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Sociological approaches to age and ageing

Sarah Harper

Introduction

Current sociological approaches to understanding ageing can be seen to address the theoretical constructs of *continuity and discontinuity* of the life course, and the *configuration and reconfiguration* of public and private personal networks. Changes which occur in later life, such as retirement and widowhood, lead to discontinuities in roles and relationships and require the reconfiguration of social networks. However, there are many roles and relationships which remain the same as we age, allowing continuity and the maintenance of stable personal networks.

Sociological approaches have, however, tended to neglect the actual concept of *age* itself. While concepts of *class*, *race* and *gender* have been explored fully, the variable *age* is less well understood. Yet the concepts of *age* and *ageing* need to be explored at various dichotomous levels: historically and contemporarily; individually and societally; biologically and socially.

Understanding concepts in age and ageing

Old age in history

There have been several analyses of the experiences and representations of age and ageing over time (Finley, 1984; Minois, 1989; Pelling and Smith, 1991; Parkin, 1992; Achenbaum, 1995; Shahar, 1997). As Kertzer (1995) points out, our notion of the historical reality of later life sits somewhere between images of a time in which the old were treated with respect, when they occupied positions of power by virtue of their control over family holdings, and when they were surrounded and supported by married children and grandchildren; and a time when old people crowded meagre public charitable facilities to allow them to survive in a society that gave little support to those lacking the ability or the health to earn their daily living. In the first scenario modernization is heralded as the tragic perpetrator/executor of doom, with older people as the victims of progress. In the second, modernization brings with it welfare reforms and older people are the beneficiaries of social programmes and intergenerational transfers. In fact, historically the social and political arrangements for older adults have varied considerably between and within societies, and over time, and were moderated by factors such as class and gender.

Pictures which emerge from these suggest that there was always a clear understanding of the heterogeneity of later life, and that the experience of ageing and old age was acutely different for men and for women. There was a recognition that old age could be broadly divided into a more active span and a more frail one, but also that capacity varied in later life, and was not necessarily in line with chronological age. Old age has thus been long divided into what in early modern England was called the 'green old age', a time of fitness and activity, albeit with some failing powers, and a final phase of decrepitude and frailty (Thane, 2000). This division is still recognized today in the notions of the Third and Fourth Ages. The Third Age is now associated with healthy active retirement, and as such is even conceived as commencing at age 50 (Harper and Leeson, 2004), and the period of increasing disability that may occur sometime between 80 and 100 is noted as the Fourth Age.

Age as a concept

While there is an extensive literature on the meaning of *old age*, analysis of the notion of age *per se* has been less well rehearsed (Kertzer and Keith, 1984; Kertzer and Schaie, 1989). Yet, within Western societies, the naturalness of the use of *chronological age* in the marking of our lives is instilled within us from our early socialization. So culturally immersed are we, that the view is almost taken for granted that there is no satisfactory alternative to chronology as an indicator of age. This is reflected in a spectrum of ways: from the social recognition of the importance of annual ageing, with the emphasis on anniversaries such as birthdays, to the legal entrenchment of chronological age as a marker for a series of life transitions—age of consent, age of majority, age of retirement, etc.

One standpoint (Hazelrigg, 1997), however, is that age *per se* explains very little, perhaps nothing of abiding interest. Age itself is not a cause of anything. It is part of the trait description of persons, a classification variable, the title of a set of categories in a particular classification system. Even its use as a social marker tells us very little about any contemporary individual of that age. The fact that individuals are enfranchised in many European countries at 18 tells us little about the maturity of a particular 18-year-old, other than that they live in a society which regards 18 to be the norm for the population of attaining some level of political maturity. Similarly the fact that the pensionable age for many individuals throughout

the West is 65 again does not inform us about any particular 65-year-old, other than that they live in a society which regards 65 to be the age at which the majority of the working population require some kind of supplementary assistance to maintain an income. Indeed, as we shall discuss later, this is based on an historical model which, in most cases, is now bereft of any relevance to contemporary health or capability status. One could thus argue that the labels 'aged 18' and '65' simply tell us that the particular individuals have survived for 18 and 65 years, respectively.

Mate selection appears to be age sensitive to some degree. Firstly, it is age sensitive in that the sexual intercourse component of mating behaviour is proscribed in most Western societies until an age-eligibility threshold has been reached, though this age varies between societies. It also appears to be age sensitive in that the ages of most couples fall within a short chronological range, on average within a 5-year band. This may be an outcome of selection on age, or it may be a proxy for other traits such as fecundity or congruent life expectancy. Alternatively, it may be a factor of proximity and availability, for at the time of initial mate selection younger people are legally inaccessible and those who are older fall outside the range of normal social interaction as delimited by education, or have already been selected. Analysis of age variation among couples in second and subsequent marital and cohabiting unions reveals greater variance than in first union, on average up to 15 years for example.

Age as a variable

A key question is whether age is able to have the same analytical coherency as race, class, or gender. Riley, for example, regards age as a classification variable of social status (Riley, 1987), while Minkler and Estes (1999) deny that age *per se* has any salience as an analytical variable, arguing instead that it is only through its association with gender and class that we can understand its relationship to power structures and access to resources. Hazelrigg (1997) argues that beyond its use by individuals and groups to date events, a simple marker in the regulation of the process of living, age itself is of little importance. There are hierarchies of power where gender is the determining factor, others where class is dominant, and yet others, as we shall see, where age is key. On the whole, sex, race, and ethnicity are fixed characteristics of individuals, class and religion have the potential to be mobile, while mobility across age strata is universal.

Age and the individual

From the perspective of the individual, age classification introduces signposts *linking memory and anticipation, an iteratively remembered past and an iteratively expected future* (Hazelrigg, 1997). Age classification is thus integral to the normal organization of consciousness. As Mead's extensive work on life history, reminiscence, and autobiography informs us, one interacts retrospectively with one's younger selves, recalling earlier states of self-hood; and prospectively with one's older selves, anticipating later states of self-hood (Mead, 1934). What is of interest is that we as individuals are able both to conceptualize age as an internal process, a marker, a lived experience, and a regulator of consciousness and memory, and at the same time accept the reality of age as an institutionalized series of sequences and an externally articulated attribute.

Modern life is lived in two separate registers. On the one hand, most of a life experience is formed directly and indirectly in a highly standardized sequence of institutionalized events—schooling, work, parenting, retirement. On the other hand, there are those aspects of life experiences that are not institutionalized and structurally stabilized in recognized life course sequences—self-image, personal satisfaction, existential aesthetics, etc. (Hazelrigg,1997)

Tensions arise when the two registers fail to coincide—that is the internal register falls out of synchrony with that regulated by society. This may be referred to as 'off time' (Hochschild, 1973). Examples include middle-aged couples falling in love and publicly exhibiting displays of physical affection and romance, or older people adopting student-style lives (Hagestad, 1986). Off time may also include the experience of being forced, through illness or external factors, to fall outside the normal behaviour range as defined for one's age.

Age and society

For both the individual and society, age conveniently dissects the life course into more manageable components. With the arrival of capitalism and industrialization, chronological age was a useful tool to divide and regulate the population (Thomas, 1979; Marshall, 1985; Kohli, 1986; Keith *et al.*, 1994) and for coping with the need for rationalization, succession, social control, and integration. Age defined the responsibilities of citizenship, including adulthood and labour-force participation, regulating the entry and exit to economic activity (Hazelrigg, 1997). Others argue that that the task of the individual is to build and maintain a stable identity. An institutionalized life course is one way to regulate this individual change over time. It arrays ages of self-hood into a predictable sequence of states and transitions that satisfies many of the demands of population management on a societal scale (Fortes, 1984).

