangements beyond the level of economic activity, and this could very

well be related to different inheritance practice. However, what we have to remember is that some economic niches, for example, salmon fishing, were maintained through an ultimogeniture inheritance system—mainly because this was economically beneficial to both generations. Hence, the inheritance system was economically motivated, and became an ethnic expression because salmon fishing was a Sámi trade.

Young men had more opportunities to take on different occupations, and for some, this may have been more attractive than staying at home. This may partly explain the decline in intergenerational co-residence between 1875 and 1900, whereas the decline was characterized by a decrease in co-residence between elderly dependent widowed and married sons.

In addition, during the period of study, we know that the Norwegian state increased its efforts to assimilate the Sámi population into Norwegian law and culture. Along with this assimilation process, we also see an increased interaction in the private sphere, as previous research has shown an increase in marriage across ethnic groups. Thus, as the analysis shows for 1900, the consequence here was an approach towards a similar family system for the Sámi and Norwegian population.

6. Appendix

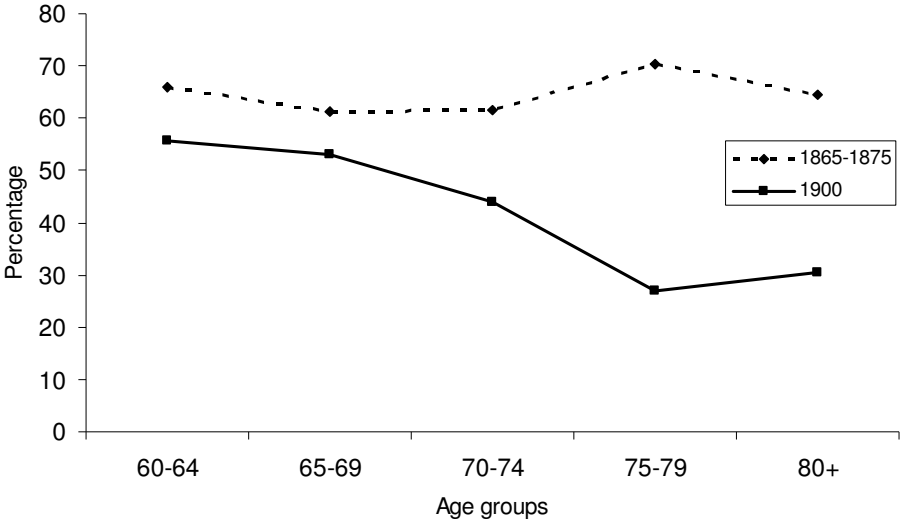


Figure 7: Elderly coastal Sámi residing with an own adult child, by age group. Source: Norwegian population censuses 1865, 1875, and 1900 extracted from Minnesota Population Center. The Norwegian Historical Data Centre, the Digital Archive and the North Atlantic Population Project. Cf www.rhd.uit.no ; www.digitalarkivet.no ; www.nappdata.org

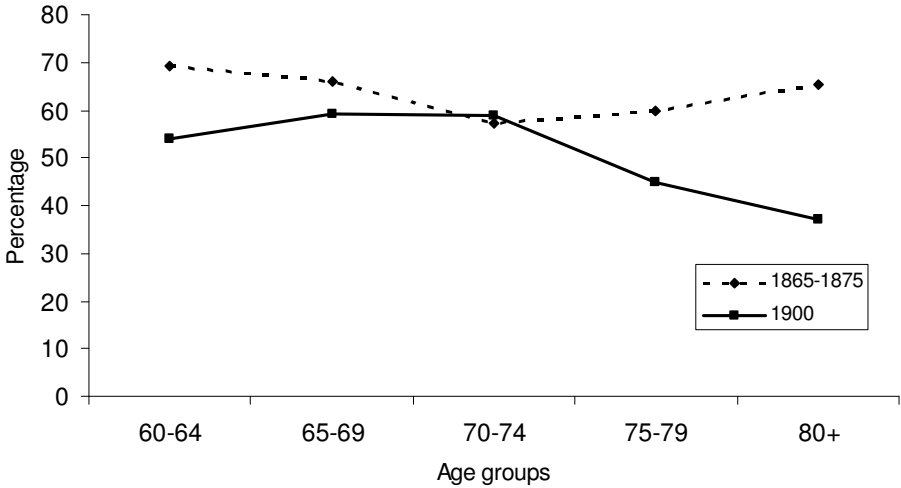


Figure 8: Elderly Sámi nomads residing with an own adult child, by age group. Source: see Figure 1.

