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Family Networks in an Ageing Society: Some Reflections and Explorations

Abstract

Past work on population ageing and family life has emphasized dependency, disregarding the aged as a resource and neglecting the young. In this article, changes in the structure of Norwegian families over the last few decades are explored. Three key changes are identified: sibling groups have become smaller and more age-homogeneous, the age difference between parents and children has decreased, and three-generational structures have become increasingly "top heavy". In modern three-generational structures, considerable support flows from the old to the young.

Population ageing and family life

There is a growing recognition that we live in an ageing society, and that population ageing presents a host of new challenges for individual life planning, social policy, and the functioning of human groups (Pifer and Bronte 1986). In no social group is the impact of demographic change more dramatic than in families. Yet, the connection between societal ageing and family patterns has received little systematic attention in social science.

In current discussions, population ageing is often automatically linked with problems of *dependence*. The social sciences have adopted the concept of the dependency ratio from demography and given it meanings far beyond its original usage. An increasing number of individuals in the last quarter of life is often automatically linked to problems of dependency and burden. The same tendency can be observed in the discussion of the family and what Matras (1990) calls "micro-dependency." As decreasing family size and increasing longevity alter the population pyramid of family lineages, we find a voluminous literature on "caregiver burden, "but very little exploration of the old as a resource".

This may in part be due to another trend in recent work on ageing and family life: a focus on the aged and a neglect of children. Nearly all discussions of how families are affected by population ageing limit themselves to old people. It is hard to find a single study which sheds light on how the kin networks of children and youth have been influenced by recent demographic change. In this chapter, the main emphasis is on children, not on the aged.

In order to systematically question the prevailing tendency to equate ageing with dependency in the family realm, it is necessary to develop new research strategies by which two key issues can be addressed: what is meant by "family," and what concepts and measures are needed in order to describe family structure? The basic position taken here is that in an ageing society, the household has limited utility as a unit of observation in the study of family life. While demographers have provided a number of indicators to measure population age and ageing, they have rarely addressed the ages and generational composition of the families. Census-takers have traditionally only recognized two units of observation: individual and household. Consequently, "family" has been linked to household, and most family statistics describe parents and dependent children living in the same household. Once the children have left the nest, they are no longer counted as a part of the family, even though their relationships with the parents may last for 50 more years.

We have no census information on adults and their parents, and no figures on the generational composition. It is clear that in order to say something about the ageing of families, we need to move beyond the limits of the household and delineate units of individuals who are still related to their parents, but who are typically not living in the same house with them.

Anchors and asymmetries: the need for new strategies

One reason why most current statistics on families are based on the household unit is that it provides boundaries for the family system. If the household is abandoned as the unit of observation, we are left with floating boundaries. How limits are set depends on the nature of our questions, but the limits have to be made clear.

In describing intergenerational networks, it is necessary to choose an *anchor* and then ask about family members below and above the anchor. This simple fact has been readily recognized by anthropologists, but typically neglected in the approach of other disciplines to families. What is needed is to create kinship charts similar to those used by anthropologists. Looking "up" along generational lines, it is necessary to separate between maternal and paternal lines; looking "down" descendants are traced in what has traditionally formed a pyramid pattern. A fundamental problem in intergenerational research is the fact that views from "the top" of family trees are different from perspectives from "the bottom." It is important to realize the asymmetries inherent in intergenerational relationships. Each of us has only one mother, but most mothers have more than one child. While grandchildren have only one paternal grandfather, he may have 25 grandchildren.

A variant of the asymmetry problem is found in the use of demographic information, such as fertility figures. These data are usually anchored in women from given birth cohorts. As Preston (1976) has pointed out in a classic paper, information on the family size of women does not enable us to draw conclusions about the family size of children. For example, the proportion of women in a cohort who bore only one child cannot be translated into the proportion of children from a given cohort who grew up without siblings.

Problems of asymmetry and unspecified anchors have plagued much of recent social research on intergenerational relations. Most surveys of family proximity and contact have been anchored among the old. Not uncommonly, estimates of contact rates are then discussed as applicable to the next generation, their children. An example of such misinterpretation can be found with regard to Shanas' (1980) finding that 80% of elderly parents see at least one child weekly or more often. It is not uncommon to find authors who conclude that according to Shanas' surveys, the majority of middle-aged individuals see their parents weekly. The asymmetry problem also creates difficulties in studies of caregiving and its burdens. Very often, such studies are anchored in a population of frail elderly. If it is found that a substantial amount of care is provided by middle-aged offspring, we frequently conclude that the majority of the middle-aged are involved in such care.