Age stratification

Age stratification theory was proposed by Riley and colleagues (Riley *et al.*, 1972) in the 1970s. Age is defined as both a process and a structure, with individual ageing comprising psychological and biological development alongside the experience of entering and exiting social roles (Riley and Riley, 1994) Using the dual concepts of *allocation*, the process whereby individuals are assigned and reassigned to roles, and *socialization*, the instructing of individuals as to how to perform new life course roles, they suggested that these two concepts moderate between social structures relating to individuals of given ages and social structures relating to roles open to individuals of given ages (with their age-related expectations and sanctions). Age stratification theory thus promotes the idea that societies organize the distributions of rewards and opportunities, and develop sets of behavioural expectations based on the stratifying characteristics of its members, with chronological age as a central element in the system (McMullin, 2000). Societies are structured and individuals stratified on the basis of age. Over time two separate processes occur as the age structures change and individuals themselves age. These processes are both independent and separate and also, at some level, interdependent.

As Harper (2006) concludes, age is an *indicator*, as opposed to a determinant, of biological and psychological changes; it can be a *determinant* of individuals' allocated roles, independent of their biological or psychological capacity; it has *analytical value* as a descriptive variable; and it identifies at any given time point *birth-cohort membership*, and thus potentially shared cohort life experiences.

Age and the life course

The life course in complex societies is thus based on a combination of generational and chronological age (Elder, 1985; Hagestad and Neugarten, 1985; Fry, 1999). It is necessary to combine age with other social characteristics (gender, race, and class, for example) to understand specific life experiences for men and women across the life course.

Two life-course themes—*timing* and *process*—have been identified. *Timing* relates to the incidence, duration, and sequence of roles throughout the life course (Moen, 1996). Thus, understanding an individual's life-course employment history is more useful than understanding their employment position at any one point. *Process* focuses on ageing as a series of life transitions (Elder, 1985). Each phase of life is understood in relation to prior phases, and is mediated by other variables of gender, class, and race. The transition to parenthood, for example, is experienced very differently by men and women, and the transition to parent of a non-dependent child, the so-called *empty nest syndrome*, is mediated both by gender and by the experience of active parenting itself.

A starting point for life-course analysis is the acknowledgement of the historical *context* within which different cohorts experience different aspects of the life course. It is clearly important to recognize the cohort and period influences here (Elder and O'Rand, 1995). As Harper (2006) explores, while most older men experienced a long period of economic activity followed by abrupt retirement, many older Western women experienced their younger lives within a framework of primary domestic duties, supplemented by intermittent economic activity. As a result, most older women replaced low earning capacity or economic dependence in younger life, with low incomes in old age. Cohorts in mid life, however, have had very different social and economic frameworks within which to live out their lives. Half the labour force in many countries is now female, and full-time economic employment (with or without domestic responsibilities, childcare in particular) is becoming a widespread experience for many women. Despite this, there are still considerable disparities in the earning capacity of mid-life men and women. However, it is likely that future cohorts of older women will have higher incomes relative to the older women of today, and the gender disparity in incomes will be lower.

Age in cultural contexts

The intersection of age with gender, race, and class, or status groups, thus produces specific life experiences for men and women across the life course. The connection of the life course with age is far weaker in traditional societies. Various anthropological studies (Makoni and Stroeken, 2002) have highlighted alternative ways in which the life course might be structured, though by the late 20th century the influence of the state and penetration of chronological age as an ordering variable was evident in most of the research sites. In Stroeken's study of the Sukama of north-west Tanzania, for example, rather than individuals being marked by a physical body, they were defined by a zone, incorporating the large network of their life-course events. The social status of elderhood was thus measured by the accumulated wealth of alliances, offspring, and livestock, which could not be diminished through ill-health or loss of mental capacity. The Gussui of south-western Kenya (Okemwa, 2002) have a similar notion of elderhood. However, they have adapted this traditional seniority gradation, based on networks and affiliations, to modern demands, and have incorporated such aspects as the role of entrepreneur into the criteria for achieving successful seniority status. As a consequence, elders no longer have a precise measure by which to gauge their successful attainment of elderhood.

Neither the !Kung nor Herero, hunter-gatherer and Bantu pastoralist peoples, respectively, of Botswana, have a concept of chronological age. They were unable to perceive similarities between members of different age groups, nor conceive that there should be any. Their concept of ageing is of a slow inexorable process of physical decline, but with a tempo of this process which varies widely among individuals, so that a person who retains health at age 70 does much the same thing every day as does a 50-year-old (Okemwa, 2002). While the Herero or !Kung mark changes in age by physical transitions, the Tuareg, semi-nomadic people in northern Niger, use social transitions. Courtship, marriage, childbirth, and grandchildren mark the steps in ageing, not number of years survived (Rasmussen, 1997).

Understanding old age as post-reproductive life

The percentage of people surviving to old age, and extreme old age, within each cohort has increased significantly over the past 100 years. A key question thus concerns the role of this extensive post-reproductive portion of the lifespan found in humans. Indeed, modern female humans within economically advanced societies can expect to live nearly one-third of their adult lives in a post-reproductive state.

The existence of an extensive post-reproductive life in humans has inspired an at times heated debate between biologists and anthropologists. The discussion can be simply put as follows. Some believe that the female menopause is an adaptive consequence of natural selection, probably as a solution to the trade-off between investing in additional offspring, or in existing offspring and their children (Hill and Hurtado, 1991; Kaplan, 1997). If this long post-reproductive period of the lifespan was formed through evolution, what is its role? And, given the very rapid changes in modern environments, what kinds of responses and variability might occur. Others argue that this post-reproductive life of human females is a modern effect due to environmentally induced increases in longevity (Austad, 1997). In other words, the protection offered by our current environment has enabled us to live much longer than the period within which natural selection has moulded our reproductive capacity.

The evolution of the menopause

Most arguments have accepted the longevity of humans as given, and then asked what type of selective forces would result in the menopause. Selection for the cessation of reproduction has generally been seen as a solution to trade-offs between two broad types of investment. Firstly, a trade-off between early and late reproduction, secondly between the reproductive value of existing kin and the production of additional descendants. Both cases rely on the assumption that the children of older women will be of a lower reproductive value. This is due to the increased chance of less viable children following from genetic abnormalities, or due to the higher probability of the parents dying while the children are still young and vulnerable.

Kaplan (1997) suggests that perhaps the cost of increasing the length of the reproductive period is a decrease in energy available for reproduction early in life. Thus selection might favour allocating more resources to the early reproductive period, at the expense of ending reproduction in mid-life. Two assumptions operate. Firstly, given that the children of older women are assumed to be of a lower reproductive value, the cost of the menopause would therefore be low. Secondly, by ceasing to reproduce, older people can bring benefits, by investing in the reproduction of their offspring and other kin. This has been called the *grandmother hypothesis*. Thus if the cost of the menopause is low, and the benefits are high, the existence of the menopause could maximize the biological fitness of the species (Kaplan, 1997).

Carey and Gruenfelder (1997), for example, point out that there is clearly some association between extended longevity of a species and complex social structures, and that older group members appear to play an important role in sustaining the latter. Older members of a variety of non-human species play important roles in the cohesion and dynamics of their populations, serving as guardians, leaders, teachers, caregivers, and midwives, sometimes in an apparently altruistic role (Altmann, 1980; Hrdy, 1981; L.L. Rogers, 1987; Hill and Hurtado, 1991; A.R. Rogers, 1993). Post-reproductive female life appears common among most primate species, particularly chimpanzees and gorillas (Caro et al., 1995). In Hrdy's and Altman's work we find examples of both leadership and caregiving roles. Thus both male and female older primates take on leadership of their troops, with the specific gender varying between primate species. Older females also play an important role in caregiving, with evidence from vervets that the presence of grandmothers can more than halve infant mortality (Fairbanks and McGuire, 1986). In addition, as Hrdy points out, in some species, the rank of the older females is passed on to their daughters, thus carrying on into subsequent generations all the advantages or disadvantages that the rank may hold. Finally, Hrdy also highlights the altruistic role some older female primates play in risking their own lives to defend the troop. A similar, apparently altruistic, role, is also found in female black bears (Rogers 1987), who frequently shift their territories away from areas overlapping with their daughters, thereby reducing their own foraging area in favour of their offspring.