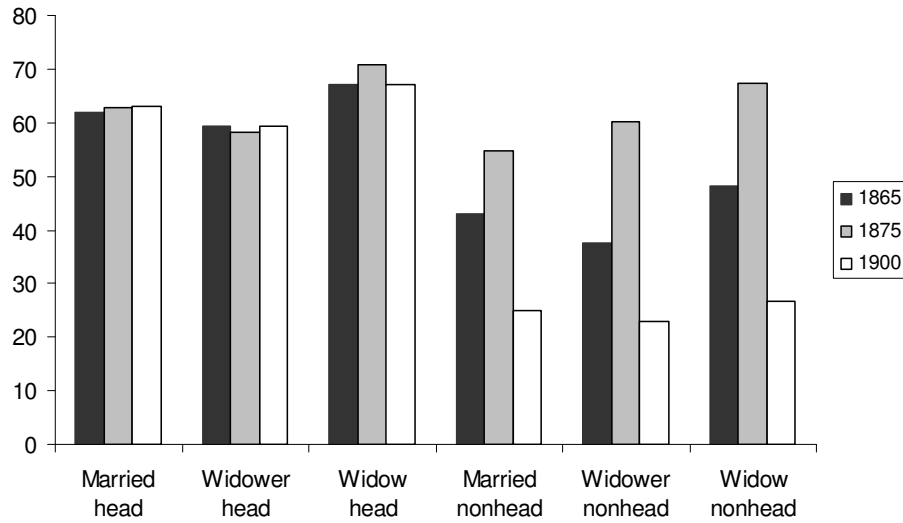


Figure 9: Elderly residing with an own adult child, by headship and marital status. Source: see Figure 1.

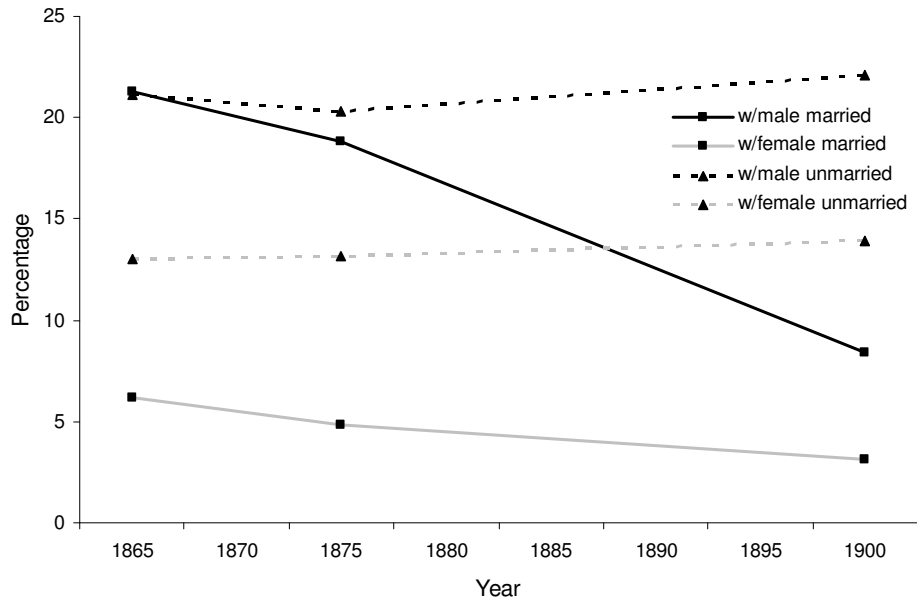


Figure 10: Elderly residing with an own adult child, by child's sex and marital status, and census year. Source: see Figure 1.