As should be clear from this brief discussion, there is a pressing need to develop data on family units beyond household boundaries. Such data should be built around carefully selected anchors who represent a specified age-cohort range. In sampling, "all families" is not a meaningful population, but "all families of the defined anchors" are, and we can obtain a probability sample of anchors. In countries with national registries and personal identification numbers, there is the potential for creating data sets which comprise family units, independently of household, and following them over time (e.g. across census points). Norway is among the countries which offer such possibilities. A highly promising strategy

would be to combine demographic descriptions of family structures with in-depth survey research. In the surveys, one could examine the social and psychological correlates of various types of structures, such as relatively "top-heavy" (old) versus "bottom heavy" (young) families; two generation versus five generation structures.

This is the approach I have taken in recent work on Norwegian family patterns. Analyses of a large-scale "family file" built on census and registry information have been combined with a sample survey of individuals from one of the cohorts included in the large file.

Norwegian families, 1930s to 1980s

In my research on family structure, I have chosen first-born children from different birth cohorts as the anchor. The birth of the first child marks the start of a nuclear family system. These anchors could also be conceptualised as cohorts of first-time mothers (independently of birth cohort). Three data sets have been utilised:

1. A "family file" including all first-born children from four birth cohorts: 1946, 1956, 1966 and 1976, totalling about 90,000 families (described below).

2. Information from the 1970 census, in which all married women were asked about all children born in the marriage. This information was restructured to be anchored in first-born children from four periods: the 1920s, the 1930s, the period 1946-1949, and the 1950s. Information from this census was used to provide basic data on families formed before World War II, when there were no person identification numbers.

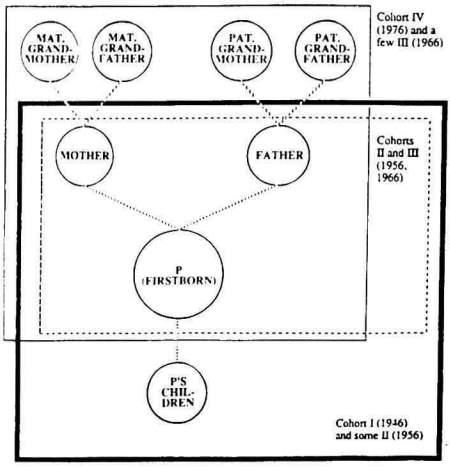
3. A survey of approximately 800 members of the 1946 cohort when they were about 42 years of age (1988). The survey included questions on the current family structure, health status of the respondents and their parents, and exchange of support across generations in the family.

Using these three sources, I briefly discuss three aspects of family structure: changing sibling groups, the age differences between parents and children, and the relative ages and numbers in three generations, with special emphasis on the position of grandparents.

The Norwegian family file

Since the 1960s, all Norwegians have been assigned a personal identification number. At the time of birth, a child is assigned a number and entered in a national registry. In this registry, the numbers of the child's parents are also entered. By 1985, the Norwegian Central Bureau of Statistics, which carries out the census, had created a file with linked data from three census points: 1960, 1970 and 1980. In other words, for a given individual, the file contains information for a 20-year period. With the help of the Bureau, records for parents and children were linked over the same period. First-born children from four birth cohorts were identified: 1946, 1956, 1966 and 1976. These cohorts represent distinct areas in recent Norwegian history. Members of the first cohort spent their childhood years with limited material resources. They spent their youth in the 1960s, a decade of heightened political awareness and rapidly expanding educational opportunities. The 1956 cohort arrived at a time when the post-war recovery allowed more comforts of life than were experienced by the children of the 1940s. Their youth was spent in the context of an expanding economy. The 1966 cohort is still a part of the baby boom and its members have faced a labour market not able to absorb them. The last cohort, some of whom are the children of the oldest cohort (1946), was born in a period marked by a strong decline in fertility.