Let us now move to explore two frameworks within which ageing and later life are constructed. The first adopts the perspective of the individual: their position and experience of work and retirement. The second focuses on family, intergenerational relationships, and the changing roles of individuals within them.

Understanding retirement

The acceptance of mass retirement for all at broadly fixed chronological but increasingly younger ages, in order to carry out a fulfilled leisure- and consumption-based healthy period of late life is historically very new. It is a post-war phenomenon. It arose in the second half of the 20th century to cope with specific health and socio-economic needs of the then older population, and in response to the changing demands of the labour market. Mass withdrawal by workers at state pension age has been extended to ever younger ages over the last 30 years through the spread of early retirement practices (Harper and Laslett, 2005).

To put this in a historical perspective, there has been a steady withdrawal in most OECD countries from employment at earlier ages throughout the 20th century (Costa, 1998). In the UK in 1881, when male life expectancy at birth was less than 42 years, three-quarters of men aged over 65 were economically active (Riddle, 1984). By 1931 male life expectancy at birth had risen to 58; 70% of those aged 65–69 were still economically active, and 37% of those over 70. Thirty years later, male life expectancy at birth had reached 67 years of age, and economic activity had fallen to 40% for those aged 65–69 and 10% for those over age 70 (Harper and Laslett, 2005).

The figures in the immediate post-war period are confused. Firstly there was a male labour shortage due to the impact of the Second World War. It is likely that this in part was compensated for by older male workers remaining longer in employment. In 1948 there was the introduction of public pensions conditional on retirement from full-time employment, and it is likely that this began to encourage retirement at 65, though the effects would have been staggered over the next 20 years. Older workers found the increase in pace required by the increasing mechanization of many production processes more difficult than younger workers and this too may have encouraged retirement (Le Gros Clark, 1968). Similarly, employers, coping with increasing bureaucratized organizations with a heavy administrative structure, used a retirement age to regulate the workforce (Harper and Thane, 1986; Harper 1989).

This period saw a steady move towards fixed retirement ages. While around one quarter of firms had fixed retirement ages in the 1940s and 1950s (Ministry of Labour 1945–55; Shenfield 1997), these had increased to two-thirds by the early 1960s (Acton Society Trust, 1960; Heron and Chown, 1961), particularly in large, technological industries with complex administrative structures (Green, 1963). By the mid-1960s, major industries such as such as chemicals, iron and steel, and the nationalized coal mines and railways, all operated with rigid retirement ages. Alongside this ran growing ageism towards older workers. Already by 1957, there was a recognition that discrimination by employers against men over 50 was becoming widespread (Shenfield, 1957; Industrial Welfare Society, 1951).

The medical profession supported the *retirement impact hypothesis* (McMahon and Ford, 1995) leading to widespread public acceptance that retirement led to ill-health, deterioration, and death:

> The literature is overwhelming in its indications that retirement is detrimental to the health of older men.
>
> Anderson and Cowan (1954, p. 1346)

> …the weight of medical opinion is that sudden demise of mental and bodily functions, previously regularly exercised, such as may happen through retirement is likely to cause atrophy and degeneration which are harmful to the health of older persons.
>
> Shenfield (1997, p. 59)

Indeed the literature, far from being overwhelming, was negligible in the UK (Harper, 1989), and under debate in the USA (Granick, 1952). Yet, it was clearly useful for the government in its campaign to retain older workers to promote such views:

> After six weeks of this existence, life began to pall. He became unsettled, restless and irritable. He really had nothing to do and longed to be back at work. He was repeatedly asked to take up some hobby, which he readily promised to do but his restlessness prevented him from seriously attempting it and a laissez-faire attitude resulted. Eventually getting up in the morning became an effort, and in a short time all his interest in everything flagged. The peace of death came to him soon.
>
> Ministry of Health Circular (1954)

There was a dramatic shift in attitudes over the second half of the 20th century, so that a period of funded leisure after leaving employment is now generally regarded as everyone's right. However, as Harper and Thane (1986) point out, current retirement expectations are a post-1960s phenomenon, which arose during the second half of the 20th century in order to cope with the specific socio-economic needs of the growing older population, and in response to the changing administrative and personnel management demands of growing corporations (Harper, 1989; Harper and Thane, 1989).

The introduction of widespread state and increasing employer-based pensions allowed retirement to occur by choice among a healthy active population. No longer was retirement confined to old frail workers, who were either pushed out of the labour market by employers or forced to exit due to ill-health. Retirement was now a choice (Carter and Sutch, 1996). The increase in late life health, and the spread of private pensions and occupational pensions, encouraged the growth of late life consumption and leisure activities. Retirement based on leisure has replaced retirement out of physical necessity. By the 1980s, the internalization of the period of funded leisure at the end of one's working life had become firmly established. The notion of retirement has thus been redefined from one of *Rest* in the 1940s and 1950s, to *Reward* in the 1970s to a *Right* by the 1980s (Harper, 2000).

It is, however, the rapid increase in early retirement which has caused most concern. Economic analysis suggests that retirement incentives exist within many national pension systems. As an influential study by Gruber and Wise (1999) reports, part of the diffusion of early retirement practices is motivated by retirement incentives in current pension schemes. State social security provision in some countries offers considerable incentives to early retirement, and may account for a significant part of the long-term decline in rates of economic activity for older men. Disability and unemployment programmes have provided early retirement benefits well before the official retirement age. Similarly, accumulated wealth, savings behaviour, and the availability of other sources of income in later life, including state as well as private benefits, are also influential.

Changes within the work environment and labour market still both force and encourage workers to withdraw. These include structural, sectoral, and technological changes, as well as evidence that employers retain ageist attitudes towards older workers. There is some evidence that age discrimination by employers encourages early withdrawal from the labour market and that push factors, such as redundancy or fixed retirement ages, are responsible for a large percentage of early retirements (McKay and Middleton, 1998; Scales and Scase, 2000). There is evidence of a lack of practices aimed at including older workers, lack of training, and lack of flexible working arrangements (David and Pilon, 1990; Gibson, 1993; Lussier and Wister, 1995; Bellemarre *et al.*, 1998); and evidence that employers are also reluctant to employ older workers (Harper *et al*, 2006). There are perceived factors which might discourage employers from recruiting older workers: the perception that they lack appropriate skills, lack qualifications, and offer a low return on training investment (Leeson and Harper, 2006).

Health attitudes and behaviours towards disability and frailty have also been important factors, with evidence that retirees are more likely to be in poor health or to have more functional limitations (Quinn *et al.*, 1998; Uccello and Mix, 1998; Humphrey *et al.*, 2003). While ill-health may be given as a socially acceptable reason for retirement (Casey, 1998), there does seem to be consistent evidence that between one-fifth and one-quarter of retirements prior to age 65 can genuinely be assigned to the category of being promoted by 'ill-health' (Maule *et al.*, 1996; Tanner, 1997).

Finally, as Harper (2006) discusses, there is evidence that the current older cohorts have internalized the notion of retirement, including early retirement, as an extended period of funded leisure and consumption after leaving work, and expectations of this are considerably entrenched (Scales and Scase, 2000). Such expectations are now strongly held not only by the employee, but also by his or her partner and wider family (Mutran *et al.*, 1997; Harper, 1999). In particular, both high job satisfaction and having a working spouse decreased the likelihood of retirement, this latter finding being supported elsewhere (Henretta *et al.*, 1993; Uccello and Mix, 1998) including findings that male retirement was nearly twice as likely if the spouse had retired (Henretta *et al.*, 1993). This suggests that social factors are also significant at the individual level of choice. While it might appear counter-intuitive, given that on economic grounds one spouse might be more able to retire if the other was still working, here clearly couples were perceiving retirement as a time of leisure, in which they could carry out jointly shared activities. This is compounded by the growing responsibilities that many of these cohorts have for kin care and support, especially for their parents (Kodz *et al.*, 1999; Anderson, 2001). The interaction of all of these factors with health status and disability in these ages may account for more than a third of early retirements.