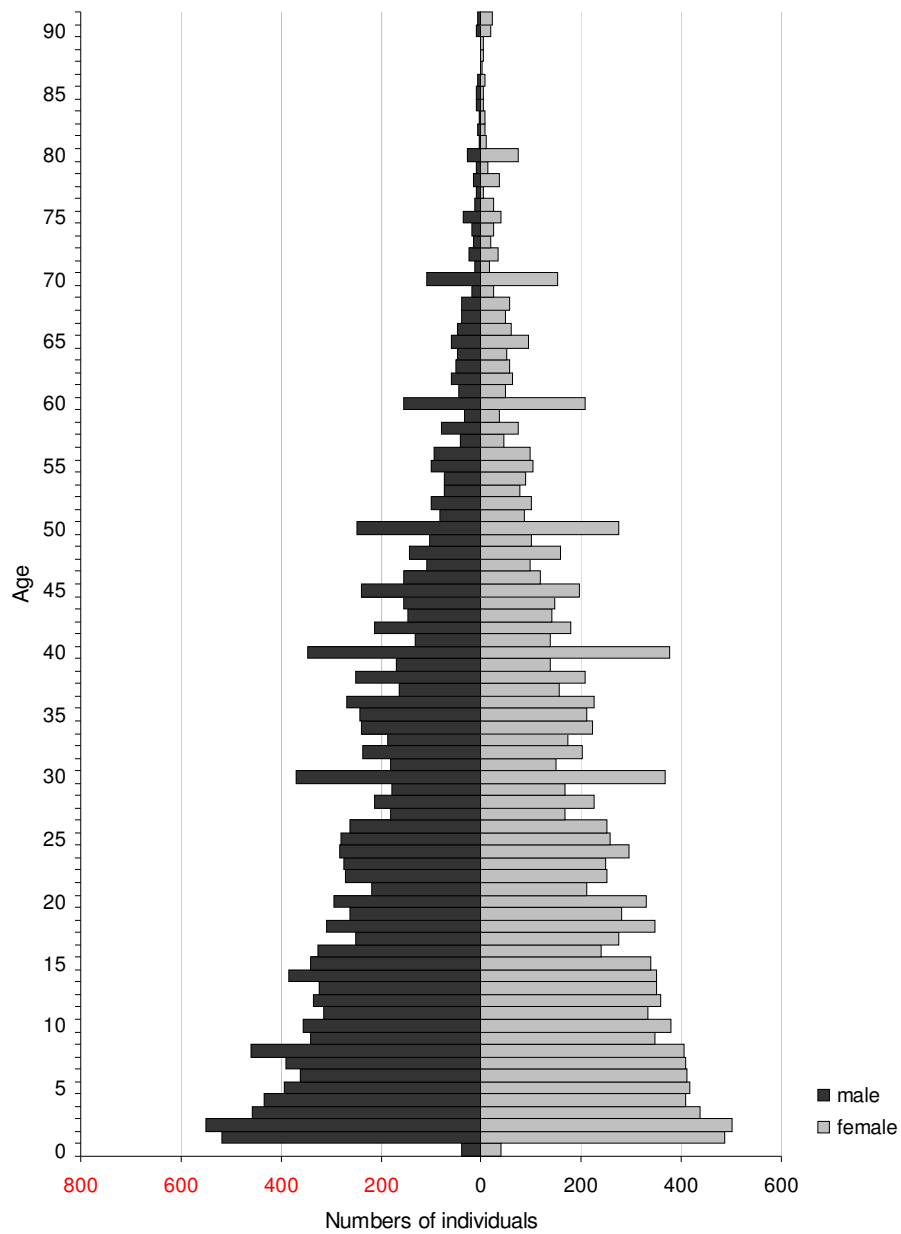


Figure 11: Age pyramid for each birth year, by sex. NTF-area in 1865.
Source: see Figure 1.