Fig. 1:
Family members included in sub-files from four cohorts



For these cohorts, information on the family was obtained by moving "backwards" and "forwards" in census information and by checking the results against registry information. Members of the oldest cohort were 14 and living with their parents at the time of the 1960 census. By the 1980 census, most of these persons had children of their own. For the 1976 cohort, the parents' numbers were used to find them as children living at home in 1960 and to obtain information on the anchor's grandparents. All record linkages were performed at the Central Bureau of Statistics, and the final data file does not contain any identifying information. (The Bureau assigned new, random identification numbers.)

Fig. 1 shows the family members represented in the subfiles for each cohort. In all four, information is available for the anchors (first-born children, marked P) and their parents. In the 1946 cohort subfile (marked in bold solid line) P's children are also included. Subfiles for the two middle cohorts (1956 and 1966, marked with dotted line) contain a few individuals who had children by the early 1980s, but the majority of these records contain information on only two generations (P and parents). The youngest cohort (1976, outlined with thin solid line) is the only one whose file includes information on grandparents. If the anchors' parents were living at home with their parents (P's grandparents) at the time of the 1960 census, this record linkage was possible.

The four subfiles contain basic background information on all family members included. For example, we know their educational attainment and occupation, and their geographic location at all census points. For members deceased between 1960 and 1986, we have the year of death.

Changing family structures

Demographic change which leads to an ageing society also alters the contours of family groups and lives within them. Two key changes in family structure are addressed here: *increasing "verticalisation"* and a *shift from "bottom heavy" to "top-heavy" structures* (Bengtson et al. 1990; Hagestad 1989; Knipscheer 1987). Altered fertility patterns lead to an emptying of *intragenerational* relationships. The most extreme examples would be cases in which a one-child policy has been successful for two generations. Under this fertility scenario, the individual has no horizontal ties outside the marital relationship. Even when children do have siblings, the sibling group is smaller and more homogeneous than was the case earlier in this century. Several authors (e.g. Hareven 1989; Uhlenberg 1978) have argued that recent demographic change has lead to a *homogenisation of childhood*, i.e., subsequent cohorts have grown up in increasingly similar family environments. Such discussions also include references to vertical, intergenerational ties. Authors point out that an increasing proportion of children are born to parents aged 25 to 35 (Eggebeen and Uhlenberg 1989), and a steadily growing number of them grow up with grandparents alive for the duration of their childhood. The increased availability of intergenerational relationships is part of what is described as a

process of *verticalisation* (Knipscheer 1987).

Reduced fertility and mortality lead to a dramatically altered balance between adults, especially older adults, and children in family groups. From a traditional lineage pyramid, with 20-30 grandchildren and, at best, two grandparents, there is a move toward "an inverted triangle" -- the pattern which results from two generations having only one child. If such fertility patterns are accompanied by modern mortality patterns, family lineages will frequently have more grandparents than grandchildren.

In early analyses of the Norwegian family material, I have begun to explore the extent to which the changes outlined above can be identified in families which were started over the last few decades.

Horizontal ties: the shrinking sibling group.

Over the last five-six decades, two interrelated changes have taken place with regard to children's sibling groups. First, the experience of growing up in large families has become statistically rare. Second, the distance between the first and last child has steadily declined. Analysis of the 1970 census information and the family file reveals a steady increase in the proportion of firstborns who grew up in families of two or three children, with an average distance of 2-4 years between them.

Table 1:
Number of siblings at age 14 among first-born children

	1920s*	1930s*	1946**	1956s**	1966**
0	4%	6%	28%	15%	12%
1	15%	19%	35%	35%	45%
2	19%	23%	22%	29%	32%
3	17%	19%	10%	14%	9%
4	45%	33%	5%	7%	2%
	100%	100%	100%	100%	100%

Sources:
* Family File,
** Data from 1970 Census

As table 1 shows, among children born in the 1920s, nearly half ended up with four or more siblings. In contrast, the 1966 cohort has only 2% who grew up in families of five or more children. While two-thirds of the 1920s' first-borns had at least three siblings, the corresponding figure for the 1966 cohort is 11%. During the post-war era, families with 2-3 children have become the norm. In the 1966 cohort of first-borns, more than three-fourths had one or two siblings by the age of 14. In the 1976 cohort, this figure will most likely be over eighty percent.