Finally, those taking early retirement thus include two distinct groups (Day, 1995; Mutran *et al.*, 1997; Quinn *et al.*, 1998; Uccello and Mix, 1998; Humphrey *et al.*, 2003):

> Professional and managerial workers, with high levels of education, and secure well funded pension plans have a higher than average likelihood of withdrawing from economic activity, especially if their pension plan includes a defined benefit component. This may be tempered however by a restraining factor of high enjoyment of work, but also encouraged by increasing levels of stress in these high level occupations. A second group of early retirees comprise those with low levels of education and manual or semi-skilled occupations, who may be being encouraged or forced to take early retirement through employer instigated redundancy schemes. These may be involuntary or nominally voluntary but set in a context of discriminatory and uncomfortable working conditions.
>
> Harper (2006)

The impact of changing family structures on old age

The second half of the 20th century saw the emergence of a variety of new family structures. Reconstituted stepfamilies, single-parent families, and cohabiting couples now comprise around 25% of Western European families, living alongside European-style nuclear family households, and the various ethnic minority households with their own distinctive family forms. Three main trends can be identified: the ageing of individuals, life transitions, and demographic and social changes, which have impacted upon family

structures, roles, relationships, and responsibilities. There has been a general ageing of life transitions, in particular that of the birth of the first child and of leaving the parental home. These have delayed the transition to grandparenthood and the *empty nest syndrome*, and in some cases resulted in childlessness. The demographic factors of falling fertility and mortality have resulted in vertically shaped families, and both the lengthening of adult unions and increases in divorce. Social changes have contributed to the increase in divorce, cohabitation, and reconstituted families. These have all affected the experience of kinship roles, relationships, and responsibilities in old age.

Impact of ageing life transitions

While public and legal institutions may be lowering the age threshold into full legal adulthood (age of thresholds for inheritance, suffrage, jury service, alcohol and cigarette purchase, licensed driving having all fallen in many societies over the last half century), individuals themselves are choosing to delay many of those transitions which demonstrate a commitment to full adulthood—full economic independence from parents, formal adult union through marriage or committed long-term cohabitation, and parenting (Harper, 2004a,b). As Harper (2006) argues, the *ageing of life transitions* occurs as individuals recognize the general lengthening of their own lifespan and those of their peers. For women in particular, an ever-lengthening lifespan allow them the liberty to delay childbirth. Because infant mortality has fallen, and because early death through disease, war, famine, and (for women) reproduction is no longer the common experience, individuals feel more comfortable about establishing marital unions later in life, bearing children later, and having fewer children.

Delayed childbirth

There has been in many OECD countries, and indeed also now in some parts of Asia and Latin America, a consistent delaying in birth of first child, with the mean age of first birth in the EU, for example, rising from 24 to 28 in the last four decades of the 20th century (Table 2.1).

Delaying the birth of the first child may lead to long intergenerational spacings, and a transition to both parenthood and grandparenthood at a later age than has been the recent historical norm. It delays the age at which the parent experiences the child leaving the family home, which is also being delayed by a general increase in the age at which the child '*flies the nest*'.

Delayed independent living

Within most countries of the EU and the USA, young people are *leaving home* at a later age. Within Europe, every EU15 member state, with the exception of Denmark and The Netherlands, saw an increase between 1987 and 1996 in those aged 20–29 years continuing to live with their parents. In 1996, more than 80% of Spanish, Portuguese, and Italian men and women aged 20–24 years lived in the parental home, and over 50% of 25–29 year olds. The proportion of young adults who live with their parents has also increased in the USA. In 1997, 15% of men and 8% of women aged 25–34 years lived at home with their parents, an increase since 1970 of 10% and 7%, respectively (Goldscheider and Goldscheider, 1994). Furthermore, even those children who choose to spend a protracted period of time outside the parental home before setting up their own home increasingly remain economically dependent on their parents through, for example, subsidized boarding and rental expenses, assistance with home buying, and prolonged and expensive investment in education.

Table 2.1 Mean age of women at birth of first child in the European Union, 1960–2000. Source: Council of Europe (2001), European Demographic Data Sheet (2006).

	1960	1970	1980	1990	1995	2000	2004
Austria			24.3	25.0	25.6	26.3	27.0
Belgium	24.8	24.3	24.7	26.4			27.6
Denmark	23.1	23.8	24.6	26.4	27.4		28.4
Finland	24.7	24.4	25.6	26.5	27.2	27.4	27.8 (2003)
France	24.8	24.4	25.0	27.0	28.1	28.7	28.4
Germany	25.0	24.0	25.0	26.6	27.5	28.0	29.0
Greece		24.5	24.1	25.5	26.6	27.3	28.0 (2003)
Ireland		25.5	25.5	26.6	27.3	27.8	28.5
Italy	25.7	25.0	25.0	26.9	28.0		28.7 (2001)
Luxembourg					27.4	28.4	28.6
Netherlands	25.7	24.8	25.7	27.6	28.4	28.6	28.9
Portugal			24.0	24.9	25.8	26.4	27.1
Spain		25.1	25.0	26.8	28.4	29.0	29.2 (2003)
Sweden	25.5	25.9	25.3	26.3	27.2	27.9	28.6
United Kingdom				27.3	28.3	29.1	27.5

This extended economic dependence on parents not only delays the individual's full transition to independent adulthood, but also the experience for the parents of losing the last child from the family home—the *empty-nest syndrome*—the extended post-parental period following the departure from the family home of the child or children. In some societies, this is associated with a period of apparent grieving, especially for mothers.

These two phenomena, delayed first birth and delayed independence from parents, are clearly linked, and in addition they are influencing a third phenomenon, increasing childlessness.

Childlessness

The later an individual has a child, the fewer children that individual has, with significant implications for their care and support in later life. As Uhlenberg has pointed out, in terms of support for older people the critical distinction is between one and none. Significantly, though, increasing childlessness in cohorts born after 1960 means that fewer adult children will have simultaneous commitments to an older parent and to children. So childlessness in today's younger cohorts paradoxically leads to more time being available for caregiving to older relatives. Furthermore, in both the USA and the UK, the highest percentage within the last century of very old women without children or with just one child occurred in the 1990s, among cohorts born at the around the beginning of the 20th century. One-quarter of these women had no children, and a further quarter had just one child. The proportion of women over 85 years of age with two or more surviving children will actually increase over the next decades, from less than 50% in 1995 to almost 75% by 2015. However, even though this will be followed by an increasing proportion of women with just one or no children, it will not return to the levels of the 1990s—according to current predictions, which run to 2050.

Demographic ageing

As Harper (2006) points out:

> [T]he shift from a high-mortality/high-fertility society to a low-mortality/low-fertility society, results in an increase in the number of living generations, and a decrease in the number of living relatives within these generations. Increased longevity may increase the duration spent in certain kinship roles, such as spouse, parent of non-dependent child, sibling. A decrease in fertility may reduce the duration of others, such as parent of dependent child, or even the opportunity for some roles, such as sibling.

Verticalization of family structures

The lengthening of lives combined with a fall in fertility has lead to *intragenerational contraction* and *intergenerational extension*. This is a decrease in the number of members within each generation, and an increase in vertical ties, or in other words an increase in the number of living generations with typically longer gaps between them (Shanas, 1980; Hagestad, 1986, 1988; Bengtson *et al.*, 1990; Lowenstein, 2003; Harper, 2004a; Katz *et al.*, 2005). Individuals will thus grow older having more vertical than horizontal linkages in the family. For example, vertically, a four-generation family structure has three tiers of parent–child relationships, two sets of grandparent–grandchild ties, and one great-grandparent–grandchild linkage. Within generations of this same family, horizontally, ageing individuals will have fewer brothers and sisters. In addition, at the level of extended kin, family members will have fewer cousins, aunts, uncles, nieces, and nephews. However, while the number of living generations will increase, the absolute number of living relatives will decrease (Harper, 2003).