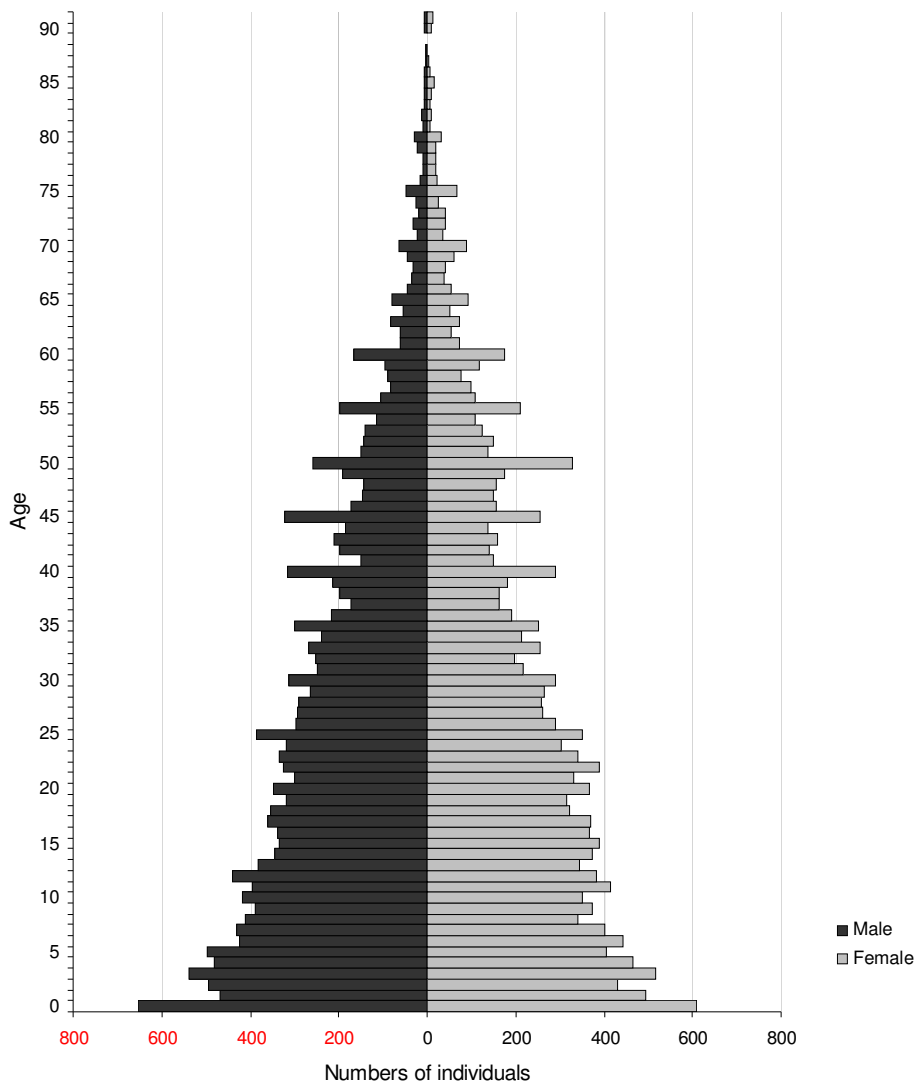


Figure 12: Age pyramid for each birth year, by sex. NTF-area in 1875.
 Source: see Figure 1.

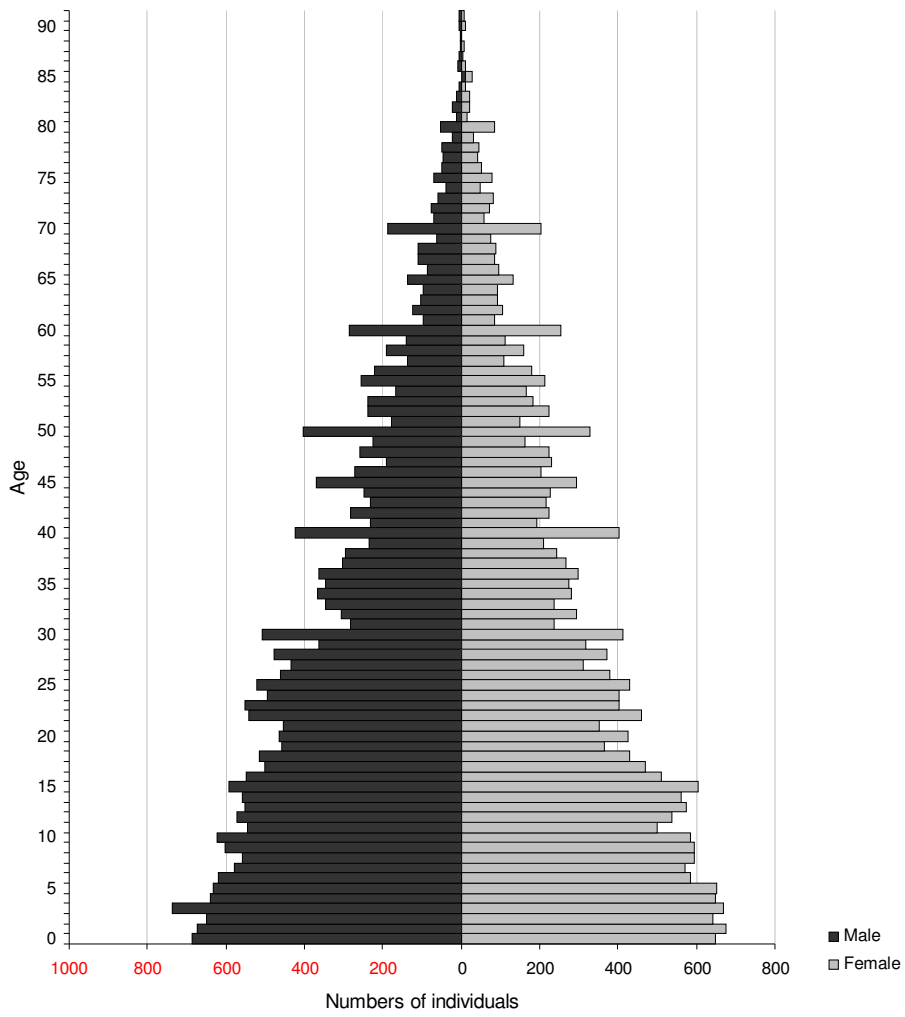


Figure 13: Age pyramid for each birth year, by sex. NTF-area in 1900.
 Source: see Figure 1.