A substantial proportion, one-third, of the 1920s first-borns were sixteen years or older when their last sibling was born. In the 1950s and 60s, that figure is under 5%. In these recent cohorts, the vast majority have less than ten years between them and their youngest sibling. In families with two children, the distance is four to five years; in sibling groups of three, eight to nine years. The shorter span between the first- and last-born child means that the siblings to an increasing degree can be said to have grown up "in the same family". While many youngest children early in this century only knew their parents with grey hair, today's siblings have experienced their parents in the early phase of adulthood, have had similar material resources available to them, and known the same "galleries of kin".

The greater age homogeneity of sibling groups has implications for adult life. Siblings will have long life-overlaps and are likely to grow old together. Throughout adulthood, they will tend to have a sense of being peers, who face key adult transitions at about the same time. Such peership may increase empathy and communication, but it also means that they face similar constraints and stresses. This, in turn, may limit their ability to serve as social supports for one another.

A note about "only" children is necessary. Since census information on family units cannot identify only children, it was not

known until the family file was available that the Norwegian post-war cohorts had an unusually high proportion of first-borns who ended up with no siblings. As table 1 shows, more than one-fourth of the 1946 cohort grew up as only children. The reason for that becomes apparent when we examine age differences between parents and children. These "onlies" were typically postponed children; delayed because of a depression and a world war.

Vertical ties: parents and children

Examination of the age of mothers at the birth of the first child shows that in the 1946 and 1956 cohorts, only children had relatively old mothers. More than half of the number these women were over thirty when the child was born. In contrast, children who ended up with large families had relatively young mothers. Among those with three or more siblings, about 40% had mothers who were under 22 years of age at the time of the first-born's arrival.

In the four post-war cohorts, a remarkably stable proportion of mothers started the family between the ages of 22 and 30 (table 2). From 1946 to 1976, this figure stays between 52% and 56%. Where we see shifts is in the relative distribution of "early" and "late" mothers. During the four decades, a decreasing proportion of first-borns were born to mothers over 30 (from 32% in 1946 to 11% in 1976) and an increasing proportion had mothers under the age of 22 (from 14% in 1946 to 33% in 1976). Thus, in the four decades covered by the family file, it has become increasingly common for the families to get started before the mother had turned 30. By 1976, nearly nine out of ten first-borns had mothers under 30. Eggebeen and Uhlenberg (1989) show very similar trends in the United States during the period 1940-1980.

Table 2:
Age of mother at the birth of first-born child in four cohorts

	1946	1956	1966	1976
Under 22	14%	25%	39%	33%
22-25	28%	32%	37%	37%
26-29	27%	22%	15%	19%
30 and over	32%	21%	9%	11%
Total	101%	100%	100%	100%

Source: Family File

The 1946 cohort at forty-two

When members of the 1946 cohort of first-borns were contacted in 1988, 82% had at least one living parent. About 10% also had a living grandparent. Of the 792 respondents, about 10% were without children.

The respondents were asked where they would turn for various forms of help. Their answers reflect the centrality of the parent-child connection. Parents, especially mothers, are mentioned more than friends and more than siblings. Parents were seen as potential sources of financial help in a pinch, assistance with care for children in the case of illness, and advice and encouragement in the tasks of child rearing. A strong theme in these data is that parents are supportive players for adult children in their own role as parents. They are there in times of crisis, such as illness, unemployment, and divorce, and they serve as emotional boosters for their children's parenting. These findings are supported by a number of recent studies on both sides of the Atlantic (e.g. Cherlin and Furstenberg 1986; Heatherington and Camara 1984; Johnson 1988; Parke 1989).

Becoming a grandparent, especially a grandmother, has always been a transition which typically occurred in the middle years. The most significant change with regard to the grandparent role is its relationship to the parent role. By the time her first grandchild is born, a woman is typically not engaged in

day-to-day childrearing (Hagestad and Burton 1986). Thus, there is less competition between these two roles. Rather, grandparents are what Gutmann (1987) calls *emeritus parents*, who help provide a supportive framework for their adult children's functioning as parents. Thus, the key to understanding the functions of grandparents in modern families lies in the quality of ties between adults and their parents (Johnson 1988).

In considering the flow of resources and support between the generations, it is of course important to examine the relative number of old and young in the family. In some current work (Hagestad and Gautun 1990) we have explored three-generational structures, using the survey from the 1946 cohort. Starting with the ratio of grandparents to grandchildren, we defined the following three structures:

Traditional: .00 - .25 grandparent per grandchild;

Transitional: .26 - .99 grandparent per grandchild;

Modern: 1.00 or more grandparent per grandchild.