Family members are spending more time in intergenerational family roles than before: more time as parents and children, more time as grandchildren, and more time as great-grandchildren/great-grandparents. Both the Health and Retirement Survey (HRS, 2004) and the AARP Intergenerational Linkages Survey report more than half of the respondents being members of four-generation families (Bengtson and Harootyan, 1994; Bengtson, 1995; Soldo and Hill, 1995), while Hagestad (1988) reports that a fifth of all women surviving to beyond age 80 years will spend some time in a five-generation family as great-great-grandmothers.

Lengthening adult unions and parent–child relationships

The common experience of length of marriage at the beginning of the 20th century in the USA was under 25 years for a White couple, and as low as 10 years for an African-American couple (Morgan and Kunkel, 1998). However, as life expectancy has increased, so the potential length of marriage has also lengthened. So that by the end of the 20th century, the majority of those marriages not terminated by divorce were exceeding 40 years (Myers, 1990). Marital satisfaction within these long marriages tends to rise in later life to levels expressed by younger married people, after a typical dip in mid-life (Bengtson *et al.*, 1990). The dimensions which make early and late life marriage happy and successful differ, however, with elements such as physical attraction and passion being replaced by familiarity and loyalty (Reiss, 1960; Brehm, 1992).

Increasing longevity also means that most parent–child relationships will be lived out as predominantly non-dependent adult dyads, this despite the delaying of childbirth. The common experience for many parents and children is around 60 years of joint life, of which under one-third is spent in the traditional parent/dependent-child relationship. Around one-quarter of UK women and nearly 40% of US women aged 55–63 still have a surviving parent. These women have thus spent around 60 years as a child, some 40 of these years in an adult relationship with a living parent (Grundy, 1999). This relies on *re-bonding* in adulthood, sometimes also referred to as 'reverse bonding' (Harper, 2006). Under such experiences we see a loosening of the association between marital and parental roles As the common experience of parenthood moves to more than 50 years of shared life, parents and children are adjusting to spending most of their relationship as independent adults. Similarly husbands and wives are spending fewer years of their joint lives as parents of young children

> ...Relationships which have historically been based on a hierarchy which existed in part to support successful reproduction must move to greater equality, both child-parent, and husband-wife, as traditional roles based on parenthood give way to companionate relationships.
>
> Harper (2006)

However, not only will parents and children spend longer in non-dependent relationships, but the time spent as a child with a dependent parent is also increasing. Within the USA, for example, the time spent as the daughter of a parent over 65 now exceeds the time spent as the mother of a child under 18. This must, however, include the caveat that, while for much of the last two centuries a high proportion of those over 65 would be in varying degrees of dependency on others for some aspect of their daily living, this is now no longer the case. Indeed given that it is now not until after the age 80 of that the crucial stage for relying on children for assistance is reached (Uhlenberg, 1995), we should perhaps be comparing age over 80 with under 18. What is then apparent is that adult US women now spend more time *without* a dependent—albeit a dependent child or potentially dependent parent—than with one.

This has important implications for our understanding of the *sandwich generation*, or *women in the middle phenomenon* (Rossi, 1987) whereby women in particular are faced with coping with simultaneous demands from dependent parents and children. It is thus not that unusual for a mid-life woman to be an active grandmother with childcare responsibilities, mother of a new parent, and daughter of an increasingly frail elderly mother (Harper, 2005).

Impact of divorce on old age

Owing to the reduction in early widowhood, the rate of marital dissolution has remained remarkably constant, with divorce replacing death as the primary cause of marital break-up. In the 18th century, for example, the average length of an American marriage was 12 years, and well over half of all children spent a part of their childhood in a single-parent or step-family. It has been argued that the potential length of marital unions has placed strains on such relationships, and is a contributory factor in divorce levels. The decline in death rates has made divorce more likely, or even more essential. This, combined with the relaxation of religious and social control, has made divorce more possible. The picture has the additional complexity that widowhood is predominantly a late-life experience, while divorce has been a young and mid-life phenomenon, but it is becoming increasingly common in older age groups.

Most of the research has been on divorce in younger life, but there is now a small but growing literature on the impact of divorce in old age—both early life divorce which does not lead to remarriage

or repartnering, and late life divorce itself. Dissolution in younger life often leads to remarriage or cohabitation by one or both partners, introducing a variety of complex reconstituted family structures, which impact upon both reciprocal family care and intergenerational transmission. Dissolution in later life can lead to loneliness, lack of support and care, and loss of roles.

In comparison with non-married people, married people have an advantage which may be measured across both health and socio-economic variables (Waite, 1995; Waite and Bachrach, 2000). As Waite has pointed out, intact husband–wife families provide a multiple support system for a spouse in terms of emotional, financial, and social exchanges, and married people tend to enjoy higher levels of health and survival, social participation, and life satisfaction than persons who are not married (Waite and Bachrach, 2000). Not only do married people appear to have an advantage in terms of both health and longevity, but this mortality differential between the married and non-married population appears to have increased over the past decades. Among the non-married category at all ages, most studies find the divorced have the highest mortality rate, followed by the widowed, and then the never-married. Divorced men are at an extra disadvantage in relation to widowed men, however, in that they frequently also lose social support networks, which appear more likely to be retained by both widowed men, and widowed and divorced women. Given that women generally have stronger and more multifaceted networks than men, they are able to retain stronger social support following divorce.

Each successive US cohort entering old age in the 20th century experienced lower mortality rates, increasing widowhood, and higher divorce rates over its lifetime. There are indications that this trend is likely to continue, resulting in larger proportions of non-married older persons in the second quarter of this century (Uhlenberg, 1994). The differential implications of widowhood versus death is clearly at their most acute in late life.

Between 1980 and 1996 the percentage of divorced people over 65 in the USA almost doubled from 3.5 to 6.4% (US Bureau of the Census, 1997). These figures emerge from a complex interaction of an increased divorce rate in mid and late life, with a fall, in all age groups, in the rates of remarriage following divorce. At the beginning of the last century, the number of widowed US men aged 55–64 outnumbered those divorced by 20 to 1. By the end of the century divorced men and women outnumbered those widowed, with three times as many male divorcees as widowers. Given the declining mortality for men, and lack of remarriage generally and particularly among older ages, this trend will continue into old age for the next few decades at least. Trends suggest that those currently in mid-life will also be experiencing high rates of divorce in later life.

Research looking at the differing impact of divorce and widowhood on family and intergenerational relationships has suggested that there are significant gender differences in the experience of these. Women face economic decline through both widowhood and divorce, but are able to maintain strong family and other relationships, while men are cut off from personal relationships through divorce to a far greater degree than through widowhood (Hughes and Waite, 2004).

In addition, as Harper (2006) points out, the recombination of new kin relationships following divorce is far more complex than it is following death. In the latter, while new combinations are formed, and have been historically so, there is but one family line to follow. Marriages cut short by death have only to integrate biographies from the past on remarriage, while those ended by divorce have also to include the new kin narratives, which develop in parallel with their own new family lines.

Older divorced women are as likely as widowed women to co-reside with a child, and supportive intergenerational relationships are likely to continue for widowed, divorced, and married older women. Eighty to ninety per cent of all children live with their mothers after divorce. Mother–child relations for older divorced women remain quite similar to those of women who do not divorce, with, if anything, an intensification of mother–child relationships among divorced women. There is some evidence that maternal attachment by children increases after divorce, and that women intensify their kin relationships generally after divorce (Hagestad, 1986).