Variables		Count	Mean
Total number of cases		2604	100.0
Census year	1865	689	26.5
	1875	735	28.2
	1900	1180	45.3
Individual characteristics			
Present of child	1=yes	1486	57.1
Male			
Female		1508	57.9
Married		1402	53.8
Widows		904	34.7
Widowers		298	11.4
Age groups	60 to 64	892	34.3
	65 to 69	589	22.6
	70 to 74	569	21.9
	75 to 79	274	10.5
	80+	280	10.8
Headship status	Married with headship	1203	46.2
	Married without headship	238	9.1
	Widowed with headship	199	7.6
	Widowed without headship	964	37.0
Household characteristics			
	Agriculture	2043	78.4
	Fishery	426	16.4
	Secondary and tertiary	135	5.2

Table 3: Data set description of the Sámi population, NTF area 1865–1900.
Source: see Figure 1.

Variables		Count	Mean
Total number of cases		2623	100.0
Census year	1865	560	21.4
	1875	647	24.7
	1900	1416	54.0
Individual characteristics			
Present of child	1=yes	1395	53.2
Male		1265	48.3
Female		1358	51.8
Married		1545	58.9
Widows		712	27.1
Widowers		366	14.0
Age groups	60 to 64	842	32.1
	65 to 69	682	26.0
	70 to 74	550	21.0
	75 to 79	344	13.1
	80+	205	7.8
Headship status	Married with headship	1355	51.7
	Married without headship	190	10.9
	Widowed with headship	137	7.3
	Widowed without headship	793	30.2
Household characteristics			
	Agriculture	1496	57.0
	Fishery	470	17.9
	Secondary and tertiary	657	25.1

Table 4: Data set description of the Norwegian population, NTF area 1865–1900.
Source: see Figure 1.

Variables		Count	Mean
Total number of cases		1537	100.0
Individual characteristics			
Present of child	1=yes	974	63.4
Male		649	42.2
Female		888	57.8
Married		893	58.1
Widows		473	30.8
Widowers		171	11.1
Age groups	60 to 64	571	37.2
	65 to 69	368	23.9
	70 to 74	295	19.2
	75 to 79	147	9.6
	80+	156	10.2
Ethnicity	Sámi	560	36.4
	Norwegian	689	44.8
	Kven	267	17.4
	Mixed	21	1.4
Headship status	Married with headship	785	51.1
	Married without headship	108	7.0
	Widowed with headship	117	7.6
	Widowed without headship	527	34.3
Household characteristics			
	Agriculture	1070	69.6
	Fishery	268	17.4
	Secondary and tertiary	199	13.0

Table 5: Data set description of the NTF area in 1865.

Source: see Figure 1.

Variables		Count	Mean
Total number of cases		1885	100.0
Individual characteristics			
Present of child	1=yes	1131	60.0
Male		840	44.6
Female		1045	55.4
Married		1055	56.0
Widows		594	31.5
Widowers		236	12.5
Age groups	60 to 64	685	36.3
	65 to 69	442	23.5
	70 to 74	352	18.7
	75 to 79	225	11.9
	80+	181	9.6
Ethnicity	Sámi	647	34.3
	Norwegian	735	39.0
	Kven	450	23.9
	Mixed	53	2.9
Headship status	Married with headship	896	47.5
	Married without headship	159	8.5
	Widowed with headship	164	8.7
	Widowed without headship	666	35.3
Household characteristics			
	Agriculture	1374	72.9
	Fishery	287	15.2
	Secondary and tertiary	224	11.9

Table 6: Data set description of the NTF area in 1875. Source: see Figure 1.

Variables		Count	Mean
Total number of cases		3285	100.0
Individual characteristics			
Present of child	1=yes	1597	48.6
Male		1564	47.6
Female		1721	52.4
Married		1895	57.7
Widows		950	28.9
Widowers		440	13.4
Age groups	60 to 64	1016	30.9
	65 to 69	797	24.3
	70 to 74	752	22.9
	75 to 79	409	12.5
	80+	311	9.5
Ethnicity	Sámi	1416	43.1
	Norwegian	1180	35.9
	Kven	655	19.9
	Mixed	34	1.1
Headship status	Married with headship	1635	49.8
	Married without headship	260	7.9
	Widowed with headship	380	11.6
	Widowed without headship	1010	30.8
Household characteristics			
	Agriculture	2012	61.3
	Fishery	609	18.6
	Secondary and tertiary	664	20.2

Table 7: Data set description of the NTF area in 1900.

Source: see Figure 1.

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