Among these families, 39 percent fall into the traditional "bottom-heavy" pattern of considerably more grandchildren than grandparents. Forty-three percent reveal a transitional pattern, with a grandparent-grandchild ratio of .26 to .99. Finally, 19 percent have a modern structure, with equal numbers of grandparents and grandchildren, or more grandparents than grandchildren.

The relative numbers of grandparents and grandchildren is a neglected aspect of family structure, but it would seem reasonable to expect that it has profound impact on the flow of support across generational lines. Using an index of "reservoir of support" from grandmothers (the respondent's mother), analysis of variance revealed significant differences between the three structural types. Grandmothers in modern, "top-heavy" family structures were seen as the most helpful, while grandmothers in traditional, "bottom- heavy" structures were perceived as the least helpful.

The question of variability

Both in sibling groups and in parent-child relationships, we may be witnessing decreasing variability on an intra- as well as an inter-family level. However, if we consider three generations or more, we find a great deal of heterogeneity (Bengtson, Rosenthal and Burton 1990). The age differences between grandparents and grandchildren reflect the fertility patterns of two generations, and reveal a wide variance. In the family file, nearly two-thirds of the 1976 cohort had all grandparents living in 1980. As would be expected, the youngest grandparent was the maternal grandmother and the most commonly found, while the oldest and least frequently encountered grandparent was the paternal grandfather. However, across grandparents, ages ranged from 30s to 90s.

It is also important to keep in mind the current discussion of "aged heterogeneity" in society at large (Dannefer and Sell 1988). A number of authors argue that with increasing age, we see a "fanning out," an increasing variability in available resources, health and functioning. A neglected aspect of variability in old age is the type of intergenerational structures individuals are embedded in.

A note about social and historical contexts is in order. Although this discussion builds on recent literature on intergenerational relations from both sides of the Atlantic, it may be wise to caution about forming generalisations across continents. An obvious factor to consider is size and distance, but several others are worth mentioning. One is the impact of welfare states, especially national health care plans. The lack of provisions for long-term care in the U.S. puts economic pressures on the aged which are much less evident in a country like Norway.

Such pressures may restrict the flow of financial resources from old to young. Canada would be an interesting case in three-way comparisons, since it combines the distance and scale with a fairly developed welfare state. Another important factor to keep in mind is World War II and its aftermath. I have already mentioned the phenomenon of postponed children. In many parts of Europe, severe housing shortages in the post-war era made extended households common. In the survey of the 1946 cohort, we found that nearly 40% had spent a part of their early childhood living in the same house as their grandparents. It would be reasonable to expect that such early experiences would affect subsequent orientations to kin ties.

Summary and discussion

Using data on Norwegian families, this brief discussion has focused on some key changes in family structure produced by altered fertility and mortality patterns. It is argued that we witness horizontal constriction in family relations, and an increasing homogeneity in children's nuclear family contexts. However, a new vertical intergenerational complexity spells increasing heterogeneity and variability, both for old and young. An examination of three-generational structures challenges prevailing views of family ageing as linked to problems of burden and dependency. In the Norwegian families studied, family lineages with modern, "top-heavy" structures had the most support flowing *down* generational lines, from old to young. These data point to the importance of considering both macro (societal) and micro (family) levels in our discussions of intergenerational transfers and the complex issues of dependencies in an ageing population. A reconsideration of family functions is also in order. Modern vertical family structures are typically found in societies in which other key social structures, such as schools, the workplace and residential areas, are highly age-homogeneous. In societies which erect structural barriers against contact and communication between members of different age groups, the family provides a critical antidote to such segregation. Interwoven lives, longstanding personal knowledge and long-term reciprocities, can help to soften age-related contrasts and chasms in society at large. It has been argued that modern family relations are characterised by ambiguity and ambivalence (Hess and Waring 1978; Rosenmayr 1986), with few culturally provided guidelines. There is another side to this lack of clarity: flexibility. The old notion of family as a highly specialised institution which only takes care of emotional needs in a highly bureaucratized urban society, is outmoded. What we are beginning to see is that the family is the *omnibus institution* which fills the gap left by other institutions. In policy discussions, it is important to ask how the strength and flexibility of the family can be maximised. Such deliberations should consider the old as significant social and psychological resources for the young. It is also imperative to move beyond limited static views of dependency to dynamic, multi-generational perspectives on complex patterns of interdependence. Both old and young would benefit from such broadened vistas.