Divorced older men appear to do far worse than their younger counterparts. Among older age groups, for example, mortality among divorced men is particular high in relation to married men (Uhlenberg, 1995). In addition, interaction between fathers and their children tends to decline significantly following divorce. Among nationally representative divorced men aged 50–79 years, only half of the fathers saw or communicated with at least one child weekly, only 11% maintained contact with more than one child, and one-third had no contact at all with their children (US National Survey of Families and Households). One US study went so far as to suggest that half of adolescents living with their mothers after divorce had no contact with their fathers (Cherlin, 1992; Bornat *et al.*, 1998). This thus suggests that these men are less likely to have adult children available for them in time of need.

Most studies exploring the impact of divorce on well-being and standard of living have indicated that immediately after divorce younger cohorts appear to experience a general improvement in their economic situation for men, and a significant decline for women (Waite and Bachrach, 2000). However, the interruption of savings and destruction of assets associated with divorce are likely to depress the economic well-being of both men and women divorced in later life. Indeed, the rather limited empirical evidence we have suggests that divorce is associated with lower economic well-being among all older people. Thus, US data on both income and wealth indicate that older persons who are married enjoy much higher standards of living than non-married older persons, with the highest rates of poverty being experienced by those who are divorced—as much as three or four times the married rate (Waite and Bachrach, 2000). Uhlenberg's work on older divorced women, for example, which controlled for both race and educational attainment, found that these women were more likely to continue to work in later life and to reduce living expenses by sharing their homes. In addition, compared with those who were married, never-married, or widowed, divorced men and women both reported higher levels of dissatisfaction with their economic condition (Uhlenberg, 1995). In summary, while older divorced men and women both experience the highest poverty rates of any unmarried group, divorced men experience the highest mortality rates, have weaker social support networks, and have less contact with their children (Fox and Kelly, 1995, Waite, 1995).

Divorce, especially divorce which is not followed by remarriage, is an increasingly common experience, particularly among this age group, and has negative consequences for both men and women, especially in their old age. However, as divorce becomes the common experience of many more older people, the effects of being divorced in later life may be very different in the future. Even so, the prevalence of living alone in old age will increase, especially for men, who formerly escaped being alone in old age due to their greater likelihood of dying before their spouse. In addition, under a regime of low fertility both men and women will have fewer children, and in all Western industrialized countries geographical mobility results in separation from children. Given that, as we discussed earlier, children currently have a higher propensity to remain with the mother after a marital divorce or cohabitation split, an increasing number of men may find themselves without support from a child in later life.

Social change

Impact of increasing cohabitation on old age

The second concern is over the increase in *cohabitation*. It is now recognized that there are different types of cohabitation: a series of short-term, frequently dissolved temporary relationships; single pre-marriage cohabitation; and long-term stable marital-type unions. Thus, many of the existing and future consensual unions may well support the long-term vertical and lateral kin relationships developed through marriage. However, most studies do not distinguish between the different forms of cohabitation (Lesthaege, 1992; Lewin, 1992). While demographically most people still end up in a marital union at some time in their lives, and most cohabitations will end up as marriages, we still know little about the impact of a period of cohabitation on later life or on wider family relationships (Haskey, 1992; McRae, 1993). Indeed our general understanding of cohabitation, particularly outside the Scandinavian countries, is limited. The debate as to the processes behind its growth continues to be polarized between those who see it is a protest against conventional living and those who regard it as a practical living arrangement for turn-of-the-century industrialized society (Lesthaege, 1992).

There is discussion, for example, as to whether marital union between existing cohabitating partners is in some sense different from other marriages, since in the former case the existing union is transformed without any actual change in living arrangements (thus they are termed transformations). It is unclear as to whether such transition to marriage necessitates an alteration in the norms and expectations of the relationship, or whether marriage following cohabitation is primarily a confirmation of the relationship which has been already established (Lewin, 1992). Most of the consensual unions which are not dissolved evolve into marriages with high levels of dissolution risks. Indeed, if couple formation and dissolution rates remain constant, only 10% of all consensual unions compared with 70% of all marriages would last until death.

Perhaps the potentially biggest impact is from the growth of cohabitations in later life, particularly following divorce, as these are less likely to end in marriage. By 1998 around 15% of all cohabitations in Australia, for example, were among the 40–59 year age group (Australian Bureau of Statistics, 1998). It may be that such late life alliances do not provide the stability for the extensive cross-kin interactions and relationships which are supported within marriage-based families or step families. This may be particularly important in terms of reciprocal care in late life. However, the assertion that these relationships are less stable is based primarily on evidence from younger cohabiting couples. As older adults move to this form of mid- and late-life union, the picture may be very different.

Reconstituted families and old age

The new family forms emerging this century include the linking of multi-'bean pole' families, thereby creating the horizontal or extended step family. Second marriages and subsequent birth of children often have to be assimilated into the on-going relationship between a former husband and wife, in addition to the assimilation of a former spouse's latest offspring, and the inclusion of step siblings and half-siblings from current and previous marriages. The process by which family members set about rewriting their new roles and relationships, becoming in essence new kin to each other, is unclear. Indeed, while the downward generations are often considered, few have explored this question in relation to antecedent generations—how modern families incorporate grandparents, step-grandparents, and grandparents-in-law into the complex network of modern Western kinship. Following the dissolution of a marriage with children, new relationships pivoting around those children must be sustained and re-created, including maintaining extended family relationships, which though cast off by the parents are blood-linked to the children. Among the most viable of these are grandparents. One family today may well have several lateral tiers of grandparents, each with a biological link to one or more children of a reconstituted family.

Grandparenting

As was indicated earlier, demographic and life-course changes have changed the experience of grandparenting. The opportunity for greater interaction across generations has increased because of the increase in the number of living grandparents (Uhlenberg, 1980).

As Kornhaber (1996) argues, conceptualizing grandparenthood as a developmental process is helpful in understanding its many complexities and variations, the factors which promote successful grandparenting, and the conflicts which lead to dysfunctional grandparenting. In particular, how an individual proceeds from parenthood to grandparenthood, and even great-grandparenthood, determines both their self-identity and their roles and functions as a grandparent. In addition, interaction between family members is an important determinant of family life in later years: the experience of the relationship that grandchildren have with their grandparents earlier will partially determine the way they take on the role and relate to their own grandchildren later on in life (King and Elder,1997)

Our understanding of grandparent relationships has drawn on concepts from family sociology. The work of Bengtson on solidarity within multigenerational families is of importance here; he also emphasizes a life-course perspective and the inclusion of cohort and period effects into our understanding (Bengtson *et al.*, 1996). This perspective is also clearly described by Szinovacz (1998), who argues that grandparents whose cohort values an active and companionate relationship with grandchildren, and whose life stage and that of their grandchildren is unencumbered with other commitments, will have higher role involvement than others in the role. Other sociological theories which have been applied to the study of grandparenthood include *role theory*, which has been adopted to suggest that a successful transition to grandparenthood requires some socialization to the role, and appropriate life-course timing (Szinovacz, 1998); and *social stress theory*, which

is used to argue that stress associated with transition to grandparenthood is related to the number, type, and context of the transitions, and moderated by gender, education, income, and race (Szinovacz, 1998).

Various roles of grandparenthood have been identified. Bengtson (1985), for example, identifies what he refers to as five separate symbolic functions of grandparents: being there; grandparents as national guard; family watchdog; arbiters who perform negotiations between (family) members; and participants in the social construction of family history. Harper *et al.*'s (2004) study of grandmothers identifies grandmother as carer, replacement partner (confidante, guide, and facilitator), replacement parent (listener, teacher, and disciplinarian), and as family anchor (transferring values, attitudes, and history).

Currently, women can expect to become grandmothers in their 50s and 60s due to the early first age of births in the 1960s and 1970s. In addition, grandparental roles are lasting far longer due to increased longevity (Watkins *et al.*, 1987) and with that the grandparent is more likely to be able to build a relationship with their grandchild into their adulthood (Hagestad, 1988). As a result many grandmothers in particular now face simultaneous demands as children of possibly frail and dependent parents, mothers, and grandmothers, as well as possibly still being in full or part-time economic employment (Harper, 2005). Grandmothers have more influence in almost every value domain over their grandchildren than do grandfathers (Roberto and Stroes, 1995). Cunningham-Burley (1986) notes that grandparenthood is an especially desirable status for grandmothers, and Thompson *et al.* (1990) and Dench *et al.* (1999) both identify grandmothers as the 'central' grandparent. Thompson *et al.* (1990) in their study found that grandchildren only ever mentioned grandmothers, implying that they are regarded as the single real grandparent. One obvious reason for this is that child rearing has been a culturally encouraged area of competence for women throughout their life course, thus grandmothers are most often drawn into caring for their grandchildren (Hagestad and Neugarten, 1985; Hagestad, 1986).

Maternal grandmothers are consistently noted as having the most contact and closest relationship with their grandchildren. Findings show that maternal grandparents are more likely to have frequent contact with grandchildren, and that grandchildren tend to have a stronger bond with maternal grandparents (Henretta *et al.*, 1993; Harper *et al.*, 2004). However, paternal grandparents play an important role, and this is evident especially where grandsons are concerned (Barranti, 1985). Emphasis on maternal grandmothers has perpetuated the matrifocal tilt in grandparent research, supporting the notion that familial continuity is most likely to persist through women, and that women of all ages are likely to retain the closest links with their child and grandchild (Matthews and Sprey, 1984; Hagestad and Neugarten, 1985). Maternal grandmothers are also considered more influential than paternal grandparents in terms of promoting 'closeness' and a 'sense of security' (Hyde and Gibbs, 1993). Harper *et al.* (2004) also found that grandmothers through the maternal line generally held the strongest involvement with grandchildren, though this is mediated by the grandmother's age, health, and proximity to her grandchildren.

Research into the role of grandfathers has been limited (Kivett, 1991; Radin *et al.*, 1991; Mann, 2007). However, it has been proposed that men become more nurturing as they get older and it could be hypothesized that these qualities might be expressed in relationships with their grandchildren (Dench *et al.*, 1999). Similarly, the need to consider grandfathers as important resources for teenage mothers who are rearing their children has been stressed (Radin *et al.*, 1991). Harper *et al.* (2004) also found that grandfathers could act as replacement partners and replacement fathers in female single-parent households.

Family care in old age

Increasing life expectancy at later ages implies that more members of successive cohorts reach the age at which help with activities of daily living may be required, and family members are a likely source of at least some of this help. Given the rapidly changing demography of the family, and the impact this is having on kin roles and relationships, there are concerns that families will be unable to sustain the increasing care of the elderly which will be required. Declining fertility implies a reduction in the number of kin available to provide care, changing family structures and age transitions influence the availability and willingness of younger generations to care, and changing female activity across the life course, in particular, reduces the availability and willingness of women to care (Wolf and Soldo, 1994). In addition, the increase in the number of step and reconstituted—so-called 'blended'—families suggests that kin networks will increasingly comprise family members with highly diverse levels of connectedness and commitment to each other (Finch and Wallis, 1994; Wachter, 1997; Bornat *et al.*, 1998, 1999; Haskey, 1998; Dimmock *et al.*, 2004).

Intergenerational transfers of care and services generally flow from older to younger generations, declining during the life course. However, in later life the flow from younger to older generations increases and comes to dominate the intergenerational exchange (HRS, 2004). From a peak of parent to child transfers when the parents are in their early 60s, and/or the children are young adults, this declines rapidly, so that as the parent reaches their mid-70s the child to parent transfers begin to dominate (Kohli and Kunemund, 2003; Litwin, 2004).

However, despite the growth in individual household living and individualistic values, in complex recombinant families, and in dispersed living arrangements (Grundy, 1987; Grundy and Harrop, 1992; McGlone, 1996; Mason, 1999; Scott *et al.*, 1999) families still play an important role in late life, remaining committed, both in terms of expressed attitudes and behaviour, to caring for and supporting their kin.

Around two-thirds of the care provided to older people within the EU comes from within the family (Anderson, 2004). In the UK, in particular, spouses and children supplement formal care for elderly people by up to 80% of required community based care (Green, 1988; Arber and Gilbert, 1989; Arber and Ginn, 1992; Twigg, 1992; Askham, 1998). Family structure, including number and proximity of children, cultural values, which determine the kin relationship, gender, or numerical positioning of the child, followed by family history and personal characteristics, are key in the decision as to who should provide primary care and support to a frail older relative. This is likely to be a spouse or child, and most likely a daughter. Although men, particularly husbands, are increasingly providing care, the majority of carers are still female (Finch, 1989; Harper and Lund, 1989; Dwyer and Coward, 1991; Marks 1996; McGarry, 1998; Ikels, 2004).

Given the high reliance on family caregivers, current concerns include the lack of children, increasing levels of female employment, and unstable adult relationships.

Lack of children

The availability of children to provide care depends on the number of offspring and their individual characteristics. The child's employment, geographical distance from the parent, and presence of their own children affects the caregiving network, by raising or lowering that child's availability (Anderson, 2001). For example, Henretta reports for the USA that having one's own children or having more education reduce the probability of providing elder care (Wolf *et al.*, 1997). Alternatively, children who have received earlier financial help from the parent are more likely to provide care for a parent later (Henretta *et al.*, 1997).

Cohabitation

The concern that consensual unions will not provide stable extensive cross-kin relationships is based on evidence from younger cohabiting couples. Many of the existing and future consensual unions will be formed in mid and later life by older adults, and may well support the long-term vertical and lateral kin relationships developed through marriage. In addition, while divorce may be replacing death in long marriages, those marriages which do survive appear to provide a strong base for elder care, particularly by the spouse. There is some valid concern, however, over the rise in divorce and the impact this has on men. Interaction between fathers and their children tends to decline significantly following divorce, indicating that these men are less likely to have adult children available for them in time of need (Harper, 2004a).

Female employment

There is concern that increasing levels of mid-life female employment reduce the time available to provide care for a dependent parent. The percentage of women aged between 45 and 65 in the US labour market has risen since 1960 from one-third to two-thirds (US Bureau of the Census, 1998; Johnson and Lo Sasso, 2004). However, the relationship between female caring and labour market responsibilities is complex, and one cannot make direct predictions (Wolf and Soldo, 1994). There does appear, however, to be a negative, but rather small effect, on both hours worked and amount of care given (University of Wisconsin, 2003; National Institute on Aging/Duke University, 2006; US Census Bureau, 2006; United States Bureau of Labor Statistics, 2007). This suggests that as more women assume important roles in the labour market, providing time-intensive personal care assistance will become increasingly difficult for them. In particular Johnson and Lo Sasso (2004) suggest that devoting time to the informal care of elderly parents may be incompatible with full-time paid employment at mid-life. It is clear that special work arrangements, including flexible work schedules and part-time work, may be necessary if persons with frail family members are to balance successfully their work and caregiving responsibilities.

It is also important to recognize that increasingly it is spouses who care for each other in later life. For example, over a quarter of men in a German study were giving care to a spouse, and 10% of men in their 80s in England are primary caregivers for their wives. Furthermore, of those men who were caring, 60% were caring full time. Data from the Berlin Ageing Study (BASE) also highlights the importance of extended kin in providing support for older generations. In particular, extended relatives may take over specific functions when central family relationships drop out from the older adult's personal network (Litwak, 1985).