References

Bengtson, V.; Rosenthal, C. and Burton, L. 1990; "Families and ageing: Diversity and heterogeneity." In: R.H. Binstock and L. George (eds.), *Handbook of Ageing and the Social Sciences* (3rd edition), Academic Press, New York.

Cherlin, A.J. and Furstenberg, F.F. 1986; *The New American Grandparent*, Basic Books, Inc., New York.

Dannefer, D. and Sell, R.R. 1988; "Age Structure, the Life Course and "Aged Heterogeneity": Prospects for Research and Theory." In: *Comprehensive Gerontology* 1: 1-10.

Gutmann, D. 1985; *Reclaimed Powers. Toward a New Psychology of Men and Women in Later Life*, Basic Books, Inc., New York.

Hagestad, G.O. 1986; "The Ageing Society as a Context for Family Life." In: *Daedulus* (Winter) 115/1.

Hagestad, G.O. 1987; "Families in an Ageing Society: Recent Changes in the Life Course and Socialization Experiences of Adults." In: *Zeitschrift für Sozialisationsforschung und Erziehungssoziologie*, 7/2.

Hagestad, G.O. 1989; "Familien in einer alternden Gesellschaft: Veranderte Structuren und Beziehungen." In: M. Baltes, M. Kohli and K. Sames (eds.). *Erfolgreiches Altern: Bedingungen und Variationen*, Verlag Hans Huber, Bern, Stuttgart, Toronto.

Hagestad, G.O. and Burton, L. 1986; "Grandparenthood, Life Context, and Family Development." In: *American Behaviourial Scientist* 29/4: 472-484.

Hagestad, G.O. and Gautun, H. 1990; *Modern Grandparenthood: Changing Structures and Functions*, Paper prepared for the 12th World Congress of Sociology, Madrid, Spain.

Hareven, T. 1989; "Historical Changes in Children's Networks in the Family and Community", Chapter 1 in: D. Belle (ed.). *Children's Social Networks and Social Supports*, Wiley, New York.

Heatherington, E.M. and Camara, K. 1984; "The Family." In: R.D. Parke (ed.) *Review of Child Development Research* 7: 398-439, University of Chicago Press, Chicago.

Hess, B.B. and Waring, J.M. 1978; "Parent and Child in Later Life: Rethinking the Relationship." In: R.M. Lerner and G.B. Spanier (eds.) *Child Influences on Marital and Family Interaction* (241-273), Academic Press, New York.

Johnson, C.L. 1988; *Ex-familia. Grandparents, Parents, and Children Adjust to Divorce*, Rutger's University Press, New Brunswick, NJ.

Knipscheer, C.P.M. 1988; "Temporal Embeddedness and Ageing within the Multigenerational Family: The Case of Grandparenting." In: J.E. Birren and V.L. Bengtson (eds.) *Emergent Theories of Ageing*, Springer, New York.

Matras, J. 1990; *Dependency, Obligations and Entitlements: A New Sociology of Ageing, the Life Course, and the Elderly*, Prentiss Hall, New York.

Parke, R. 1988; "Families in Lifespan Perspectives: A Multilevel Developmental Approach." In: M. Heatherington, R.M. Lerner and M. Perlmutter (eds.) *Child Development in the Life Span Perspective*. Earlbaum, New Jersey.

Pifer, A. and Bronte, L. (eds.) 1986; *Our Ageing Society: Paradox and Promise*, W.W. Norton and Company, New York.

Preston, S. H. 1976; "Family Sizes of Children and Family Sizes of Women." In: *Demography* 13/1: 105-114.

Rosenmayr, L. 1986; "Belastungen und Befreiungen in den Wechselbeziehungen zwischen Familie und alternden Menschen." In: *Triangel* 25: 7-12.

Shanas, E. 1980; "Older people and their Families: The New Pioneers." In: *Journal of Marriage and the Family* 42/9: 9-15.

Siegel, Jacob S. and S.L. Hoover 1984; "International Trends and Perspectives: Ageing", *International Research Documents* 12, U.S. Bureau of the Census.

Uhlenberg, P.R. 1978; "Changing Configurations of the Life Course". In: T. Hareven (ed.) *Transitions* (65-95), Academic Press, New York.