Attitudes towards providing care

The prevailing view is that modern nuclear-based families are not as willing or as able to provide care for older frail dependents as in the past (Cowgill and Holmes, 1972). It is argued that the extended family encouraged respect and prestige for elders. This sense of obligation towards kin was a manifestation of family culture, and took priority over individual needs and personal happiness (Hareven, 1982, 1996). The conjugal or nuclear family, on the other hand, is seen as lacking the resources to provide care and support for elderly dependents. Furthermore, it encourages independent adult living, which places older dependent adults in an ambiguous position because the concept of full personhood is closely tied to the ability to live alone. Thus the ideal of the nuclear family household makes living in an independent household an indicator of full adult status, something which young people strive for and older people resist giving up. This results in problematic re-entry into an extended family household when widowhood or increasing frailty occur (Goode, 1964; Keith *et al.*, 1994).

This view has been questioned on two levels. Macfarlane (1978) points out that from at least medieval times the English family has operated primarily on individual rather than collective principles, while Finch (1989) argues that there is actually little normative agreement in Britain on the obligations and responsibilities of adults towards other adult kin; and that furthermore, these obligations vary between cohorts. In addition there are considerable cultural differences, in some cases defined by law and policy.

Within the EU15 for example, there appears to be a spectrum of responsibility defined at the national level. At one end of this spectrum stand the Scandinavians, whose intergenerational contract has allowed the development of policy focused on individual entitlements and citizenship rights for all, with those in need expecting to receive state rather than family support. At the other end are the southern Europeans, who expect to rely almost exclusively upon the extended family. The expected obligations of those in the UK and Ireland are nuclear family-based, and mixed. Clearly, however, there are subtle difference in family responsibilities (Reher, 1998; Segalen, 1997; Murphy, 2001).

In terms of attitudes towards families, it is clear that the family still acts in a supportive manner towards its kin in times of need. Thus Scandinavian research has highlighted the importance of kinship within a modern welfare state, and indicated both increased contact with family members and a significant move towards a more positive view on the family as a supportive institution (Leeson, 2004). Data from northern Europe suggest that the vast majority of mid-life adult children would provide for their parents in a variety of practical ways. Southern European societies still support strong imperatives to care for needy relatives, and even US families continue to reveal a strong sense of obligation between the generations (Bengtson *et al.*, 2002). A recent global survey has also indicated that family obligations, and in particular the role of the family in self identification, still rank high in Western society (Leeson and Harper, 2007).

Households and family networks are becoming smaller, adult unions are changing, and life-course changes, particularly for

women, are reducing opportunities for caregiving. However, family ties are remaining strong both in contact and attitude, and older adults are providing and will continue to provide major sources of elder care as their healthy life expectancy increases. This care will probably increasingly come from spouses rather than children, as the life trajectory and demands across the life course change, particularly for women. In addition, increasing healthy life expectancy not only means delaying morbidity, but also increasing the number of healthy late-life carers. Families are also providing support through reciprocal financial transfers. The indications are that families will continue to care, but that older people themselves will also become increasingly independent in their care and support needs.

Conclusion

As this chapter has explored, though age is often understood as a determinant of biological and psychological changes, it is but an *indicator* of these changes. However, it can be a *determinant* of individuals' allocated roles, independent of their biological or psychological capacity. Age also has *analytical value* as a descriptive variable; and it identifies at any given time point *birth-cohort membership*, and thus potential shared cohort life experiences.

Exploration of the changing roles and relationships which occur in old age have also highlighted the tension between the continuity and discontinuity of the late age life course, and the potential for configuration and reconfiguration of public and private personal networks. Retirement, ill-health, widowhood, divorce, and grandparenthood, for example, result in the renegotiation of roles within the family and wider community, and the reconfiguration of social networks. Alternatively, many older people maintain continuity in their relationships with partners and children throughout their lives, and the introduction of early retirement has meant that some of the transitions previously arising in old age now occur in mid-life, allowing time for adjustment and reconfiguration of personal networks.

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3

Cognitive change in old age

Elizabeth Anderson

Cognitive change in old age happens. The cells of the brain, just like those of all other bodily organs, are vulnerable to the processes of cellular senescence (for reviews see Kemper, 1994; Raz, 2000; Whalley, 2001; Hedden and Gabrieli, 2004). It was once thought that there is a significant loss of neurons during old age, but modern techniques suggest that the shrinkage of grey matter in old age is primarily due to fluid loss and loss of synaptic density rather than cell death. However, within the neural networks of the brain there is a loss of synaptic connectivity in old age and a reduction in the efficiency of dendritic remodelling. Old age is also associated with white matter change, particularly the deterioration of the myelin sheath. There are changes to the neurochemistry of the brain, particularly within the dopamine system (Backman and Farde, 2005). Thus, although cells do not die in large numbers as part of the normal ageing process there are functional alterations that would be expected to affect the processing power of the brain.

However, whilst it is clear that the brain undergoes change in old age, the relationship between the brain and the cognitive functions it produces is complex, to say the least. The brain is unique amongst bodily organs in that the relationship between the physical substrate of the brain and the mental functions it supports remains a deeply contested philosophical issue. It is difficult, therefore, to understand the true significance of the brain alterations reviewed above for cognition. The shrinkage of the cerebral cortex and the loss of synaptic density appear to begin in early adulthood and both follow a linear trajectory of decline across the lifespan into old age (Hedden and Gabrieli, 2004; Raz, 2005) and yet it is clear that cognition is not affected at this early age. Within the brain the passage of time is not only associated with the downward trajectory of biological ageing, but also the upward trajectory of learning from experience. In general, it appears that the elderly brain does become slower to learn but it never loses the capacity to learn (Nyberg, 2005) and information and skills learnt throughout the lifespan appear resilient to old age (Horn and Cattell, 1967).

There is, however, a loss of intellectual speed and flexibility which is observed even amongst the 'super-elderly', that is, very intelligent elderly people in very good health (Nielson *et al.*, 2002; Morcom *et al.*, 2003; Hedden and Gabrieli, 2004). This suggests that everyone experiences some loss of cognitive power in old age but that usually the cognitive decline is mild and the impact of such decline on everyday life is minimal. The experience of some loss in the speed, flexibility, and learning capacity of the mind in old age is likely to cause some frustration, and perhaps a little loss of pride, but to the extent that most elderly people have found a way of life well-suited to their character and skill, the need for active cognitive skills is much reduced in old age. This reflects the ancient view of old age as a time of reflection and wisdom rather than active intelligence. Whalley (2001) describes the difference between intelligence and wisdom as being that, 'intelligence is used to answer the question concerning how something should be done, whilst wisdom asks whether it should be done at all' (p. 67). By the latter decades of life most of the important questions of life have usually been answered and concepts related to wisdom (Baltes, 1993) or 'ego-integrity' (Erikson, 1982) appear to be central in determining whether people cope successfully with the negative changes of old age or not.

However, whilst the recent evidence suggests that cognitive change happens to everyone, there is marked variation in the rate of change from one individual to the next (reviewed by Hedden and Gabrieli, 2004). Many lifespan studies suggest considerable stability of intellectual ability from youth to old age (McClearn *et al.*, 1997; Deary *et al.*, 2000) but the increased variability in cognitive ability in elderly relative to young samples reveals that cognition is influenced by a greater range of factors in old age than in youth. This may reflect differences in factors that affect the rate of biological ageing itself, and also factors that affect the chances of developing the neurodegenerative conditions which can lead to dementia, particularly Alzheimer's disease and cerebrovascular disease. The extent to which biological ageing and these age-related diseases are truly separable remains controversial. The progressive nature of dementing conditions makes it extremely difficult to distinguish between the earliest signs of a neurodegenerative process and the normal effects of brain ageing. When cognitive ability in both demented and non-demented people is measured using the Mini Mental State Examination (Folstein *et al.*, 1975), or an equivalent instrument, there is no sign of bimodality in the distribution of scores to suggest that elderly people divide into two separate populations of the demented and non-demented (Brayne and Calloway, 1988). Neither do longitudinal studies tracking cognitive change within individuals reveal a critical cut-off point which marks the onset of dementia (Whalley, 2002). There appears to be no pathological or physiological marker that clearly distinguishes between